

DISSERTATION

CHAPTER 1 – 5

SECTION

GUIDELINES

RUBRIC

CHAPTER ONE: INTRODUCTION

Introduction

This section describes the conceptual basis for what the researcher will investigate, including the research questions, hypotheses, and basic research design. The introduction develops the significance of the study by describing how the study is new or different from other studies, how it addresses something that is not already known or has not been studied before, or how it extends prior research on the topic in some way. This section should also briefly describe the basic nature of the study and provide an overview of the contents of Chapter 1.

Keep in mind that you will write Chapters 1 through 3 as your dissertation proposal. However, there are changes that typically need to be made in these chapters to enrich the content or to improve the readability as you write the final dissertation manuscript. Often, after data analysis is complete, the first three chapters will need revisions to reflect a more in-depth understanding of the topic and to ensure consistency.

To ensure the quality of both your proposal and your final dissertation and reduce the time your writing needs to reflect doctoral level, scholarly writing standards **from your very first draft**. Each section within the proposal or dissertation should be well organized and easy for the reader to follow. Each paragraph should be short, clear, and focused. A paragraph should (1) be three to eight sentences in length, (2) focus on one point, topic, or argument, (3) include a topic sentence that defines the focus for the paragraph, and (4) include a transition sentence to the next paragraph. Include one space after each period. There should be no grammatical, punctuation, sentence structure, or

APA formatting errors. Verb tense is an important consideration for Chapters 1 through 3. For the proposal, the researcher uses **future tense** (e.g. “The purpose of this study is to...”), whereas in the dissertation, the chapters are revised to reflect past tense (e.g. “The purpose of this study was to...”). Taking the time to ensure high quality, scholarly writing for each draft will save you time in all the steps of the development and review phases of the dissertation process so make sure to do it right the first time!

As a doctoral researcher, it is your responsibility to ensure the clarity, quality, and correctness of your writing and APA formatting. Your chair and your committee members are not obligated to edit your documents. If you do not have outstanding writing skills, you may need to identify a writing coach, editor and/or other resource to help you with writing and editing. Poorly written proposals and dissertations will be immediately suspended in the various levels of review if submitted with grammatical, structural, and/or form and formatting errors.

The quality of a dissertation is not only evaluated on the quality of writing. It is also evaluated based on the criteria that have been established for each section of the dissertation. The criteria describe what must be addressed in each section within each chapter. As you develop a section, first read the section description. Then review each criterion contained in the table below the description. Use both the overall description and criteria as you write each section. It is important that each listed criterion is addressed in a way that it is clear to your chair and committee members. You should be able to point out where each criterion is met in each section.

Prior to submitting a draft of your proposal or dissertation or a single chapter to your chair or committee members, please assess yourself on the degree to which each criterion has been met.

You need to continuously and objectively self-evaluate the quality of your writing and content for each section within the proposal or dissertation. When you have completed a comprehensive self-evaluation of your work, then you may submit your document to your chair for review. Your chair will also review each section of the proposal and dissertation and will determine when it is ready for full committee review. Keep in mind the committee review process will likely require several editorial/revisions rounds, so plan for multiple revision cycles as you develop your dissertation completion plan and project timeline. You will notice in the tables that certain columns have an X in the scoring box. As mentioned above, your chair will score all five chapters, the abstract and the reference list. Your chair and committee members will assess each criterion in their required chapters when they return the document with feedback.

Once the document has been fully approved by your chair and committee, and is approved for, your chair will approve each chapter in the courseroom.

INTRODUCTION This section provides a brief overview of the research focus or problem, explains why this study is worth conducting, and discusses how this study will be completed. (Minimum three to four paragraphs or approximately one page)	
Dissertation topic is introduced and value of conducting the study is discussed.	
Discussion provides an overview of what is contained in the chapter.	
Provide the reader with a clear understanding of the problem in a concise yet complete manner	
Articulate that the problem is worthy of further investigation.	
Briefly describe how the study will be done	
Present the guiding research question or hypothesis for the study	
Explain how this study can contribute to the existing knowledge	
Describe how the study will address something that is not already known or has not been studied before	
Describe how the study will fill a gap in existing literature or research.	
Describe how the study extends prior research on the topic in some way	

Background, Context and Theoretical Framework

The background, context, and theoretical framework of the study should tell the reader what has happened in the past to create the problem or need today. It is a brief historical overview that answers these questions: What do we know? What created the problem? When did the problem begin, and for whom is it a problem? What research has been done?

This section provides information necessary to allow the reader to understand the background of the problem and context in which the problem occurs. The primary objectives in writing this section are (a) to provide a brief overview of research related to the problem; (b) to identify and describe the key components, elements, aspects, concepts of the problem; (c) to provide the reader with an understanding of how the problem arose and the specific context within which the problem is occurring; and (d) to briefly introduce the reader to the theoretical framework and how that framework either supports the proposed study or provides a theoretical context for developing the research problem. The length of this section will depend on the complexity of the problem. Many learner-researchers first develop a working draft of the literature review (Chapter 2), since a good portion of this section is a brief summary of the related literature. Typically, background sections are five to eight paragraphs but can be longer for more complex problems or for problems that have an extensive history of investigation.

The context for the study refers to the physical setting of the research and the natural or artificial (simulated) properties of that setting. In some research these properties are called “experimental conditions” or “study environment.” This section should introduce the theory that will provide support and justification for your study. It will be used to briefly introduce the primary theoretical topics that will be developed in detail in Chapter 2.

The purpose of the theoretical framework is to tie the dissertation together. As the researcher, you should approach the proposed research from a theory or set of theories that provide the backdrop for the work (researchers do not create theory; they use established theory in which to embed their work). This section should describe how this study will relate to existing theories and discuss how the methodology being used in the study links to those theories. Questions to answer: Is the theoretical foundation strong? Are the theoretical sources apparent? Are they appropriate for the topic? Do they need further explanation? Further, the theoretical framework describes a context within which to locate the intended project and suggests why doing such a study is worthwhile. The theoretical framework justifies the methods you plan to use for conducting the study and presents how this research will contribute to the body of knowledge and/or practice. Further, it describes the context within which to locate the intended project and suggests why doing such a study is worthwhile.

BACKGROUND, CONTEXT AND THEORETICAL FRAMEWORK	
The background section explains both the history of and the present state of the problem and research focus. It identifies the "gap" or "need" based on a summary of the current literature and discusses how the study will address that "gap" or "need." (Minimum two to three paragraphs or approximately one page)	
Describe why the study is being conducted	
Provide a brief overview of research related to the problem	
Identify and describe the key components, elements, aspects, concepts of the problem	
Describe who or what is impacted by the problem or research focus	
Provide the reader with an understanding of how the problem arose and the specific context within which the problem is occurring	
Briefly introduce the reader to the theoretical framework and how that framework either supports the proposed study or provides a theoretical context for developing the research problem.	
Describe and justify the research methods planned for the study	
Briefly describe why the study is being conducted.	
Provides a summary of results from the prior empirical research on the topic and identifies the need as defined by the prior research which this current study will address.	

Problem Statement

This section clearly states the problem or research focus, the population affected and how the study will contribute to solving the problem. A well-written problem statement begins with the big picture of the issue (*macro*) and works to the small, narrower, and more specific problem (*micro*). It clearly communicates the significance, magnitude, and importance of the problem and transitions into the Purpose of the Study with a declarative statement such as “It is not known if and to what degree/extent...” or “It is not known how/why and...”

- Other examples are:

- It is not known _____.
- Absent from the literature is _____.
- While the literature indicates _____, it is not known in (school/district/organization/community) if _____.
- It is not known how or to what extent _____.

As you are writing this section, make sure your research problem passes the ROC test meaning your problem is **Researchable, Original, and Contributory!**

PROBLEM STATEMENT	
This section includes the problem statement, the population affected, and how the study will contribute to solving the problem. This section is summarized in Chapter 3. This section of Chapter 1 should be a minimum of three to four paragraphs with citations from empirical research articles to support statements. (Minimum three or four paragraphs or approximately one page)	
States the specific problem proposed for research by presenting a clear declarative statement that begins with “It is not known if and to what degree/extent...” (quantitative) ~or~ or “It is not known how/why and...” (qualitative)	
Identifies the general population affected by the problem.	
Suggests how the study may contribute to solving the problem.	
Clearly describe the magnitude and importance of the problem.	
Identify the need for the study and why it is of concern to the researcher.	

Purpose of the Study

The purpose of the Study section of Chapter 1 provides a reflection of the problem statement and identifies how the study will be accomplished. It explains how the proposed study will contribute to the field. The section begins with a declarative statement, “The purpose of this study is.... .” Included in this statement are also the research design, population, variables (quantitative) or phenomena (qualitative) to be studied, and the geographic location. Further, the section clearly defines the dependent

and independent variables, relationship of variables, or comparison of groups for quantitative studies. For qualitative studies, this section describes the nature of the phenomena to be explored. Keep in mind that the purpose of the study is restated in other chapters of the dissertation and should be worded exactly as presented in this section of Chapter 1. Refer to Creswell (2014) for sample purpose statement templates that are aligned with the different research methods (qualitative/quantitative).

PURPOSE OF THE STUDY	
The purpose statement section expands on the problem statement and identifies how the study will be accomplished. It explains how the proposed study will contribute to the field. This section is summarized in Chapter 3. (Minimum two to three paragraphs)	
Presents a declarative statement: “The purpose of this study is...” that identifies the research methodology and design, population, variables (quantitative) or phenomena (qualitative) to be studied and geographic location.	
Identifies research methodology as qualitative, or quantitative, and identifies the specific research design.	
Describes the target population and geographic location for the study.	
<u>Quantitative</u> : Defines the variables, relationship of variables, or comparison of groups. <u>Qualitative</u> : Describes the nature of the phenomena to be explored.	

Research Question(s) and Hypotheses

This section narrows the focus of the study and specifies the research questions to address the problem statement. Based on the research questions, it describes the variables or groups and their hypothesized relationship for a quantitative study or the phenomena under investigation for a qualitative study. The research questions and hypotheses should be derived from, and are directly aligned with, the problem and purpose statements, research methods, and data analyses. The Research Questions or Hypotheses section of

Chapter 1 will be presented again in Chapter 3 to provide clear continuity for the reader and to help frame your data analysis in Chapter 4.

If your study is qualitative, state the research question(s) the study will answer, and describe the phenomenon to be studied. Qualitative studies will typically have one overarching research question with three or more sub-questions. If your study is quantitative, state the research questions the study will answer, identify the variables, and state the hypotheses (predictive statements) using the format appropriate for the specific design. Quantitative studies will typically have three or four research questions and associated hypotheses; mixed method studies can use both depending on the design.

In a paragraph prior to listing the research questions or hypotheses, include a discussion of the research questions, relating them to the problem statement. Then, include a leading phrase to introduce the questions such as: The following research questions guide this qualitative study:

RQ1: This is an example of how a qualitative research question should align within the text of the manuscript. Indent .25 inches from the left margin. Text that wraps around to the next line is indented using the Hanging Indent feature at .5”.

RQ2: Add a research question here following the format above. Additional research questions should follow the same format.

Or for a quantitative study the research questions are formatted as below. The following research question and hypotheses guide this quantitative study:

RQ1: This is an example of how a quantitative research questions and hypotheses should align within the text of the manuscript. Indent .25 inches from the left

margin. Text that wraps around to the next line is indented using the Hanging Indent feature at .5”.

H1₀: The null hypothesis that aligns to the research question is listed here.

H1_a: The alternative hypothesis that aligns to the research question and null hypothesis is listed here. Repeat this pattern for each quantitative research question and associated hypotheses.

