KABARAK UNIVERSITY

INSTITUTE OF POSTGRADUATE STUDIES

REVISED GUIDELINES FOR PREPARING RESEARCH CONCEPT, PROPOSAL, PROJECT /THESIS

2024

Revised Graduate Student Guide

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SECTION ONE
GUIDELINES FOR PREPARING A CONCEPT PAPER

A. Preamble

It will be a mandatory requirement for all Kabarak University postgraduate students to undertake a process of research by writing a concept paper. This process will enable postgraduate students to express their thoughts and ideas in a paper for research consideration before the same is developed into a research proposal. In other words, the aim of the concept paper would be to:

i) lay the foundation and provide a summary for the applied thesis or dissertation writing process
ii) initiate a formal communication between the student and the department postgraduate committee about the intent of one's research study
iii) offer an opportunity for the student to explain his research focus/research interests, and curiosity and receive initial insights into his or her research ideas
iv) provide a clear plan for the student's research process

B. General Information

i) Preliminary pages such as Declaration, Acknowledgement, Operational Definition of Terms, Abstract, Tables and Figures, Recommendation, Copyright, Abbreviations, and Acronyms will not constitute a concept paper.
ii) The concept paper should not be presented in chapters
iii) The concept paper should be three to ten pages
iv) The writing should be double-spaced.
v) The student should formulate research ideas that are really of interest to him or her and research questions that are of appropriate academic inquiry.
vi) Are your research questions actual questions that can be researched through academic means (e.g., library sources, interviews, surveys, etc.), or are they opinions or attitudes that can't be researched?
vii) Ensure that your concept paper employs acceptable and appropriate academic writing jargon. The student should avoid casual journalistic language.

C. Grading and Scoring

i) The process of grading and scoring will be two-fold-concept paper examination and Oral defense.

ii) The process will be determined by individual schools and will be dependent on the nature of the program or the course unit incorporating the writing of the concept paper.

iii) The candidate shall proceed to develop a research proposal after a successful oral defense of one's concept paper at the departmental level.

D. Format of Kabarak University Concept Paper

Kabarak University concept paper should have a maximum of ten pages unless certain specific disciplines demand more pages. While the structure of the concept paper may vary from one academic program or discipline to another, essentially its key elements remain constant. Thus, the main components of the Kabarak University concept paper and their corresponding descriptions will include the following:

S/N	Key components	Description
1.	**Title Page**	▪ Should have a working title of the student's research work ▪ The title should be focused (a stand-alone statement) ▪ The title should describe and summarize the main idea of the research ▪ The title should spell out the variables being investigated and the relationship between the variables ▪ The title's word count should not exceed 20 ▪ The page should include the student's name, Department/School, and the rest of the citation depending on the program the student is enrolled in
2.	**Introduction/Background of the Study**	▪ Offers a brief understanding of the topic and the area of specialization ▪ Offers a summary of how the rest of the concept paper will be presented

		▪ Highlights the research concerns and gaps to be addressed ▪ Provides a descriptive narrative of the research ideas structured from the worldview, regional, and localized perspectives of the topic
3.	**Statement of the Problem/Need of the Study/Purpose**	▪ Explains the overarching argument/claim of the study ▪ Explain the drive or the motivation behind the study (why the researcher is inspired to investigate the research concerns, thus why the research is needed ▪ Explains how the significance of the findings to the problem to be investigated ▪ Offers clear evidence or documentation including concrete data available to buttress the study argument or claims ▪ Endeavours to persuade and intrigue the reader to develop an interest in the research ideas being conceptualized ▪ A focused and crystallized problem will serve as a strong foundation for a strong proposal and the subsequent thesis/project
4.	**Research Objectives**	▪ A broad objective is stated followed by specific ones ▪ Aims to address general and specific areas of the research concerns ▪ Should conform to S.M.A.R.T principle (Specific, Measurable, Attainable, Relevant and Timely)
6.	**Research Questions/Hypothesis**	▪ Outlines key questions the researcher will interrogate ▪ The questions are drawn from theoretical, past research and the tangible needs discussed in preceding sections particularly the statement of the problem. ▪ The research questions should aim to inform the research methodology ▪ The questions should not be composite and in an attainable manner (one should avoid ambiguity)

7.	**Research Methodology**	▪ Describes ways in which the objectives will be achieved during fieldwork/study ▪ Explains the design of the research and the reasons for the choice of the design ▪ Defines target population, categories of data to be collected, and processes of data analysis ▪ Objectives identified in previous sections should relate research methods discussed in this section. ▪ The methodology is presented as an abridged version or a general outline of the methods to be presented in the main research.
8.	**Study Schedule**	▪ Provides timelines and time frames within which certain tasks should be accomplished ▪ Presents a structure or ways of executing different sections of the study within a realistic time frame
9.	**References**	▪ The section presents a list of material cited in the literature review and elsewhere in the Concept Paper.

SECTION TWO

GUIDELINES FOR PREPARING A RESEARCH PROPOSAL

A. Preamble

Research proposals contain many, at times different or varying features dictated by the respective disciplines. The difference gives them discipline peculiarities and/or specialties. However, overall, there are common salient features to all the disciplines. They are four namely:

i) The preliminaries
ii) The main text
iii) The references
iv) Appendices

B. The Preliminaries

These preliminaries include:

i) The Title Page
ii) The Declaration Page
iii) Recommendation Page
iv) Copy right Page
v) Acknowledgement Page
vi) Dedication Page
vii) The Abstract
viii) Table of Contents (Includes References and Appendices at the Bottom)
ix) List of Tables
x) List of Figures
xi) List of Abbreviations and Acronyms
xii) Conceptual and Operational Definition of Terms

Note: *The pagination of the preliminary pages should be Roman numerals. The title page should however not be numbered.*

C. The Body or Main Text

This should contain the chapters in the document. A research proposal should have three chapters with components that mostly include the following in various sequences:

1. Introduction/Context Background of the Problem
2. The Statement of the Problem
3. Objectives of the Study
4. Research Questions/ Hypotheses/Premises
5. Justification of the Study
6. Significance of the Study
7. Scope of the Study
8. Assumptions of the Study
9. Limitation(s) and/or Delimitation(s) of the Study
10. Literature Review
11. Theoretical Framework (Where Applicable)
12. Conceptual Framework
13. Methodology

D. The References

General Information

- Use the latest APA (American Psychological Association) Format for the entire proposal/thesis, especially in the text and the list of references.
- The minimum should be at least APA Manual 6th or 7th editions.
- References consist of cited quotes only.
- Appropriately crediting the contributions of scholars on which your research and writing are based.
- While the in-text citations in your research works include just a few basic details (author, date, page/paragraph.), The reference list provides much more information so your tutors/readers can locate the sources you have used.

- Reference list entries might include the full title and publication details of printed works, the names of editors (where applicable), a URL or DOI for electronic resources, and other information.

Note: *Deviation from the use of APA shall, however, be determined by the specific discipline dynamics or school-by-school basis and this should be clearly explained from the outset of the study*

Formatting the Reference List

These guidelines will help you properly format your reference list in APA style:

i) Begin the reference list on a new page at the end of your assignment.
ii) Title the reference list "REFERENCES" in bold and centered at the top of the page.
iii) Order your reference list alphabetically by author.
iv) Apply a hanging indent to each reference list entry. This means that the first line of each entry is left-aligned, while the second and subsequent lines are indented (the Publication Manual recommends 0.5" or 1.27cm—the default in Microsoft Word).
v) Use the paragraph-formatting function of your word-processing program to automatically apply the hanging indent.
vi) The Publication Manual also recommends double-line spacing within and between reference list entries, but check your tutor or department's preferences.
vii) Make all links to websites or DOIs live (hit the space bar after each entry).

E. The Appendices

General Information

- This consists of questionnaires, transcriptions, and a list of candidates' relevant publications. It also contains analysis details and relevant raw data.
- Remember to include an appendix if it helps readers understand, evaluate, or replicate the study or theoretical argument being made.

