

GNAT IRIRS THESIS AND DISSERTATION MANUAL



A HANDBOOK FOR GRADUATE STUDENTS

First Edition (2024)

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Thesis and Dissertation Manual of GNAT IRIRS-

PREFACE

Congratulations on reaching the research stage of your graduate studies. Advancing independent critical thinking and scholarship through rigorous and original research that contributes meaningfully to knowledge and practice are hallmarks of graduate education at the GNAT Institute for Research and Industrial Relations Studies (GNAT IRIRS).

In graduate education, theses and dissertations must conform to fundamental rules of literary and scholarly presentation, as they are the pinnacle of graduate research. This Manual serves as the official guide governing the preparation and submission of theses and dissertations at GNAT IRIRS. The Manual outlines the style, specifications, formats, and procedures to be followed in conducting graduate research in partial fulfilment of the requirements for a graduate degree from the Institute.

Theses and dissertations submitted to GNAT IRIRS must meet the requirements in this Manual to qualify for a graduate degree. All graduate students and supervisors shall operate in accordance with the broad principles, provisions, and specifications outlined in the Manual. While the Management of the Institute shall take reasonable steps to ensure that every graduate student and supervisor receives a copy of this Manual, ignorance of it or any subsequent modifications shall not constitute a valid defence under any circumstances. The Institute reserves the right to reject a thesis or dissertation if the requirements outlined in this Manual have not been followed properly.

The provisions stated in this Manual are subject to change, modification, or substitution at any time to reflect the global environment in graduate studies and graduate research. Therefore, the most recent version of the Manual should always be used to structure and format theses and dissertations in GNAT IRIRS. Previously submitted theses and dissertations should not be used as formatting or stylistic references.

This Manual is not intended to be an exhaustive guide to style, the process of developing and writing theses and dissertations, or how to conduct research. Instead, it is designed to be used in conjunction with a professional writing style manual. Therefore, for matters of format, style, and procedures not specified and covered in this Manual, students should consult the official style manual adopted by GNAT IRIRS: the Publication Manual of the American Psychological Association (APA-7th Edition). In instances of inconsistencies, this Manual takes precedence over the chosen style manual.

Graduate students are advised to carefully and critically read this Manual before they begin to work on their theses and dissertations. Faculty members are likewise urged to familiarise themselves with its contents to provide effective guidance and supervision.

The Institute wishes you every success in the preparation of your thesis or dissertation. We welcome your questions, feedback, and suggestions, and look forward to working with you to establish best practices and achieve optimal outcomes in graduate education.

Rev. Prof. Emmanuel Adow Obeng

President-GNAT IRIRS

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ABBREVIATIONS AND ACRONYMS

| | |
|------------|--|
| APA | American Psychological Association |
| GNAT IRIRS | GNAT Institute for Research and Industrial Relations Studies |
| CMOS | Chicago Manual of Style |
| CPD | Continuous Professional Development |
| DOI | Digital Object Identifier |
| HoDs | Heads of Divisions |
| GREC | Graduate Research Committee |
| IRB | Institutional Review Board |
| MLA | Modern Language Association |
| PLS | Partial Least Squares |
| RCD | Research and Consultancy Division |
| SMART | Specific, Measurable, Achievable, Relevant, and Time-bound (SMART) |
| SAS | Statistical Analysis System |
| SPSS | Statistical Package for the Social Sciences |
| STATA | Statistics and Data Analysis |
| URL | Uniform Resource Locator |

OPERATIONAL DEFINITIONS

- Academic Misconduct:** A breach of academic integrity intended to gain an unfair advantage.
- Axiology:** The study of values and ethics in research, particularly regarding how the researcher's values influence the research process and interpretation.
- Citation:** A reference to a scholarly source, such as a journal, book, or other publications, that allow readers to trace the original source.
- Conceptual Framework:** An analytical model of interrelated variables illustrating a cause-and-effect relationship between the variables. It is often represented graphically.
- Dissertation:** A graduate-level research project submitted in partial fulfillment of the requirements for a Master of Education (MEd) or Master of Arts (MA) degree.
- Confidentiality:** Safeguarding the information and the identity of research participants and data.
- Epistemology:** The branch of philosophy that focuses on the nature and scope of knowledge, how we know what we know in research contexts.
- Graduate Research Student:** A student writing a dissertation or thesis under the guidance of a supervisor.
- Grey Literature:** Non-academic materials or evidence not controlled by commercial publishers
- Narrative Citation:** A form of in-text citation in which the author's name is integrated into the sentence as part of the narrative, typically at the beginning
- Originality:** The act of generating new knowledge, either through research topic, approach, or context.
- Ontology:** The philosophical study of the nature of reality, focusing on what exists and what can be known in research.
- Plagiarism:** Taking and using another person's work, thoughts, or ideas as one's own without proper attribution.
- Research Ethics:** Standards and values governing research conduct and how they impact researchers and research subjects.
- Research Design:** A structured framework or strategy of inquiry that outlines how data will be collected, measured, and analysed to answer specific research questions.
- Research Gap:** A research problem or issue that remains unaddressed by previous studies, including gaps in theory, knowledge, methodology, or practice.
- Research Paradigm:** A worldview or philosophical framework that underpins a research approach, guiding assumptions about reality (ontology), knowledge (epistemology), values (axiology), and methodology.
- Research Proposal:** A detailed description of a proposed research study developed to investigate a given research problem.

Research Topic: The subject area of a proposed research study, often refined by the researcher's interest, experience, or an identified research gap.

Self-plagiarism: The reuse of an author's own previously published material, presented as if it were new or original.

Supervisor: A research advisor who provides academic guidance and support to students writing a dissertation or thesis.

Style Manual: A framework that provides the rules and guidelines for academic writing, including dissertations, theses, journals, and other publications.

Theoretical Framework: A set of related theories that guide the research by explaining the relationships among key variables and concepts.

Thesis: A graduate-level research project submitted in partial fulfillment of the requirements for a Master of Philosophy (MPhil) or Doctor of Philosophy (PhD) degree.

Triangulation: The use of multiple data sources, methods, or theoretical perspectives in a study to enhance the validity and reliability of the results and findings.

Viva Voce: An oral examination of a thesis or dissertation conducted by a panel of examiners.

CHAPTER 1: INTRODUCTION

1.1 Background of the Manual

Graduate education is the foundation for creating knowledge societies and institutions. Its purpose is to provide academic and research opportunities that extend the boundaries of knowledge, practice, and experience. In this regard, graduate students are expected to demonstrate a strong general knowledge of the field of study and proficiency in research and applied skills recognised in that field. The capacity for original research as well as critical and independent thinking are essential skills in academic writing, including the writing of dissertations and theses.

The value of any research as a scholarly activity and outcome lies in its contribution to knowledge and practice. Writing theses and dissertations offers graduate students the opportunity to gain expertise in an area of interest and contribute to the world of research. This process also enables both students and faculty to engage in critical inquiry surrounding shared interests in a research problem. The GNAT IRIRS aims to cultivate an environment where research skills are actively developed, promoted, and celebrated. The Institute acknowledges the responsibility of safeguarding and enhancing graduate research by training and producing graduates skilled in conducting high-quality research in their theses and dissertations. At GNAT IRIRS, a thesis or dissertation is regarded as the capstone and culminating experience for graduate students to meaningfully explore the relationship between theory and practice, thereby creating knowledge that informs development.

There is no universal consensus regarding the definitions of the terms “thesis” and “dissertation” (Tannor, 2024; Swales & Feak, 2012; Cone & Foster, 2006), which has led to the terms being used interchangeably in some instances. The conceptual definitions and scope differ from country to country, university to university, degree to degree, and discipline to discipline. In the UK, a dissertation is submitted for a master's degree, whereas a thesis is submitted for a doctoral degree. In contrast, in the US and Canada, a thesis is submitted for a master's degree, while a dissertation is submitted for a doctoral degree. Most African universities require dissertations for professional and practice-oriented master's degrees, and theses for academic and rigorous research-based master's and doctoral degrees, such as Master of Philosophy (MPhil) and Doctor of Philosophy (PhD).

For many, the primary objective of writing a thesis or dissertation is to meet the partial requirement to earn an academic degree as part of a graduate programme and to fulfil the capstone requirement for graduation. Both terms denote seminal works of rigorous and original research that make a significant contribution to a specific field of knowledge, representing original results and interpretations from a unique investigation conducted by the degree candidate.

At GNAT IRIRS, dissertations are linked to professional and practice-oriented master's degrees (i.e. Master of Education, Master of Arts), while theses pertain to academic and research-based master's and doctoral degrees (i.e. Master of Philosophy, Doctor of Philosophy). All graduate students of GNAT IRIRS are required to complete the theory, research, and presentation of a thesis or dissertation to prove and demonstrate their knowledge of scholarship and research proficiency.

Each student pursuing the one-year Master of Education (MEd) or Master of Arts (MA) degree shall, alongside coursework and under the guidance of a supervisor, prepare and present a dissertation of 40–60

pages based on their own original research. This dissertation shall be internally assessed and shall count towards the final award of the degree. In contrast, students enrolled in the two-year Master of Philosophy (MPhil) degree shall, alongside coursework, prepare a thesis of 120–150 pages based on their own original and rigorous research, under the supervision of a Principal Supervisor and a Co-Supervisor. The thesis shall be assessed by both internal and external examiners and shall be defended before a panel of examiners (viva voce) as part of the requirements for the award of the degree.

1.2 Purpose of the Manual

Writing a thesis or dissertation is a time-consuming and daunting task but a rewarding experience for graduate students and their supervisors. Most graduate students shy away from research-based programmes because they have weak research backgrounds and lack the right attitude and dispositions to foster independent critical thinking. The effects are low graduate research completion rates (Watson, 2023; Hayton, 2015). At GNAT IRIRS, the necessary support and environment required for successful graduate research are made available to graduate students, via several research support systems, including this Manual and the organisation of graduate research seminars.

This Manual has been developed to guide graduate students and their supervisors through manuscript preparation and to help create a uniform and visually clear dissertation and thesis document. It is a guide to the specific style requirements of GNAT IRIRS that provides the general rules, regulations, and guidelines for the preparation, production, and presentation of theses and dissertations at the Institute. This helps to establish standardised style and format guidelines while allowing sufficient flexibility to accommodate the practices of various academic disciplines.

The Manual has been established to maintain consistency of style, format, specifications, and submission procedure to be followed by graduate students at GNAT IRIR. It ensures that theses and dissertations are presented in a conventional form, following universally accepted standards for academic writing, and written in a manner that provides maximum utility to readers. The Manual serves as a guide for navigating the multi-step process involved in writing theses and dissertations to ensure a smooth final step to degree completion.

1.3 Structure of the Manual

The Manual is structured into seven chapters that provide a step-by-step explanation of the entire processes and requirements involved in writing theses and dissertations. It also explains the submission process and the specific formatting guidelines.

Chapter One introduces the background and purpose of the Manual, including why graduate students are required to write a thesis or dissertation as part of a graduate programme. Chapter Two outlines the thesis and dissertation process, including research topic selection, supervision, research proposal submission and defence, and the assessment and final defence (viva voce) of the dissertation or theses. Chapter Three focuses on the main text and chapters of a thesis or dissertation while Chapter Four deals with the order and components of theses and dissertations, including front matter, main text, and back matter. Chapter Five focuses on citations and referencing, including the style manual of GNAT IRIRS. The specifications and formatting guidelines for writing theses and dissertations are discussed in Chapter Six. Finally, the legal and ethical issues related to the writing of theses and dissertations are presented in Chapter Seven.

CHAPTER TWO: THESIS AND DISSERTATION PROCESS

This chapter outlines the thesis and dissertation process, including research topic selection, supervision, research proposal submission and defence, and the final thesis and dissertation defence, which includes an oral examination (viva voce). It highlights the sequence of responsibilities and actions involved, as well as the key stakeholders and their roles in ensuring a smooth progression throughout the thesis and dissertation journey.

2.1 Purpose of Writing Theses and Dissertations

Theses and dissertations are seminal pieces of rigorous and original research that make a significant contribution to a particular field of knowledge and represent original results and interpretations of a unique investigation by the degree candidate.

- **A partial requirement to earn an academic degree:** The objective of a thesis or dissertation is to fulfil the requirements of a graduate programme, under the guidance of a supervisor and evaluated by an examination committee that includes an external examiner.
- **Independent research and scholarship:** Theses and dissertations are scholarly works that require the demonstration of research capabilities and academic writing skills, including independent critical thinking. They reflect students' capability to conduct research, draw logical conclusions, and present interpretative claims. In writing theses and dissertations, students are required to demonstrate significant knowledge of their discipline's methodological approach to research. A thesis or dissertation must demonstrate that the student has the ability to produce a scholarly piece of work and is familiar with the main scholarly works in the subject area. At GNAT IRIRS, students are required to produce dissertations and theses that make original contributions to theory and practice in their field of study, including an evaluation of students' ability as well as competence to function independently and autonomously as researchers.
- **Contribution to theory and practice (advancement of knowledge):** The main requirement of a dissertation or thesis is the contribution of new knowledge to theory and practice. This is the greatest pride of every research student, to contribute to developing new theories and concepts and solving theoretical, conceptual, methodological, and practical problems. Graduate research at GNAT IRIRS is expected to address issues of importance to the academic fraternity, industry, and society.
- **Originality:** Originality is about focusing on research areas not previously addressed in a particular field and advancing knowledge in a way that has not been done before. Originality is not about doing something entirely novel but generating knowledge that might be new because of the topic, approach, or context. Every thesis or dissertation submitted to GNAT IRIRS must meet the fundamental requirements of demonstrating academic rigour and making a distinct and significant contribution to knowledge in the field of study.

2.2 Research Skills Required in Writing Theses and Dissertations

The art of writing theses and dissertations requires a unique blend of intellectual, research, and academic writing skills and attributes. Developing and mastering these skills is a continuous process. Therefore, consulting and seeking feedback from your supervisor, attending research seminars and workshops, and embracing the learning journey are important. Early recognition of one's limitations and seeking help from the supervisor, as well as consulting credible sources of information relevant to the research area, is essential.

- **Critical thinking:** During the writing of dissertations and theses, students are expected to expand their ability to think critically and independently, analyse, synthesise the works of other researchers and scholars, and present their arguments in a scholarly, clear, and professional manner. Both dissertations and theses require a demonstration of logical, structured, and defensible reasoning based on credible, verifiable, and validated evidence with a strong emphasis on originality and relevance. Therefore, students must demonstrate the cognitive skills necessary for the acquisition of information, the integration of knowledge, and the resolution of issues.
- **Research methods and analytical literacy:** The ability to apply, deepen, adapt, or develop the appropriate research methods and analytical techniques appropriate to the discipline is a core requirement for writing theses and dissertations. Selecting a research methodology that is appropriate, robust, and justifiable for the research questions is a core skill. Some research topics naturally involve deeper statistical or methodological analyses. Therefore, the choice of a research topic should be guided by the skills, expertise, and demonstrated strengths of the student. Additionally, students must have the ability to search for, identify relevant, and critically review literature pertaining to their studies.
- **Time management:** For most students, writing a dissertation or thesis is their first research project. Ineffective management of their time can lead to missed deadlines, thereby forcing a rushed completion of the dissertation or thesis. It is common for students to underestimate the time requirement for various stages of the research, particularly the literature review and data collection. The ability to sufficiently consider and balance existing work, family, and other demands is critical. Developing a research work plan using a Gantt Chart is strongly encouraged for effective time management in the research process.
- **Academic writing skills:** The structure and formatting of theses and dissertations require building a coherent narrative, logically transitioning between ideas, and supporting claims with evidence. Using proper citation styles is essential for clarity, credibility, and academic integrity.
- **Tenacity and coping with stress:** The writing process for theses and dissertations is often very frustrating and challenging, requiring resilience and adaptability. Passion and interest play a critical role. Students must select research topics that are personally motivating and fascinating to keep them encouraged amid any frustrations and challenges in the research process.
- **Record keeping:** Maintain duplicates of all research materials and various drafts of the thesis or dissertation.
- **Computer literacy:** Computer literacy is not just a technical skill, it is a critical enabler of academic research competency, efficiency, and integrity. Without it, students struggle with essential research functions such as writing, referencing, analysis, and communication.