<p>RESEARCH QUESTION(S) AND/OR HYPOTHESES This section narrows the focus of the study by specifying the research questions to address the problem statement. Based on the research questions, it describes the variables and/or groups and their hypothesized relationship (quantitative study) or the phenomena under investigation (qualitative study). It describes how the research questions are related to the problem statement and how the research questions will facilitate collection of the data needed to answer the research questions. (Minimum two to three paragraphs or approximately one page)</p>	
<p>Qualitative Designs: States the research question(s) the study will answer and describes the phenomenon to be studied.</p> <p>Quantitative Designs: States the research questions the study will answer, identifies the variables, and states the hypotheses (predictive statements) using the format appropriate for the specific design.</p>	
<p>This section includes a discussion of the research questions, relating them to the problem statement.</p>	

Rationale, Relevance, and Significance of the Study

Rationale for the Study

The Rationale for the Study section of Chapter 1 clearly justifies the methodology the researcher plans to use for conducting the study. It argues how the methodological framework is the best approach to answer the research questions and address the problem statement. Finally, it contains citations from textbooks and articles on research methodology and/or articles on related studies.

For qualitative designs, this section states the research question(s) the study will answer and describes the phenomenon to be studied. For quantitative designs, this section

describes the research questions the study will answer, identifies the variables, and states the hypotheses (predictive statements) using the format appropriate for the specific design. Finally, this section includes a discussion of the research questions, relating them to the problem statement. This section should illustrate how the methodological framework is aligned with the problem statement and purpose of the study, providing additional context for the study.

RATIONALE FOR THE STUDY	
This section clearly justifies the methodology the researcher plans to use for conducting the study. It argues why the methodological framework is the best approach to answer the research questions and how it will address the problem statement. It uses citations from textbooks and articles on research methodology and/or articles on related studies to justify the methodology. (Minimum two to three paragraphs)	
Identifies the specific research methodology for the study.	
Justifies the methodology to be used for the study by discussing why it is the best approach for answering the research question(s) and addressing the problem statement.	
Uses citations from seminal (authoritative) sources (textbooks and/or empirical research literature) to justify the selected methodology. Note: <i>Introductory or survey research textbooks (such as Creswell) are not considered seminal sources.</i>	

Significance of the Study

This section identifies and describes the significance of the study. It also discusses the implications of the potential results based on the research questions and problem statement, hypotheses, or the investigated phenomena. Further, it describes how the research fits within and will contribute to the current literature or body of research. Finally, it describes the potential practical applications from the research. This section is of particular importance because it justifies the need for, and the relevance of, the research.

SIGNIFICANCE OF THE STUDY

This section identifies and describes the significance of the study and the implications of the potential results based on the research questions, the problem statement, and the hypotheses or the investigated phenomena. It describes how the research fits within and will contribute to the current literature or body of research. It describes potential practical applications from the research. (Minimum three to four paragraphs)	
Describes how the proposed research fits within the prior research and how the study will make an academic research contribution in the field of study.	
Describes how the study will make a practical contribution in the field of study.	
Describes how addressing the problem will add value to the population, community, or society.	

Nature of the Study

This section describes the specific research design to answer the research questions and why this approach was selected. Here, the learner discusses why the selected design is the best design to address the problem statement and research questions as compared to other designs. This section also contains a description of the research sample being studied, as well as, the process that will be used to collect the data on the sample. In other words, this section provides a preview of Chapter 3 and succinctly conveys the research approach to answer the research questions and/or test the hypotheses.

NATURE OF THE STUDY This section describes the specific research design to answer the research questions and affirms why this approach was selected. It describes the research sample being studied as well as the process that will be used to collect the data on the sample. It identifies the instruments or sources of data needed to answer the research questions. It provides citations from seminal sources such as research textbooks, research articles, and articles on similar studies. (Minimum three to four paragraphs or approximately one page)	
Describes the selected design for the study.	
Discusses why the selected design is the best design to address the problem statement and research questions as compared to other designs.	
Briefly describes the target population, and the sampling method for the study, the data collection procedures to collect data on the sample, and the instruments or sources of data needed to answer the research questions.	

Definition of Terms

The Definition of Terms section of Chapter 1 defines the study constructs and provides a common understanding of the technical terms, exclusive jargon, variables, phenomena, concepts, and technical terminology used within the scope of the study. Terms are defined in lay terms and in the context in which they are used within the study. Each definition may be a few sentences to a paragraph in length. This section includes any words that may be unknown to a lay person (words with unusual or ambiguous meanings or technical terms).

Definitions must be supported with citations from scholarly sources. Do not use *Wikipedia* to define terms. This popular “open source” online encyclopedia can be helpful and interesting for the layperson, but it is not appropriate for formal academic research and writing. Additionally, do not use dictionaries to define terms. A paragraph introducing this section prior to listing the definition of terms can be inserted. However, a lead-in phrase is needed to introduce the terms such as: “The following terms were used operationally in this study.” This is also a good place to “operationally define” unique phrases specific to this research. See below for the correct format:

Term, Write the definition of the word. This is considered a Level 3 heading., Make sure the definition is properly cited (Author, 2010, p.123). Terms often use abbreviations. According to the American Psychological Association (APA), abbreviations are best used only when they allow for clear communication with the audience. Standard abbreviations, such as units of measurement and names of states, do not need to be written out. APA also allows abbreviations that appear as words in

Merriam-Webster's Collegiate Dictionary (2005) to be used without explanation [4.22-4.30].

Spaces. Do not use periods or spaces in abbreviations of all capital letters unless the abbreviation is a proper name or refers to participants using identity-concealing labels. The exception to this rule is that a period is used when abbreviating the United States as an adjective. Use a period if the abbreviation is a Latin abbreviation or a reference abbreviation [4.02]. Use standard newspaper practice when presenting AM and PM times, as in 7:30 PM or 6:00 AM.

Abbreviations. Do not use periods with abbreviated measurements, (e.g., cd, ft, lb, mi, and min). The exception to this rule is to use a period when abbreviated inch (in.) to avoid confusion with the word “in”. Units of measurement and statistical abbreviations should only be abbreviated when accompanied by numerical values, e.g., 7 mg, 12 mi, *M* = 7.5 measured in milligrams, several miles after the exit, the means were determined [4.27].

Time units. Only certain units of time should be abbreviated. Do abbreviate hr, min, ms, ns, s. However, do not abbreviate day, week, month, and year [4.27]. To form the plural of abbreviations, add “s” alone without apostrophe or italicization (e.g., vols, IQs, Eds). The exception to this rule is not to add “s” to pluralize units of measurement (12 m not 12 ms) [4.29].

DEFINITIONS OF TERMS	
This section defines the study constructs and provides a common understanding of the technical terms, exclusive jargon, variables, phenomena, concepts, and sundry terminology used within the scope of the study. Terms are defined in lay language and in the context in which they are used within the study. (Each definition may be a few sentences to a paragraph.)	
Defines any words that may be unknown to a lay person (words with unusual or ambiguous meanings or technical terms) from the research or literature.	
Defines the variables for a quantitative study or the phenomena for a qualitative study from the research or literature.	
Definitions are supported with citations from scholarly sources.	

Assumptions, Limitations, Delimitations

This section identifies the assumptions and specifies the limitations, as well as the delimitations, of the study. An assumption is a self-evident truth. This section should list what is assumed to be true about the information gathered in the study. State the assumptions being accepted for the study as methodological, theoretical, or topic-specific. For each assumption listed, you must also provide an explanation. Provide a rationale for each assumption, incorporating multiple perspectives, when appropriate. For example, the following assumptions were present in this study:

1. It is assumed that survey participants in this study were not deceptive with their answers, and that the participants answered questions honestly and to the best of their ability. Provide an explanation to support this assumption.
2. It is assumed that this study is an accurate representation of the current situation in rural southern Arizona. Provide an explanation to support this assumption.

Limitations are things that the researcher has no control over, such as bias.

Delimitations are things over which the researcher has control, such as location of the study. Identify the limitations and delimitations of the research design. Discuss the potential generalizability of the study findings based on these limitations. For each

limitation and/or delimitation listed, make sure to provide an associated explanation. For example: The following limitations/delimitations were present in this study:

1. Lack of funding limited the scope of this study. Provide an explanation to support this limitation.
2. The survey of high school students was delimited to only rural schools in one county within southern Arizona, limiting the demographic sample. Provide an explanation to support this delimitation.

ASSUMPTIONS, LIMITATIONS AND DELIMITATIONS	
This section identifies the assumptions and specifies the limitations, as well as the delimitations, of the study. (Minimum three to four paragraphs)	
States the assumptions being accepted for the study (methodological, theoretical, and topic-specific).	
Provides rationale for each assumption, incorporating multiple perspectives, when appropriate.	
Identifies limitations of the research design.	
Identifies delimitations of the research design.	

Summary and Organization of the Remainder of the Study

This section summarizes the key points of Chapter 1 and provides supporting citations for those key points. It then provides a transition discussion to Chapter 2 followed by a description of the remaining chapters. For example, Chapter 2 will present a review of current research on the centrality of the dissertation literature review in research preparation. Chapter 3 will describe the methodology, research design, and procedures for this investigation. Chapter 4 details how the data was analyzed and provides both a written and graphic summary of the results. Chapter 5 is an interpretation and discussion of the results, as it relates to the existing body of research related to the dissertation topic. For the proposal, this section should also provide a timeline for completing the research and writing up the dissertation. When the dissertation is complete, this section should be revised to eliminate the timeline information

CHAPTER 1 SUMMARY AND ORGANIZATION OF THE REMAINDER OF THE STUDY This section summarizes the key points of Chapter 1 and provides supporting citations for those key points. It then provides a transition discussion to Chapter 2 followed by a description of the remaining chapters. The Proposal, but not the Dissertation, provides a timeline for completing the research and dissertation. (Minimum one to two pages)	
Summarizes key points presented in Chapter 1.	
Provides citations from scholarly sources to support key points.	
Describes the remaining Chapters and provides a transition discussion to Chapter 2. For proposal only, a timeline for completing the research and dissertation is provided.	
The Chapter is correctly formatted to dissertation template using the <i>Word Style Tool</i> and APA standards. Writing is free of mechanical errors.	
All research presented in the Chapter is scholarly, topic-related, and obtained from highly respected academic, professional, original sources. In-text citations are accurate, correctly cited, and included in the reference page according to APA standards.	
Section is written in a way that is well structured, has a logical flow, uses correct paragraph structure, uses correct sentence structure, uses correct punctuation, and uses correct APA format.	

CHAPTER TWO: LITERATURE REVIEW

Introduction to the Literature Review

This chapter presents the theoretical framework for the study and develops the topic, specific research problem, question(s), and design elements. In order to perform significant dissertation research, the learner must first understand the literature related to the research focus. A well-articulated, thorough literature review provides the foundation for a substantial, contributory dissertation. The purpose of Chapter 2 is to develop a well-documented argument for the selection of the research topic, to formulate the research questions, and to justify the choice of research methodology. A literature review is a **synthesis** of what has been published on a topic by accredited scholars and researchers. It is not an expanded annotated bibliography or a summary of research articles related to your topic.

The literature review will place the research focus into context by analyzing and discussing the existing body of knowledge and effectively telling the reader everything that is known, or everything that has been discovered in research about that focus, and where the gaps and tensions in the research exist. As a piece of writing, the literature review must convey to the reader what knowledge and ideas have been established on a topic, and build an argument in support of the research problem.

This section describes the overall topic to be investigated, outlines the approach taken for the literature review, and the evolution of the problem based on the “gap” or “need” defined in the literature from its origination to its current form. Make sure the Introduction and Background section of your literature review addresses all required criterion listed in the table below.

CHAPTER 2 INTRODUCTION (TO THE CHAPTER) AND BACKGROUND (TO THE PROBLEM)	
This section describes the overall topic to be investigated, outlines the approach taken for the literature review, and argues the evolution of the problem based on the "gap" or "need" defined in the literature from its origination to its current form. (Minimum two to three pages)	
Introduction: Provides an orienting paragraph so the reader knows what the literature review will address.	
Introduction: Describes how the chapter will be organized (including the specific sections and subsections).	
Introduction: Describes how the literature was surveyed so the reader can evaluate thoroughness of the review. This includes search terms and databases used.	
Background: Discusses how the problem has evolved historically into its current form.	
Background: Describes the “gap” or “need” defined in the current literature and how it leads to the creation of the topic and problem statement for the study.	