- All relevant ethical standards must be followed for any material placed in the appendices, including copyright attribution, accurate representation of data, and protection of human participants.
- An appendix may consist of text, tables, figures, or a combination of these.
- Examples of materials suitable for an appendix are;

a) Letter of Introduction (Preferably Appendix I)

b) Research Instrument (questionnaire, interview schedule, data capture sheet, etc.) (Preferably Appendix II)

c) Lists of stimulus materials

d) Tests, scales, or inventory developments for the study being reported

e) Detailed demographic descriptions of subpopulations in the study, maps, and other graphics where applicable. Any other useful notes/documents e.g. copy of research permit/authorization

f) Work plan & Budget – ***not included in the final thesis***

Formatting Appendices

i) Number appendix using Roman numbers

ii) An appendix begins with a new page after the references section, footnotes, tables, and figures. Each appendix should have a label and a title. If a paper has one appendix label it **''Appendix'';** if it has two appendices label each using Romans numbers for example **''Appendix I,''** **''Appendix II''** in the order in which it is mentioned within the text.

iii) Each appendix should be mentioned at least once in the text by its name e.g., ''see Appendix I''

iv) The appendix should describe the contents.

v) The appendix label and title are in bold and centered on separate lines at the top of the page on which the appendix begins.

F. Work Plan

i) The work plan is simple and is useful in guiding the research to keep pace with the plan of the research.

ii) The work plan is presented in timed sub-topics connoting activities of the research.

G. Budget

iii) The budget is an essential component of the proposal. It should be as detailed as is relevant and should account for the value and cost of the project. Be as realistic as possible.

iv) Everything in the budget should be itemized. The item will include stationery, transport, subsistence, research assistants, and cost of production of the final documents to incidentals.

v) Addition of the total cost, usually 10% in acceptance to cater for fluctuations.

vi) A budget should come after the work plan and before references.

H. Content Outlook

i) **Title Page**

Details of the title page to include;

i Title:

- Should be a concise statement of the main topic and should identify the variables
- Should also be convincingly problematize
- Should be a reflection of the contents of the documents
- Should be fully explanatory when standing alone
- Abbreviations should not appear in the title
- Should contain 12 to 20 words

Note: *The title should bear the title of the thesis in capital letters followed below by the full name of the candidate*

ii Authors' Name and Affiliation

- Avoid use of words like... 'by….from….
- The preferred order of names – start with 1st, middle, followed by last name.
- Full names should be used, initials should be avoided

- Titles like Dr. should not appear in the names.

iii Next should be the citation (*format in Sample Cover Page*)

iv This is followed by **Kabarak University** just above the month and Year. Do not include the name of one's school or department

v Finally the month and the year of presentation e.g. **January 2024**

vi Should not be paginated

vii See Sample Cover Page **Appendix I**

ii) **Declaration**

This is the page in which the author/candidate/student swears that the work is original and has not been presented before as outlined in **Appendix II.**

iii) **Recommendation**

The declaration page is followed by the 'Recommendation' section where the supervisor(s) declare that the work has been presented with their approval. Please refer to **Appendix III.**

iv) **Copyright Page**

This is not necessary for a proposal but a must in a thesis as outlined in **Appendix IV.**

v) **Acknowledgment and Dedication Pages**

The student has the option to include the acknowledgment and dedication pages.

vi) **Abstract**

i) Should follow the declaration/recommendation page and the word "Abstract" should be in caps, bold, and centered.
ii) The purpose of the abstract is to give an interested reader a compact summary of the proposal content.
iii) The abstract should be a summary, synopsis, or gist of the whole work presented.

iv) An abstract should be one paragraph or a maximum of two paragraphs, single-spaced with no quotations or references, and at most 300 and 400 words for the proposal and thesis respectively.

v) If the work is not in English, the writer should provide an English translation of the abstract.

vi) Essentially it should contain the following consist of:

- Background to the problem
- Justification/Significance
- Objectives
- Methods
- **Results**
- **Conclusion**
- **Recommendation**

Not required for proposal

vii) **Table of Contents**

i) This page serves as a synopsis of the structure pattern of the report

ii) The rubric should be in title case and single-spaced.

iii) The chapter titles should be in caps and bold.

iv) The table of contents should be organized to match the headings, subheadings, and page numbers up to a maximum of three (3) levels.

v) The headings listed in the table must be worded exactly as they appear in the body of the report.

vi) The wording and presentation (i.e. capitalization, special fonts, and characters, etc) used for all entries in the table of contents must match exactly that which is used in the text.

viii) **List of Tables**

i) A separate page should be devoted to the list of items giving the tables, the exact title, and the page numbers where it may be found in the body of the report.

ii) The List of Tables should be separated from the Table of Contents and should follow immediately after the Table of Contents.

iii) All entries must contain a corresponding page number with leader dots or dashes connecting the entry to the page number.

iv) Formatting of tables should use the latest APA (American Psychological Association) Format.

v) These should be labelled as per serializations without including the Chapters in which they are found e.g. **Table 1** should be labelled as **Table 1** and if the next Table is in Chapter Four it should be labelled as **Table 2.**

ix) **List of Figures**

i) This list is governed by the same rules as the list of tables and comes after the list of tables.

ii) Formatting of figures should use the latest APA (American Psychological Association) Format.

iii) The figures may include graphs, photographic illustrations, maps, and drawings. These should be labelled as per serializations without including the Chapters in which they are found e.g. the first figure in chapter one should be labelled as **Figure 1** and if the next Figure is in Chapter Three it should be labelled **Figure 2** and so on)

x) **Abbreviations and Acronyms**

i) The abbreviations and acronyms should be arranged alphabetically.

ii) This should include all symbols and abbreviations.

iii) The abbreviations and acronyms should be capitalized and separated from the text by 2 indentations of 5 points each.

iv) The corresponding explanatory text should be in the Title Case and aligned to the left.

xi) **Conceptual and Operational Definition of Terms**

- A conceptual definition tells what the concept means, while an operational definition of a variable is the specific way in which it is measured in that study.

- The operational definitions describe the variables one will use as indicators for the constructs and the procedures one will use to observe or measure the variables. Refer to the sample conceptual model in **Appendix V**.

Note: *The pagination of the preliminary pages should be Roman numerals and lowercase. The title page should however not be numbered.*

SECTION THREE

GUIDELINES FOR PREPARING RESEARCH THESIS

A. The Preamble

Research theses contain different features dictated by their mother disciplines. The differences give them discipline peculiarities. However, there are common salient features across all academic disciplines. These include: -

(i) Title Page
(ii) The preliminaries (Pagination in Roman numerals lower case)
(iii) The main text (Chapter layout)
(iv) The references
(v) Appendices

B. General Guidelines

A research thesis will include **CHAPTER ONE, TWO, AND THREE** plus **CHAPTER FOUR AND FIVE.** However, Chapters One to Three should be revised to reflect the transition to Chapters One to Three of the proposal. The chapters should demonstrate growth in terms of the following:

i) The tense should change from future tense to past tense
ii) Additional relevant literature in Chapter Two should be introduced where need be
iii) Chapter Three should demonstrate the value added by piloting the study.
iv) There should be concrete evidence of how the pre-testing of instruments added value to the study.
v) Indicate actual limitations that the study encountered in place of anticipated limitations.
vi) Show clearly if there was a necessitated revision of sections of data collection tools indicated in Chapter Three.

C. General Thesis Specifications

(i) The final hardbound cover should be black with no writing except on the spine.

(ii) Spine – candidates' surname and initial, the abbreviation for the degree. Writings from top of the spine to bottom. The font type and size for the writing should be 'Roman Times' and 20 -22 points respectively.

(iii) Pagination: bottom centre

(iv) Margins: 1.00" left, 1.00" right, and 1.00" bottom.

(v) Maximum 300 pages.

(vi) List of candidate's publications (options): to appear as an appendix

(vii) Legends/Titles; tables – top figures - bottom

(viii) Chapter headings must be in x12 font in bold capitals (upper case) and centred.

(ix) Sub-section headings must be in bold lowercase.

(x) All text must be in Times Roman size 12

(xi) The spacing should be double-spaced

(xii) The first line in a new paragraph must be indented 5 spaces or separated of paragraph by a blank line.

(xiii) Word count for the Master's and Ph.D. thesis should be at least 20,000 and 50,000 words respectively.