2.3 Research Topic Selection

Refining the terms used, accurately framing the focus of the research with a clear scope, and selecting the appropriate academic knowledge base are key to defining a research topic. The first step in writing a thesis or dissertation is the identification of a potentially suitable research topic with an accurate title statement. The research topic is the initial impression of a dissertation or thesis, which sets the stage for the entire research and provides a broader version of the research area. Therefore, it must be defined and drafted accurately to attract an audience and increase the visibility of the research paper.

A research topic is a research problem identified and defined by an academic discipline through interest, experience, or professional practice. The research topic is a concise, brief, and succinct statement of the research problem, and serves as a framework for guiding the research process while setting the scope of the research. Selecting a research topic is the foundation of the thesis or dissertation process. Therefore, do not rush over this. Take time to work on the research topic and be convinced that you have got it right.

Upon matriculation into the graduate programme, students are expected to begin considering possible research topics for their theses and dissertations. Therefore, this Manual should be made available by the Office of the Vice President of GNAT IRIRS to students during matriculation.

Students are encouraged to begin the thesis or dissertation writing process as early as possible in their programme to ensure timely completion of the degree. Research method lecturers and instructors should encourage students to begin considering their proposed research topics during research method courses. This requires that lecturers not only emphasise the theoretical aspects of research but also the practical application of research to societal and institutional problems.

Some students begin the graduate programme with a general idea for their thesis or dissertation topic, while others develop their research focus as a result of their coursework. Students are encouraged to think about potential research topics as they progress through the programme. Early engagement should allow sufficient time to refine their topics and work in a well-planned and collaborative manner with their supervisor.

Students are expected to submit their research topics to the Office of the Vice President through their Heads of Divisions (HoDs) by the middle of the first semester.

2.3.1. Guiding Principles in the Selection of an Appropriate Research Topic

Generating and defining a research topic should evolve out of the natural course of your graduate studies. Students are encouraged to consider issues of interest that arise during the coursework and the range of experiences from professional practice and other settings in the broader society. Gaps identified from previous studies serve as sources of potentially substantial research topics.

- **Is there a research gap?** The main criterion for accepting a research topic for a thesis or dissertation at GNAT IRIRS is that it should be sufficiently applied. The first step to writing a dissertation or thesis that shows a unique contribution is identifying a research gap in the existing literature. It refers to a problem, question, or issue that remains insufficiently addressed in the current body of knowledge. Identifying a research gap can help to narrow down the topic, define the research questions, and justify the significance and originality of the study. The topic must make new and substantial contributions to the field of study.

- **Is the topic socially and/or politically sensitive?** Most socially sensitive topics have the potential of being considered unethical, illegal, and immoral, including putting the research participants at risk. Therefore, students should avoid topics that could be socially or politically contentious.
- **Is the topic feasible and practical?** Every researcher is confronted with limited resources, including time and financial constraints. Within these constraints, some things can be researched while others cannot (Bryman et al., 2021). Therefore, students must focus on research topics that are realistic, achievable, and doable within the limited time available for the completion of their dissertations and theses. The research topic must be demonstrably feasible. Attention must also be given to the sources of data while choosing a research topic. Can the required data be accessed ethically, legally, and reliably?
- **Is the scope of the study manageable and appropriate?** Once a decision regarding the research topic is made, the scope of the topic must be assessed. The scope of a research topic focuses on the extent to which the research problem defined by the research area will be explored, including the specific parameters, boundaries, and variables within which the study will function. Avoid research topics that are too broad and complex, and cannot be comprehended, managed, and completed within the required time, or very narrow topics that are limited in scope and do not provide enough information and direction for the study. Pre-researching the proposed research topic for its scope, size, feasibility, and viability is essential.
- **Is the topic aligned with and relevant to your discipline of study?** Students are strongly encouraged to select research topics relevant to the field of study. The topic selection should also be relevant to the professional background of the student. Lack of a broader understanding of the issues implied in the topic could lead to errors and misinterpretations of the results and findings.
- **Is the topic brief, clear, and self-explanatory?** The research topic should be concise, specific, and informative. This Manual recommends a research topic title of not more than 15 words, in line with the guidance of Brink, Walt and Rensburg (2018), and Creswell and Creswell (2023), who suggest a maximum of 10–15 words. The title should be self-explanatory and reflect the core focus of the study.

2.4 Theses and Dissertation Supervision: Graduate Research Supervision

Swanson (2023) described graduate research supervision as the backbone of graduate students' success. Writing a thesis or dissertation is generally under the guidance of a supervisor. The dissertation and thesis writing process can be described as an apprenticeship between a mentee (graduate student) and an academic or professional expert (supervisor).

At GNAT IRIRS, the major parties involved in graduate research supervision include:

- i. The Graduate Student
- ii. The Supervisor
- iii. The Office of the Vice President

2.4.1 Appointment of Supervisors

The Office of the Vice President appoints supervisors for the supervision of theses and dissertations based on the recommendations from the Heads of Divisions (HoDs) and the Graduate Research Committee (GREC).

In appointing supervisors, the student's proposed research topic must align with the supervisor's academic or professional expertise. Students are assigned to supervisors with specialised knowledge related to their proposed topic. It is assumed that appointed supervisors possess the relevant expertise and experience to support students effectively. Supervisors shall only be assigned after the student has submitted a proposed research topic to the Graduate Research Committee.

- **Dissertations:** One supervisor is appointed for each student.
- **Thesis:** Two supervisors (Principal and Co-supervisor) are appointed for each student. The Principal Supervisor is an academic and a faculty member who serves as the main supervisor, while the Co-Supervisor is a practitioner who provides additional insights and expertise from a professional perspective. The Co-Supervisor may act in the absence of the Principal Supervisor, if necessary. To avoid conflicting guidance, both supervisors must clarify their roles and coordinate effectively.

All students shall be assigned supervisors by the middle of the first semester, in alignment with the requirement to submit research topics at that stage of the programme. This applies to MEd, MA, and MPhil candidates to ensure timely research guidance, compliance with academic timelines, and progress toward successful completion.

Qualification of supervisors: All supervisors must be accredited by the Institute.

- **Academic supervisors:**

- i. Must have taught or carried out research in a university or equivalent research institution for a minimum of two (2) years, with some publication experience.
- ii. Must be sufficiently familiar with, and have expertise in, the student's research area, or willingness to acquire that familiarity and expertise before accepting to supervise.

- **Practitioners**

- i. Must be a qualified professional in the relevant field of study.
- ii. Must have at least five (5) years of experience in the field.

2.4.2. Responsibilities of the Graduate Student

Before embarking on the journey of writing a thesis or dissertation, it is essential to equip yourself with the right tools and skills to establish a solid foundation. These essential requirements lay the groundwork for a more successful and productive thesis and dissertation writing process, which can lead to a rewarding academic experience. Understanding your role as a graduate student in the supervision process can help maximise the benefits of the supervisory relationship.

- **Research topic selection:** It is not the supervisor's responsibility to assign a research topic. The supervisor provides guidance in choosing a topic, but the student must identify and select a topic that aligns with their field of study and contributes meaningfully to knowledge. Students must ensure that their topics meet the criteria for original research.
- **First meeting with the supervisor:** The student-supervisor relationship often begins with the first preliminary meeting, which typically includes a discussion of the level of input students expect from their supervisors. Students are encouraged to approach this meeting with confidence and openness. The relationship may evolve into a collegial one as the student takes ownership of the research process. The initial meeting should focus on refining the research topic, where necessary, and on establishing mutual expectations.
- **Responding to supervisor feedback and adherence to corrective actions:** Maintain regular communication with the supervisor and seek feedback at every stage of the research. Given supervisors' academic workload, including teaching and grading, students should submit drafts early to allow sufficient time for review. Always include previous drafts when submitting revisions. When responding to comments, provide a summary of changes made and how each suggestion was addressed. This improves efficiency and expedites feedback. If a deadline is approaching, inform your supervisor early.

In the student's best interest, it is crucial to follow the guidance and corrective actions suggested. Supervisors often engage more meaningfully with students who are responsive and committed to

the process. Students should be open to constructive criticism, reflect on feedback, and challenge their ideas as part of the learning process.

- **Adherence to style and formatting specifications:** It is your responsibility to ensure that the thesis or dissertation submitted is well-written and conforms to the requirements of this Manual. Strict adherence to formatting, referencing, and presentation standards is required. Thorough familiarity with this Manual is essential before beginning your thesis or dissertation.
- **Owning the research and responsibility for independence:** As the principal investigator, you are responsible for conducting and owning the research process. While independent thinking is encouraged, students should balance autonomy with active engagement from the supervisor. The goal is to generate original work while receiving the best guidance through regular communication and collaborative reflection.
- **Standards of integrity and ethical behaviour:** Students must uphold high ethical standards throughout the research. This includes seeking ethical clearance from the Graduate Research Committee when human participants are involved and consulting the Institute's Research Ethics Policy. You are accountable for ensuring academic honesty and ethical conduct throughout the work.
- **Proofreading:** You are responsible for proofreading your thesis or dissertation. Supervisors are not responsible for basic editing, formatting, or grammar corrections. Supervisors may return drafts that show poor proofreading. To improve accuracy, consider proofreading printed versions rather than digital formats. Given the difficulty of self-proofreading, you may also seek help from peers or professional editors.
- **Identify and utilise research materials and resources:** You must locate and use appropriate research materials, including relevant literature. Make full use of the Institute's research resources. All graduate students have access to Turnitin for plagiarism detection and software such as SPSS and NVivo for data analysis. Use the GNAT IRIRS Library and its electronic access point: <http://ghlibrary.online:1037/>.
- **Acquire relevant and new research skills:** Disclose early any challenges or knowledge gaps, and seek support from supervisors or faculty. This includes areas such as methodology, data analysis, or academic writing. Accept guidance with humility and openness.
- **Research-life balance:** Effective time management is critical. Students must balance academic responsibilities with personal and professional demands. Developing a research work plan or Gantt chart will support a healthy and productive balance.
- **Defence of the research proposal and the final thesis or dissertation:** Once the research topic is agreed upon, the student must submit a research proposal to the supervisor for review, after which it will be forwarded to the Graduate Research Committee for defence and ethical clearance. The student is also responsible for defending the completed thesis or dissertation during the oral examination (viva voce).

2.4.3. Responsibilities of the Supervisor

A supervisor is a faculty member or a practitioner who provides an academic and/or professional service of supervision to a graduate student writing a dissertation or thesis. Throughout the research and writing process, the supervisor guides, advises, facilitates, and offers suggestions on how students can curate, create, produce, present, and defend a high-quality thesis or dissertation. However, it is the sole responsibility of the student to create, produce, present, and defend the dissertation or thesis, since the student is the author of the work. Nevertheless, it is rewarding for supervisors to see their students produce a high-quality dissertation or thesis that passes the examination and makes a significant contribution to knowledge and practice.

- **Accept responsibility and be responsive:** Acceptance of the role of a supervisor implies that supervisors have a duty of responsibility and care to the student, the Institute, and any other bodies involved in the supervisory relationship.
- **Establish initial contact with students:** Supervisors are expected to arrange for their first meeting with their students. During this meeting, the ground rules for supervision should be discussed. The supervisor should provide early advice about the nature of research and the standard required, since most students may be engaging in a research project for the first time. For many students, the degree of help the supervisor can extend to them is unclear; this must be clearly communicated to students at the outset.
- **Reconsideration and refinement of the research topic:** The initial research topic may require some modification and refinement. While research topic selection is the core responsibility of the student, supervisors should assist in the formulation, planning, and refining of the research topic where necessary, to ensure that the topic is significant and could demonstrate originality and independent critical thinking.
- **Technical guidance:** Providing subject-specific guidance and appropriate supervision across all stages of the thesis or dissertation process is the supervisor's responsibility.
- **Guidance on sources of literature:** The supervisor should guide the student to relevant sources of materials on the research topic, particularly for the literature review.
- **Regular supervisory meetings and feedback:** Regular communication with students is essential to help them remain focused and committed. This includes providing timely and thorough feedback with constructive suggestions for improvement and continuation. Agreed supervisory meetings and scheduled times are important in ensuring that supervisors do not disadvantage students by making meetings less frequent. Supervisors are to maintain close and regular contact with the student and establish availability through negotiations. The turnaround time for feedback should normally not exceed **three weeks**.
- **Progress report:** Supervisors are to prepare and submit quarterly progress reports to the Office of the Vice President on the student's progress. This report must also be signed by the student.

- **Encourage independent critical thinking:** For students to produce dissertations and theses that reflect independent critical thinking, supervisors should encourage the development of skills and attitudes that promote autonomous research. This can be achieved by fostering open discussion and debate, and by paying attention to and respecting the views, knowledge, and expertise of students.
- **Conferences and professional networking:** Supervisors are to encourage students to attend and present at conferences and seminars organised by GNAT IRIRS, as well as at external scholarly or professional bodies related to their research. This is critical in helping them build professional networks.
- **Guidance on proposal defence and viva voce:** Supervisors should provide guidance to help students prepare for both the proposal defence and the final oral examination. Passing the viva voce is a key objective for both the supervisor and the student. It is the supervisor's responsibility to prepare the student by organising a pre-viva (i.e., mock viva) session. The supervisor should also guide the student in addressing the examiners' comments and verify that the necessary corrections have been made.
- **Motivating:** Generally, encouragement is often considered one of the most essential elements of motivation. Supervisors are advised to remain positive even when offering criticism, be courteous, and avoid using offensive language that could discourage or demotivate students. Communicating critiques in a constructive and respectful manner, and maintaining academic rigour, are essential for sustaining student motivation.
- **Publication:** Supervisors are encouraged to collaborate with students on joint publications in high-ranking academic journals, where appropriate.
- **External assistance:** A dissertation or thesis may require complex statistical analyses or methodologies in which the student may possess limited expertise. The supervisor should advise the student to seek such help as early as possible. This may include enrolling in additional courses or training sessions.
- **Sabbatical leave and retirement:** Supervisors who plan to take sabbatical leave or are approaching retirement must make appropriate arrangements with the Graduate Research Committee to ensure that the student's work continues without unnecessary delays due to the supervisor's absence.
- **Attend faculty research seminars:** As part of GNAT IRIRS's development into a world-class applied research institution, faculty research seminars are essential for building faculty capacity and improving the quality of graduate research output. This includes participation in seminars on effective supervision. Faculty members are therefore expected to attend these seminars.

2.4.4. Responsibilities of the Institute: Office of the Vice President

The Office of the Vice President, through the Graduate Research Committee, oversees graduate education and research at GNAT IRIRS. This responsibility is fulfilled by monitoring the activities of graduate students, supervisors, and examiners.