Theoretical Framework and/or Conceptual Framework

This **section identifies the theory(ies) or model(s)** that provide the foundation for the research study. It also contains an explanation of how the problem under investigation relates to the theory or model. The seminal source for each theory or model presented in this section should be identified and described.

For a quantitative study, the theory(ies) or models(s) guides the research question(s) and justifies what is being measured (variables), and describes how those variables are related. In a qualitative study the theory or model justifies the phenomena being investigated (qualitative). This section also includes a discussion of how the research question(s) align with the respective theory(ies) or model(s) and illustrates how the study fits within the prior research based on the theory(ies) or model(s). The learner should cite references reflective of the foundational, historical, and current literature in

the field. Overall, the presentation in this section should reflect that the learner understands the theory or model and its relevance to the proposed study. The discussion should also reflect knowledge and familiarity with the historical development of the theory.

THEORETICAL FRAMEWORK AND/OR CONCEPTUAL FRAMEWORK	
This section identifies the theory(ies) or model(s) that provide the foundation for the research. This section should present the theory(ies) or models(s) and explain how the problem under investigation relates to the theory(ies) or model(s). The theory(ies) or models(s) guide the research questions and justify what is being measured (variables) as well as how those variables are related (quantitative) or the phenomena being investigated (qualitative). (Minimum two to three pages)	
Identifies a model(s) or theory(ies) from seminal source(s) that provide a reasonable conceptual framework or theoretical foundation to use in developing the research questions, identifying variables/phenomena, and selecting data collection instruments.	
Accurately cites the appropriate seminal source(s) for each theory or model.	
Includes a cogent discussion/synthesis of the theory or model and justifies the theoretical foundation/framework as relevant to the study. Connects the study directly to the theory and describes how the study will add or extend the theory or model.	
Builds a logical argument of how the research questions directly align to the theoretical foundation for the study.	
Reflects a deep understanding of the foundational, historical, research relevant to the theoretical foundation/framework.	

Review of the Literature

This section provides a broad, balanced overview of the existing literature related to the proposed research topic. The Review of Literature identifies themes, trends, and conflicts in research methodology, design and findings. It provides a synthesis of the existing literature, examines the contributions of the literature related to the topic, and presents an evaluation of the overall methodological strengths and weaknesses of the

research. Through this synthesis, the gaps in research should become evident to the reader.

Citations are provided for all ideas, concepts, and perspectives. The researcher's personal opinions or perspectives are not included. Chapter 2 must be a minimum of 30 pages in length. However, it is important to note that a well-written comprehensive literature review will likely exceed this minimum requirement. The literature review must be continuously updated throughout the dissertation research and writing process. Chapter 2 needs to include a minimum of 50 peer-reviewed, empirical research articles, and 75% of all references within this chapter (and in proposal/dissertation) must be within the past five years. Seventy five percent (75%) of your sources must be dated within five years of the proposal defense date or dissertation defense date, and updated as appropriate at the time of the dissertation defense. Other requirements for the literature review include:

- Quantitative study: Describes each research variable in the study discussing the prior empirical research that has been done on the variable(s) and the relationship between variables.
- Qualitative study: Describes the phenomena being explored in the study discussing the prior research that has been done on the phenomena.
- Discusses the various methodologies and designs that have been used to research topics related to the study. Uses this information to justify the proposed design.
- Argues the appropriateness of the dissertation's instruments, measures, and/or approaches used to collect data.

- Discusses and synthesizes studies related to the proposed dissertation topic. This may include (1) studies describing and/or relating the variables (quantitative) or exploring related phenomena (qualitative), (2) studies on related research such as factors associated with the themes, (3) studies on the instruments used to collect data, (4) studies on the broad population for the study, and/or (5) studies similar to the proposed study. The themes presented and research studies discussed and synthesized in the Review of Literature demonstrates a deep understanding of all aspects of the research topic. The set of topics discussed in the Review of Literature must demonstrate a comprehensive understanding of the broad area in which the research topic exists.
- Discusses and synthesizes the various methodologies and designs that have been used in prior empirical research related to the study. Must use authoritative sources information to justify the proposed design. Provides discussion and justification for the instrumentation selected for the study. This section must argue the appropriateness of the dissertation's instruments, measures, and/or approaches used to collect data. Empirical research must be used to justify the selection of instrument(s).
- Each major section in the Review of Literature includes an introductory paragraph that explains why the particular topic was explored relative to the dissertation topic.
- Each major section in the Literature Review includes a summary paragraph(s) that (1) compares and contrasts alternative perspectives on the topic, (2) provides a synthesis of the themes relative to the research topic discussed that emerged from

the literature, (3) discusses data from the various studies, and (4) identifies how themes are relevant to the proposed dissertation topic.

- The types of references that may be used in the literature review include empirical articles, a limited number of dissertations (no more than 5) , peer-reviewed or scholarly journal articles, and books (no more than 5-10) that present cutting edge views on a topic, are research based, or are seminal works.
- Provides additional arguments for the need for the study that was defined in the Background to the Problem section.

The body of a literature review can be organized in a variety of ways depending on the nature of the research. Work with your chair and committee to determine the best way to organize this section of Chapter 2 as it pertains to your research design. Make sure you include a section for methodology and instrumentation (see the rubrics, below).

Chapter 2 can be particularly challenging with regard to APA format for citations and quotations. Refer to your APA manual frequently to make sure your citations are formatted properly. It is critical that each in-text citation is appropriately listed in the Reference section. Incorrectly citing and referencing sources is a serious scholarly and ethical violation, particularly at the doctoral level when writing the dissertation. As an emerging scholar you must demonstrate the capability and responsibility to properly cite and reference every single source that you reference in your literature review and in throughout your dissertation!

As a rule, if a direct quote comprises fewer than 40 words, incorporate it into the narrative and enclose it with double quotation marks. The in-text citation is included after

the final punctuation mark [6.03]. The final punctuation mark in quoted text should be placed inside the quotation mark.

For a quote within a quote, use a set of single quotation marks. Here is an example of a direct quote within a quote integrated into the narrative. In the classic introspective autobiography, *The Memoirs of a Superfluous Man*, we read that, “one never knows when or where the spirit’s breathe will rest, or what will come of its touch. ‘The spirit breathes where it will,’ said the *Santissimo, Salvatore*, ‘and thou hearest the sound thereof, but cannot tell whence it cometh or whither it goeth.’” (Nock, 1943, p.187) [4.08].

As a rule, if a quote comprises 40 or more words, display this material as a freestanding block quote. Start formal block quotes on a new line. They are indented one inch in from the left margin. The entire block quote is double-spaced. Quotation marks are *not* used with formal block quotes. The in-text citation is included after the final punctuation mark. [6.03]. Below is an example of a block quote: In an important biography, *The First American: the Life and Times of Benjamin Franklin*, historian H. W.

<p>REVIEW OF THE LITERATURE</p> <p>This section provides a broad, balanced overview and synthesis of the existing literature related to the proposed research topic. It identifies topics, themes, trends, and conflicts in research methodology, design, and findings. It describes the literature in related topic areas and its relevance to the research topic and research approach. It provides an overall analysis and synthesis of the existing literature examining the contributions of this literature to the field; identifying the conflicts; and relating the topics, themes, and results to the study topic and research approach. Accurate, empirical research citations are provided for all ideas, concepts, and perspectives. The researcher's personal opinions or perspectives are not included.</p> <p>(Minimum 30 pages)</p>	
<p>This section must be a minimum of 30 pages. The purpose of the minimum number of pages is to ensure that the overall literature review reflects a foundational understanding of the theory or theories, literature and research studies related to the topic. A well-written comprehensive literature review that reflects the current state of research and literature on the topic is expected and will likely exceed 30 pages. Literature review should be updated continuously. This is an ongoing process to dissertation completion.</p>	
<p>Quantitative Studies: Describes each research variable in the study discussing the prior empirical research that has been done on the variables and the relationship between the variables.</p> <p>Qualitative Studies: Describes the phenomena being explored in the study discussing the prior research that has been done on the phenomena.</p>	
<p>Themes or Topics (Required): Discusses and synthesizes studies related to the proposed dissertation topic. May include (1) studies describing and/or relating the variables (quantitative) or exploring related phenomena (qualitative), (2) studies on related research such as factors associated with the themes, (3) studies on the instruments used to collect data, (4) studies on the broad population for the study, and/or (5) studies similar to the proposed study. The themes presented and research studies discussed and synthesized in the Review of Literature demonstrates a deep understanding of all aspects of the research topic.</p>	
<p>Methodology Section (required): Discusses and synthesizes the various methodologies and designs that have been used in prior empirical research related to the study. Must use authoritative sources to justify the proposed design.</p>	
<p>Instrumentation Section (required): Provides discussion and justification for the instrumentation selected for the study. This section must argue the appropriateness of the dissertation's instruments, measures, and/or approaches used to collect data.</p>	

Empirical research must be used to justify the selection of instrument(s).	
Structures literature review in a logical order, includes actual data and accurate synthesis of results from reviewed studies as related to the learners own topic, not just a summary of the findings.	
Includes in each major section (theme or topic) within the Review of Literature an introductory paragraph that explains why the particular theme or topic was explored relative to the overall dissertation topic.	
Includes in each section within the Review of Literature a summary paragraph(s) that (1) compares and contrasts alternative perspectives on the topic and (2) provides a synthesis of the themes relative to the research topic discussed that emerged from the literature, and (3) identifies how themes are relevant to the proposed dissertation topic.	
Provides additional arguments for the need for the study that was defined in the Background to the Problem section.	
Ensures that for every in-text citation a reference entry exists. Conversely, for every reference list entry there is a corresponding in-text citation. Note: The accuracy of citations and quality of sources must be verified by learner, chair and committee members.	
Uses a range of references including founding theorists, peer-reviewed empirical research studies from scholarly journals, and government/foundation research reports. Note: A minimum of 50 peer-reviewed, empirical research articles are required for the literature review.	
Verifies that 75% of all references are scholarly sources within the past 5 years. The 5 year time frame is referenced at the time of the proposal defense date and at the time of the dissertation defense date. Note: Websites, dictionaries, publications without dates (n.d.), are not considered scholarly sources and should not be cited or present in reference list.	
Avoids overuse of books and dissertations. Books: Maximum of 10 scholarly books that present cutting edge views on a topic, are research based, or are seminal works. Dissertations: Maximum of 5 published dissertations.	

Summary

This section succinctly restates what was written in Chapter 2 and provides supporting citations for key points. The summary section reflects that the learner has done his/her "due diligence" to become well-read on the topic and can conduct a study that will add to the existing body of research and knowledge on the topic. It synthesizes the information from the chapter to define the "gaps" in or "identified research needs" arising from the literature, the theory(ies) or model(s) to provide the foundation for the study, the problem statement, the primary research question, the methodology, the design, the variables or phenomena, the data collection instruments or sources, and the population to be studied. Overall, this section should help the reader clearly see and understand the relevance and importance of the research to be conducted. The criteria listed in the table below are required for this section. The Summary section transitions to Chapter 3 by building a case for the study, in terms of research design and rigor, and it formulates the research questions based on the gaps and tensions in the literature.

CHAPTER 2 SUMMARY	
This section restates what was written in Chapter 2 and provides supporting citations for key points. The summary section reflects that the learner has done his/her "due diligence" to become well-read on the topic and can conduct a study that will add to the existing body of research and knowledge on the topic. It synthesizes the information from the chapter to define the "gaps" in or "identified research needs" arising from the literature, the theory(ies) or model(s) to provide the foundation for the study, the problem statement, the primary research question, the methodology, the design, the variables or phenomena, the data collection instruments or sources, and the population to be studied. It then provides a transition discussion to Chapter 3. (Minimum one to two pages)	
Synthesizes the information from all of the prior sections in the Literature Review using it to define the key strategic points for the research.	
Summarizes the gaps and needs in the background and introduction describing how it informs the problem statement.	
Identifies the theory(ies) or model(s) describing how they inform the research questions.	