D. Content Outlook

i) Title Page

- The title page should be short, precise, concise, and clear. It should relate to the subject matter of the thesis. It should also be captivating.
- The title page should contain 12 to 20 words.
- The title page should bear the title of the thesis in capital letters followed below by the full names of the student.
- This is followed by the following: **(refer to Appendix I)**

A Thesis Presented to the Institute of Postgraduate Studies of Kabarak University in Partial Fulfillment of the Requirements for the Award of Master of Science (IT Security Audit)

(Or for Ph.D.)

A Thesis Submitted to the Institute of Postgraduate Studies of Kabarak University in Partial Fulfillment of the Requirements for the Award of Doctor of Philosophy in Business Administration (Marketing)

Finally, the month and the year of the presentation should be included

ii) **Declaration Page**

On this page, the candidate should swear that the work is original and has not been presented for the award of any other degree elsewhere as outlined in **Appendix II.**

iii) **Recommendation Page**

This page is the supervisor(s) declaration that the work has been presented with their approval as outlined in **Appendix III.**

iv) **Copyright Page** (**Appendix IV**)
v) **Acknowledgment Page**
vi) **Dedication Page** (Optional)
vii) **The Abstract**

- i Language: English (As determined by thematic disciplines)
- ii Maximum 400 words
- iii Should consist of:
    - a) Background to the problem
    - b) Justification
    - c) Objectives
    - d) Methods

e) Results

f) Conclusion

g) Recommendation

viii) **Table of Contents**

(i) This is a synopsis of the structural pattern of the thesis

(ii) It contains all major sections i.e. chapter-level headings. If the report is long, sub-headings may be included.

(iii) The headings listed in the table must be worded exactly as they appear in the body of the report.

(iv) The wording and presentation (i.e. capitalization, use of special fonts and characters, etc) for all entries in the table of contents must match exactly with the text.

(v) All entries must have a corresponding page number with leader dots or dashes connecting the entry to the page number.

ix) **List of Tables**

(i) A separate page should be devoted to the list of tables specifying the title and the page where tables can be found in the thesis.

(ii) The list of tables should be separate from the table of contents and should come immediately after the table of contents.

(iii) All entries must contain a corresponding page number with lead dots or dashes connecting the entry to the page number.

x) **List of Figures**

(i) The lists are governed by the same rules as the list of tables.

(ii) Figures include graphs, photographic illustrations, maps, and drawings.

xi) **Abbreviations and Acronyms**

These should include all symbols and abbreviations.

xii) **Conceptual and Operational Definition of Terms**

These technical terms in the thesis should be listed on this page and their full interpretations and the units were appropriately given.

E. Chapter Layout

(i) All chapters should begin with a new page.

(ii) Within a chapter, the presentation of sub-sections must be continuous.

(iii) Partially filled textual pages are acceptable only if followed by non-textual pages such as those presenting tables and illustrations.

(iv) Whenever the heading of a section or sub-section appears near the bottom of a page, it must be followed by at least one complete line of text or the heading should be forced to the top of the next page.

(v) Detailed organization of the text varies among academic disciplines. However, the formatting of the text must be consistent throughout.

SECTION IV

PRESENTATION OF CHAPTERS

Proposals should be confined to Chapter One to Chapter Three. A Thesis should extend to five chapters (Chapter One to Chapter Five). The following presents an outline of what is contained in each Chapter.

CHAPTER ONE

INTRODUCTION

It is important to note that:

i) The introduction of the thesis should be brief and clear.
ii) Should give the reader an insight into the whole work, thereby acting as a summary of the same.
iii) Comes before the literature review and hence exposes the views of other authorities on the subject. In a nutshell, it portrays the relevant aspects of the thesis such as the problem and significance of the study.

1.1 Background to the Study

i) A well-laid down context of the background to the problem brings about a sound understanding of the problem or rather exposes the same.
ii) It should show the understanding and genesis of the problem.
iii) The background should lay the broad foundation for the problem beginning from a global perspective and narrowing down to regional context then to the country (local) and actual location of the study e.g. in a precise place in Kenya.
iv) Talk about the target group in the study.
v) Highlight the specific knowledge gaps that justify your study problem and which must lead logically to the statement of the problem in an ensuing sub-section.
vi) This is what culminates in the scholar's curiosity to study the subject

1.2 Statement of the Problem

It is an undisputed fact that the problem is the core or heart of any research project. If the student does not understand the problem, there are only remote chances, if any, of success. When adequately understood as portrayed through the statement, achieving it is easy and less expensive, Therefore,

i The problem must be clearly stated to stand out conspicuously, unequivocally, and sharply i.e. one must indicate exactly what the problem is.
ii It should be focused, and avoid preambles, wandering, and irrelevancies.
iii The problem must be clear and conspicuously stated in just one paragraph
iv Indicate why and how it is a problem. Give information to support this e.g. by use of statistics or evidence. This should be derived from background information to illustrate connectivity.
v The problem should answer the following questions
    - What is the problem/issue?
    - What is causing the problem?
    - What is the magnitude of the problem?
    - Who is the most affected by the issue raised?
    - What could happen if the problem/issue is not addressed?
vi Length should be a maximum of 1 page.

1.3 Objectives of the Study

1.3.1 General Objective of the Study

The general objective of the study should provide a specific and accurate synopsis of the overall goal of the study as outlined in the title.

1.3.2 Specific Objectives of the Study

Generally, objectives should be linked to the problem, be comprehensive, and be presented logically and explicitly. However, the specific objectives;

i) Should be related to the general objective which is essentially the title.
ii) There should be outcome-based verbs such as "find out, analyze, assess, establish, examine, investigate, etc."

iii) Should not be questioned in the questionnaire
iv) (Each objective) Should be numbered in Roman Numbers.

Additionally, depending on the nature of the research, the student is guided to observe as follows;

a) Qualitative Research

- The specific objectives should equal the main objective and should be properly sequenced to give clarity on how the main objective will be achieved. They should be SMART-specific and measurable. Achievable, Realistic, and Time-bound (if applicable)

b) Quantitative Research:

- The specific objectives should equal the main objective and should be properly sequenced to give clarity on how the main objective will be achieved. They should be SMART-specific and measurable. Achievable, Realistic, and Time-bound.

- The specific objectives should be in line with the variables the candidates hypothesize to influence the phenomenon being investigated.

c) Mixed Methods Research:

- The specific objectives - The summation of these objectives should equal the main objective and should be properly sequenced to give clarity on how the main objective will be achieved. They should be SMART-specific and measurable. Achievable, Realistic, and Time-bound.

1.4 Research Questions/Hypothesis

Generally, Research Questions or Hypotheses should be in line with the specific objectives and equal in number. However for;

a) Qualitative Research

- Research Questions need to feed/contribute towards the overall aim of the study.
- The research questions need to be adaptable, non-directional, and flexible.
- (Each Research Question) Should be numbered in Roman Numbers.

b) Quantitative Research

- Research Questions need to feed/contribute towards the overall aim of the study.
- They can be descriptive, comparative, or relational.
- (Each Research Question) Should be numbered in Roman Numbers.
- **Hypotheses (if/where applicable)** should be testable statements about the relationship between two or more variables, and be numbered **$H0_1$, $H0_2$, $H0_3$,** etc.

c) Mixed Methods Research

- Research Questions need to feed/contribute towards the overall aim of the study. They can be descriptive, comparative, or relational.
- Hypotheses (if/where applicable) should be testable statements about the relationship between two or more variables, and be numbered **$H0_1$, $H0_2$, $H0_3$,** etc.

1.5 Justification (or Rationale) for the Study

- Justification is a reason, rationale, or explanation that provides convincing, morally acceptable support for carrying out the study i.e. it should illustrate why the researcher is conducting the research and how it fits into global, national, and regional development blueprints.
- One should prove that the research findings would be beneficial to the targeted stakeholders besides contributing the existing knowledge.

1.6 Significance of the Study

- Significance is the extent to which something matters i.e. its importance. It should determine who benefits from the study and how that specific audience will benefit from its findings.
- The significance of the study could be simply reflected by the following two questions:
  i) Why should my study be published?

ii) What significant academic contribution is my study making to my field of research?

1.7 Scope of the Study

- It should cite the focus of the study's geographical area, the content scope, and the time scope. It should clearly describe the extent to which the identified problem will be addressed in the study. It may also include the target group/population of the study.
- This is a review of the extent the research has been conducted. It is pegged on the geographical and intellectual area of study, the time taken, the resources used, and the research design.
- It justifies what, when, and why the work was done as expressed.
- It portrays the established results under the given circumstances.