- **Appointment of supervisors:** Through the HoDs, the Office of the Vice President appoints supervisors who are sufficiently familiar with, and have expertise in, the student's field of research. Supervisors are appointed only after students have submitted their proposed research topics to their respective divisions.
- **Appointment of examiners:** At GNAT IRIRS, both dissertations and theses are evaluated by appointed examiners, followed by an oral examination. The Office of the Vice President is responsible for appointing these examiners, ensuring they are subject-matter experts in the candidate's field of study.
- **Monitor adherence to style and format:** Before certifying to the Office of the Registrar and the Division that the thesis or dissertation has been formally approved, the Office of Vice President shall review the manuscript to determine whether it complies with the standards of form and style outlined in this Manual. The Office must certify that the work meets acceptable standards of scholarship and reflects a level of research, originality, and academic writing appropriate for graduate-level research. Theses and dissertations are approved only if they meet content, format, and stylistic standards as specified in this Manual.
- **Organise and supervise the oral examination:** Through the Graduate Research Committee, the Office of the Vice President organises, supervises, and verifies that the student has successfully passed the oral defence of the thesis or dissertation. The panel of examiners for the viva voce typically consists of faculty members, experienced researchers, and professionals, including both internal and external examiners. The examiners must be experts in the field of study, including the methodological approach adopted, to prevent what Gray and Jensen (2022) described as being philosophically antipathetic to a particular research paradigm.
- **Organisation of graduate and faculty seminars:** The Office of the Vice President organises research seminars to promote academic engagement and collaboration. These events support students in improving their research and presentation skills and help integrate them into the academic community. For faculty, particularly new members, the seminars strengthen supervision abilities and enhance the quality of graduate research.

2.4.5. Supervisor-Student Working Relationship

Since the relationship between the supervisor and the student is akin to an apprenticeship, a healthy working relationship is a key determinant of the relationship's success. The inherent power imbalance between students and faculty members can shape the research in significant ways. The student and supervisor are jointly responsible for the scholarly style and quality of the thesis or dissertation.

The following measures can enhance a healthy supervisory relationship:

- **Mutual respect:** Supervisors and students may have different styles of relationships in the supervision process. The key requirement is for the supervisor and student to treat each other with mutual respect, since each brings different skills to the research problem, though the supervisor is known to be the expert and lead. In most cases, the supervisor may be knowledgeable and experienced in their field. However, as the expertise and knowledge of the student grow in the topic, the student may question the supervisor. Therefore, there must be a balance between respecting the supervisor and thinking independently as a research student under supervision. The student must acknowledge that the supervisor may be an experienced mentor with several years of supervising students.
- **Agree on mode of communication:** The student and supervisor should establish a coherent understanding of how communications will be initiated and responded to. The initial meeting should explicitly spell out meeting times, telephone communication, correspondence by e-mail, and submission of output in softcopy or hardcopy.
- **Avoid inappropriate personal relationships:** Amorous relationships between supervisors and their students are unethical and constitute a violation of the Institute's Sexual Harassment Policy.
- **Addressing misunderstandings and conflict:** Like all other relationships, misunderstandings and conflicts cannot be ruled out in the student-supervisor relationship. While it is always advisable for students to resolve any conflicting issues with their supervisors, by first undertaking an honest and objective appraisal of the issues and making amends, where applicable, and by seeking the attention of the supervisor. If the conflict cannot be resolved in this manner, the student should seek help from the HoD or the appropriate authority, who may refer it to the Office of the Vice President. It is always in the best interest of the student to maintain the working relationship with the supervisor until the completion of the work.

2.5. Submission, Defence, and Approval of the Research Proposal

Before commencing the writing of a research proposal, a graduate student is required to seek approval from the supervisor regarding the chosen research topic. Once the research topic is approved, the student proceeds to submit a comprehensive research proposal to the supervisor. The research proposal is a blueprint for action that outlines the entire research process through a plan, including why the research is important, and how the researcher intends to undertake the study, using sound literature and methodologies. The proposal is also a persuasive, informative, and original statement of the student's research interests; it could be described as an accepted statement of the research and forms the cornerstone of the entire research.

The research proposal includes a clear statement of the research problem, the purpose of the study, an extended literature review highlighting its relationship to existing work in the area, the contribution to the advancement of knowledge in the field, a proposed research methodology, and an annotated list of references.

In developing the proposal, students must work closely with their supervisors. Once the draft is approved by the supervisor, the proposal must be submitted to the Office of the Vice President through the Graduate Research Committee at least **two weeks** before the scheduled presentation date. The student is responsible for ensuring that the supervisor's formal approval accompanies the submission.

2.5.1 Components of the Research Proposal

The proposal is structured into four major sections: the Introduction, Literature Review, Methodology, and Timeline. At this stage, the introduction, literature review, and methodology are analogous to, but not as comprehensive as, the first three chapters of the completed thesis or dissertation. Typically, the proposal will include, but not be limited to, an introduction of the research problem or question, an abbreviated literature review that provides a summary of the current status of the research problem, a methodology that outlines the research philosophy and paradigm, methods and techniques of addressing the research question, and a proposed timeline presented in the form of a Gantt Chart.

Introduction:

The introduction section of the proposal focuses on the research problem, purpose, rationale, and significance of the study. The introduction demonstrates the justification for the need to explore the research problem, including asserting the new insights of the significant potential contributions of the study to existing knowledge and advancement in the field of study. The introduction generally argues that there is a niche for the study, and also outlines the benefits and importance of investigating the problem.

The introduction in the research proposal is structured as follows:

- Background of the Study
- Problem Statement
- Research Objective, Questions, and Hypotheses
- Significance of the Study
- Scope and Delimitations of the Study
- Limitations of the Study
- Definitions of Terms

The introduction section of the proposal often becomes Chapter One in the final thesis or dissertation.

Literature Review:

To place the research problem in context, the proposal must review the relevant literature. Students are expected to demonstrate their understanding and appreciation of relevant theories, concepts, and empirical studies. The review must identify what is known and unknown about the topic and show that the proposed research has the potential to advance both knowledge and theory.

The literature review section of the proposal is typically structured as follows:

- Theoretical Literature
- Conceptual Literature
- Empirical Literature

As the research progresses, this preliminary literature review is expanded and developed into Chapter Two of the final thesis or dissertation.

Methodology:

While a designated chapter is provided for methodology in the final thesis, the research proposal must include a summarised and focused version of the intended methods to be used. The abbreviated methodology should clearly explain how the research questions will be addressed.

The methodology section is essential for demonstrating the soundness and appropriateness of the research approach. It also forms the basis for granting ethical clearance. If the study presents significant ethical concerns, the Graduate Research Committee may withhold approval.

The methodology section of the research proposal should outline the philosophical and methodological foundations of the study, including:

- Research Philosophy and Paradigm (**for thesis candidates only**)
- The Research Approach and Design
- Study Population and Study Area
- Sampling Design and Procedure
- Data Collection Techniques
- Data Analysis
- Ethical Consideration

The proposal must justify why these methods were selected and why alternative approaches were not adopted. The methods should be described in the future tense and later revised to the past tense in the final thesis after data collection and analysis are completed.

2.5.2 Length of the Research Proposal

As a guide, a viable research proposal that appropriately frames the study, supported by a sufficiently developed literature review and methodology, should adhere to the following maximum lengths:

- **Dissertation:** 15 pages, including the List of References.
- **Thesis:** 15 pages, including the List of References.

For the final dissertation or thesis, the following length standards apply:

- **Dissertation:** 40-60 pages, excluding appendices.
- **Thesis:** 120-150 pages, excluding appendices.

2.5.3 Examination and Approval of the Research Proposal: Possible Outcomes

The proposal is typically reviewed through a formal oral presentation, which should last approximately **15 minutes** for both dissertations and theses, followed by a question-and-answer session with the committee. The proposal should be circulated to the committee members at least **seven days** before the presentation.

For a thesis proposal, the candidate has up to **three** opportunities to pass the defence. Appendix A shows the template for the assessment of the research proposal, with a pass mark set at **60%**.

The Graduate Research Committee will deliberate and determine one of the following four outcomes:

- i. Acceptance of the proposal without any changes
- ii. Acceptance of the proposal with minor changes
- iii. Acceptance of the proposal with major changes
- iv. Non-acceptance of the proposal

Each proposal is carefully examined for its rigour, originality, and relevance to determine whether it meets institutional standards. Once the proposal is approved by the Graduate Research Committee, the supervisor and student may proceed to the Intermediation Submission stage, which includes Chapters 1, 2, and 3 of the research process.

2.5.4 Ethical Clearance

The GNAT IRIRS is committed to upholding ethical standards in all research activities. In accordance with the Institute's Research Ethics Policy, any research involving human subjects must receive prior approval from the Institutional Review Board (IRB) before initiation. This applies to all graduate and faculty research.

The IRB is responsible for ensuring that research upholds the rights, welfare, and safety of participants, communities, and the environment. Students must submit a complete research proposal along with the Ethical Clearance Form (Appendix B) to the IRB, allowing at least **two weeks** for approval. The proposal must also be submitted to the Graduate Research Committee as part of the ethical review process.

As students begin planning their theses or dissertations, they must incorporate ethical considerations from the outset. No data collection involving human participants shall begin without written IRB approval. All research must adhere to the principles of informed consent, voluntary participation, confidentiality, risk minimisation, and respect for persons, in line with national and international standards.

2.5.5 Assessment and Defence: The Oral Examination (Viva Voce)

When the student and supervisor agree that the thesis or dissertation is complete and ready for assessment, the final version is submitted to the Office of the Vice President for examination. The oral defence provides students with the opportunity to demonstrate their ability to participate in a scholarly discussion of their thesis or dissertation. The defence verifies and tests the candidate's knowledge to determine if the research piece is their work as declared by the candidate. It also provides the candidate with the opportunity to explain and defend the arguments of the dissertation or thesis.

Dissertations are examined by one internal examiner, while theses are examined by both an internal and an external examiner. Examiners are given **two weeks** to review dissertations and **four weeks** to review theses, after which they provide written recommendations for any required revisions. If the examiners pass the thesis or dissertation, the candidate is invited for an oral examination and defence (viva voce). The oral examination is a critical element of the research process. To allow for the incorporation of changes and possibly additional research, the oral examination should be held at least **six weeks** before the date of graduation. The date for the oral examination must be set by the Office of the Vice President not later than **two weeks** before the defence to give students sufficient time to prepare.

The final oral defence of a dissertation shall last **20 minutes**, while that of a thesis shall last **30 minutes**. Candidates are required to deliver a verbal presentation using PowerPoint, followed by a question-and-answer session with the examination panel.

To successfully defend the dissertation or thesis, the following preparatory steps are recommended:

- Prepare a PowerPoint presentation, and show it to your supervisor for any review before the main viva. Keep the slides as brief as possible to present within the allocated time.
- Attend other oral examinations, particularly from your division to observe the process and gain insight regarding what is expected in terms of format and style of questioning.
- A mock viva is a practical simulation session designed to simulate the actual viva experience as closely as possible.

During the examination:

- Candidates must respect the allocated time for the presentation and ensure that they cover all essential aspects of the research within the allocated time.
- It is allowed to have a copy of the thesis or dissertation with you during the defence to refer to any portion in responding to questions.

In conducting the oral examination:

- The Chairperson of the Graduate Research Committee may preside over and manage the examination, and ensure that it is conducted fairly and professionally.
- Other graduate students and faculty members interested may attend the oral examination. However, only the panel of examiners are allowed to raise issues and ask questions after the presentation.

Outcomes of the Viva Voce

Immediately at the end of the oral examination, the student (and any visitors) will be asked to leave the room. The examiners will deliberate and privately convene to discuss the thesis and oral examination. The candidate is often informed about the decision of the panel of examiners in person at the viva voce and in writing thereafter, typically within **one week**, including the date by which the corrections should have been addressed.

The results of the oral examination must be signed by all committee members and submitted to the Office of Vice President. The pass mark is **60%**. Appendix C shows the scoring sheet.

The student shall be notified immediately of the panel's decision, which typically falls into one of the following categories:

- (a) The thesis or dissertation is passed with no revision
- (b) The thesis or dissertation is passed with minor revisions
- (c) The thesis or dissertation is passed with major revisions
- (d) The thesis or dissertation is not passed

If the thesis or dissertation is passed with major revisions, it means the student has passed the defence but with reservations, and that major revisions are required. In such cases, a repeat of the oral defence is not required. The student is then responsible for making the changes indicated and resubmitting the thesis or dissertation. If the student fails the examination, the defence must be repeated at a later date with all the suggestions fully effected. After consulting with the supervisor, a second oral defence must be scheduled for the student. The oral defence may be repeated only once.

The durations for re-submission in case (a) and case (b) are one month and two months, respectively. In case (c), students have a maximum period of **six months to one year** to effect the necessary changes.

CHAPTER THREE: MAIN TEXT AND CHAPTERS

At GNAT IRIRS, the traditional format of a dissertation or thesis is organised and structured into six chapters, as a single narrative describing the research problem, context and significance, the methods used, the results and findings, and the conclusions and recommendations.

The six generic chapters include:

Chapter One: Introduction

Chapter Two: Literature Review

Chapter Three: Research Methodology

Chapter Four: Presentation of Results and Findings

Chapter Five: Discussion of Results and Findings

Chapter Six: Conclusions and Recommendations

The first three chapters are an expansion of the three sections (Introduction, Literature Review, and Methodology) of the research proposal.

3.1 Chapter One: Introduction

This chapter provides a comprehensive introduction to the research problem, research objectives, questions, hypotheses (where applicable), significance, and scope of the study. The chapter sets the context and presents the rationale and importance of the research topic. It typically opens with a broad overview of the research topic, starting at the global or regional level, and progressively narrows down to the national, local, or institutional context in which the study is situated.

The Introduction Chapter is structured as follows:

3.1.1 Background of the Study

The background of the study is the basic contextual and conceptual foundation readers require to understand the purpose of the research. It establishes the context to situate the study in time, location, or culture, by discussing how the problem evolved, trends related to the issue, and unresolved elements in theory and practice. The background of the study is generally positioned within the broader classical and current theory or practice and may include the results and findings of previous research to demonstrate gaps and justify the need for the study.

In the background, the student should set the stage for the study's relevance, purpose, and scope. This section should also integrate a brief review of relevant literature to underscore the research gap and introduce key conceptual definitions. The background should clearly establish the study's significance.

3.1.2 Problem Statement

The problem statement could be a gap in existing knowledge, contradictions, debates, controversies in an established theory, a real-world practical problem, or a challenge that is to be addressed by the student. It should be something challenging or worth studying. Therefore, the problem statement is a clear, brief, and precise statement that encapsulates what the study intends to do, and mainly sets out reasons the research is worth tackling.

An effective problem statement should articulate the significance and urgency of the issue under investigation, demonstrating that the research is necessary and timely. In defining and stating the problem, present the important characteristics of the research problem, including the underlying cause, the current effects, and the implication of tackling or not tackling the problem. This section should reflect a logical flow from the background and clearly link to the research objectives and questions.

3.1.3 Purpose of the Study

The purpose of the study is the overall goal or intended outcome of the research, presented as a clear and concise broad statement. It should explain what the researcher aims to achieve, guided by the problem identified.

The purpose statement should begin with a phrase such as “The purpose of this study is to...” and must align directly with the research problem, objectives, and questions.