Justifies the design, variables or phenomena, data collection instruments or sources, and population to be studied.	
Builds a case (argument) for the study in terms of the value of the research and how the research questions emerged from the review of literature	
Reflects that the Learner has done his or her “due diligence” to synthesize the existing empirical research and write a comprehensive literature review on the research topic.	
Summarizes key points in Chapter 2 and transitions into Chapter 3.	
The Chapter is correctly formatted to dissertation template using <i>the Word Style Tool</i> and APA standards. Writing is free of mechanical errors.	
All research presented in the Chapter is scholarly, topic-related, and obtained from highly respected, academic, professional, original sources. In-text citations are accurate, correctly cited and included in the reference page according to APA standards.	
Section is written in a way that is well structured, has a logical flow, uses correct paragraph structure, uses correct sentence structure, uses correct punctuation, and uses correct APA format.	

Chapter 3: Methodology

Introduction

Chapter 3 documents how the study is conducted in enough detail so that replication by others is possible. The introduction begins with a summary of the research focus and purpose statement to reintroduce the reader to the study. This can be summarized in three to four sentences from Chapter 1. This section also outlines the expectations for this chapter.

CHAPTER 3 INTRODUCTION	
This section includes both a restatement of the research focus and the Purpose Statement for the study from Chapter 1 to reintroduce reader to the need for the study and a description of contents of the chapter. (Minimum two to three paragraphs)	
The Introduction summarizes the research focus, and the purpose statement to reintroduce the reader to the study. This section also outlines the expectations for this chapter.	
Section is written in a way that is well structured, has a logical flow, uses correct paragraph structure, uses correct sentence structure, uses correct punctuation, and uses correct APA format.	
The research problem is restated for the convenience of the reader. This section aligns to the related section in Chapter 1.	

Research Question(s) or Hypotheses

This section restates the research question(s) and the hypotheses for the study from Chapter 1. For a quantitative study, it then presents the matching hypotheses and explains the variables. For a qualitative study, it then describes the phenomena to be understood as a result of the study. The section also briefly discusses the approaches to collecting the data to answer the research questions. For a quantitative study, it describes the instrument(s) or data source(s) to collect the data for each and every variable. For a qualitative study, it describes the instrument(s) or data source(s) to collect the data to

answer each research question. It also discusses why the design was selected to be the best approach to answer the research questions, test the hypotheses (quantitative), or understand the phenomena (qualitative).

RESEARCH QUESTIONS AND/OR HYPOTHESES	
This section restates the research question(s) and the hypotheses or phenomena and explains why the selected design is the best approach to answer the research questions. Further, it defines the variables and/or groups. The section also discusses the approaches to collecting the data to answer the research questions. This section expands on the related section in Chapter 1. (Minimum one to two pages)	
<p>For a qualitative study, restates the research questions and the phenomena for the study from Chapter 1.</p> <p>For a quantitative study, restates the research questions from Chapter 1, presents the matching hypotheses and operationalizes the variables. Research questions must align directly with the problem and purpose statements,</p>	
<p>Describes the nature and sources of necessary data to answer the research questions (primary versus secondary data, specific people, institutional archives, Internet open sources, etc.).</p> <p>For a quantitative study, the section describes the instrument(s) or data source(s) to collect the data for each and every variable.</p> <p>For a qualitative study, The section describes the instrument(s) or data source(s) to collect the data to answer each research question.</p>	

Research Methodology

This section describes the research methodology for the study (quantitative, qualitative, or mixed) and explains the rationale for selecting this particular methodology. It also describes why this methodology was selected as opposed to the alternative methodologies. This section should elaborate on the Methodology section (from Chapter 1) providing the rationale for the selected research method (quantitative, qualitative, or mixed). Arguments are supported by citations from articles and books on research methodology and/or design. It is also appropriate in this section to outline the predicted

results in relation to the research questions and hypotheses based on the existing literature.

RESEARCH METHODOLOGY This section describes the research methodology for the study (quantitative, qualitative, or mixed) and explains the rationale for selecting this particular methodology as opposed to the alternative methodologies. (Minimum one to two pages)	
Elaborates on the research methodology (from Chapter 1) for the study (quantitative, qualitative, or mixed). Provides the rationale for selecting the particular methodology supported by empirical studies in the research literature. Justifies why the methodology was selected as opposed to alternative methodologies.	
Uses authoritative source(s) to justify the selected methodology. <i>Note: Do not use introductory research textbooks (such as Creswell) to justify the research design and data analysis approach.</i>	

Research Design

This section elaborates on the nature of the Research Design for the Study section from Chapter 1. It includes a detailed description of, and a rationale for, the specific design for the study. It also discusses the specific research design for the study (descriptive, correlational, experimental, quasi-experimental, historical, case study, ethnography, phenomenology, content analysis, exploratory, explanatory, embedded, triangulation, etc.) and describes how it aligns to the selected methodology indicated in the previous section. Additionally, it describes why the selected design is the best option to collect the data to answer the research needed for the study. It explains exactly how the selected design will be used to collect data for each and every variable (for a quantitative study), or how the selected design will be used to collect data to describe the nature of the phenomena in detail (for a qualitative study). It identifies the specific instruments and data sources to be used to collect all of the different data required for the study.

Arguments are supported by citations from articles and books on research methodology and/or design. This section should specify the independent, dependent, and/or classificatory variables as appropriate. Be sure to relate the variables back to the research questions and/or hypotheses. A brief discussion of the type of data collection tool chosen (survey, interview, observation, etc.) can also be included in this section as related to the variables.

RESEARCH DESIGN	
<p>This section describes in detail the specific design for the study and describes why it is the best design to collect the data to answer the research needed for the study. It explains exactly how the selected design was used to facilitate collection of data for each and every variable (for a quantitative study) or how the selected design was used to facilitate collection of data to describe the nature of the phenomena in detail (for a qualitative study). It identifies the specific instruments and data sources to be used to collect all of the different data required for the study. This section expands on the Nature of the Research Design for the Study section in Chapter 1. (Minimum one to two pages)</p>	
<p>Elaborates on the research design from Chapter 1. Provides the rationale for selecting the particular research design supported by empirical references. Justifies why the design was selected as the best approach to collect the needed data, as opposed to alternative designs.</p>	
<p>Describes how the specific, selected research design will be used to collect the type of data needed to answer the research questions and the specific instruments or data sources that will be used to collect this data. For quantitative studies provide the variable structure and state the unit of analysis.</p>	
<p>Uses authoritative source(s) to justify the design. <i>Note: Do not use introductory research textbooks (such as Creswell) to justify the research design and data analysis approach.</i></p>	

Population and Sample Selection

This section discusses the setting, general population, target population, and study sample. The discussion of the sample includes the research terminology specific to the type of sampling for the study. This section should include the components listed in the following table.

POPULATION AND SAMPLE SELECTION

This section discusses the setting, general population, target population, and study sample. The discussion of the sample includes the research terminology specific to the type of sampling for the study as well as how the sample population and final sample will be protected. This section provides a detailed description of the population and sample which were identified in the Research Design for the Study section in Chapter 1 as well as research considerations relevant to the sample and population. **(Minimum one to two pages)**

Describes the general population (i.e., students with disabilities), target population (i.e. students with disabilities in one specific district - geographic location) and the study sample (students with disabilities in the district that participated in the study - actual study sample).

Describes the study sample size. Provides evidence (based on the empirical research) literature that sample size is adequate for the research design.

Quantitative Sample Size Requirements:

Absolute Minimum: 50 cases or participants or 40 cases per cell. Applicable to studies that use frequencies/descriptive statistics and parametric statistical tests (t-tests, ANOVA, correlation, regression analysis)—additional requirements related to the use of certain statistical analysis procedures may increase that number. General rule of thumb on survey research = 10 subjects per survey question. **An a-priori and/or post hoc Power Analysis is required to justify the study sample size based on the anticipated effect size and selected design.**

Qualitative Sample Size Requirements:

Case Study: Minimum 10 participants or cases; Recommended Target=20 due to attrition; minimum of 3 sources of data; must demonstrate triangulation of the data. Case study interviews may include closed-ended questions with a dominance of open-ended questions; should be no less than 30 minutes; at least 15 pages of transcribed data, single spaced, 12 pt. Times New Roman.

Phenomenology: 10-15 interviews; no closed ended questionnaires allowed; Interviews should be 60-90 minutes. There should be a minimum of 60 pages of transcribed data, single spaced, 12 pt. Times New Roman.

Descriptive: 12-15 interviews or cases with at least 3 sources of data; 30-60 pages of transcribed data, single spaced, 12 pt. Times New Roman.

Narrative or Grounded Theory: Minimum of 30 pages of transcribed data from interviews, open-ended questionnaire, or other data sources. Transcript to be

12 Point and single spaced. Studies typically have a minimum of 10-20 interviews or 40-60 open-ended questionnaires. Interviews are 60-90 minutes in length. Grounded theory studies must yield a theory or model.	
Defines and describes the sampling procedures (such as convenience, purposive, snowball, random, etc.) supported by scholarly research sources. Includes discussion of sample selection, and assignment to groups (if applicable), and strategies to account for participant attrition.	
Describes the site authorization process, confidentiality measures, study participation requirements, and geographic specifics.	

Instrumentation or Sources of Data

This section fully identifies and describes the types of data that will be collected, as well as the specific instruments and sources used to collect those data (tests, questionnaires, interviews, data bases, media, etc.). Discuss the specific instrument or source to collect data for each variable or group for a quantitative study. Discuss the specific instrument or source to collect information to describe the phenomena being studied for a qualitative study. Use the “Instrumentation” heading if you are conducting quantitative research. Use the “Sources of Data” heading if you are conducting qualitative research. Use appropriate APA level subheadings for each data collection instrument and place a copy of all instruments in an appendix.

If you are using an existing instrument, make sure to discuss in detail the characteristics of the instrument. For example, on a preexisting survey tool describe: how the instrument was developed and constructed, the validity and reliability of the instrument, the number of items or questions included in the survey, the calculation of the scores, and the scale of measurement of data obtained from the instrument. You must also obtain all appropriate use permissions from instrument authors. If you are developing

your own instrument, describe in detail the process used to develop the instrument, how the validity and reliability of the instrument was established, and the characteristics of the instrument as described above. You must describe the Pilot Test or Field Test that you performed to ensure that there is no bias in your questions or instrument.

INSTRUMENTATION OR SOURCES OF DATA	
This section identifies and describes the types of data that were collected as well as the specific instruments and sources used to collect those data. For quantitative studies it also describes the specific type of scale of measurement used in an instrument or used to define the different groups. (Minimum one to three pages)	
Data Collection Instruments: Provides a detailed discussion of the instrumentation and data collection, which includes validity and reliability of the data. Includes citations from original publications by instrument developers (and subsequent users as appropriate).	
Data Collection Instruments: Describes the structure of each data collection instrument and data sources (tests, questionnaires, interviews, observations data bases, media, etc.). Specifies the type and level of data collected with each instrument.	

Validity

This section describes and defends the procedures used to determine the validity of the data collected. Validity refers to the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure. Ask if what is actually being measured is what was set out to be measured. As a researcher, you must be concerned with both external and internal validity. External validity refers to the extent to which the results of the study are generalizable (quantitative) or transferable (qualitative) to the population. Internal validity refers to the rigor with which the study was conducted (study design, theory instrumentation, measurements, etc.). For this section, provide specific validity statistics for quantitative instruments, identifying how they were

developed. Explain specific approaches on how validity will be addressed for qualitative data collection approaches.