1.8 Assumptions of the Study (Where Applicable)

This section should present issues or circumstances assumed to be true or at least plausible that are necessary for the achievement of the study objectives.

1.9 Limitation (s) and Delimitation (s) of the Study

i This requires identification of potential weaknesses/challenges of the study that may be beyond the capability of the researcher to intervene e.g., the nature of self-report, your instruments, and the sample size or design.

ii The researcher needs to think about threats to internal validity that may have been impossible to avoid or minimize. Hence, it is imperative to explain how you as the researcher intend to overcome such limitations as much as possible.

CHAPTER TWO

LITERATURE REVIEW

General Guidelines

i) The literature review can be viewed as a selective and critical survey of the written works of the subject area. These include journal articles, books, and unpublished papers.

ii) The literature review should include current research works. Preferably not more than five (5) years old.

iii) The literature review by objective should highlight the knowledge you find already existing concerning the study problem.

iv) The review should be a critical analysis of the selected works to reveal the done and the untouched, therefore revealing the gaps that require filling.

v) It is not a collection of loosely related studies in a field but instead represents research developments related to a specific research question/hypothesis, interpreted and analyzed by the researcher in a synthesized way.

vi) In essence, the literature should be critically analyzed, and the results of various studies compared and contrasted, i.e., the review is more than a series collection of loosely related studies.

vii) The Literature reviewed should demonstrate clearly which gaps in knowledge concerning the problem are being investigated and not exclude methodology, theory, scope, and how these link to your proposed study.

viii) Above all, it buttresses the researcher's statement of the problem by revealing that the area of study is untouched.

ix) It is useful in providing the theoretical frameworks(s) that subsequently conceptualize the fieldwork results.

x) A literature review is, therefore, a must, and should be exhaustive, thorough, critical, informative, and current.

xi) The review should conclude with a summary of the literature and its implications for the problem investigated.

2.1 Introduction

The introduction should provide an outline of the contents of this chapter. It informs the reader that theoretical literature review, empirical literature review, conceptual framework, a summary of the reviewed literature, and research gaps are captured in the chapter.

2.2 Theoretical Review (Where applicable)

This is a structure derived from existing relevant theorization of key aspects of your study. Often existing theories/theories provide the foundation for the Theoretical Framework within which to position your research not limited to;

i) Often existing theories/theories provide the foundation for the Theoretical Framework within which to position your research.
ii) This contains theories that exist on tackling a given research problem.
iii) In establishing a suitable theoretical framework, the researcher should consider both outdated and modern theories; and reveal the merits, demerits, and limitations of each.
iv) The researcher should then choose either one whole already established framework, or a modification of one or several frameworks for solving the research problem at hand.
v) The choice of the framework should be convincingly justified. A clear mental plan or contemplation on how to steer the work should be shown here.
vi) This section is important because it relates and coordinates the literature review, the problem, the significance of the study, and the objectives of the applied methodology.

Theories should follow each other in the following order:

    2.2.1 The first theory
    2.2.2 The second theory etc.

The above structure should be derived from existing relevant theorization of key aspects of your study. Often existing theory/theories provide the foundation for the Theoretical Framework within which to position your research

Each theory should capture the following:

i) Mention the proponents of each theory used and the year

ii) Cite the main arguments of each theory

iii) Do a critique of each theory (Arguments in support or disagreement with each theory)

iv) Demonstrate the link between the theoretical proposition and the proposed study. Show how each theory informs/ guides your study i.e. the relevance of each theory to your work.

2.3 Empirical Review/Literature Review of the Study Variables

Empirical/Literature research is defined as any research where conclusions of the study are strictly drawn from concretely empirical evidence, and therefore "verifiable" evidence i.e. it is a critique of the past studies relevant to the current study.

The variables should be organized in the following order:

2.3.1 Review literature based on Objective One

2.3.2 Review literature based on Objective Two

2.3.3 Review literature based on Objective Three

2.3.4 Review literature based on Objective Four etc.

Each reviewed variable should:

- Form the subheadings of the literature review.
- Be fully discussed and the main constructs brought out clearly. Each key variable should be 2-3 pages long.
- Be linked to the dependent variable of the study.

NB

- The researcher should indicate what has been done by other researchers including the methodologies used and identify gaps.
- The literature review by objective should highlight the knowledge you find already existing concerning the study problem
- In addition, it should bring out what is still not known about this study problem, i.e. the knowledge gaps.

- Show clearly which gaps in knowledge concerning and not excluding methodology, theory, scope, and how these link to your proposed study

2.4 Conceptual Framework

i) This is the researcher's perception of the problem and how variables operate in influencing each other. The Conceptual Framework unpacks the title and graphically presents the independent and dependent variables of the research as well as the moderating or intervening variables.

ii) The researcher is expected to provide a graphic presentation that is self-explanatory showing how various variables interact and the direction of the outcomes from such interactions.

iii) The researcher should offer a brief explanation of the conceptual framework for clarification of the flow.

iv) The researcher should show how intervening variables will be addressed in the study.

2.5 Research Gaps

This section should present a clear and concise summary of the literature pinpointing the key problems, methods/approaches, outcomes, and shortcomings of works reviewed in the literature. There are various types of research gaps and therefore indicate the kind of research gap that exists that your study will address. *Examples of gaps are given below.*

- **Knowledge void** - Analyze literature about theoretical concepts and look for specific gaps or under-researched areas of research.
- **Methodological conflict-** Scrutinize if findings on a certain topic are inconclusive concerning applied research methods.
- **Contradictory evidence** -Synthesize key findings and determine contradictions etc.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

The introduction should provide an outline of the contents of this chapter. It informs the reader that the research design, population of the study, sampling procedure, sample size, pilot study, validity of the instrument, reliability of the instrument, data collection procedure, and data analysis are covered in this chapter.

3.2 Research Philosophy (applicable for PhD only)

- All PhD dissertations should have a Research philosophy
- Research Philosophy deals with the source, nature, and development of knowledge or a belief about how data on a phenomenon should be collected, analyzed, and used
- Discussion of research philosophy in your dissertation should include the following:

  i) Specify the research philosophy of your study. *Your research philosophy can be pragmatism, positivism, realism, or interpretivism*

  ii) Provide reasons behind the philosophical classifications of the study

  iii) Discuss the implications of your research philosophy on the research strategy in general and the choice of data collection methods in particular.

3.3 Research Design

- Indicate the type of research design **(*qualitative, quantitative, or mixed research*)** and justify the choice of type of research design by citing authority.
- *For* ***mixed methods research*** a clear description of the type of mixed methods approach that will be utilized, the integration of quantitative and qualitative approaches (objectives, study participant selection, sampling, inclusion and exclusion criteria, recruitment, consenting process, data collection, data analysis) and the triangulation arising from the use of the approach
- The design should be linked to the topic

3.4 Location of the Study

- **Geographical Location:** Indicate the specific geographic location where the research will take place. This could include a city, state, country, or even a particular region or community.
- **Study Site:** Describe the specific study site within the location. This might be a particular building, institution, or natural area.
- **Rationale:** Explain why the location is important and why it was chosen for the study. This could include factors such as access to resources, existing research infrastructure, or unique characteristics of the location.
- **Accessibility:** Discuss how the location will be accessed by the research team, and any challenges that may arise during the study. This could include travel logistics, language barriers, or cultural differences.
- **Ethics and Safety:** Address any ethical considerations related to conducting research in the chosen location, as well as any safety concerns that may need to be addressed.