3.1.4 Research Objective, Questions, and Hypotheses

The research questions are mainly generated from the problem statement and the purpose of the study. Avoid double-barreled and leading questions, and dichotomous research questions. They should be framed to guide the investigation and align directly with the specific dimensions of the problem.

The research objectives and questions must be aligned and logically connected. Each research objective should begin with a measurable action verb (e.g., identify, examine, analyse, evaluate) and must adhere to the SMART criteria; being Specific, Measurable, Achievable, Relevant, and Time-bound.

For quantitative studies, research questions alone are inadequate to comprehensively explore the problem statement. Therefore, setting supporting operational hypotheses as additional assessments of the research objectives and questions may be required. These hypotheses should be testable statements that predict relationships between variables and are aligned with the theoretical framework and methodology.

3.1.5 Significance of the Study

The significance of the study focuses on the importance and relevance of the research by indicating why the study matters, to whom it is important or relevant, in what way, and how such persons will benefit from the research.

This section should articulate the rationale for conducting the study, highlighting the knowledge gap it seeks to address and its potential contribution to both academic scholarship and real-world practice. Explain the primary contribution and implications of the study to policy, practice, and theory, and how the study adds to the body of knowledge.

To emphasise the significance of your study, explain why it is necessary to conduct it, and the specific contributions expected from it. Indicate how the results and findings will inform policy decisions, improve professional practice, enhance theoretical understanding, or benefit specific stakeholders such as practitioners, educators, community groups, or policymakers.

3.1.6 Scope and Delimitations of the Study

The scope of the study relates to the boundaries, focus, and coverage of the research. It defines the restrictions and parameters the researcher sets out to narrow the study, by clearly indicating the topics, themes, geographical area, time period, and target population the study will address. The scope sets out the boundaries by specifying the issues to be studied and the intended depth of coverage.

Delimitations, on the other hand, are the elements that limit the scope and are within the control of the researcher. These include choices and constraints such as time, location, financial and human resources, methodological approach, and selection of variables or conceptual frameworks.

While the scope identifies what the study will focus on, the delimitations clarify what the study will intentionally exclude. Clearly stating the scope and delimitations helps the reader understand the parameters within which the study was conducted and provides a context for interpreting the results and findings.

3.1.7 Definitions of Terms

This section presents the operationalisation of key terminologies and concepts as used within the context of the study. The key concepts in the study must be defined in terms of both scientific and operational definitions to help readers understand how such terms are measured.

Include words that may be vague, open to misinterpretation, or unfamiliar to the reader. Definitions should be context-specific and reflect how the terms are applied within the framework of the research. Where appropriate, indicate whether the terms are drawn from theoretical frameworks, empirical studies, or institutional usage.

Providing clear and consistent definitions enhances the study's credibility and ensures that readers interpret the research concepts accurately.

3.1.8. Organisation of the Study

The organisation of the dissertation or thesis provides a roadmap of how the research is structured. This section offers a brief synopsis of the content of each chapter, guiding the reader through the logical progression of the study. It helps to clarify how the various chapters are interconnected and how each contributes to addressing the research problem and objectives.

A typical organisational summary should state the purpose and key focus of each of the six chapters.

3.2 Chapter Two: Literature Review

The literature review is prepared early in the research process, beginning with the research proposal stage. Once the research topic and the purpose of the study are identified, a systematic search of the literature is conducted to find out what is known and unknown about the research topic.

The goal of this chapter is to present and critique the literature to answer the research questions identified in Chapter One. The chapter identifies the relevant literature, evaluates and summarises it in relation to the research topic, and establishes the theoretical and empirical basis for the study.

This chapter is organised thematically, typically around the research questions, key concepts, or theoretical frameworks, rather than following prescribed headings, as in Chapter One. An effective review of the literature involves structuring the identified themes into sections and sub-sections that present a logical and coherent flow of ideas.

The chapter typically begins with an introduction that briefly indicates the sources of literature consulted, the scope of the review, and how the chapter is structured.

The major themes in the literature review may include (but are not limited to):

- Conceptual definitions and clarifications
- Theoretical and/or conceptual frameworks
- Empirical studies related to the research problem
- Gaps, contradictions, or limitations in the existing literature
- Relevance of reviewed literature to the current study

3.2.1 Theoretical Framework and Underpinning

Theory guides and generates research ideas, while research assesses the value of existing theories and provides a foundation for how new theories are developed and existing ones redefined, refined, modified, or extended. The theoretical framework must demonstrate the key theories that have been influential and accepted in explaining, predicting, or exploring the variables implied in the research topic, including the main theoretical debates surrounding the research topic.

The specific theories that formed the theoretical framework of your study should be declared, including any alternative theories considered, and a justification provided for why the selected theory or theories are the most suitable for addressing the research questions.

In this section, explain the core assumptions, applicability, strengths, and weaknesses of the theory, and how any weaknesses will be addressed in your study. Where applicable, discuss how the theory informs the research design, data collection, and interpretation of the results and findings.

3.2.2 Empirical Literature

Empirical literature consists of previous research studies that have collected and analysed data to explore issues related to the research topic. It provides evidence on the research designs, data collection instruments, analytical techniques, and major patterns and trends in the results and findings of previous studies.

An evaluation of the methodology used in these studies can suggest the adoption of a similar methodology, a modified methodology, or an alternative approach in your proposed study. This evaluation helps in justifying your methodological choices based on what has or has not worked in similar contexts.

The empirical literature strengthens the argument of the study by citing previous studies that have addressed similar research problems or used comparable methodological frameworks. It should demonstrate how prior results and findings inform your study and identify gaps, inconsistencies, or areas requiring further exploration. The empirical literature should also clearly establish its relationship with the theoretical framework, showing how the theory has been tested or supported through real-world applications.

3.2.3 Conceptual Framework

The foundation of every conceptual framework is a strong theoretical framework grounded in one or more formal theories, including other key concepts and empirical findings. A conceptual framework can take several forms and shapes, but is mostly presented in a visual format, diagrammatically illustrating the presumed cause-and-effect relationship.

The conceptual framework should show the relationships among these concepts and how they relate to the research study. This framework helps guide the research design, data collection, and analysis by visually mapping the variables or constructs under investigation and how they interact. It should clearly indicate independent, dependent, and mediating or moderating variables (where applicable).

3.2.4 Characteristics of an Effective Literature Review

In addition to presenting empirical, theoretical, and conceptual insights, the literature review must demonstrate the following core characteristics:

- **Structured and critical:** While the themes from the research questions are often used to structure the literature review, the argument must be coherent and thematically logical. A major requirement of the literature review is a demonstration of your ability to think as a scholar by being critical.

Critiquing the literature involves analysing, synthesising, and interpreting findings, identifying consistencies, contradictions, and gaps, and drawing reasoned conclusions from the body of evidence. Do not present just a list of literature sources instead of a literature review. A critique of the literature involves opposing and contradictory opinions in relation to the research questions to help build consensus or identify areas of divergence.

To conduct an effective critique, the arguments, debates, claims, controversies, contradictions, and schools of thought surrounding the research topic and questions should be examined and critically evaluated to develop an informed and balanced perspective.

- **Current and relevant literature:** Using current literature is important to ensure that the literature is still relevant within the time frame of the study. There is no strict age limit for sources; however, the currency of the literature depends on the nature of the topic and the evolution of research in the field.

The review should include both current and historical literature that is directly relevant to the phenomenon under investigation. Materials that do not have any direct bearing on the research topic, objectives, and questions must be excluded.

Employing clear inclusion and exclusion criteria, based on keywords from the research topic, can enhance the search strategy, limit information overload, and eliminate irrelevant sources.

- **Credible, reliable, and comprehensive:** Credible and reliable literature refers to the quality, authenticity, and scholarly rigour of the sources consulted. It is important to verify and validate all sources for their scientific merit, methodological soundness, and relevance to the study.

It is strongly advisable to prioritise materials from peer-reviewed journals, reputable academic publishers, and high-impact scholarly databases. The use of grey literature, such as unpublished theses, non-peer-reviewed reports, or blogs, should be minimised and carefully justified if included, particularly in theses.

3.3.5 Common Deficiencies in Student Literature Reviews

Despite its importance, the literature review often poses challenges for students. Common deficiencies include:

- Poor organisation and weak structural flow, leading to a disjointed narrative
- Lack of thematic focus and coherence across sections and sub-sections
- Failure to cite current and up-to-date literature, resulting in outdated discussions
- Inadequate use of credible, scholarly, and influential sources
- Limited or no critical analysis or synthesis of the literature reviewed
- Inclusion of irrelevant sources and inconsistent referencing styles or formatting

Addressing these issues is essential for producing a rigorous and scholarly literature review that sets a strong foundation for the research.

3.2.6. Concluding the Literature Review

The literature review should conclude with a summary of the synthesised findings of existing work. The summary of the literature review should restate the major conclusions by encapsulating the key analysis and findings and placing such conclusions within the context of the study.

It should highlight the main themes and insights emerging from the review and indicate the knowledge gaps articulated in the Problem Statement in Chapter One, which the current study seeks to address. Avoid merely repeating the same information presented in the body of the literature without drawing out the implications and insights. The conclusion should clarify how the reviewed literature supports the need for the present study and sets the stage for the methodological approach in Chapter Three.

3.3: Chapter Three: Research Methodology

The Methodology chapter explains how the research questions generated and developed from the Introduction and Literature Review chapters were answered, and why such methods were the most appropriate. This chapter should provide the empirical basis and theoretical justification for the research approach adopted.

The emphasis should be placed not merely on describing the methodology, but on justifying the methodological choices. Clear justification demonstrates methodological rigour and enhances the credibility of the research.

To structure this chapter effectively, begin with a summary of the overall purpose of the research and a restatement of the research questions. Then, organise the chapter around the following standard headings:

- Research Paradigm and Philosophy (**for thesis candidates only**)
- Research Approach and Design
- Study Population and Study Area
- Sampling Design and Procedure
- Data Collection Techniques
- Data Analysis
- Ethical Consideration
- Chapter Summary

Each section should be logically connected and demonstrate how the research methodology supports the achievement of the study objectives and answering the research questions.

3.3.1 Research Paradigm and Philosophy (only for thesis candidates)

For theses, students are required to present the philosophical and paradigmatic underpinnings of their research, by demonstrating awareness of the epistemological, ontological, axiological, and methodological assumptions that shape the conduct of scientific enquiry.

The Research Paradigm and Philosophy section should clearly articulate the research philosophical stance that guides the study and provide a well-reasoned justification for its selection. This includes explaining why the chosen paradigm is most suitable over alternative positions and discussing the strengths and limitations of the adopted philosophical stance.

Common philosophical paradigms include positivism, critical realism, interpretivism, and pragmatism (Creswell & Creswell, 2023). Each of these paradigms reflects differing views on the nature of reality (ontology), the nature and source of knowledge (epistemology), the role of values in research (axiology), and preferred methodologies.

Every graduate thesis should be grounded in one or a combination of these paradigms. The choice should be logically aligned with the research questions, objectives, and methodology.

3.3.2 Research Approach and Design

The three broad research methodologies are quantitative, qualitative, and mixed methods. The adopted research approach should be clearly stated and justified, and it must align with the philosophical stance adopted in the study. The strengths and limitations of the selected research approach should be identified, along with a discussion of how any limitations were addressed or mitigated in the study.

The research design, which refers to the specific procedure or strategy of inquiry used within the broader research approach, should also be stated, explained, and justified. This includes a clear rationale for its suitability in addressing the research questions and achieving the study objectives.

Common research designs include:

- **Quantitative research:** Survey and experimental designs.
- **Qualitative research:** Case study, ethnography, grounded theory, and, action research
- **Mixed methods research:** Sequential explanatory, sequential exploratory, and concurrent triangulation designs.

Each design carries its own strengths and weaknesses. These should be acknowledged, and steps taken to address potential limitations must be discussed. The research approach and design must together provide a coherent methodological foundation for the entire study.

3.3.3 Study Population and Study Area

This section should identify, define, and describe both the target population and the study population. These two concepts must be clearly distinguished if they differ. The target population refers to the broader group from which the study seeks to draw generalisations and conclusions. The study population, on the other hand, refers to the subset of the target population that is accessible and available for data collection by the researcher.

Clearly specify the key characteristics of the study population, including demographic details such as age, gender, education, occupation, or other relevant attributes. Include the estimated or actual population size, if known, and explain why this population is appropriate for the research.

The study area refers to the geographical, institutional, or social context in which the research is conducted. Provide a brief description of the profile and location of the study area, noting any significant physical, economic, cultural, or institutional features that are relevant to the study.

This section should establish the context and justification for selecting both the population and the study area, ensuring alignment with the research questions and objectives.

3.3.4 Sampling Design and Procedure

This section should indicate and thoroughly explain the sampling techniques and procedures used to select the study participants. A detailed justification for the sampling method must be provided, including its relevance to the research objectives and methodology. Discuss the strengths and limitations of the chosen sampling technique and how potential weaknesses were mitigated in the study.

Common sampling techniques in quantitative research include:

- Simple random sampling
- Systematic sampling
- Stratified sampling
- Cluster sampling
- Multi-stage sampling

For qualitative research, commonly used techniques include:

- Purposive sampling
- Snowball sampling
- Convenience sampling
- Expert/theoretical sampling
- Quota sampling

In addition to describing the sampling technique, indicate and justify the basis for determining the sample size. This may be based on statistical formulas, saturation principles (for qualitative studies), or previous studies.

While justifying the sample size, also acknowledge its limitations and the implications for generalisability, validity, or richness of data. The sampling process should be transparently reported to ensure methodological rigour and reproducibility.

3.3.5 Data Collection Techniques

This section should describe the research instrument used to collect data for answering the research questions and provide a clear justification for its appropriateness in relation to the research objectives, philosophical stance, paradigm, and research design.

Common data collection techniques and tools in quantitative research include:

- Questionnaires
- Structured interviews
- Quantitative content analysis

In qualitative research, the primary data collection methods include:

- In-depth interviews
- Participant observation
- Focus Group Discussions (FGDs)
- Archival records
- Diary examinations
- Narratives or life stories

In addition, this section should include the following:

- Clearly state whether the instrument used was newly developed, adapted, modified, or adopted from previous studies. Provide information on how it was developed, who developed it, and the rationale behind its structure and content.
- Briefly describe the structure and content of the research instrument, including the number and type of items, and how it was organised into sections or thematic areas.
- Explain how the validity, reliability, and/or credibility of the instrument were assessed. For qualitative research, describe procedures for ensuring credibility, transferability, dependability, and confirmability.
- Describe and justify the specific instrument used (e.g., semi-structured interview guide, Likert-scale questionnaire), and explain how it was administered (e.g., face-to-face, online, self-administered).
- Indicate the total number of instruments (e.g., questionnaires or interview guides) distributed or applied, and how many were returned or completed. Report the response and non-response rates.
- Specify the duration of the data collection period, highlight any logistical or ethical challenges encountered, and explain how these challenges were addressed.
- State whether the instrument was pre-tested and/or included in a pilot study. Describe how each was conducted (if applicable), including the sample used and key adjustments made as a result. Explain how both the pre-test and pilot test contributed to the refinement and finalisation of the instrument.

3.3.6 Data Analysis

This section should explain how each research question or hypothesis was analysed, including the specific type of analysis performed and a description of the analytical procedures. Additionally, indicate and justify the analytical tools and software used in processing and interpreting the data.

In quantitative studies, statistical software such as SPSS, STATA, SAS, R, Python, and SmartPLS are commonly used. These tools are effective for various statistical procedures but operate within the bounds of the researcher's knowledge of statistics.