VALIDITY	
This section describes and defends the procedures used to determine the validity of the data collected appropriate to the methodology conducted. (Minimum two to four paragraphs or approximately one page)	
<p>Quantitative Studies: Provides specific validity statistics for quantitative instruments, identifying how they were developed. Validated surveys cannot be used in part or adapted. Validated instruments borrowed by the learner must be included in the proposal/dissertation appendices as a pdf or jpeg document along with the learner’s word file of his/her version of the instrument (whose content should be identical with that of the original pdf). NOTE: <i>Learners should not modify or develop quantitative instruments without permission from the Director of Dissertations.</i></p> <p>Qualitative Studies: Establishes validity to ensure the data that is collected is true and certain. Processes include collection of multiple sources of data; triangulation; member checking; quasi-statistics; review of data analysis by others; expert panel review of developed instruments; and/or practicing interviews and observations.</p>	
<p>Appendices must include copies of instruments, qualitative data collection protocols, codebooks, and permission letters from instrument authors (for validated instruments, surveys, interview guides, etc.)</p>	

Reliability

This section describes and defends the procedures used to determine the reliability of the data collected. Reliability is the extent to which an experiment, test, or any measuring procedure is replicable and yields the same result with repeated trials. For this section, provide specific reliability statistics for quantitative instruments, identifying how the statistics were developed. Explain specific approaches on how reliability will be addressed for qualitative data collection approaches.

RELIABILITY	
This section describes and defends the procedures used to determine the reliability of the data collected appropriate to the methodology conducted. (Minimum two to four paragraphs or approximately one page)	
<p>Quantitative Studies: Provides specific reliability statistics for quantitative instruments, identifying how the statistics were developed. Explains specific approaches on how reliability will be addressed for qualitative data collection approaches.</p> <p>Qualitative Studies: Establishes consistency and repeatability of data collection through in-depth documented methodology; detailed interview/observation/data collection protocols and guides; creation of research data-base; and/or use of triangulation.</p>	

Data Collection and Management

This section details the entirety of the process used to collect the data. Describe the step-by-step procedures used to carry out all the major steps for data collection for the study in a way that would allow another researcher to replicate the study. Think of this section of Chapter 3 as a recipe, that you need to carefully follow in order to produce the best possible study results (or “entrée”).

If you were to insert a table in this section, for any reason, set it up as shown below. Refer to Table 1 on page 29 for formatting instructions.

Table 2

t Test for Equality of Emotional Intelligence Mean Scores by Gender

<i>t</i> test for Equality of Means			
	<i>t</i>	<i>df</i>	<i>p</i>
EI	1.908	34	.065

DATA COLLECTION AND MANAGEMENT	
This section details the entirety of the process used to collect the data. It describes each step of the data collection process in such a way that another researcher could replicate the study. (Minimum one to three pages)	
<p>Quantitative Studies: Describes the procedures for the actual data collection that would allow replication of the study by another researcher, including how each instrument or data source was used, how and where data were collected, and recorded. Includes a linear sequence of actions or step-by-step of procedures used to carry out all the major steps for data collection. Includes a workflow and corresponding timeline, presenting a logical, sequential, and transparent protocol for data collection that would allow another researcher to replicate the study.</p> <p>Qualitative Studies: Provides detailed description of data collection process that would allow replication of the study by another researcher, including all sources of data and methods used, such as interviews, member checking, observations, surveys, and expert panel review. Note: The collected data must be sufficient in breadth and depth to answer the research question(s) and interpreted and presented correctly, by theme, research question and/or instrument.</p>	
Describes the procedures for obtaining informed consent and for protecting the rights and well-being of the study sample participants.	
Describes (for both paper-based and electronic data) the data management procedures adopted to maintain data securely, including the length of time data will be kept, where it will be kept, and how it will be destroyed.	

Data Analysis Procedures

This section provides a step-by-step description of the procedures to be used to conduct the data analysis. The key elements of this section include the process by which you prepared raw data for analysis and then subsequently analyzed that data. Overall, be sure that the language used to describe the data analysis procedure is consistently used in Chapters 4 and 5.

Here is an example of a figure:

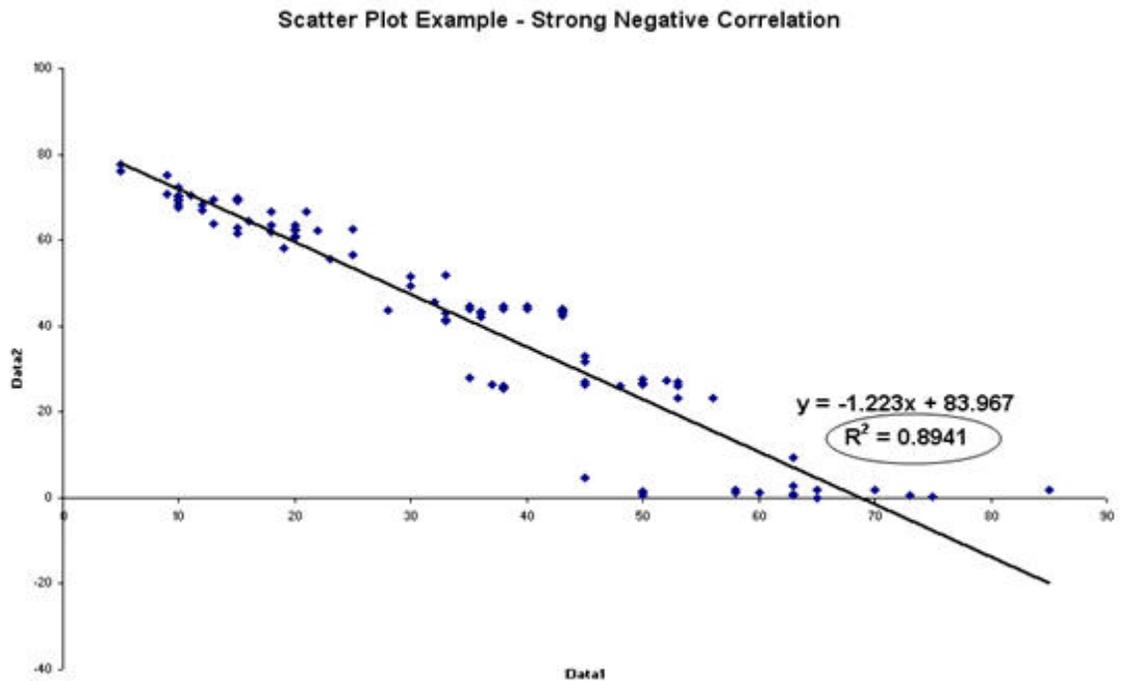


Figure 1. Correlation for SAT composite score and time spent on facebook.

DATA ANALYSIS PROCEDURES	
This section describes how the data were collected for each variable or group (quantitative study) or for each research question (qualitative study). It describes the type of data analyzed, identifying the descriptive, thematic, inferential, and/or non-statistical analyses. This section demonstrates that the research analysis is aligned to the specific research design. (Minimum one to three pages)	
Lists the research question(s). Also includes the null and alternative hypotheses for quantitative studies.	
Describes in detail the relevant data collected for each stated research question and/or each variable within each hypothesis (if applicable).	
Describes in detail the data management practice including how the raw data was organized and prepared for analysis, i.e., ID matching of respondents who may respond to more than one survey/instrument, coding/recoding of variables, treatment of missing values, scoring, calculations, etc.	
What: Describes, in detail, statistical and non-statistical analysis to be used and procedures used to conduct the data analysis.	
Why: Provides the justification for each of the (statistical and non-statistical) data analysis procedures used in the study.	
How: Demonstrates how the statistical and non-statistical data analysis techniques align with the research questions/design.	
Qualitative Analysis - evidence of qualitative analysis approach, such as coding and theming process, must be completely described and include the analysis /interpretation process.	
Provides evidence that quantity and quality of data is sufficient to answer the research questions. This must be present in this section or in an appendix including data samples.	

Ethical Considerations

This section should demonstrate adherence to the key principles of the Belmont Report (respect, justice and beneficence) in the study design, sampling procedures, and within the theoretical framework, research problem, and questions. You should clearly discuss how your data will be stored, safeguarded, and destroyed, as well as how the

results of the study will be published. This section should also reference IRB approval to conduct the research, which includes subject recruiting and informed consent processes, in regard to the voluntary nature of study. Finally, the IRB approval letter with the protocol number, informed consent/subject assent documents, site authorization letter(s), or any other measures required to protect the participants or institutions, must be included in an appendix.

ETHICAL CONSIDERATIONS	
<p>This section discusses the potential ethical issues surrounding the research as well as how human subjects and data will be protected. It identifies how any potential ethical issues have been and will be addressed. (Minimum three to four paragraphs or approximately one page)</p>	
Provides a discussion of ethical issues related to the study and the sample population of interest.	
Describes the procedures for obtaining informed consent and for protecting the rights and well-being of the study sample participants.	
Addresses anonymity, confidentiality, privacy, strategies to prevent coercion, and any potential conflict of interest.	
<p>Describes the data management procedures adopted to store and maintain paper and electronic data securely, including the length of time data will be kept, where it will be kept, and how it will be destroyed.</p> <p><i>Note: Learners are required to securely maintain and have access to raw data/records for a minimum of three years. The learner must provide all evidence of data including source data, Excel files, interview transcripts, evidence of coding or data analysis, or survey results etc. No dissertation will be allowed to move forward in the review process if data are not produced upon request.</i></p>	
Includes copy of IRB Informed Consent (Proposal) and IRB Approval letter (Dissertation) in an Appendix.	

Limitations and Delimitations

While Chapter 1 addresses the broad, overall limitations of the study, this section discusses, in detail, the limitations related to the research methodology and design and potential impacts on the results. The section also describes any limitations related to the methods, sample, instrumentation, data collection process and analysis. Other methodological limitations of the study may include issues with regard to the sample in terms of size, population and procedure, instrumentation, data collection processes, and data analysis. This section also contains an explanation of why the existing limitations are unavoidable and are not expected to affect the results negatively.

LIMITATIONS AND DELIMITATIONS	
This section discusses in detail the limitations and delimitations related to the research methodology and design and potential impacts on the results. (Minimum two to three paragraphs)	
Describes any limitations and delimitations related to the methodology, sample, instrumentation, data collection process and analysis. Explains why the existing limitations are unavoidable. Note: This section must be updated as limitations emerge in the data collection/analysis, and then incorporated in Chapter 5 the limitations overall and how the study results were affected.	
Presents strategies to minimize and/or mitigate the negative consequences of limitations and delimitations.	

Summary

This section restates what was written in Chapter 3 and provides supporting citations for key points. Your summary should demonstrate an in-depth understanding of the overall research design and analysis techniques. The Chapter 3 summary ends with a discussion that transitions the reader to Chapter 4.

CHAPTER 3 SUMMARY	
This section restates what was written in Chapter 3 and provides supporting citations for key points. It then provides a transition discussion to Chapter 4. (Minimum one to two pages)	
Summarizes key points presented in Chapter 3 using authoritative, empirical sources/citations.	
Presents alignment of the 10 strategic points, illustrating how the research questions align with the problem statement, methodology, design, instrumentation, data collection, procedures and data analysis approach.	
Demonstrates in-depth understanding/mastery of the overall research methodology, design and data analysis techniques.	
Ends Chapter 3 with a transition discussion to focus for Chapter 4.	
The Chapter is correctly formatted to dissertation template using the Word Style Tool and APA standards. Writing is free of mechanical errors.	
All research presented in the Chapter is scholarly, topic-related, and obtained from highly respected academic, professional, original sources. In-text citations are accurate, correctly cited and included in the reference page according to APA standards.	
Section is written in a way that is well structured, has a logical flow, uses correct paragraph structure, uses correct sentence structure, uses correct punctuation, and uses correct APA format.	