3.5 Population of the Study

i) Describe the population from where your research sample will be selected. This should include Target as well as Accessible Population.

ii) Describe the specific study site within the location. This might be a particular building, institution, or natural area.

iii) Justify the choice of the target population and give figures where appropriate.

iv) Describe the study population and the parameter of interest depending on the research design chosen.

v) If a vulnerable population is included, justify why they should be included i.e. they should be included only if it becomes very necessary and all other available options for the study are not forthcoming. The **'Inclusion of Vulnerable Population's form'** must be comprehensively completed. Any untruths regarding their inclusion would lead rejection of the proposal.

vi) Outline the criteria that will be used to identify study participants *(Inclusion and Exclusion Criteria)*

vii) **Use of Secondary/Archival/Pre-existing Data (if applicable)**

- **Justification for the use of Secondary/Archival/preexisting Data:** Justify the use of secondary data and why the chosen secondary/archival or pre-existing data set/s
- **Data Source:** Describe the source of all the preexisting data sets, the usage rights, and conditions for the use e.g. acknowledgments of source and funders
- **Data Acquisition:** Describe the legitimate process of acquiring the data.
- **Variable identification and extraction:** Describe the criteria for the selection of the specific variables to be extracted from the preexisting data for use in the current study.
- **Inclusion and Exclusion Criteria:** Describe the criteria that will be used to identify candidate records from the preexisting data.
- **Location of the Study:** Describe the location of the original data collection.

3.6 Sampling Procedure and Sample Size

3.6.1 Sample Size Determination

i) Give the proportion of the sample with the accessible population

ii) The sample size should be presented in a tabular form where there is more than one category of the target population. The table should be presented in APA format

iii) **Computation:** The formula or approach used to determine the number of participants in the study should be provided, and its use demonstrated through computations resulting in the study sample size.

iv) **Inclusion and Exclusion Criteria:** The criteria that will be used to identify participants are clearly outlined

v) **Sampling Method:** Describe the approach used to identify a subset of a population from the general population.

vi) A formula should be used to show how the sample was arrived at. Also, indicate the source of the formula and the workout of the figures arrived at in the sample size.

3.6.2 Sampling Technique

i) This section should indicate how the final sample size is arrived at e.g. simple random, purposive, convenient, etc.
ii) Also, justify the choice of the sampling procedure
iii) **For the Census (if applicable),**
   - **Inclusion criteria:** Provide the criteria that will be used to identify participants in the census.
   - **Recruitment method:** Outline the process that will be used to identify and/or screen the study participants based on the inclusion and exclusion criteria.

3.7 Instrumentation

i) This section describes the tools for data collection. For each tool and/or instrument to be used for data collection provide the following information;
   - **Type of data collection tool and/or instruments:** Indicate and justify the type of tool and/or instruments to be used for data collection.
   - **Variables** *(where applicable)***:** Describe the variables of interest in the study (dependent, independent, and covariates / intervening), their levels of measurement, the data collection tool, data collection approach, data source, and their purpose in the study (related to achieving the study objectives).
   - **Constructs** *(Where applicable)***:** Describe the constructs of interest in the study, the data collection tool, the data collection approach, the data source, and their purpose in the study (*related to achieving the study objectives*).

ii) Describe how each instrument was designed and justify its use in the study.

3.7.1 Pilot Study

i) Indicate where the pilot study was undertaken and justify the choice of the location.
ii) The population in the pilot study must be as similar as possible to the target population.
iii) The area/persons selected to participate in the pilot study should not take part in the final study.

3.7.2. Validity of the Instrument

i) This is the extent to which a concept is accurately measured in a study
ii) Indicate measures to ensure construct, content, and other types of validity.
iii) Include also external validity which has to do with the generalizability of the findings.

3.7.3. Reliability of the Instrument

i) This is the degree to which the result of a measurement, calculation, or specification can be depended on to be accurate. i.e. the extent to which a measuring procedure yields the same results on repeated trials
ii) Indicate the measures to ensure instrument reliability and how it will be calculated.

3.8 Data Collection Procedure

i) Describe how, when, and by whom the data will be collected and recorded, the location of data collection, time of data collection, safety, privacy, and confidentiality of the participants during data collection including researcher safety.
ii) Describe the entire process of conducting actual research based on the following aspects of managing your data;

- **Privacy and Confidentiality:** Describe measures to be taken to ensure privacy and confidentiality of the data and data subjects in the primary or preexisting data during its use in the current study.
    - ❖ If identifier information will be collected or extracted;
    - ❖ Explain its nature and why it is necessary for the study.
    - ❖ Explain when and how the data set will be de-identified.
- **Data Safeguards:** Describe administrative, physical, and technical safeguards that will be put in place to protect the study data from unauthorized destruction, loss, misuse, unauthorized disclosure, or alteration.
- **Data Monitoring and Safety Plan:**
    - ❖ Specify the frequency and method of data monitoring for adherence to data collection procedures, safety, privacy, and confidentiality among others.

- ❖ Specify who will be responsible for monitoring the data and how often they will review it.
- ❖ Provide the criteria for data review, including when and why certain data will trigger a review.

- **Data Entry and Cleaning**; Provide the procedures for data entry and cleaning.
- **Data Storage, Archiving, and Disposal:** Provide the provisions for data storage, archiving, and disposal.

iii) Preliminary agreements with the respondents, when and how the instruments will be delivered i.e.;

- ❖ **Recruitment Process:** Describe how contact between researchers and prospective participants to inform them of the study will be done.
- ❖ **The Consenting/Assenting Process**: Link to other documents from here e.g. informed consent form
  - Outline the procedure through which a competent subject or guardian, after having received and understood all the research-related information, will voluntarily provide their willingness (consent/assent) for participation in the study.
  - Provide the informed consent/assent form in the appendices of the proposal.
- ❖ **Payment for Participation:** Indicate if participants will be paid to participate in the study, the rates and the specific activities to be paid for.

iv) Indicate steps to obtain permission i.e., Institutional, NACOSTI, KUREC, County level, etc.

3.9 Data Analysis and Presentation

i) Describe and justify the data analysis procedures and methods for each study objective/research question or hypothesis.

ii) If a software program will be used in the analysis, describe it and justify the choice.

iii) This describes the entire process from the time data is obtained to the presentation of analyzed data.

iv) Indicate the diagnostic tests to be carried out and their justification

v) Explain the methods that will be applied in analyzing the data based on each objective stated for both descriptive and inferential statistics. e.g. mode, Chi-Square, t-tests, correlation, regression, etc.

vi) Explain how data will be presented after analysis is complete (e.g., in text, tabular, graphic, etc.)

3.10 Ethical Considerations

This section should be written in prose demonstrating how you will observe other ethical issues related to;

- **Conflict of Interest:**
    - Clearly outline any direct or indirect personal, family, friendships, commercial, or social interests that are in a position to compromise the judgments, decisions, or actions of any investigator, co-investigator, or participant in a manner that has the potential to influence the study outcomes.
    - Explain how any identified conflicts of interest will be managed or mitigated, such as through recusal from certain aspects of the research, independent oversight, or other strategies.
- **Professional, Legal, and Regulatory Requirements:** Outline all Permits, approvals, materials transfer agreements, Intellectual Property agreements, and other regulatory approvals that will be sought for the study.
- **Researcher Credentials, Qualifications & Competencies:** Highlight the specific credentials, competencies, and skills required for the study and, the corresponding education, research experience/track record, work experience, and training possessed by the investigator/s in these competency and skill areas.
- **Participant / Subject Risk-Benefit Analysis (if applicable)**
    - **Risks:** Outline any risks (physical harm, psychological distress, loss of privacy, and social or economic consequences.) that participants in your study may be exposed to at any stage of the study such as data collection, data processing and analysis, data storage, and dissemination stages of the work.

- **Benefits:** Outline benefits (advancement of knowledge, medical advancements, improved treatments, or societal benefits, etc.) that the participants may experience directly, indirectly, or 3rd parties, immediately or in the longer term.
- **Risk-Benefit Analysis Computation:** Assess the risks identified as follows;
    - **Risk Scoring:** Compute a risk score by multiplying the likelihood (*a probability between 0 and 1*) of the risk occurring by its potential severity (*on a three, five, or seven-point scale*).
    - **Benefits Scoring:** Compute a benefits score by multiplying the likelihood (*a probability between 0 and 1*) of the benefit occurring by its potential magnitude (*on a three-, five-, or seven-point scale*).
    - **Risk-Benefit Ratio -** Compute the overall Risk Benefit Ratio as follows; *Risk Benefit Ratio = Total Risk Score / Total Benefit Score*
- **Risk-Benefit Assessment:** Assess the level of the risk-benefit ratio. Higher values are indicative that the study should be reconsidered.
- **Risk Mitigation:** Outline measures that will be taken to mitigate the risks identified.