For qualitative research, the analysis typically involves thematic, content, narrative, or discourse analysis, depending on the nature of the research questions. Modern tools such as NVivo, ATLAS.ti, or MAXQDA support coding and pattern recognition in qualitative data. Manual or hand-coding may also be used where appropriate.

In addition, the following should be addressed:

- Describe the data preparation process, including steps taken for data cleaning, editing, coding, and entry (for quantitative studies) or transcription and organisation (for qualitative studies).
- Explain the measures implemented to minimise errors during data entry, transcription, or coding, such as double-checking entries, using software validation tools, or conducting inter-coder reliability checks.
- For quantitative studies, specify and justify the descriptive (e.g., means, frequencies, standard deviations) and inferential statistics (e.g., regression, ANOVA, chi-square) used in the analysis. Clearly identify the statistical software employed.

- For qualitative studies, describe the process of data transcription, open and axial coding, theme generation, and pattern identification. Also state whether qualitative data analysis software (e.g., NVivo) was used or whether coding was conducted manually.

This section should demonstrate that the chosen analytical methods are aligned with the research questions, objectives, data type, and overall methodology.

3.3.7 Ethical Consideration

This section should indicate how ethical standards were upheld throughout the research process.

- **Access to research site:** Indicate how access to the research site was obtained, including any permissions or formal authorisations granted by institutions, gatekeepers, or relevant authorities. Where applicable, provide details of formal letters of introduction or ethical access agreements.
- **Informed consent:** Describe how informed consent was obtained from participants, including whether written or verbal consent was used, and how participants were made aware of their rights to withdraw at any time without penalty.
- **Anonymity and confidentiality:** Explain the procedures adopted to protect participant anonymity and ensure the confidentiality of the data collected. This includes the use of pseudonyms, secure data storage, encryption, or limited access to identifiable information.
- **Potential benefits and risks:** Describe how the study was designed to maximise potential benefits and minimise potential risks to participants. This should include measures taken to avoid harm, whether physical, emotional, psychological, social, or legal, and how any anticipated risks were mitigated.
- **Privacy of research participants:** Outline the steps taken to safeguard the privacy and dignity of research participants, especially when dealing with sensitive topics or vulnerable populations.

Lastly, state whether ethical clearance was sought and obtained from the GNAT IRIRS Institutional Review Board (IRB), and reference the relevant supporting documentation (e.g., attached IRB approval form in Appendix B).

3.4: Chapter Four: Presentation of Results and Findings

This chapter represents the core results and findings derived from the analysis of the data collected, in direct relation to the research questions and hypotheses (where applicable)

The chapter typically begins with a brief restatement of the research questions and hypotheses, along with the type of analysis performed. The results and findings should be structured and presented in the same order as the research questions in Chapter One.

Before addressing the substantive research questions or hypotheses, present a demographic profile of the respondents. In doing so, describe the sample and restate the sample size, including characteristics such as age, gender, education level, occupation, or other relevant attributes.

For quantitative studies, results should be presented using tables, figures, and relevant statistical formulae. All tables and figures must adhere strictly to the formatting guidelines provided in this Manual.

In addition, the following should be observed:

- Minimal commentary and interpretation should be provided in this chapter. Avoid drawing implications from the results and findings or referencing existing literature, as this is reserved for Chapter Five (Discussion).
- The chapter should objectively and concisely report the empirical results and findings, without speculation, logical deduction, or explanation of why the results and findings occurred. That level of analysis belongs in the Discussion chapter.
- A brief commentary is permitted when presenting the demographic analysis, particularly to clarify patterns or summarise characteristics.
- Raw data or detailed measurements that do not add interpretive value should be excluded from the main text and instead placed in the appendices.

This chapter must maintain an objective, data-driven presentation style and avoid interpretive or theoretical extrapolation.

3.4.1 Presentation of Tables

All tables included in this chapter, and throughout the entire dissertation or thesis, must conform to the APA 7th edition formatting guidelines. The following standards shall apply:

- **Table numbering:** Each table number must be numbered in bold, using a chapter-based hierarchical format (e.g., Table 1.1, Table 2.3, etc.). The number should be positioned above the table.
- **Table title:** A brief, descriptive title should be provided in italics directly below the table number. Only the table number is bolded; the title is not.
- **Formatting:** Use horizontal lines to improve readability. Vertical lines are not permitted under APA 7th edition formatting.
- **Font and emphasis:** The body of the table must not contain any bolded text. Maintain the same font type and size used in the main body of the text.
- **Headings:** Column and row headings must be clearly and concisely labeled.
- **Source attribution:** Each table must include a source note beneath it, indicating the origin of the data or adapted material.

- **In-text references:** When referring to a table in the text, capitalise the word “Table” (e.g., as shown in Table 3.2).

Refer to Appendix D for a sample table formatted according to these specifications.

3.4.2 Presentation of Figures

A table is a set of data arranged in rows and columns, whereas all other visual materials, including diagrams, charts, graphs, images, maps, drawings, and photographs, are considered figures under APA 7th edition. Figures serve to visually support the written narrative and should effectively communicate key patterns, trends, or summaries that are otherwise difficult to present in the text.

Figures included in the dissertation or thesis must adhere to the following formatting standards:

- **Figure numbering:** Each figure number must be numbered in bold, and placed below the figure (e.g., Figure 1.2, Figure 3.4). Numbering should follow a chapter-based hierarchical format, similar to that used for tables.
- **Figure title:** A concise, descriptive title should follow the figure number and be written in *italics*. The title should provide sufficient detail to make the figure understandable on its own.
- **Source:** A source note must be placed beneath the figure, identifying the origin of the figure or data used.
- **Clarity of content:** Labels, legends, and any other textual elements embedded within the figure must be readable and not cluttered
- **In-text reference:** When cited within the text, the word “Figure” must be capitalised (e.g., as illustrated in Figure 2.1).

All figures must be relevant, purposeful, and visually clear to enhance the academic value of the work.

Refer to Appendix D for a sample figure formatted according to these specifications.

3.4.3: General Guidelines for Presenting Tables and Figures

To ensure clarity, relevance, and effective communication of results, tables and figures presented in the dissertation or thesis must adhere to the following best practices:

- **Avoid excessive detail:** Tables and figures containing large amounts of data, perhaps extending over several pages, should not go into the main text of the dissertation or thesis, but rather be reserved for the appendix. A table or figure in the text should not exceed the printed area of the page.
- **Highlight key results:** Do not report every minor detail embedded in a table or figure. Focus attention on the most significant results and findings, drawing the reader’s attention to key patterns or insights.
- **Use as a complementary communication tool:** Tables and figures should support and enhance the narrative, not replace it. Present them just before discussing the results and findings they illustrate, ensuring they serve as illustrative aids rather than exhaustive data repositories.
- **Prioritise significant results and findings:** Only include tables and figures that showcase critical results and findings. Including minor or supplementary outcomes in visual formats can mislead readers regarding the weight and importance of those results and findings.
- **Justify the use of tables or figures:** Use visual formats only when they convey patterns, relationships, or summaries that are more effectively presented than in written form. A figure or table should tell the reader something that the text alone cannot convey efficiently.

- **Multi-page formatting:** If a table spans multiple pages, repeat the column headers at the top of each subsequent page to maintain clarity and orientation.
- **Textual integration:** Every table and figure must be referenced in the main text ("called up") and must be interpretable independently, without requiring the reader to search through the narrative for context.
- **Placement of figure legends:** Each figure must have its own legend positioned directly with the figure itself. Do not compile multiple figure captions into a single list.

These guidelines aim to ensure that tables and figures are used purposefully and effectively to enhance the analytical value and readability of the research.

3.5: Chapter Five: Discussion of Results and Findings

This chapter provides a critical analysis of the results and findings presented in Chapter Four. Its primary purpose is to interpret the meaning and significance of the results and findings in relation to the research questions, theoretical framework, existing literature, and broader implications for policy, practice, and future research.

The discussion should go beyond summarising the results and findings; it must interrogate why the results and findings emerged as they did and how they contribute to academic understanding, real-world application, and the refinement of theory. The following elements are essential to a robust and scholarly discussion:

- **Engagement with the research questions:** The discussion must relate the results and findings to the research questions or hypotheses, showing how each has been answered or addressed through the data.
- **Comparison with previous studies:** The analysis should examine whether the results and findings confirm, extend, or contradict existing literature reviewed in earlier chapters. Highlight areas of alignment and divergence with prior empirical work.
- **Interpretation, not description:** Avoid merely restating the results and findings. Instead, provide a critical and reasoned interpretation of what the results and findings mean, supported by logical connections and evidence from the study.
- **Speculation and explanation:** Thoughtful, evidence-based speculation is permissible, especially when the results and findings deviate from initial expectations. Offer plausible explanations for such outcomes.
- **Discussion of unexpected or contradictory results:** Identify and explore results and findings that contradict the research questions and hypotheses or diverge from the literature. Discuss possible contextual or methodological reasons for such deviations.
- **Beyond confirmation:** The discussion should include both results and findings that support and those that challenge or complicate the research objectives. Avoid selective interpretation that only confirms expectations.
- **Limitations:** Acknowledge any methodological, contextual, or conceptual limitations that may affect the interpretation, generalisability, or transferability of the results and findings.
- **Implications for theory and practice:** Reflect on how the results and findings advance theoretical understanding and what they imply for practitioners, policymakers, or communities of interest.

- **Areas for further research:** Identify gaps uncovered by the study and propose specific areas where future research is needed to deepen understanding or address unresolved questions.

Important Notes:

- This chapter is not a mere conclusion; it must offer an elaborate and in-depth engagement with the data and its broader meaning.
- The discussion must remain grounded in the analysed data, do not introduce or discuss unanalysed information.

3.6: Chapter Six: Conclusions and Recommendations

This chapter synthesises the entire research process by presenting the key results and findings, drawing conclusions, and providing recommendations based on the results and findings of the study. It also outlines areas that warrant further investigation. The chapter begins with a concise restatement of the problem, the purpose of the study, the research questions, and a summary of the methodology.

The structure of this chapter includes four key components: A summary of key results and findings, conclusions aligned with the research objectives, practical and theoretical recommendations, and suggestions for further research.

3.6.1 Key Results and Findings

Begin this section by summarising the core results and findings in relation to each research question. Although these results and findings were discussed in detail in Chapter Five, this section requires a concise and critically analytical synthesis. Each research question should be addressed separately, with a summary of the relevant results and findings.

Note: While this section may appear repetitive, it requires analytical writing that distills the essence of the results and findings without engaging in detailed interpretation or discussion.

3.6.2 Conclusions

The conclusions must be presented in the same order as the research objectives. Each objective should be addressed in a distinct paragraph, with the concluding statement aligned with the results and findings of the study.

- Unexpected outcomes or deviations from initial expectations should be acknowledged, accompanied by logical speculation or plausible explanations.
- Conclusions must remain grounded in the study's results and findings; no new data or literature should be introduced in this section.
- Avoid extensive discussion or elaboration on the results and findings; the purpose here is to draw clear, succinct, and evidence-based conclusions.

3.6.3 Recommendations

The recommendations should logically emerge from the conclusions and should reflect the study's theoretical, practical, and policy-related implications.

- Each recommendation should be specific, actionable, and directed at a particular audience, such as institutions, agencies, policymakers, practitioners, or researchers.
- Recommendations must be justified by the results and findings, and conclusions of the study, not based on personal opinion or speculative claims.
- Structure the recommendations clearly, possibly in bullet points or short paragraphs for readability.

3.6.4 Suggestions for Further Research

This section identifies gaps or questions that emerged during the study which could not be fully addressed due to the study's scope, limitations, or delimitations.

- The suggestions should be rooted in the research results and findings and must reflect issues that warrant deeper exploration.
- Clearly articulate how future studies could extend, refine, or challenge the current research.
- Avoid general or vague statements, and be specific about the thematic or methodological directions for future inquiry.

CHAPTER FOUR: ORDER AND COMPONENTS

Theses and dissertations are structured into three main components as outlined below:

- Component 1: Preliminaries (Front Matter)
- Component 2: Main Text (Main Body)
- Component 3: Back Matter (End Matter)

4.1: Component 1: Preliminaries (Front Matter)

The Front Matter comprises standard requirements in the writing of theses and dissertations.

Samples of these elements and their formatting specifications are provided in the appendices of this Manual.

- i. Outside Cover and Spine
- ii. Title Page (Inside Cover)
- iii. Declaration
- iv. Abstract
- v. Acknowledgements
- vi. Dedication
- vii. Table Of Contents
- viii. List Of Tables
- ix. List Of Figures
- x. List Of Abbreviations and Acronyms

4.1.1 Outside Cover

Final copies of all theses and dissertations shall be submitted to the Office of the Vice President.

The Outside Cover must contain four blocks of information, all in upper-case letters and centered on the page:

- i. GNAT INSTITUTE FOR RESEARCH AND INDUSTRIAL RELATIONS STUDIES
- ii. TITLE OF THE THESIS OR DISSERTATION
- iii. NAME OF CANDIDATE
- iv. YEAR OF AWARD

Refer to Appendix E for the approved layout and formatting of the Outside Cover.

4.1.2. Title Page (Inside Cover)

The Title Page contains five blocks of information, arranged in the order listed below.

All text must be in uppercase letters and centered on the page:

- i. GNAT INSTITUTE FOR RESEARCH AND INDUSTRIAL RELATIONS STUDIES
- ii. TITLE OF THE THESIS OR DISSERTATION

- iii. FULL NAME OF THE CANDIDATE (FIRST NAME, MIDDLE NAME, AND LAST NAME)
- iv. A statement indicating that the thesis/dissertation is submitted in partial fulfilment of the requirements for the award of the degree being conferred (single-spaced)
- v. MONTH AND YEAR OF AWARD

The Title Page formally indicates the degree for which the candidate is being considered, as well as the month and year in which the degree is to be awarded.

The Title Page is not numbered but is counted as page “i” in the pagination of the Preliminaries. It is the only page without a visible page number but is considered **the implied page “i.”**

Use the month and year in which the thesis or dissertation was examined and approved.

In addition, observe the following formatting rules:

- All text on the title page must be centered
- Do not use bold, underline, or other font effects
- Exclude titles, academic degrees, or institutional identifiers (e.g., Dr., BSc)
- Use your full legal name exactly as registered with the Institute
- Use your legal name as reported to the Institute
- Avoid abbreviations or acronyms in the thesis or dissertation title
- Use the actual month and year in which the thesis or dissertation was defended

Refer to Appendix F for the approved sample layout of the Title Page.

4.1.3 Declaration

In the Declaration, the candidate affirms authorship and accepts full responsibility for the thesis or dissertation as an original work. In addition, the supervisor (s) confirm that the work has been conducted under their supervision in accordance with the Institute’s guidelines for graduate research. This affirmation is made through the provision of the candidate’s signature and the signature(s) of the supervisor (s). The content and wording of the Declaration are standardised and must be reproduced verbatim.

The Declaration page is numbered as page “ii.” The word “**DECLARATION**” must appear in uppercase and be centered at the top of the page.

Refer to Appendix G for the approved format and wording of the Declaration.

4.1.4. Abstract

The Abstract is a critical component of theses and dissertations, since it is often the first section read by examiners, researchers, and other readers. It provides a concise and accurate summary of the entire research, capturing the main argument in a clear, informative, and succinct manner.