Chapter 4: Data Analysis and Results

Introduction

The purpose of this chapter is to summarize the collected data, how it was analyzed and then to present the results. This section of Chapter 4 briefly restates the problem statement, the methodology, the research question(s), hypothesis(es) or phenomena, and then offers a statement about what will be covered in this chapter. Chapter 4 should present the results of the study as clearly as possible, leaving the interpretation of the results for Chapter 5. **Make sure your dissertation is changed to past tense and reflects how the study was *actually conducted*.**

This chapter typically contains the analyzed data, often presented in both text and tabular, or figure format. To ensure readability and clarity of findings, structure is of the utmost importance in this chapter. Sufficient guidance in the narrative should be provided to highlight the findings of greatest importance for the reader. Most researchers begin with a description of the sample and the relevant demographic characteristics presented in text or tabular format. Ask the following general questions before starting this chapter:

1. Is there sufficient data to answer each of the research question(s)/hypothesis(es) asked in the study?
2. Is there sufficient data to support the conclusions made in Chapter 5?
3. Is the study written in the third person? Never use the first person.
4. Are the data clearly explained using a table, graph, chart, or text?

Visual organizers, including tables and figures, must always be introduced, presented and discussed within the text first. Never insert them without these three steps. It is often best to develop all the tables, graphs, charts, etc. before writing any text to

further clarify how to proceed. Point out the salient results and present those results by table, graph, chart, or other form of collected data.

INTRODUCTION (TO THE CHAPTER) (Minimum two to four paragraphs or approximately one page)	
Reintroduces the purpose of the research study.	
Briefly describes the research methodology and/or research questions/hypotheses tested.	
Provides an orienting statement about what will be covered in the chapter.	

Descriptive Findings

This section of Chapter 4 provides a narrative summary of the population or sample characteristics and demographics of the participants in the study. It establishes the number of subjects, gender, age, education level or employee classification, (if appropriate), organization, or setting (if appropriate), and other appropriate sample characteristics (e.g., education level, program of study, employee classification, etc.). The use of graphic organizers, such as tables, charts, histograms and graphs to provide further clarification and promote readability, is encouraged to organize and present coded data. Ensure this data cannot lead to anyone identifying individual participants in this section or identifying the data for individual participants in the data summary and data analysis that follows.

For numbers, equations, and statistics, spell out any number that begins a sentence, title, or heading – or reword the sentence to place the number later in the narrative. In general, use Arabic numerals (10, 11, 12) when referring to whole numbers 10 and above, and spell out whole numbers below 10. There are some exceptions to this rule:

- If small numbers are grouped with large numbers in a comparison, use numerals (e.g., 7, 8, 10, and 13 trials); but, do not do this when numbers are used for different purposes (e.g., 10 items on each of four surveys).
- Numbers in a measurement with units (e.g., 6 cm, 5-mg dose, 2%).
- Numbers that represent time, dates, ages, sample or population size, scores, or exact sums of money.
- Numbers that represent a specific item in a numbered series (e.g., Table 1).

A sample table in APA style is presented in Table 1. Be mindful that all tables fit within the required margins, and are clean, easy to read, and formatted properly using the guidelines found in Chapter 5 (Displaying Results) of the *APA Publication Manual 6.0* (2010).

Table 1

Correct Formatting for a Multiple Line Table Title is Single Spacing and Should Look Like this Example

Variable	Column A <i>M (SD)</i>	Column B <i>M (SD)</i>	Column C <i>M (SD)</i>
Row 1	10.1 (1.11)	20.2 (2.22)	30.3 (3.33)
Row 2	20.2 (2.22)	30.3 (3.33)	20.2 (2.22)
Row 3	30.3 (3.33)	10.1 (1.11)	10.1 (1.11)

Note. Adapted from “Sampling and Recruitment in Studies of Doctoral Students,” by I.M. Researcher, 2010, *Journal of Perspicuity*, 25, p. 100. Reprinted with permission.

DESCRIPTION OF THE SAMPLE (Number of pages as needed)	
<p>Provides a narrative summary of the population or sample characteristics and demographics.</p> <p><u>Quantitative Studies:</u> Presents the "Sample (or Population) profile," using statistics for the demographics collected from or retrieved for the actual sample or population.</p> <p>If the actual sample is smaller than the <i>a priori</i> sample, the learner must discuss consequences (e.g., limitations, change of statistical analysis procedures, possibly even change of design).</p> <p>The second section of Descriptive Data should be "Descriptive statistics for the variables of interest" (analyzed to answer the RQs). For composite continuous variables, reliability coefficients computed on the study data precede the descriptive statistics and have to be compared with coefficients reported by instrument authors and prior users. Low reliability (< 0.7) may require changes in design and analysis (dropping variables with unreliable data). In case of changes of statistical analysis that became necessary during the computation of descriptive statistics, the learner will present and justify the new statistical procedures.</p> <p><u>Qualitative Studies:</u> Presents the "Sample (or Population) profile," using statistics for the demographics collected from or retrieved for the actual sample or population.</p>	
<p>Includes a narrative summary of data collected (e.g., for qualitative studies, samples of collected data should be included in an Appendix.)</p>	
<p>Uses visual graphic organizers, such as tables, histograms, graphs, and/or bar charts, to effectively organize and display coded data and descriptive data. For example:</p> <p><u>Quantitative Studies:</u> sample-level frequencies and descriptive or graphic comparisons of study-relevant groups. If the intended analysis involves parametric procedures, tests of assumptions are required to evaluate sample distribution (skewness and kurtosis data and charts) normality and homogeneity of variance. If nonparametric procedures are used, justification must be provided.</p> <p><u>Qualitative Studies:</u> Discuss and provide a table showing number of interviews conducted, duration of interviews, #pages transcript; # observations conducted, duration, #pages of typed-up field notes, #</p>	

of occurrences of a code, network diagrams, model created, etc.	
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Data Analysis Procedures

This section presents a description of the process that was used to analyze the data. If hypotheses or research question(s) guided the study, data analysis procedures can be framed relative to each research question or hypothesis. Data can also be organized by chronology of phenomena, by themes and patterns, or by other approaches as deemed appropriate according for a qualitative study.

<p>DATA ANALYSIS PROCEDURES</p> <p>This section presents a description of the process that was used to analyze the data. If hypotheses or research question(s) guided the study, data analysis procedures can be framed relative to each research question or hypothesis. For a qualitative study, data can also be organized by chronology of phenomena, by themes and patterns, or by other approaches as deemed appropriate. (Number of pages as needed)</p>	
<p>Describes in detail the data analysis procedures.</p> <p><u>Qualitative Studies:</u> Coding procedures must be tailored to the specific analytical approach; they are not generic.</p> <p>Start discussion of data analysis procedures by identifying and describing the analytical approach (e.g., thematic analysis, Phenomenological analysis).</p> <p>Describes coding process, description of how codes were developed, how categories were developed, how these are related to themes. Provide examples of codes and themes with corresponding quotations, demonstrating how codes were developed into themes. Provides evidence of initial and final codes and themes in text or an Appendix.</p> <p><u>Quantitative Studies:</u> The preparation of the data file ought to be presented BEFORE the Descriptive Findings. If the analysis is run as planned, the learner will present the results of the statistical procedures per RQ. If the analysis had to be changed, the learner will present the results of the new procedure(s) per RQ. No analyses unrelated to the RQs are allowed. Results tables have to be included in text. For each question, the learner will comment on the relevant statistics and will draw a conclusion in terms of accepting the null or the alternative hypothesis stated for that question. It is possible that a single statistical procedure may generate the statistics needed to answer multiple</p>	

RQs—in that case, the learner will present the analysis results, with appropriate table(s), and then state and answer the RQs in due order.	
Explains and justifies any differences in why data analysis section does not match what was approved in Chapter 3 (if appropriate). Quantitative Studies: Changes in the analysis have to be justified earlier (as recommended above). In a rubric, the order of evaluation criteria is not important, BUT in the TEMPLATE, it is very important (changes may have to be made at different points in data processing for different reasons).	
Provides validity and reliability of the data in statistical terms for quantitative research OR describes approaches used to ensure validity and reliability for qualitative data including expert panel review of questions, practice interviews, member checking, and triangulation of data, as appropriate.	
Identifies sources of error, missing data, or outliers and potential effects on the data. Discuss the limitations this places on the study results.	
Describe Power Analysis and Test(s) of Assumptions (as appropriate) for statistical tests.	
Quantitative Studies: Justifies how the analysis aligns with the research question(s) and hypothesis(es) and is appropriate for the research design. Qualitative Studies: Justifies how the analysis aligns with the research question(s), and how data and findings were organized by chronology of phenomena, by themes and patterns, or by other approaches as deemed appropriate.	

Results

This section, which is the primary section of this chapter, presents a summary and analysis of the data in a nonevaluative, unbiased, organized manner that relates to the research question(s) and/or hypothesis(es). List the research question(s) as they are discussed to ensure that the readers see that the question has been addressed. Answer the research question(s) in the order that they are listed for quantitative studies. Learners can organize data in several different ways for qualitative studies including: by research

question, by themes and patterns, or by other approaches deemed appropriate for the study.

The results must be presented without implication, speculation, assessment, evaluation, or interpretation. Discussion of results and conclusions are left for Chapter 5. Refer to the APA Style Manual for additional lists and examples. In quantitative dissertations, it is not required for all data analyzed to be presented; however, it is important to provide descriptive statistics and the results of the applicable statistical tests used in conducting the analysis of the data. It is also important that there are descriptive statistics provided on all variables. Nevertheless, it is also acceptable to put most of this in the appendix if the chapter becomes too lengthy.

Required components include descriptive and inferential statistics. Descriptive statistics describe or summarize data sets using frequency distributions (e.g., to describe the distribution for the test scores in a class of 30 pupils) or graphical displays such as bar graphs (e.g., to display increases in a school district's budget each year for the past five years), as well as histograms (e.g., to show spending per child in school and display mean, median, modes, and frequencies), line graphs (e.g., to display peak scores for the classroom group), and scatterplots (e.g., to display the relationship between two variables). Descriptive statistics also include numerical indexes such as averages, percentile ranks, measures of central tendency, correlations, measures of variability and standard deviation, and measures of relative standing.

Inferential statistics describe the numerical characteristics of data and then go beyond the data to make inferences about the population based on the sample data. Inferential statistics also estimate the characteristics of populations and test hypotheses

about population parameters using sampling distributions, estimation, or hypothesis testing. Table 2 presents example results of an independent t test comparing Emotional Intelligence (EI) mean scores by gender.

Table 2.

Equality of Emotional Intelligence Mean Scores by Gender

<i>t</i> test for Equality of Means			
	<i>t</i>	<i>df</i>	<i>p</i>
EI	1.908	34	..065

For qualitative studies, it is important to provide a complete picture of the constant comparative analysis conducted or of the coding pursued to arrive at a set of themes or conclusions about the subject. In qualitative studies, if thematic analysis is used, the questions to ask include the following:

1. What themes occur in interviews and field notes?
2. Does the study provide samples that the themes exist by using interviews or field notes?
3. What topics were mentioned most often?
4. What issues were most important to the people in the study?
5. How do the participants view the topic of research?
6. What kinds of relationships are apparent? (e.g., strict inclusion, cause-effect, function, sequence)?
7. How can the categories identified in the data be ordered into meaningful, grounded theories?

After completing the first draft of Chapter 4, ask these general questions:

1. Are the findings clearly presented, so any reader could understand them?
2. Are all the tables, graphics or visual displays well-organized and easy to read?
3. Are the important data described in the text?

4. Is factual data information separate from analysis and evaluation?
5. Are the data organized by research questions?

Chapter 4 can be challenging regarding mathematical equations and statistical symbols or variables. When including an equation in the narrative, space the equation as one would words in a sentence: $x + 5 = a$. Punctuate equations that are in the paragraph, as one would a sentence. Remember to italicize statistical and mathematical variables, except Greek letters, and if the equation is long or complicated, set it off on its own line.

Refer to the APA manual for specific details on representation of statistical information.