- **Overall Risk-Benefit Analysis**
    - **Risks:** Outline any risks that the researcher, research assistants, data, equipment, infrastructure, and environment, among others, are likely to manifest in any stage of the study such as data collection, data processing and analysis, data storage, and dissemination stages of the work.
    - **Benefits:** Outline benefits that the researcher, research assistants, data, environment, and the community / general public in your study may experience directly, indirectly, or 3rd parties, immediately or in the longer term.
    - **Risk-Benefit Analysis Computation:** Assess the risks identified as follows;
        - **Risk Scoring:** Compute a risk score by multiplying the likelihood (*a probability between 0 and 1*) of the risk occurring by its potential severity (*on a three, five, or seven-point scale*).
        - **Benefits Scoring:** Compute a benefits score by multiplying the

likelihood (*a probability between 0 and 1*) of the benefit occurring by its potential magnitude (*on a three-, five-, or seven-point scale*).

- **Risk-Benefit Ratio -** Compute the overall Risk Benefit Ratio as follows; *Risk Benefit Ratio = Total Risk Score / Total Benefit Score*

- **Risk-Benefit Assessment:** Assess the level of the risk-benefit ratio. Higher values are indicative that the study should be reconsidered.
- **Risk Mitigation:** Outline measures that will be taken to mitigate the risks identified.
- **Handling Adverse Events** - Outline measures that will be taken to handle any adverse events arising from the manifestation of the risks identified.

- **Reporting and Dissemination:**
  - **Audience:** Provide details on all relevant stakeholders such as study participants, researchers, government, community, and businesses among others to whom the study findings will be disseminated.
  - **Content:** Provide details on the specific results to be disseminated to each of the identified target audiences.
  - **Avenues:** Provide details on avenues, forums, or platforms that will be used to disseminate the findings of the study.
- **Ethical Issues -** Comment on how the following ethical principles have been addressed in the proposed study; Respect for persons, Beneficence, Non-maleficence, and Justice

Nota Bene: For guidelines on how to structure the proposal, refer to **Appendix VI** which provides detailed instructions on scientific and ethics review proposal preparation guidelines.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION

Preamble

i) This chapter presents the findings, interpretations, and discussion according to the objectives, research questions, and/or hypotheses as shown in the preceding subsections.

ii) The structure may be dictated by mother disciplines of various schools in line with the CUE and Kabarak University guidelines

4.1 Introduction

- Introduction provides the structure of the chapter e.g. This chapter presents the findings, interpretations, and discussion according to the objectives, research questions, and/or hypotheses.
- In the introduction, the candidate should re-cast the objectives, research questions, and/ or hypotheses as presented in Chapter One.

4.2 General and Demographic Information/Statistical Data (Where Applicable)

4.2.1 General Information

This should include the response rate and diagnostic tests.

4.2.2. Demographic/Statistical Data

To include types of sampling units (schools and colleges), educational level; experience; age, and gender.

4.3 Findings as per Objective, Research Question/Hypothesis

i) Note, that the objective/question, and/ or hypothesis should be stated in a phrase to summarize the main issues in the objective.

ii) The style of presentation should capture the presentation of raw data followed by a discussion.

iii) For each objective, start with *descriptive statistics* with subsequent discussions then follow up with *inferential statistics* which leads to a clear indication of whether objectives have been achieved or not or whether the null hypothesis was rejected or not.

iv) The findings should be guided by the methodology.

v) The unit of analysis should be based on the research questions or objectives and should capture the independent variables.

vi) Tables and Figures (and the titles) should conform to the current APA formatting.

vii) Tables copied from elsewhere should have a source below them.

viii) Any table generated by the researcher should not have the source quote.

ix) Discussion should follow the results.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Introduce the chapter structure as exemplified in previous similar sections

5.2 Summary of the Major Findings

This section should present a succinct summary of the main findings guided by the objectives (with sub-headings per objective).

5.3 Conclusions

The section should focus on conclusions based on the findings and be organized by objectives and the write-up should be in prose.

5.4 Recommendations

i) Recommendations should be linked to findings and/or conclusions.
ii) All recommendations should be realistic and directly linked to the research findings as per the objectives cited as well as related conclusions already presented in the study.

5.4.1 Policy Recommendations

These must be directly linked to:

(i) An existing policy that needs enhancement
(ii) Non-existent policies that need to be formulated
(iii) Practical interventions may be presented in this section under specific policy considerations.

5.4.2 Recommendations for Further Research

These should be related to the gaps that the concluded study presents and the issues that may emerge from the research findings i.e. new knowledge.

Appendix I: Sample Cover Page

STUDENTS' ATTITUDE TOWARDS WEB-BASED LEARNING RESOURCES

STUDENT NAME

A (Proposal/Project/Thesis) Submitted to the Institute of Postgraduate Studies of Kabarak University in Partial Fulfillment of the Requirements for the Award of Master of Science (IT Security Audit) Degree

(Or for Ph.D.)

A (Proposal/Thesis) Submitted to the Institute of Postgraduate Studies of Kabarak University in Partial Fulfillment of the Requirements for the Award of Doctor of Philosophy in Business Administration (Marketing)

KABARAK UNIVERSITY

JANUARY, 2024

Appendix II: Sample Declaration

DECLARATION

1. I do hereby declare that:

(i) This (proposal/project/thesis) is my work and to the best of my knowledge, it has not been presented for the award of a degree in any university or college.

(ii) The work has not in-cooperated material from other works or a paraphrase of such material without due and appropriate acknowledgment.

(iii) The work has been subjected to processes of anti-plagiarism and has met Kabarak University's 15% similarity index threshold.

2. I do understand that issues of academic integrity are paramount and therefore I may be suspended or expelled from the University or my degree may be recalled for academic dishonesty or any other related academic malpractices

Signed: ______________________________________Date:_____________________________

Name of Student: Grace Bill

Admission Number: GDI/M/0789/09/14

Appendix III: Sample Recommendation

RECOMMENDATION

To the Institute of Postgraduate Studies:

The (thesis/research project/proposal) entitled "**Students' Attitudes towards Web-Based Learning Resources"** written by **Grace Faith** is presented to the Institute of Postgraduate Studies of Kabarak University. We have reviewed the (thesis/research project/proposal) and recommend it be accepted in partial fulfillment of the requirement for the award of the degree of Master of Science in …………..

Signed: ______________________________________Date:_____________________________

Prof. Chris Wisdom

School of Science, Engineering and Technology

Kabarak University

Signed: ______________________________________Date:_____________________________

Dr. Faith Willis

Senior Lecturer, School of Science, Engineering and Technology

Kabarak University

Appendix IV: Sample Copyright

COPYRIGHT

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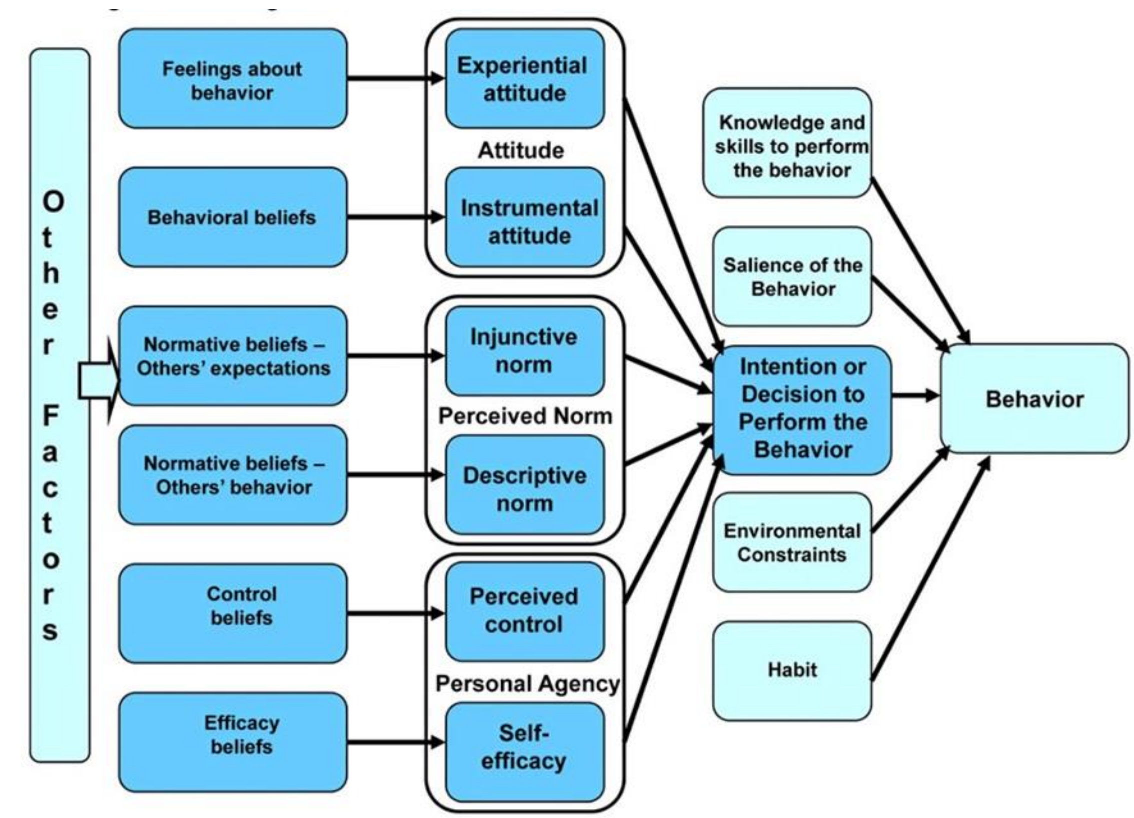
Grace Faith