Structurally, the Abstract should begin with a brief overview of the background of the study and problem statement, followed by a summary of the research methodology, key results and findings, conclusions, and recommendations, including the practical and theoretical implications of the results and findings.

Every thesis or dissertation must include a one-page abstract that presents the research objectives, the problem investigated, data collection methods, the analytical approach, the main results and findings, and their implications.

The word “ABSTRACT” must appear in uppercase and be centered at the top of the page.

In addition

- Do not include charts, graphs, images, or figures in the abstract, as it is typically published in text-only format.
- Maintain the same narrative and tense used in the main body of the thesis or dissertation.
- When possible, avoid including symbols or foreign words in the Abstract, as they cannot be indexed or searched.
- Do not include statistical or mathematical formulae, tables, or content not found in the main text.

Refer to Appendix H for the approved format and sample of the Abstract.

4.1.5 Acknowledgements

You may wish to recognise and express gratitude for the support and assistance received from individuals or institutions who contributed to the successful completion of your thesis or dissertation. Acknowledgements highlight those to whom the candidate is indebted for encouragement, guidance, and specific contributions. Such individuals may include your supervisor (s), other faculty members, institutions, colleagues, family, and friends who provided valuable support throughout the research process.

The word “ACKNOWLEDGEMENTS” must appear in uppercase and be centered at the top of the page.

Refer to Appendix I for the required format and sample of the Acknowledgements page.

4.1.6 Dedication

The Dedication page is **optional** and not a mandatory requirement. When included, it should contain a brief statement, not exceeding two lines.

Dedication is distinct from Acknowledgements and should not be used to extend expressions of appreciation.

It is unconventional to dedicate a scholarly work such as a thesis or dissertation to any deity.

Refer to Appendix J for the approved format and sample of the Dedication page.

4.1.7 Table of Contents

All page numbers in the Table of Contents must accurately reflect the location of each corresponding heading in the thesis or dissertation. The page should be headed “TABLE OF CONTENTS”, not simply “CONTENT” and must be typed in uppercase letters.

Headings and subheadings should appear in descending order of hierarchy, and consistency must be maintained in the positioning of headings at the same level. The entries listed in the Table of Contents must match exactly the capitalisation and wording of chapter titles and subheadings as they appear in the body of the thesis or dissertation.

The Table of Contents must identify and locate by page number the following elements:

- Chapters, headings, and subheadings within the Main Text
- Abstract, List of Tables, List of Figures
- Appendices and References

It should provide a detailed listing of all major Level 1 and Level 2 headings, and not just a simple list of chapters. However, it must remain relatively concise.

Use the word processing computer function “Insert Table of Contents” to generate and automatically update the Table of Contents. Ensure correct alignment by adjusting tab settings, and hide all vertical and horizontal lines after final formatting.

Indent Level 2 subheadings to the right using consistent tab spacing. Page numbers must be aligned just inside the right page margin.

Refer to Appendix K for the approved format and sample of the Table of Contents.

4.1.8 List of Tables and Figures

The List of Tables provides the titles and corresponding page numbers of all tables included in the main text and appendices. Tables must be numbered consecutively using Arabic numerals (e.g., Table 1.1, Table 2.1, etc.) in the order in which they appear in the document. This list should begin on a new page, separate from both the Table of Contents and the List of Figures.

The List of Figures presents the titles and corresponding page numbers of all figures used in the thesis or dissertation. Figures should also be numbered sequentially with Arabic numerals in the order they appear. Like the List of Tables, the List of Figures must begin on a separate page, distinct from both the Table of Contents and the List of Tables.

4.1.9. List of Abbreviations and Acronyms

If the thesis or dissertation contains numerous abbreviations or acronyms, an alphabetical list of their definitions must be provided. This enhances the document's readability and allows readers to easily reference unfamiliar terms.

All abbreviations and acronyms must be written in full the first time they appear in the text, followed by the abbreviated form in parentheses. For example: the Ghana National Association of Teachers (GNAT).

Avoid beginning any sentence with an abbreviation or acronym, even if it has already been defined earlier in the text.

The list should be presented on a separate page, arranged in alphabetical order, and formatted consistently throughout.

4.2 Component 2: Main Text (Main Body)

The Main Text is structured into six chapters.

- i. CHAPTER ONE: INTRODUCTION
- ii. CHAPTER TWO: LITERATURE REVIEW
- iii. CHAPTER THREE: RESEARCH METHODOLOGY
- iv. CHAPTER FOUR: PRESENTATION OF RESULTS AND FINDINGS
- v. CHAPTER FIVE: DISCUSSION OF RESULTS AND FINDINGS
- vi. CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

4.3 Component 3: Back Matter (End Matter)

4.3.1. List of References

The List of References appears in the Back Matter of the thesis or dissertation and includes all sources cited throughout the main text. The following guidelines apply:

- The List of References must appear at the end of the manuscript, after the last chapter and before the appendices (if any).
- References must not be placed at the end of individual chapters.
- The heading "REFERENCES" must be written in uppercase letters and included in the Table of Contents with the corresponding page number.
- The referencing style required in this Manual, APA, must be applied consistently throughout the document.

Note: Ensure that every in-text citation has a corresponding entry in the List of References and that all reference entries are accurately and consistently formatted.

4.3.2 Appendices

Appendices form part of the End Matter and are used to present supplementary materials that support the main text but are not essential to its central argument or flow. These may include instruments such as survey questionnaires, interview guides, extended data tables, ethics clearance letters, or technical notes.

General guidelines for formatting the appendices:

- Each appendix must be referred to at least once in the main text.
- Appendices are lettered, not numbered, using uppercase letters in sequential order (e.g., APPENDIX A, APPENDIX B, etc.).
- Each appendix must have a clear and descriptive title that accurately reflects its content (e.g., APPENDIX A: INTERVIEW GUIDE).
- The title of the appendix must be written in uppercase letters and centered at the top of the page.
- Each appendix must begin on a new page.
- The pagination of the appendices continues from the main text and is not restarted.
- All appendices must be listed in the Table of Contents after the List of References.

CHAPTER FIVE: CITATION AND REFERENCING

The writing of dissertations and theses requires ideas, arguments, data, evidence, and the perspectives of others to thrive. However, these ideas, arguments, and perspectives must be rigorously cited and referenced.

5.1 Style Manual

A style manual is a set of conventions, traditions, rules, and standards for the writing, formatting, and design of documents. Style manuals provide comprehensive guidance on the rules and regulations for academic writing for degrees, journals, and other publications. Globally, several style manuals are used by universities in the writing of theses and dissertations. However, the most common style manuals are the American Psychological Association (APA), the Modern Language Association (MLA), and the Chicago Manual of Style (CMOS). Students do not have the choice of choosing a referencing style except to adhere to the style manual of the university, discipline, and department. The APA style is commonly used in the social sciences (Creswell & Creswell, 2023), and other fields such as education, psychology, and business. The MLA is commonly used in the Arts, Languages, and other humanities. The CMOS is also used in the social sciences. While none of the referencing styles is necessarily more ‘accurate’ than the other, whichever system is required and selected must be applied consistently.

The APA uses the author-date-referencing system for in-text citations using the author’s last name and the year of publication. The APA system requires only two elements; an in-text citation, and a single, integrated List of References that contains full details of the in-text citation, including the author’s name, year of publication, title, and source information at the end of the thesis or dissertation. The 7th edition of APA (APA, 2020) is the current version that provides a standard and consistent guideline for referencing in academic writing, including writing of theses and dissertations.

The APA is perhaps the most widely used referencing style in academic writing, including writing of dissertations and theses, journals, and books (Mpofu, 2018). The APA has traditionally been used due to its widespread usage, ability to save space, particularly in in-text citation, and its ability to deliver clearer, more consistent, cleaner, and simpler texts than the MLA, which uses footnotes.

In line with this, the GNAT IRIRS requires all theses and dissertations to follow the APA referencing style.

5.2. Purpose and Importance of Referencing

Referencing helps to position the research in context, demonstrates the scope, acknowledges the work of others to avoid plagiarism, and leads readers to the source of the ideas, theories, models, or practices cited in the dissertation or thesis. This helps to determine the credibility of the information presented to support the arguments of the study, and serves as some form of verification, validation, and demonstration of credibility.

References are required or mandatory when:

- Adapting and reprinting tables, figures, statistics, photographs, diagrams, and any other illustrations in the dissertation or thesis.
- Describing, discussing, or emphasising the definition of a concept, theory, model, idea, practice, or argument, by other researchers. These could be issues that are of significant agreement, debates, or disagreement in the literature.

- Strengthening and giving credibility to the argument in the dissertation or thesis.
- Establishing the appropriateness and applicability of the research design
- Justifying a factual or strong statement, argument, or expectations that demand some form of proof
- Building an argument that reflects the key stages in the development of an idea
- Making direct quotations and paraphrasing

Referencing for a dissertation or thesis comes in two forms:

- Referencing within the text (**in-text citation**).
- Referencing in the **List of References** at the end of the thesis or dissertation (end-of-text reference).

References mentioned in the main text of the dissertation or thesis are referred to as **in-text citations**, while those that provide the details of the citation at the end of the thesis or dissertation are known as the **List of References**.

Both in-text citations and the List of References point to the source of the information. However, in-text citations often give little information, such as the author's surname and year of publication.

5.3 In-text citation: Citation within the Text

To reference a source within the text, one only needs the author's last name (surname) and the year of publication. All other information regarding the author (s), such as first and middle name, and publication information, such as title of the publication, volume, page, and issue numbers appear in the List of References at the end of the dissertation or thesis ([end-of-text reference](#)).

It is unconventional to include the initials or full names of the author (s) in in-text citations, except when distinguishing between authors who share the same surname. In such cases, initials are included to avoid confusion.

In-text citation takes two primary forms: narrative citation, and parenthetical citation.

- **Narrative citation** occurs when the author's name is incorporated into the sentence as part of the narrative (i.e. begins the sentence).

Example:

Tannor (2010) indicated that one needs some level of basic statistics to use SPSS effectively.

- **Parenthetical citation** occurs when the author's name is not part of the sentence but is placed in parentheses at the end.

Example:

One needs some level of basic statistics to use SPSS effectively (Tannor, 2010).

5.3.1 Rules and Standards for In-Text Citations

Citation of source by one or two authors: State the surname (s) and the year of publication in every citation of the same work. However, when citing the same source multiple times within a single paragraph and the citations are narrative (i.e., the author’s name is integrated into the sentence), you may omit the year in subsequent narrative citations after the first, provided it cannot be confused with other citations in the paragraph.

Example:

Tannor (2010) argued that basic statistical knowledge is essential. Tannor also suggested that SPSS is best learned through practice.

Note: For parenthetical citations, always include the year, even when citing the same author multiple times in the same paragraph.

Example:

Globally, SPSS is widely used in educational research (Tannor, 2010). It remains a preferred tool for data analysis (Tannor, 2010).

Citation of sources by three or more authors: The term “et al.” is a Latin abbreviation meaning “and others.” According to APA (2020), when a source has three or more authors, use only the first author's surname followed by et al. and the year of publication in all in-text citations, including the first one.

Example: Narrative citation

Tannor et al. (2024) noted that an effective literature review could form the basis for developing strong research questions and hypotheses.

Example: Parenthetical citation

An effective literature review can support good research questions (Tannor et al., 2024).

Note: The previous APA rule for citing three to five authors on the first mention has been updated in the APA 7th edition. From three authors onward, use et al. for all in-text citations.

In the List of References, however, all authors' names must be listed in full, regardless of the number of authors.

Missing reference information: While it is not advisable to rely heavily on sources with incomplete bibliographic information, there are occasions when certain details, such as the year of publication, are unavailable. In such cases, use the abbreviation “n.d.” (meaning “no date”) to indicate the absence of a publication year.

Example: Narrative citation

Tannor (n.d.) argued that empirical validation grounded in sound theory is the most effective way to prove or disprove a hypothesis.

Example: Parenthetical citation

Empirical validation is key to testing hypotheses (Tannor, n.d.).

Note: In the List of References, also indicate n.d. in place of the year, and provide as much of the remaining citation information as possible.

Citing a source within a source: Intermediary (secondary) sources: Intermediary or secondary sources refer to sources that you have not personally read, but which are cited within a work that you have read. In such cases, the in-text citation must credit both the original (unseen) source and the secondary (seen) source. However, in the List of References, cite only the source you actually read.

It is always advisable to locate, verify, and evaluate the original (primary) source. This helps ensure that the interpretation or summary presented in the secondary source is accurate and not taken out of context.

Example:

(Korhner, 2023, as cited in Tannor & Carter, 2024) revealed that.....

In the List of References, only include the secondary source: Tannor, L., & Carter, S. (2024). *Title of the book or article*. Publisher.

Multiple authors for different sources: When referencing multiple sources by different authors within the same in-text citation:

- List the sources in alphabetical order by the first author's surname, with the earliest or current publication date first for each author. Thus, argue first by year and second by name, in alphabetical order;
- The year of publication follows each author's name.
- Separate each citation with a semicolon.
- This format is used only in parenthetical citations, not in narrative citations.

Example:

The evolution of consumer behaviour can be traced to the 1940s and 1950s as a distinct subject within marketing which has contemporarily become an interdisciplinary concept from other disciplines (Sroka, 2025; Tannor, 2023; Venkatesh & Davis, 2000).

Multiple works by the same author in the same year: When citing multiple works by the same author (s) published in the same year, assign a lowercase letter (a, b, c, etc.) after the year to distinguish each source. These letters correspond to the order in which the works appear in the List of References.

Example: Narrative citations

According to Mensah (2024a), critical writing is essential for the successful completion of graduate dissertations and theses. Additionally, Mensah (2024b) noted that many students delayed writing their dissertations due to poor knowledge of academic writing.

Example: Parenthetical citation

Several challenges hinder dissertation writing (Mensah, 2024a, 2024b).

Note: The letters (a, b, c...) used in in-text citations must match exactly those used in the List of References.

Citing organisation as an author (Group authors): The source of information in a dissertation or thesis may originate from an organisation, especially when citing official reports, data, or statistics. When this occurs, follow these guidelines:

- If the document lists individual authors affiliated with the organisation, cite the individual authors.
- However, if the organisation itself is the author, the organisation's name becomes the author.

In-Text Citation Format:

- Use the full name of the organisation the first time it is cited, followed by its acronym or abbreviation (if available) in parentheses, and the year of publication.
- In subsequent citations, use only the acronym or abbreviation and the year.
- Always use the organisation's official abbreviation or acronym. If none exists, you may create a clear and logical abbreviation or acronym yourself.

Example: First narrative citation:

According to the American Psychological Association (APA, 2021), proper referencing is central to scholarly writing.

Example: Subsequent narrative citation:

The APA (2021) further emphasises consistency in citation.

Note: The full name of the organisation (not just the abbreviation or acronym) must be listed as the author in the List of References.

Citing direct quotation information: Quotations are exact words taken from a source. They are used when paraphrasing might alter the meaning, tone, or nuance of the original statement. Every direct quotation must include:

- i. The author's last name
- ii. The year of publication
- iii. The page number (s)

Use 'p.' for a single page and 'pp.' for multiple pages.

Example: Short/narrative citation

According to Tannor (2021, p. 2), “teachers should not be posted to rural and deprived areas as punishment.”

Example: Short/parenthetical citation

“Teachers should not be posted to rural and deprived areas as punishment” (Tannor, 2021, p. 2).