Basic guidelines include:

- Statistical symbols are italicized (t , F , N , n)
- Greek letters, abbreviations that are not variables and subscripts that function as identifiers use standard typeface, no bolding or italicization
- Use parentheses to enclose statistical values ($p = .026$) and degrees of freedom $t(36) = 3.85$ or $F(2, 52) = 3.85$
- Use brackets to enclose limits of confidence intervals 95% CIs [- 5.25, 4.95]

Make sure to include appropriate graphics to present the results. Always *introduce*, *present*, and *discuss* the visual organizers in narrative form. Never insert a visual organizer without these three steps.

A figure is a graph, chart, map, drawing, or photograph. Below is an example of a figure labeled per APA style. Do not include a figure unless it adds substantively to the understanding of the results or it duplicates other elements in the narrative. If a figure is used, a label must be placed under the figure. As with tables, refer to the figure by number in the narrative preceding the placement of the figure. Make sure a table or figure

is not split between pages. Below is another example of a table that the characteristics of a servant leader.

Table 3.

The Servant Leader

Trait	Descriptors
Values People	By believing in people By serving other's needs before his or her own By receptive, non-judgmental listening
Develops People	By providing opportunities for learning and growth By modeling appropriate behavior By building up others through encouragement and affirmation
Builds Community	By building strong personal relationships By working collaboratively with others By valuing the differences of others
Displays Authenticity	By being open and accountable to others By a willingness to learn from others By maintaining integrity and trust
Provides Leadership	By envisioning the future By taking initiative By clarifying goals
Shares Leadership	By facilitating a shared vision By sharing power and releasing control By sharing status and promoting others

Note. Derived from Laub, J. (1999). *Assessing the servant organization: Development of the servant organizational leadership assessment (SOLA) instrument* (Doctoral Dissertation). Available from ProQuest Dissertation and Theses Database. (UMI No. 9921922)

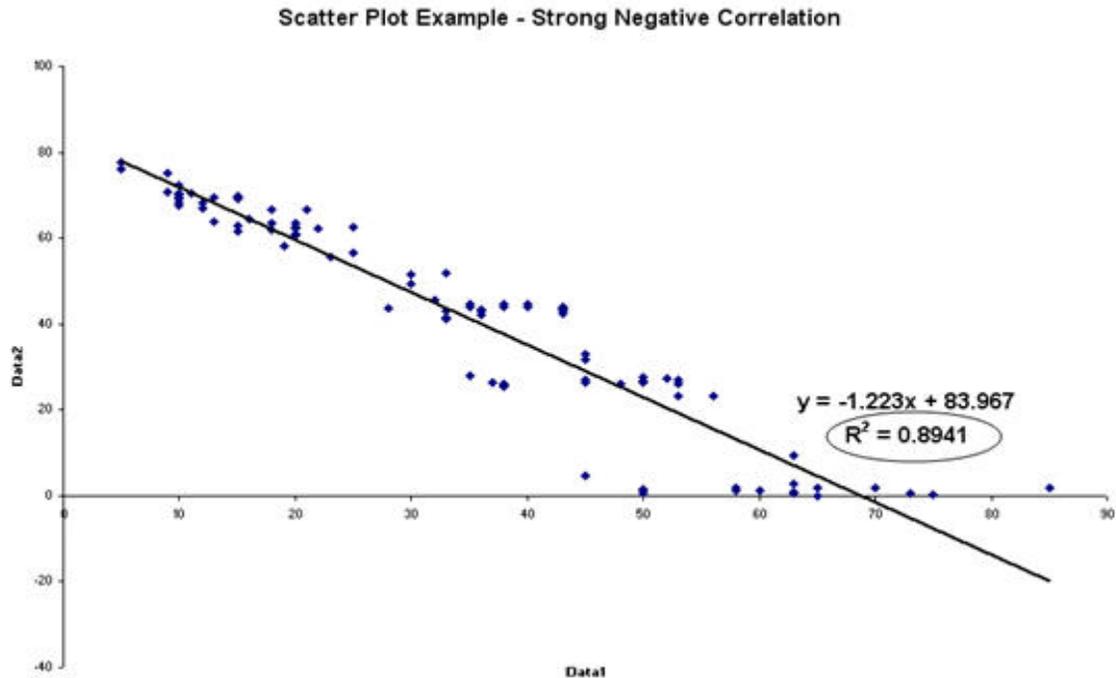


Figure 2. Correlation of SAT composite score and time spent on Facebook.

<p>RESULTS</p> <p>This section, which is the primary section of this chapter, presents an analysis of the data in a non-evaluative, unbiased, organized manner that relates to the research question(s) and/or hypotheses. List the research question(s) as you are discussing them in order to ensure that the readers see that the question has been addressed. Answer the research question(s) in the order that they are listed. (Number of pages as needed)</p>	
<p>Data and the analysis of that data are presented in a narrative, non-evaluative, unbiased, organized manner.</p> <p>Quantitative data are organized by research question and/or hypothesis. Findings are presented by hypothesis using section titles. They are presented in order of significance if appropriate.</p> <p>Qualitative data may be organized by theme, participant and/or research question.</p> <p>Qualitative Studies: Results of analysis are presented in appropriate narrative, tabular, graphical and/or visual format. If using thematic analysis, coding and theming process must be completely described in the results presentation. Integration of quotes in the results presentation to substantiate the stated findings and build a narrative picture is required. Data analysis should include narrative story for narrative analysis;</p>	

<p>case study summary for case study; model or theory for grounded theory.</p> <p>Learner describes thematic findings mostly in own words in narrative form as if they are telling their story or summarizing their experiences, and then use selected quotes (ideally one or few sentences, no longer than one paragraph) to illustrate.</p>	
<p>Includes appropriate graphic organizers such as tables, charts, graphs, and figures.</p> <p><u>Quantitative Studies:</u> Results of each statistical test are presented in appropriate statistical format with tables, graphs, and charts.</p> <ul style="list-style-type: none"> • Tables and/or figures are included for descriptive findings. • Tables and/or figures are included for assumption checks. • Tables and/or figures are included for and results. <p><u>Qualitative Studies:</u> As appropriate, tables are presented for initial codes, themes and theme meanings, along with sample quotes.</p>	
<p>Sufficient quantity and quality of the data or information appropriate to the research design is presented in the analyses to answer the research question(s) and or hypotheses. Evidence for this must be clearly presented in this section and in an appendix as appropriate.</p> <p><u>Quantitative Studies:</u></p> <ul style="list-style-type: none"> • Discuss quantity in relation to the actual sample (or population) size, • Discuss quality in relation to sampling method, data collection process, and data completion/accuracy. <p>Note: Dissertation Chair may request to review raw data at any time during the writing process. Additional data collection may be required if sufficient data is not present.</p>	
<p><u>Quantitative Studies:</u></p> <ul style="list-style-type: none"> • <u>Inferential statistics</u>, require tests of normality, tests of assumptions, test statistics and <i>p</i>-value reported for each hypothesis. • <u>Control variables</u> (if part of the design) are reported and discussed. • <u>Secondary data</u> treatment of missing values is fully described. • <u>Outlier responses</u> are explained as appropriate. 	

<p><u>Qualitative Studies:</u></p> <ul style="list-style-type: none"> • <u>Qualitative data analysis</u> is fully described and displayed using techniques specific to the design and analytic method used. • <u>Data sets</u> are summarized including counts AND examples of participant's responses for thematic analysis. For other approaches to qualitative analysis, results may be summarized in matrices or visual formats appropriate to the form of analysis. • <u>Outlier responses</u> are explained as appropriate. <p><u>Findings</u> may be presented as themes using section titles for thematic analysis, as stories for narrative designs, as models or theories for grounded theory, and as visual models or narrative stories for case studies.</p>	
<p>Appendices must include qualitative or quantitative data analysis that supports results in Chapter 4 as appropriate (i.e. source tables for t test/ANOVA; or coding and theming process or codebook, if not included directly in Chapter 4).</p>	

Summary

This section provides a concise summary of what was found in the study. It briefly restates essential data and data analysis presented in this chapter, and it helps the reader see and understand the relevance of the data and analysis to the research question(s) or hypothesis(es). Finally, it provides a lead or transition into Chapter 5, where the implications of the data and data analysis relative to the research question(s) and/or hypothesis(es) will be discussed. The summary of the data must be logically and clearly presented, with the information separated from interpretation. For qualitative studies, summarize the data and data analysis results in relation to the research question(s). For quantitative studies, summarize the statistical data and results of statistical tests in relation to the research question(s)/hypothesis(es). Finally, provide a concluding section and transition to Chapter 5.

<p>SUMMARY</p> <p>This section provides a concise summary of what was found in the study. It briefly restates essential data and the data analysis presented in this chapter, and it helps the reader see and understand the relevance of the data and analysis to the research questions or hypotheses. Finally, it provides a lead or transition into Chapter 5 where the implications of the data and data analysis relative to the research questions and/or hypotheses will be discussed. (Minimum one to two pages)</p>	
<p>Presents a clear and logical summary of data.</p>	
<p>Quantitative Studies: Summarizes the statistical data and results of statistical tests in relation to the research questions/hypotheses.</p> <p>Qualitative Studies: Summarizes the data and data analysis results in relation to the research questions. Summarizes data across research questions for case studies, narratives, and grounded theory.</p>	
<p>Discusses limitations that emerged based on data analysis and how the interpretation of results may be affected by the limitations. Data limitations are added to Chapters 1, 3, 5 and discussed as appropriate.</p>	
<p>Provides a concluding section and transition to Chapter 5.</p>	
<p>The Chapter is correctly formatted to dissertation template using the Word Style Tool and APA standards. Writing is free of mechanical errors.</p>	
<p>All research presented in the Chapter is scholarly, topic-related, and obtained from highly respected academic, professional, original sources. In-text citations are accurate, correctly cited and included in the reference page according to APA standards.</p>	
<p>Section is written in a way that is well structured, has a logical flow, uses correct paragraph structure, uses correct sentence structure, uses correct punctuation, and uses correct APA format.</p>	

Chapter 5: Summary, Conclusions, and Recommendations

Introduction and Summary of Study

This section introduces Chapter 5 as a comprehensive summary of the study framework including a recap of the essential 10 strategic points of Chapters 1-3. It reminds the reader of the importance of the topic and briefly explains how the study intended to contribute to the body of knowledge on the topic. It further reminds the reader of the research question(s) and illustrates how the **data analysis** approach (not findings) reported in Chapter 4 aligns to answering the research questions. It informs the reader that conclusions, implications, and recommendations will be presented.

Chapter 5 is perhaps the most important chapter in the dissertation manuscript because it presents the researcher's contribution to the body of knowledge. For many who read research literature, this may be the only chapter they will read. Chapter 5 typically begins with a summary of the essential points made in Chapters 1 and 3 of the original research proposal and includes why this topic is important and how this study was designed to contribute to the understanding of the topic. The remainder of the chapter contains a summary of the overall study, a summary of the findings and conclusions, recommendations for future research and practice, and a final section on implications derived from the study.

No new data should be introduced in Chapter 5; however, references should be made to findings or citations presented in earlier chapters. The researcher can articulate new frameworks and new insights. The concluding words of Chapter 5 should emphasize both the most important points of the study, study strengths and weaknesses, and

directions for future research. This should be presented in the simplest possible form, making sure to preserve the conditional nature of the insights.

INTRODUCTION and SUMMARY OF STUDY	
This section introduces Chapter 5 as a comprehensive summary of the entire study. It reminds the reader of the importance of the topic and briefly explains how the study intended to contribute to the body of knowledge on the topic. It informs the reader that conclusions, implications, and recommendations will be presented. (Minimum two to four paragraphs or approximately one page)	
Provides a comprehensive summary of the study framework including a recap of the 10 strategic points.	
Reminds the reader of the research questions and how the reported data analysis (<i>not findings</i>) align to answering the research questions.	
Provides an overview of why the study is important and how the study was designed to contribute to our understanding of the topic.	
Provides a transition, explains what will be covered in the chapter and reminds the reader of how the study was conducted.	