Appendix V: Sample Conceptual Model

Figure 2:

Integrated Behavioral Model



Note. This model combines constructs represented in the Theory of Reasoned Action and the Theory of Planned Behavior. It presents new or changed determinants that affect the intention to perform a behavior.

Appendix VI: Scientific and Ethics Review Proposal Preparation Guide

Purpose of the Guide

This guide serves the purpose of providing clear instructions for developing research proposals in readiness for scientific and ethical review. It follows a conventional research proposal format and includes essential questions to assist researchers in addressing scientific and ethical issues in their proposal.

The Guide

1. **Preliminaries**
   - i **Title:** The title should be concise and should summarize the main ideas of the study in as few words as possible.
   - ii **Abstract:** The abstract should provide a concise summary of the study and cover the following aspects: a brief background, the study problem, the main objective of the study, research design, study population, sample size, method of sampling, data collection procedure, data analysis procedures and the proposed method of disseminating the findings.
   - iii **Preliminaries**: The proposal should also have the preliminary pages as required in the applicable proposal guidelines. The document should be signed by all the investigators with their respective and applicable details provided.
2. **Introduction**
   - i **Section overview:** Provide a summary of the kind of information the chapter will contain (Word count 200)
   - ii **Background of the Study:** The background should introduce the area of study and explicitly demonstrate the gap/need to conduct the study. (Use a structure such as the Inverted pyramid format e.g. Global statistics/perspective/ regional/perspective, local/perspective, demonstrate the gap at every level.
   - iii **Statement of the Problem:** The statement of the problem should connect to the background of the study while directly articulating the current situation or context, the specific issue or challenge, the effects or consequences of the problem, the target

population or stakeholders affected, the location or setting where the problem exists, the timeframe or duration of the issue, any relevant statistics or data, the importance or significance of the problem, the gap in existing research or knowledge and the purpose of the study or research project.

iv **General Objective(s) / Aim(s) / Purpose of the Study:** This / These mirror the title of the study and should also give a clear indication of the output of the study. They should cover the specific objectives in a broad sense.

v **Hypothesis / Research Questions / Specific Research Objectives**

a) **Qualitative Research -** Provide specific objectives and research questions

b) **Quantitative Research -** Provide specific objectives and research questions *(if applicable)* and/or hypothesis *(if applicable)*

c) **Mixed Methods Research -** Provide specific objectives, research questions, and hypotheses. The specific mixed methods design that combines quantitative and qualitative approaches should be clear.

vi **Justification/Rationale of the Study:** This section should present the rationale for the study and how the study fits into global, national, and regional development blueprints.

vii **Significance of the Study:** This section should clearly outline positive outcomes/gains that will accrue from the study for individuals and/or communities.

viii **Limitations and delimitations of the Study:** This section should clearly outline potential challenges and weaknesses that may limit the achievement of the study objectives and provide a plan for overcoming them.

ix **Assumptions of the Study:** This section should clearly present issues or circumstances assumed to be true or at least plausible that are necessary for the achievement of the study objectives.

x **Scope of the Study:** This section should clearly describe the extent to which the identified problem will be addressed in the study. Mention the depth of the study in terms of the geographical area, the participants as well as the problem statement

3. **Literature Review**

i **Introduction:** This section should clearly describe the type of review undertaken; the content of the review; the organization of the review; and the strategy used for searching the literature should be provided in a clear and concise manner

-- *the order of the following sections in the literature review may vary from discipline to discipline* --

ii **Empirical review of Literature:** This section should provide in a clear and detailed manner; content covering the broad area of the study and the problem; key outcomes of previous research in the area; key research methods or approaches in previous studies; comparisons and contrasts of different points of view, outcomes, and approaches in previous research.

iii **Summary of gaps:** This section should present a clear and concise summary of the literature pinpointing the key problems, methods/approaches, outcomes, and shortcomings of works reviewed in the literature.

iv **Theoretical Framework (where applicable):** This section should present clear constructs informing pertinent aspects of the study such as the objectives, variable selection, and methodology.

v **Conceptual Framework:** This section should present a textual and visual representation that illustrates the relationship among variables (independent, dependent, confounding, components or constructs) and their relationship with the expected outcome/solution.

4. **Methodology**

i **Section overview:** Provide a summary of the kind of information the chapter will contain.

ii **Research Design:**

a) **The choice of a research design** depending on the type of research chosen (*qualitative*, *quantitative*, *or mixed research*) should be stated and justified (why it's the most preferred).

For mixed methods research a clear description of the type of mixed methods approach that will be utilized, the integration of quantitative and qualitative approaches (objectives, study participant selection, sampling, inclusion and exclusion criteria, recruitment, consenting process, data collection, data analysis) and the triangulation arising from the use of the approach.

iii. **Type of Data:** Two main distinctions are made in this respect: Primary and Secondary / Archival Data

a) Primary data collection from natural or legal persons.

1. **Location of the Study**:

i) ***Geographical Location:*** Indicate the specific geographic location where the research will take place. This could include a city, state, country, or even a particular region or community.

ii) ***Study Site:*** Describe the specific study site within the location. This might be a particular building, institution, or natural area.

iii) ***Rationale:*** Explain why the location is important and why it was chosen for the study. This could include factors such as access to resources, existing research infrastructure, or unique characteristics of the location.

iv) ***Accessibility:*** Discuss how the location will be accessed by the research team, and any challenges that may arise during the study. This could include travel logistics, language barriers, or cultural differences.

v) ***Ethics and Safety:*** Address any ethical considerations related to conducting research in the chosen location, as well as any safety concerns that may need to be addressed.

2. **Study Participants**

a) **Study Population**

i. Describe the study population and the parameter of interest depending on the research design chosen.

ii. If a vulnerable population is included, justify why they should be included i.e. they should be included only if it becomes very necessary and all other available options for the study are not forthcoming. The **'inclusion of vulnerable population's form'** must be comprehensively completed. Any untruths regarding their inclusion would lead rejection of the proposal.

b) **Sampling** *(if applicable)*

i. **Sample Size Computation / Determination:** The formula or approach used to determine the number of participants in the study should be provided, justified and its use demonstrated through computations resulting in the study sample size.

ii. **Inclusion and Exclusion Criteria:** The criteria that will be used to identify participants are clearly outlined

iii. **Sampling Method:** Describe the approach used to identify a subset of a population from the general population.

c) **Census** *(if applicable)*

i. **Inclusion criteria:** Provide the criteria that will be used to identify participants in the census.

ii. **Recruitment method:** Outline the process that will be used to identify and/or screen the study participants based on the inclusion and exclusion criteria.

d) **Recruitment Process:** Describe how contact between researchers and prospective participants to inform them of the study will be done.

e) **The Consenting / Assenting Process**: Link to other documents from here e.g informed consent form

iii. Outline the procedure through which a competent subject or guardian, after having received and understood all the research-related information, will voluntarily provide their willingness (consent/assent) for participation in the study.

iv. ii. Provide the informed consent/assent form in the appendices of the proposal.

f) **Payment for Participation:** Indicate if participants will be paid to participate in the study, the rates and the specific activities to be paid for.