Long Quotations (Block Quotations)

A long or block quotation is any direct quotation that is 40 words or more. When using block quotations, apply the following formatting rules:

- i. Introduce the quote with a complete sentence ending in a colon.
- ii. Indent the entire block one-half inch from the left margin. This applies to all lines of the quotation to distinguish between the actual words of the original source and the researcher’s own words.
- iii. Do not enclose the quotation in quotation marks.
- iv. Double-space the block quote, just like the rest of the text.
- v. Place the citation after the final punctuation mark (i.e., after the period, not before).

Example (block quotation):

Several academic writing skills are required in the writing of dissertations and theses:

Critical writing is essential in the successful completion of graduate dissertations and theses. Many students delayed in writing their dissertations or theses due to poor knowledge of academic writing, and the ineffective supervisory attitude of some faculty members. Many students shy away from research-based programmes due to poor academic writing skills. (Tannor, 2024, p.24)

Note:

- Short quotations (fewer than 40 words or approximately three typewritten lines) are enclosed in quotation marks and integrated into the paragraph.
- Long quotations (40 words or more) are block-indented and presented without quotation marks.

5.4: List of References (Back Matter)

Every source cited in the Main Text must be included at the end of the thesis or dissertation in the List of References. Likewise, do not include any source in the List of References that has not been cited in the text.

This Manual requires a List of References, not a Bibliography.

- A List of References includes only the sources actually cited in the body of the work.
- A Bibliography, by contrast, includes all materials consulted, whether cited or not.

Each reference entry must follow the appropriate APA 7th edition format based on the type of source (e.g., journal article, book, website, government report, thesis, etc.).

5.4.1 Referencing Books and Book Chapters

To reference a book, follow the steps below chronologically:

- i. Author's last name (surname) followed by a comma
- ii. Initials of author's first and middle name followed by a period (full stop.)
- iii. Year of publication in parentheses () followed by a period
- iv. Title of the book in italics followed by a period
- v. Edition of the book if available
- vi. Page number followed by a colon, p: or pp: if available
- vii. Place of publication followed by a colon
- viii. Name of the publisher

Examples:

Tannor, L. L. (2014). *A simple user guide to statistical data analysis using SPSS*. Accra: Blessed Publication

Nolan, D. & Stoudt, S. (2021). *Communicating with data: The art of writing for data science*. New York, NY: Oxford University Press.

Note: In the APA 7th edition, it is no longer necessary to include the publisher's city, state, or country (i.e., the place of publication).

5.4.2 Referencing Journal Articles

Referencing of journal articles include:

- i. The first three steps for referencing a book. Thus, last name, initials for first and middle names, and year of publication
- ii. Title of the article which should be in straight fonts
- iii. Title of the journal in italics but no quotation marks
- iv. Volume number in italics followed by issue number if available and
- v. page number.

All major titles within a journal should be capitalised.

Examples:

Balfour, R., Mitchell, C., & Molestsane, R. (2008). Troubling contexts: Toward a generative theory of rurality as education research. *Journal of Rural and Community Development*, 3 (3), 95-107.

Natia, Z. & Seidu, Al-hassan (2015). Promoting teaching and learning in Ghanaian Basic Schools through ICT. *International Journal of Education and Development using Information and Communication Technology*, 11 (2), 113-125.

5.4.3 Referencing Newspaper Articles

A newspaper can either be in print or electronic form.

In print:

- i. Author's last name and, initials for first and middle names
- ii. Date of publication, including the year followed by a comma, month, and day (year, month day).
- iii. Name of the newspaper article but not in italics
- iv. Name of the newspaper in italics
- v. Page number

Example:

Arthur, A. E. (2001, May 3). District and town councils' vital components in decentralisation. *The Independent News Paper*, pp: 25-26.

Electronic:

For electronic newspaper articles, additional information is required, thus the Uniform Resource Locator (URL) from which the information was retrieved.

Example:

Waldo, S.R., & Danedakar, V. (2004, January 4). Why medical school? *New York Times*. Retrieved from <http://www.nyt.com/med>

5.4.4. Referencing Dissertations and Theses

The referencing style for a thesis or dissertation depends on whether the work is published (i.e., available online or in a database) or unpublished (only accessible in print from the author or institution).

A thesis or dissertation is considered published when it is available through a database (e.g., ProQuest Dissertations & Theses Global), a university repository, or an institutional archive. If not available online or in a database, it is considered unpublished.

For both published and unpublished theses or dissertations, follow these steps:

- i. Author's last name, followed by initials of the first and middle names
- ii. Year of publication in parentheses
- iii. Title of the dissertation or thesis in italics
- iv. Type of degree (master's or doctoral)
- v. Name of the awarding institution
- vi. If published and available, include the name of the database or repository (and URL if from a university repository)
- vii. For unpublished work, include the word "Unpublished" before "master's thesis" or "doctoral dissertation"

Examples:

A: Published Dissertation (University Repository with URL):

Alexander, A. L. (2024). STEM identity in African American middle school students: A phenomenological study [Doctoral dissertation, University of South Carolina]. Retrieved from <https://scholarcommons.sc.edu/etd/7702>

B: Published Dissertation (Database):

Mensah, L. J. (2023). *Climate-smart agriculture strategies among smallholder farmers in Ghana* [Doctoral dissertation, University of Ghana]. ProQuest Dissertations and Theses Global.

C. Unpublished Master's Thesis (Print or No Online Access):

Smith, J. (2020). *Effects of cognitive behavioral therapy on agoraphobic patients* [Unpublished master's thesis]. University of Amsterdam.

5.4.5: Referencing Conference Papers and Proceedings

Conference papers may appear in different formats, such as journal articles, edited books, or online repositories. The format you use for referencing depends on where the conference paper or proceedings were published.

A: Conference proceedings published in a journal: When conference proceedings are published in a journal, follow the standard APA format for journal articles. In this case, the title of the journal (not the title of the conference) is italicised, and volume/issue/page numbers are included.

Example:

Duckworth, A. L., Quirk, A., Gallop, R., Hoyle, R. H., Kelly, D. R., & Matthews, M. D. (2019). Cognitive and noncognitive predictors of success. *Proceedings of the National Academy of Sciences, USA*, 116 (47), 23499-23504.

5.4.6: Ordering of the List of References

The List of References at the end of the thesis or dissertation must be arranged in alphabetical order by the surname of the first author of each source. All entries beginning with 'A' come before those beginning with 'B', then 'C', and so on.

When citing multiple works by the same author, order the entries chronologically, beginning with the earliest publication.

The heading “**REFERENCES**” should be centered and written in uppercase letters.

Each entry must use hanging indentation, where the first line of the reference is aligned with the left margin, and all subsequent lines are indented. This format helps visually distinguish one source from another, especially since APA style does not number references.

Most word processing software (e.g., Microsoft Word, Google Docs) allows you to apply hanging indentation automatically using the paragraph or formatting settings.

In addition, in formatting the List of References, ensure that the following conventions are followed:

- **Alphabetical order:** Arrange entries alphabetically by the author’s last names. If multiple authors share the same surname, order the entries by the initials of their first names.
- **Spacing:** References must be double-spaced throughout. Do not single-space the entries.
- **Authorship:** List all authors of a work. Do not use et al. in the List of References. This Manual requires the full author list unless the number exceeds 20 (in which case, follow APA’s rule to list the first 19 authors, insert an ellipsis, and then add the final author).
- **Consistency with in-text citations:** Ensure that every in-text citation has a corresponding entry in the List of References and vice versa.
- **Chronological order for same author:** If citing two or more works by the same author, list them in chronological order, with the earliest publication first.
- **Page continuity:** Do not split a single reference entry across two pages. If an entry does not fit completely at the bottom of one page, move the entire entry to the top of the next page.
- **One vs. multiple authors:** A single-author entry should appear before entries by the same author with co-authors.
- **Same author and year:** If an author (or group of authors) has published multiple works in the same year, distinguish them with lowercase letters (e.g., 2022a, 2022b) and alphabetise by title.

Refer to Appendix L of this Manual for a comprehensive sample layout of the List of References.

CHAPTER SIX: SPECIFICATION AND FORMAT

Theses and dissertations are scholarly, intellectual, and physical products. The Institute expects these products to have identical physical features, depending on the type. Accordingly, the Institute has established specific standards and requirements for the preparation of theses and dissertations. These intellectual and physical documents should be presented in a scholarly, well-integrated, and properly formatted manner.

6.1 Physical Specification

6.1.1 Margins

The margins in text pages should have the following dimensions:

- i. Left side margin: Leave 5.08cm (2-inch)
- ii. Right side margin: Leave 2.54cm (1-inch)
- iii. Top of the page: Leave 2.54cm (1-inch)
- iv. Bottom of the page: Leave 2.54cm (1-inch)

These margin dimensions are essential to ensure all pages stay within binding and trimming requirements. On no account must writing intrude into any of the specified margins in the Preliminaries pages and Main text.

Where tables and other illustrative materials are presented in landscape mode, the required dimensions for margins must still be applied. The materials must be appropriately inserted into the manuscript

6.1.2 Alignment

Both sides of the text of the thesis or dissertation should be justified (left and right justified)

6.1.3 Font Type and Sizes

All typing must be done with Microsoft Word with a font size of 12, using *Times New Roman* typeface. Exceptions may be made for the use of other typefaces and smaller font sizes (but not below 10) where technical details are presented in graphical form

6.1.4 Spacing and Indentation

Double spacing is required throughout the text.

Long tables may be single-spaced to reduce them if any, from spilling over to a new page. Do not include extra spaces between paragraphs.

Indent five spaces (use the default indentation) to indicate the beginning of new paragraphs. In using double spacing, it is difficult to identify the beginning of a new paragraph unless they are indented.

A single heading/sub-heading at the very end of a page (orphaned text) should be moved to the next page.

6.1.5 Sections and Headings

Sections and headings are used to make it easier to read the text. The text can be divided into sections and sub-sections, each with a relevant heading. Use line spacing to separate the sections from one another. The following standards apply to sections and headings.

- Major headings, including the titles in the preliminary pages, "CHAPTER's title, REFERENCES" should all be typed in uppercase letters, centered, and not bold.
- Each new chapter heading must begin on a new page.
- The chapter number and title must be on the same line, separated by a colon, as shown in the example: CHAPTER ONE: INTRODUCTION

Use bold, italics, and capital letters to highlight the level of headings.

6.1.6 Pagination

Except for the title page, each page of the entire thesis or dissertation must be numbered consecutively, according to the following standards:

- Paginate the Preliminaries (portions preceding the Introduction) in lower case Roman numerals ("i", "ii", "iii", etc), beginning with the title page. Thus, the pages preceding the main body of the thesis or dissertation should use Roman numerals for page numbers. Do not number the page number "i" on the title page, even though it is counted as "i." when numbering the preliminary pages that follow.
- Standard Arabic numerals ("1", "2", "3", etc.) should be used to number the Main Text, including the References and Appendices.
- Page numbering begins with the first page of the Main Text (Introduction Chapter 1). The first page of the Main Text begins with page 1.
- Page numbers should be placed consistently throughout the document.
- All page numbers, both Roman and Arabic, are numbered at the bottom of the page and centered.
- Do not use a period after the page number.
- Do not insert lettered page numbers such as 10a, 10b, 10c, etc.

6.1.7 Language and Spelling

Theses and dissertations must be written in the English language.

Spelling should follow that of the United Kingdom (UK) English Dictionary.

6.1.8. Paper and Printing

Durable A4 (201 x297mm, 80grams) bond paper should be used for printing out the thesis or dissertation. The quality of printing must have consistently clear characters.

6.1.9 Binding

For the bound cover, use a light green colour. Ring-binding is not acceptable.

6.1.10 Capitalisation (APA, 2020)

All theses and dissertations must conform to APA standard rules in the use of capitalisation.

- i. Chapter/first-level headings are always written in all capital letters, both in the text and the Table of Contents.
- ii. If a complete sentence follows a colon, capitalise the first word that comes after the colon.
- iii. Capitalise all major words in table titles, but capitalise only the first word and proper nouns in column headings of tables. Also, capitalise only the first letter of the captions of tables and figures.

CHAPTER SEVEN: LEGAL AND ETHICAL ISSUES

At GNAT IRIRS, graduate students are expected to uphold the highest standards of academic integrity and honesty in promoting an ethically responsive research culture. Cases of plagiarism, research misconduct, falsification of data, and authorship misappropriation are strictly prohibited

7.1 Plagiarism

With online libraries, it is now easier for students to blatantly engage in wholesale copying and pasting. At GNAT IRIRS, plagiarism in any form is unacceptable and will result in serious disciplinary action and possible prosecution. Plagiarism constitutes a serious breach of academic integrity, and is considered a serious offence that could result in the cancellation/revocation of one's degree, if detected, even several years after the award of the degree. Students must act ethically in all aspects of the writing process of theses and dissertations. Students are expected to know, understand, and follow the policies and procedures outlined in the Research Ethics Policy of the Institute.

Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit. Thus, the act or practice of stealing the ideas, thoughts, writings, inventions, words, and materials of others directly or indirectly without due credit, or adequate acknowledgement of the source, and deceptively portraying such works as one's own.

Every form of plagiarism, including self-plagiarism, disguised plagiarism, and patchwork plagiarism, must be avoided. Self-plagiarism occurs when authors reuse portions of their previously published writings in subsequent research papers, without citing the published work. Extended quotes from the student's previously published works must be treated as block quotes, using indentation, quotation marks, or double spacing as required.

Patchwork plagiarism occurs when a writer blends material taken almost word-for-word from several sources with no attempt to acknowledge the original sources.

All theses and dissertations at GNAT IRIRS are submitted to Turnitin, a web-based resource that detects and confirms the originality of a document and whether adequate citations have been provided. The Turnitin acceptable similarity tolerance level at GNAT IRIRS is between **0-18%**.

7.1.1. How to Avoid Plagiarism

The Institute shall take steps to educate students on how to avoid and prevent plagiarism through effective research seminars. Aside from a critical review of the literature, proper use of quotation, and paraphrasing are the two most essential means of avoiding plagiarism.

- **Quotations:** These are sentences that when paraphrased, might not bring out the exact meaning and interpretation, hence should be cited exactly as the source. Block quotes (i.e. quotations with 40 or more words) should be used sparingly and only when necessary.
- **Paraphrasing:** If the exact wording is unimportant as required in direct quotation, then it is better to paraphrase. Paraphrasing has a rather different function from summarising in that it is re-

presenting the text as far as possible using your own words. It might well go hand-in-hand with summarising but this is not necessarily so. Paraphrasing still requires explicit attribution.

- **Use of plagiarism software:** Plagiarism detection tools shall be made available to both students and faculty members of the Institute. Students must generate a similarity report via Turnitin to check the level of plagiarism before submitting their work.

7.2 Falsification

This refers to instances where content such as data, results and findings, or statistics in a dissertation or thesis is deliberately fabricated, altered, or misrepresented by a student and falsely presented as original work.

7.3. Confidential and Sensitive Research Topics

As a general rule, it is inappropriate for thesis and dissertation research to be undertaken on topics classified as confidential, sensitive, or secret due to reasons of national security or which involve restricted or proprietary information. No thesis or dissertation addressing such topics may be accepted without obtaining prior ethical and legal clearance from relevant authorities.

7.4 Use of Materials Protected by Copyright

Copyright is the legal right of the owner of created material to control copying and ownership of that material. GNAT IRIRS is committed to using copyrighted material in ways that are consistent with both local and international copyright laws.