Summary of Findings and Conclusion

This section of Chapter 5 is organized by research question(s)/hypothesis(es), and it conveys the specific findings of the study. The section presents conclusions made based on the data analysis and findings of the study and relates the findings back to the literature, significance of the study in Chapter 1, Advancing Scientific Knowledge in Chapter 1. Significant themes/ findings are compared and contrasted, evaluated, and discussed in light of the existing body of knowledge. The significance of every finding is analyzed and related to the significance section and advancing scientific knowledge section of Chapter 1. Additionally, the significance of the findings is analyzed and related back to Chapter 2 and ties the study together. The findings are bounded by the research study parameters described in Chapters 1 and 3, are supported by the data and theory, and directly relate to the research question(s). No unrelated or speculative information is

presented in this section. This section of Chapter 5 should be organized by research question(s), hypothesis(es), theme, or any manner that allows summarizing the specific findings supported by the data and the literature. Conclusions represent the contribution to knowledge and fill in the gap in the knowledge. They should also relate directly to the significance of the study. The conclusions are major generalizations, and an answer to the research problem developed in Chapters 1 and 2. This is where the study binds together. In this section, personal opinion is permitted, as long as it is backed with the data, grounded in the research methods and supported in the literature.

SUMMARY OF FINDINGS AND CONCLUSIONS	
This section is organized by research question/hypothesis, and it conveys the specific findings of the study. It presents all conclusions made based on the data analysis and findings of the study. It relates the findings back to the literature, referring to the literature discussed in the Advancing Scientific Knowledge section and the Significance of the Study section in Chapter 1. It also discusses the significant themes and findings relative to the body of knowledge covered throughout Chapter 2. (Minimum three to five pages)	
Organizes Chapter 5 using the same section titles as Chapter 4, by research question(s)/hypothesis(es) or by themes. Significant themes/ findings are compared and contrasted, synthesized and discussed in light of the existing body of knowledge covered in Chapter 2	
Summarizes study findings. Compares, contrasts and synthesizes study findings in context to prior research on the topic (Chapter 2). Provides a cogent discussion on how the study is aligned to and/or advances the research on the topic.	
Illustrates that findings are bounded by the research study design described in Chapters 1, 2 and 3.	
Illustrates how findings are supported by the data and theory, and how the findings directly align to and answer the research question(s).	
Discusses significance (or no significance) of findings and relates each of the findings directly to the Significance of the Study section and Advancing Scientific Knowledge section of Chapter 1.	
Refrains from including unrelated or speculative information in this section.	
Provides a conclusion to summarize the findings, referring back to Chapter 1, and tying the study together.	

Implications

This section should describe what could happen because of this research. It also tells the reader what the research implies theoretically, practically, and for the future. Additionally, it provides a retrospective examination of the theoretical framework presented in Chapter 2 considering the dissertation's findings. A critical evaluation of the strengths and weaknesses of the study and the degree to which the conclusions are credible given the methodology, research design, and data, should also be presented. The section delineates applications of new insights derived from the dissertation to solve real and significant problems. Implications can be grouped into those related to theory or generalization, those related to practice, and those related to future research. Separate sections with corresponding headings provide proper organization.

Theoretical implications. Theoretical implications involve interpretation of the dissertation findings in terms of the research question(s) and hypothesis(es) that guided the study. It is appropriate to evaluate the strengths and weaknesses of the study critically and include the degree to which the conclusions are credible given the method and data. It should also include a critical, retrospective examination of the framework presented in the Chapter 2 Literature Review section considering the dissertation's new findings.

Practical implications. Practical implications should delineate applications of new insights derived from the dissertation to solve real and significant problems. These implications refer to how the results of the study can be applied in professional practice.

Future implications. Two kinds of implications for future research are possible: one based on what the study did find or do, and the other based on what the study did *not* find or do. Generally, future research could look at different kinds of subjects in different

kinds of settings, interventions with new kinds of protocols or dependent measures, or new theoretical issues that emerge from the study. Recommendations should be included on which of these possibilities are likely to be most fruitful and why.

Strengths and weaknesses of the study. This section discusses all limitations of the study. Additionally, it critically evaluates the strengths and weaknesses of the study. Finally, it discusses the degree to which the conclusions are credible given the methodology, research design, and data analysis and results.

IMPLICATIONS	
This section should describe what could happen because of this research. It also tells the reader what the research implies theoretically, practically, and for the future. (Minimum one to four pages)	
<u>Theoretical implications.</u> Provides a retrospective examination of the theoretical framework presented in Chapter 2 in light of the dissertation’s findings.	
<u>Theoretical implications.</u> Connects the findings of the study back to the theoretical framework/conceptual framework and the study results are discussed in context to how the results advance a practitioner’s knowledge of that theory, model or concept.	
<u>Practical Implications and Future Implications.</u> Connects the study findings to the prior research discussed in Chapter 2, and develops practical and future implications for research based on new insights derived from the research and how the results advance practitioners knowledge of the topic and how the results may influence future research or practice.	
<u>Strengths and Weaknesses.</u> Indicates all limitations of the study, critically evaluates the strengths and weaknesses of the study, and the degree to which the conclusions are credible given the methodology, research design, and data analysis and results.	

Recommendations

This section allows the learner to add recommendations for future study based on the results of their authentic dissertation research. In this section, summarize the recommendations that result from the study. Each recommendation should be directly linked to a conclusion.

Recommendations or future research. This section should present recommendations for future research, as well as give a full explanation for why each recommendation is being made. Additionally, this section discusses the areas of research that need further examination, or addresses gaps or new research needs the study found. The section ends with a discussion of “next steps” in forwarding this line of research. Recommendations relate back to the study significance and advancing scientific knowledge sections in Chapter 1.

RECOMMENDATIONS FOR FUTURE RESEARCH	
This section should contain a minimum of four to six recommendations for future research as well as a full explanation for why each recommendation is being made. The recommended research methodology/design should also be provided. (Minimum one to two pages)	
Lists a minimum of four to six recommendations for practitioners and for future research.	
Identifies and discusses the areas that need further examination, or that will address gaps or needs the study found.	
Provides recommendations that relate back to the study significance and advancing scientific knowledge sections in Chapter 1 and theoretical foundation section in Chapter 2	

Recommendations or future practice. This section outlines recommendations for future practice based on the results and findings of the study, as well as, a full explanation for why each recommendation is being made. It provides a discussion of who will benefit from reading and implementing the results of the study and presents ideas based on the results that practitioners can implement in the work or educational setting. Unrelated or speculative information that is unsupported by data is clearly identified as such. Recommendations should relate back to the study significance section in Chapter 1.

Lists two to five recommendations for future practice.	
Discusses who will benefit from reading and implementing the results of the study.	
Discusses ideas based on the results that practitioners can implement in the work or educational setting.	
Omits unrelated or speculative information that is not unsupported by data.	
Provides recommendations that relate back to the study significance section in Chapter 1.	
The Chapter is correctly formatted to dissertation template using the <i>Word Style Tool</i> and APA standards. Writing is free of mechanical errors.	
All research presented in the Chapter is scholarly, topic-related, and obtained from highly respected academic, professional, original sources. In-text citations are accurate, correctly cited and included in the reference page according to APA standards.	

References

QUALITY OF SOURCES & REFERENCE LIST For every in-text citation a reference entry exists; conversely, for every reference list entry there is an in-text citation. Uses a range of references including founding theorists, peer-reviewed empirical research studies from scholarly journals, and government/foundation research reports. The majority of all references must be scholarly, topic-related sources published within the last 5 years . Websites, dictionaries, and publications without dates (n.d.) are not considered scholarly sources and should not be cited or present in the reference list. In-text citations and reference list must comply with APA 6th Ed.	
Ensures that for every in-text citation a reference entry exists. Conversely, for every reference list entry there is a corresponding in-text citation. Note: The accuracy of citations and quality of sources must be verified by learner, chair and committee members.	
Uses a range of references including founding theorists, peer-reviewed empirical research studies from scholarly journals, and government /foundation research reports. Note: A minimum of 50 peer-reviewed, empirical research articles are required for the literature review.	
Verifies that 75% of all references are scholarly sources within the last 5 years. The 5 year time frame is referenced at the time of the proposal defense date and at the time of the dissertation defense date. Note: Websites, dictionaries, publications without dates (n.d.), are not considered scholarly sources and should not be cited or present in reference list.	
Avoids overuse of books and dissertations. Books: Maximum of 10 scholarly books that present cutting edge views on a topic, are research based, or are seminal works. Dissertations: Maximum of 5 published dissertations.	
Section is written in a way that is well structured, has a logical flow, uses correct paragraph structure, uses correct sentence structure, uses correct punctuation, and uses correct APA format.	

Barzun, J., & Graff, H. F. (1992). *The Modern researcher: A classic work on research and writing completely revised and brought up to date*. San Diego: Harcourt Brace Jovanovich.

Brands, H. W. (2000). *The first American: the life and times of Benjamin Franklin*. New York: Doubleday.

- Calabrese, R. L. (2006). *The elements of an effective dissertation & thesis: a step-by-step guide to getting it right the first time*. Lanham, MD: Roman & Littlefield Education.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*, 4th edition. Thousand Oaks: Sage Publications, Inc.
- Hacker, D., Somers, N., Jehn, T., & Rosenzweig, J. (2008). *Rules for writers*. Boston, MA: Bedford/St. Martin's.
- Nock, A. J. (1943). *The memoirs of a superfluous man*. New York: Harper & Brothers.
- Publication Manual of the American Psychological Association*. (2010). Washington, DC: American Psychological Association. (6th edition) (ISBN 10: 1-4338-0559-6; ISBN 13: 978-1-4338-0561-5; ISBN 10: 1-4338-0561-8).
- Sprague, J., & Stuart, D. (2000) *The speaker's handbook*, Harcourt College Publishers.
- Squires, D. A., & Kranyik, R. D. (1995). The comer program: changing school culture. *Educational Leadership*, 53(4), 29-32.
- Strunk, W. I., & White, E.B. (1979). *The elements of style*. New York: Macmillan Publishing, Inc.

Appendix A

The Parts of a Dissertation

Use the *Publication Manual of the American Psychological Association*, 6th edition for its dissertation formatting and style guide. A dissertation has three parts: preliminary pages, main text, and supplementary pages. Some preliminary or supplementary pages may be optional or not appropriate to a specific project. The learner should consult with his or her dissertation chair and committee regarding inclusion/exclusion of optional pages.

Preliminary pages. The following preliminary pages precede the main text of the dissertation.

- Title Page
- Author's Name
- Copyright Page (optional)
- Committee and Deans Approval Page
- Learner Signature Page
- Abstract
- Dedication Page (optional)
- Acknowledgements (optional)
- Table of Contents
- List of Tables (if you have tables, a list is required)
- List of Figures (if you have figures, a list is required)

Main text. The main text is divided into five major chapters. Each chapter can be further subdivided into sections and subsections based on the formatting requirements for each college.

- Chapter 1: Introduction to the Study
- Chapter 2: Literature Review
- Chapter 3: Methodology
- Chapter 4: Data Analysis and Results
- Chapter 5: Summary, Conclusions and Recommendations

Supplementary pages. Supplementary pages follow the body text, including reference materials and other required or optional addenda.

- References (required)
- Appendices (required)
 - IRB Approval Letter
 - Informed Consent Form
 - Copies of Instruments and Permission Letters
- Appendices (optional)
 - Data analysis, tables and charts if referenced in Chapter 4
 - Lengthy tables or large figures if referenced in other chapters
 - Photographs, artifacts or media related to study results
- Vitae (optional)
- Glossary (optional)
- List of Abbreviations (optional)

Keep in mind that most formatting challenges are found in the preliminary and supplementary pages. Allocate extra time and attention for these sections to avoid delays in the electronic submission process. Also, as elementary as it may seem, run a complete spell and grammar check of your entire document before submission.

Appendix B
IRB Approval Letter

This is a required Appendix.

Appendix C
Informed Consent

This is a required Appendix.

Appendix D

Copy of Instruments and Permissions Letters to Use the Instruments

This is a required Appendix.