3. **Data Collection Tools and Instruments:** For each tool and/or instrument to be used for data collection provide the following information;

a) **Type of data collection tool and/or instruments:** Indicate and justify the type of tool and/or instruments to be used for data collection.

b) **Variables and Constructs:**

◦ **Variables** *(where applicable)***:** Describe the variables of interest in the study (dependent, independent, and covariates / intervening), their levels of measurement, the data collection tool, data collection approach, data source, and their purpose in the study (related to achieving the study objectives).

- **Constructs** *(Where applicable)***:** Describe the constructs of interest in the study, the data collection tool, the data collection approach, the data source, and their purpose in the study (*related to achieving the study objectives*).

c) **Validity and Reliability**: Provide all the measures that will be taken to ensure the validity and reliability of the tools, instruments, approaches, and/or methods to be used for data collection e.g. pre-testing, piloting**,** calibration, settings, or configuration of instruments among others.

4. **Data Collection Procedures -** Describe how, when, and by whom the data will be collected and recorded, the location of data collection, the time of data collection, safety, privacy, and confidentiality of the participants during data collection including researcher safety.

b) Secondary/Archival/preexisting Data.

1. **Justification for the use of Secondary/Archival/preexisting Data:** Justify the use of secondary data and why the chosen secondary/archival or pre-existing data set/s
2. **Data Source:** Describe the source of all the preexisting data sets, the usage rights, and conditions for the use e.g acknowledgments of source and funders
3. **Data Acquisition:** Describe the legitimate process of acquiring the data.
4. **Location of the Study:** Describe the location of the original data collection.
5. **Use of the secondary/archival or pre-existing data set/s**
   - **a) Study Population:** Describe the study population in the preexisting data and, if applicable, justify the inclusion of vulnerable populations from the preexisting data in the current study.
   - **b) Sample Size Determination:** Provide the approach used to determine the sample size for the current study from the preexisting data.
   - **c) Sampling Method:** Describe the sampling technique to be used to select records from the preexisting data.

d) **Variable identification and extraction:** Describe the criteria for the selection of the specific variables to be extracted from the preexisting data for use in the current study.

e) **Inclusion and Exclusion Criteria:** Describe the criteria that will be used to identify candidate records from the preexisting data.

f) **Consent:** Provide information on the consent provided by the study subjects in the original data collection as well as consent for secondary use of the preexisting data.

iv. **General Considerations**

a) **Data Management**

1. **Privacy and Confidentiality:**
   - Describe measures to be taken to ensure the privacy and confidentiality of the data and data subjects in the primary or preexisting data during its use in the current study.
     - If identifier information will be collected or extracted;
     - Explain its nature and why it is necessary for the study.
     - Explain when and how the data set will be de-identified.
2. **Data Safeguards:** Describe administrative, physical, and technical safeguards that will be put in place to protect the study data from unauthorized destruction, loss, misuse, unauthorized disclosure, or alteration.
3. **Data Monitoring and Safety Plan:**
   - Specify the frequency and method of data monitoring for adherence to data collection procedures, safety, privacy, and confidentiality among others.
   - Specify who will be responsible for monitoring the data and how often they will review it.
   - Provide the criteria for data review, including when and why certain data will trigger a review.
4. **Data Entry and Cleaning;** Provide the procedures for data entry and cleaning.

5. **Data Storage, Archiving, and Disposal:** Provide the provisions for data storage, archiving, and disposal.

b) **Data Analysis:**

1. Describe and justify the data analysis procedures and methods for each study objective/research question or hypothesis.
2. If a software program will be used in the analysis, describe it and justify the choice.

c) **Participant / Subject Risk-Benefit Analysis:**

1. **Risks:** Outline any risks (physical harm, psychological distress, loss of privacy, and social or economic consequences.) that participants in your study may be exposed to at any stage of the study such as data collection, data processing and analysis, data storage, and dissemination stages of the work.
2. **Benefits:** Outline benefits (advancement of knowledge, medical advancements, improved treatments, or societal benefits, etc) that the participants may experience directly, indirectly, or 3rd parties, immediately or in the longer term.
3. **Risk-Benefit Analysis Computation:** Assess the risks identified as follows;
   - **Risk Scoring:** Compute a risk score by multiplying the likelihood (*a probability between 0 and 1*) of the risk occurring by its potential severity (*on a three, five, or seven-point scale*).
   - **Benefits Scoring:** Compute a benefits score by multiplying the likelihood (*a probability between 0 and 1*) of the benefit occurring by its potential magnitude (*on a three-, five-, or seven-point scale*).
   - **Risk-Benefit Ratio -** Compute the overall Risk Benefit Ratio as follows;

     Risk-Benefit Ratio = Total Risk Score / Total Benefit Score
4. **Risk-Benefit Assessment:** Assess the level of the risk-benefit ratio. Higher values are indicative that the study should be reconsidered.

5. **Risk Mitigation:** Outline measures that will be taken to mitigate the risks identified.

d) **Overall Risk-Benefit Analysis**

1. **Risks:** Outline any risks that the researcher, research assistants, data, equipment, infrastructure, and environment, among others that are likely to manifest in any stage of the study such as data collection, data processing and analysis, data storage, and dissemination stages of the work.
2. **Benefits:** Outline benefits that the researcher, research assistants, data, environment, and the community / general public in your study may experience directly, indirectly, or 3rd parties, immediately or in the longer term.
3. **Risk-Benefit Analysis Computation:** Assess the risks identified as follows;
    - **Risk Scoring:** Compute a risk score by multiplying the likelihood (*a probability between 0 and 1*) of the risk occurring by its potential severity (*on a three, five, or seven-point scale*).
    - **Benefits Scoring:** Compute a benefits score by multiplying the likelihood (*a probability between 0 and 1*) of the benefit occurring by its potential magnitude (*on a three-, five-, or seven-point scale*).
    - **Risk-Benefit Ratio -** Compute the overall Risk Benefit Ratio as follows;

      Risk-Benefit Ratio = Total Risk Score / Total Benefit Score
4. **Risk-Benefit Assessment:** Assess the level of the risk-benefit ratio. Higher values are indicative that the study should be reconsidered.
5. **Risk Mitigation:** Outline measures that will be taken to mitigate the risks identified.
6. **Handling Adverse Events** - Outline measures that will be taken to handle any adverse events arising from the manifestation of the risks identified.

e) **Professional, Legal, and Regulatory Requirements:** Outline all Permits, approvals, materials transfer agreements, Intellectual Property agreements, and other regulatory approvals that will be sought for the study.

f) **Researcher Credentials, Qualifications & Competencies:** Highlight the specific credentials, competencies, and skills required for the study and, the corresponding education, research experience/track record, work experience, and training possessed by the investigator/s in these competency and skill areas. Highlight the specific technical/scientific roles to be played by every member of the team in the proposed study. The preceding information should be provided in the proposal and the CVs of all the investigators provided for verification.

g) **Conflict of Interest:**

7. Clearly outline any direct or indirect personal, family, friendships, commercial, or social interests that are in a position to compromise the judgments, decisions, or actions of any investigator, co-investigator, or participant in a manner that has the potential to influence the study outcomes.
8. Explain how any identified conflicts of interest will be managed or mitigated, such as through recusal from certain aspects of the research, independent oversight, or other strategies.

h) **Reporting and Dissemination:**

1. **Audience:** Provide details on all relevant stakeholders such as study participants, researchers, government, community, and businesses among others to whom the study findings will be disseminated.
2. **Content:** Provide details on the specific results to be disseminated to each of the identified target audiences.
3. **Avenues:** Provide details on avenues, forums, or platforms that will be used to disseminate the findings of the study.

i) **Ethical Issues** - Comment on how the following ethical principles have been addressed in the proposed study; Respect for persons, Beneficence, Non-maleficence, and Justice

j) **References:** Provide all references cited in the proposal and format them according to discipline-specific requirements.

k) **Appendices:** Provide the Budget, work plan, approvals granted, Informed consent form, and Data collection tools. Inclusion of vulnerable population form (if applicable), any other applicable documents