Permission must be obtained to reproduce any copyrighted material, including tables, figures, and photographs. Copies of all correspondence or permission letters must be retained. Documentation of such permissions must be included as evidence in the Appendix of the thesis or dissertation.

7.5 Patented Material

The use of patented material in a thesis or dissertation is expressly prohibited without the prior written consent of the patent holder. Documentation of this consent must also be included in the Appendix.

7.6 Publication

Electronic Thesis and Dissertation (ETD) submission is the final step of the thesis and dissertation writing process. The abstract of each thesis or dissertation shall be published by the GNAT IRIRS Library. The Office of the Vice President shall submit the accepted theses and dissertations to the GNAT IRIRS Library via ProQuest. ProQuest requires all submissions to be in PDF.

FURTHER READING MATERIALS

Listed below are the titles of some books that may be beneficial as you progress through the different stages of writing your thesis or dissertation. The list is not exhaustive and your supervisor may be able to suggest additional references.

American Psychological Association (APA, 2020). *Concise guide to APA style: The official APA style guide for students* (7th ed.).

Bell, J. (1999). *Doing your research project: A guide for first-time researchers in education and social science* (3rd ed.). Buckingham: Open University Press.

Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education (5th edition)*. London: RoutledgeFalmer.

Creswell, J. W. & Creswell, J. D. (2023): *Research design: qualitative, quantitative and mixed methods approach* (6th ed.). Thousand Oaks, California: Sage Publications.

Dawson, C. (2019). *Introduction to research methods: A practical guide for anyone undertaking a research project* (5th ed.). London: Robinson.

Denscombe, M. (2019). *Research proposals: A practical guide* (2nd ed.). London: Open University Press.

Evans, D., Gruba, P. & Zobel, J. (2014). *How to write a better thesis* (3rd ed). Switzerland: Springer International Publishing.

Kember, D. & Corbett, M. (2018). *Structuring the thesis matching method, paradigm, theories and findings*. Singapore: Springer Nature.

Madsen, D. (1992). *Successful dissertations and theses: A guide to graduate student research from proposal to completion* (2nd ed.). San Francisco, CA: Jossey-Bass, Inc.

Tannor, L.L. (2024). *Research processes and mechanics: A practical guide for dissertations and theses*. In Print. Smartline Publications.

Tannor, L.L. (2014): *A guide to writing dissertations*: Accra: Blessed Publication.

Tannor, L.L. (2010). *A simple user guide to statistical data analysis using SPSS*. Accra: Blessed Publication.

University of Cape Coast (UCC, 2015): *Guidelines for preparing and presenting project work, dissertations, and theses: School of Graduate Studies*. Cape Coast: UCC Press.

APPENDICES

APPENDIX A

CHECKLIST FOR EVALUATING THE RESEARCH PROPOSAL

| Evaluation Criteria | Percent (%) |
|---|--------------------|
| Research topic and contribution to field of study | 45.0 |
| Knowledge of field of study | 20.0 |
| Methodology | 30.0 |
| Quality of writing and formatting | 5.0 |
| Total | 100 |

CHECKLIST FOR EVALUATING THE RESEARCH PROPOSAL

| Attribute | Very Deficient | Somewhat Deficient | Acceptable | Very Good | Outstanding |
|--|---|--|---|--|--|
| Research topic and contribution to the field | <ul style="list-style-type: none"> Lacks originality Contribution is difficult to identify | <ul style="list-style-type: none"> Limited originality Contribution mostly unclear | <ul style="list-style-type: none"> Demonstrates some originality Limited contributions to the field | <ul style="list-style-type: none"> Original and creative At least one important contribution to the field | <ul style="list-style-type: none"> Highly original and creative Several significant contributions to the field |
| Knowledge of the field of study | Insufficient knowledge of literature relevant to the area of research | Familiar with and/or has cited some key literature, but clearly needs to read more | Cited most key literature relevant to the area of research | Demonstrates a thorough review of the key literature relevant to the area of research | <ul style="list-style-type: none"> Demonstrates a thorough review of key literature relevant to the area of research Shows awareness of literature beyond the immediate area of study |
| Methodology | <ul style="list-style-type: none"> Proposed methods are inadequate in addressing the study's objectives Unaware of suitable methodologies | <ul style="list-style-type: none"> Proposed methods may be adequate but are poorly described Shows vague awareness of suitable methodologies | <ul style="list-style-type: none"> Proposed methods are adequate for addressing the study's objectives Demonstrates awareness of suitable methodologies | <ul style="list-style-type: none"> Proposed methods include currently accepted techniques for addressing the objectives of the study Evidence of training or experience in applying methods to collecting/analysing data | <ul style="list-style-type: none"> Proposed methods demonstrate creative use or development of appropriate techniques to address the objectives of the study Shows awareness of modern and emerging methods or technologies in the field |
| Quality of writing and formatting | <ul style="list-style-type: none"> Poor citations and inconsistent reference Sentence structure, language, and style are deficient. | <ul style="list-style-type: none"> Inconsistent references Numerous typographical and grammatical errors Somewhat difficult to follow | <ul style="list-style-type: none"> Sufficient referencing Some minor editorial issues (grammatical and spelling) | <ul style="list-style-type: none"> Adequate and accurate citations and references Very well written and easy to follow Minimal editing required | <ul style="list-style-type: none"> Accurate, current, and credible references used Writing quality is consistent with that of high-impact scientific publications |

APPENDIX B

RESEARCH ETHICS CLEARANCE FORM

| Items | Description |
|--|---|
| Lay Description | Provide a brief outline of the research, including the research participants (not more than 350 words). |
| Proposed method | Describe your research methodology (Not more than 200 words) |
| Summary of study results and findings | Explain how research participants will receive a summary of the results and findings of the study when it is available? |
| Recruitment | Indicate the methods of sampling and recruiting the research participants. |
| Informed Consent | How do you intend to obtain informed consent from the research participants in written form? If Yes, please attach a copy of the informed consent. If the research participants are aged less than 18 years, and older than 80 years, please explain how informed consent will be obtained? If minors are involved, attach a parental/guardian consent form. |
| Conflict of interest | Are there any conflicts of interest in the research? Yes/No |
| Coercing | Are you giving research participants any incentives for taking part in the study? Yes/ No. If Yes, please detail the type of incentives. |
| Research instruments | Which research instrument is the research using? Attach a copy, such as a questionnaire or interview protocol. If interviews are involved, will they be recorded? Yes/No. If Yes, indicate this on the consent form. |
| Risk management | Are there risks associated with this research? Yes/No. If Yes, what are they and how will they be addressed? |
| Confidentiality and anonymity | How will the research participants and data be protected and made anonymous, and kept securely? Will the research refer to research participants using pseudonym? |
| Checklist of attachments: Please tick (✓) and attach all applicable documents: | |
| <ul style="list-style-type: none"> • Informed Consent Form (s) • Research Questionnaire • Interview Guide • Interview Protocol • Parental/Guardian Consent Form (<i>if applicable</i>) • Ethical Clearance from Institution (<i>if available</i>) • Any other relevant documents (please specify) | |

APPENDIX C

CHECKLIST FOR EVALUATING THE FINAL THESES OR DISSERTATION

| Chapter/Score | Evaluation Criteria |
|--|---|
| Abstract (3%) | <ul style="list-style-type: none"> • The abstract has succinctly summarised the study |
| Introduction (12%) | <ul style="list-style-type: none"> • The introduction establishes the broad context and clearly state the research problem • Key references and theories are included • A significant research problem has been identified for investigation • Aims, objectives and research questions are specific, logical, feasible, and well-formulated • The study clearly outlines its potential contribution to practice or scholarly knowledge • The research presents a considerable or significant advancement in existing knowledge |
| Literature Review (15%) | <ul style="list-style-type: none"> • The review is critical, evaluative, and presents a coherent argument for conducting the study • Key concepts or variables are clearly defined and consistently used throughout • Relevant terms and constructs are clearly explained • References used are of high quality (e.g., peer-reviewed journals) and up-to-date • The review shows evidence of critical writing and theoretical engagement • Core theoretical, conceptual, and empirical literature is well integrated |
| Methodology (20%) | <ul style="list-style-type: none"> • The research design is appropriate and enables the questions/hypotheses to be answered • A balanced discussion is provided for the rationale behind the chosen methodology, referencing current methodological literature • The choice of methodology and analytical framework is justified and supported by credible sources • There is strong alignment between the methodology and analytical methods • Limitations of the methodology are clearly outlined and addressed |
| Results and Findings (25%) | <ul style="list-style-type: none"> • Advanced analytical skills are demonstrated, showing deep understanding of the research problem • A clear and logical chain of evidence has been laid down |
| Discussion of Results and Findings (10%) | <ul style="list-style-type: none"> • A variety of evidence is used to develop a balanced and logical interpretation of the results and findings • The discussion avoids excessive speculation and is grounded in evidence • Results and findings are clearly related to the literature review, including current developments in the field |
| Recommendations and Conclusion (10%) | <ul style="list-style-type: none"> • Conclusions are well-reasoned, compelling, and aligned with the study's aims • Strong, clear knowledge claims are made regarding the study's contributions • The study's limitations and potential areas for further research are acknowledged • Evidence of sustained, independent research effort is presented • The dissertation or thesis demonstrates the discovery of new facts and critical independent thinking • Original contributions to knowledge are evident, including any unexpected results and findings • The dissertation or thesis acknowledges its weaknesses and indicates how future researchers should address the limitations |
| Presentation and Referencing (5%) | <ul style="list-style-type: none"> • The overall literary presentation is satisfactory in terms of clarity, conciseness, and structure • Accurate and consistent referencing is maintained throughout |

APPENDIX D

PRESENTATION OF A TABLE

Table 1.1

Rank of Respondents

| Rank | Frequency | Percent (%) |
|--------------|-----------|-------------|
| Senior | 40 | 26.7 |
| Middle level | 50 | 33.3 |
| Junior | 60 | 40.0 |
| Total | 150 | 100.0 |

Source: (Author, 2024)

PRESENTATION OF A FIGURE

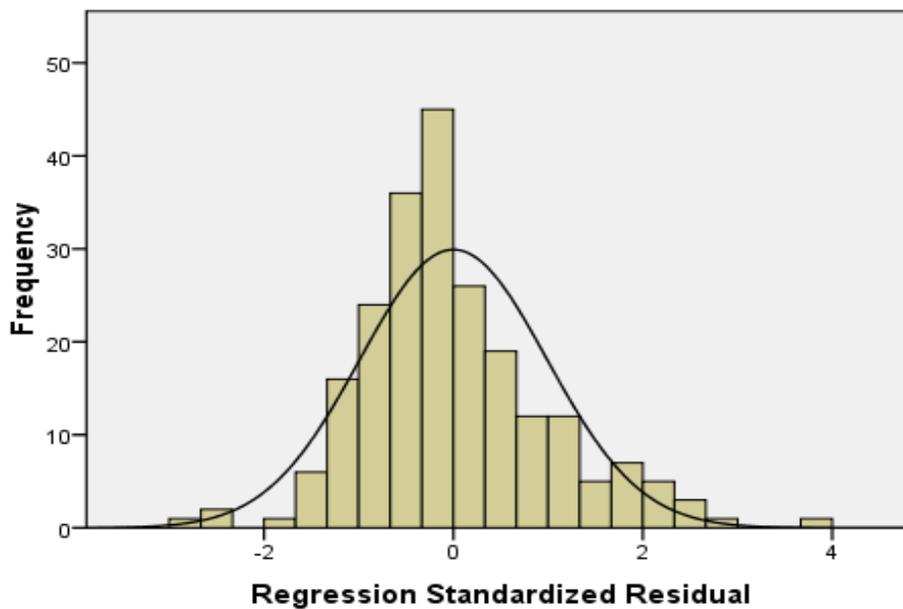


Figure 1.1: *Standardised Residual*

Source: (Author, 2024)

APPENDIX E

SAMPLE: OUTSIDE COVER

GNAT INSTITUTE FOR RESEARCH AND INDUSTRIAL RELATIONS STUDIES



ANTECEDENTS OF GRADUATE RESEARCH COMPLETION RATES IN GHANA

JOHN MENSAH

2024

APPENDIX F

SAMPLE: TITLE PAGE (INSIDE COVER)

GNAT INSTITUTE FOR RESEARCH AND INDUSTRIAL RELATIONS STUDIES

ANTECEDENTS OF GRADUATE RESEARCH COMPLETION RATES IN GHANA

JOHN MENSAH

Thesis submitted to the Division of Education, GNAT Institute for Research and Industrial Relations Studies, in partial fulfilment of the requirements for the award of Master of Philosophy degree in Educational Strategy, Planning and Administration

OCTOBER 2024

APPENDIX G

SAMPLE: DECLARATION

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this Institute or elsewhere.

Candidates' Signature.....Date.....

Name:.....

Index Number:.....

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with guidelines on supervision of thesis laid down by the GNAT Institute for Research and Industrial Relations Studies.

Principal Supervisor's Signature.....Date.....

Name:.....

Co-Supervisor's Signature.....Date.....

Name:.....

APPENDIX H

SAMPLE: ABSTRACT

ABSTRACT

Globally, trade unions are experiencing a decline in membership density and losing influence. Consequently, recruiting, retaining and representing members have been the most difficult task currently faced by trade unions. While the antecedents of falling unionism is a multiplicity of factors, the major factor causing the decline in union density is the inability of trade unions to address membership Perceptions, Expectations and Needs (PEN). Trade union membership attitudes and perceptions are important antecedents in membership retention, commitment and satisfaction. Against this background, it became necessary to undertake a GNAT Membership PEN Survey to address the priorities and desired outcomes of the membership for the survival of GNAT under the current threat of union pluralism and splinterism in Ghana.

The Theory of Change (ToC) was used as an important conceptual tool for transformational change management though the use of techniques that are collaborative, participatory and practical or applied. Accordingly, the methodology adopted for this survey was centered on a triangulated participatory approach that uses several qualitative participatory and quantitative methods to maximise the credibility and validity of the research outcomes. The stakeholders of GNAT at each level of the Association were consulted across both the political and administrative structures through stratified sampling. Using a pre-defined criterion, 1000 members of GNAT were sampled across the 10 Regional branches of the Association. The quantitative data was analysed using SPSS while the qualitative was through thematic analysis.

While about half (53.4%) of the membership had a favourable perception of the Association, a significant proportion (46.6%) either had an unfavourable perception or were neutral about their perception of the Association. Both new entrants and old members were shaped by similar perceptions of the Association. The opportunities for engagement with the membership to influence the decision-making process of the Association have been low. The weak communication in the Association has resulted in several misconceptions about the Association and also widened the expectation gap. The members respectively had moderate levels of affective and continuance commitment but low normative commitment. Effective representation requires effective membership engagement. Avenues such as membership mobilization and engagement meetings should be organised at local levels annually to help improve membership involvement in the decision-making process of the Association.

APPENDIX I:

SAMPLE: ACKNOWLEDGEMENTS

ACKNOWLEDGEMENTS

Several key persons have contributed immensely to the successful completion of this thesis, and are highly acknowledged. First are my supervisors, Rev. Prof. Emmanuel Ado-Obeng and Prof. Frank Arku who respectively provided academic guidance from the research proposal stage to the successful completion of this work. They were always available to provide me with the relevant advice and suggestions, which made this work a success.

Also deserving are the Heads of Basic Schools in Nkwanta South Municipality of the Oti region of Ghana who participated in this study.

My heartfelt thanks also go to family and friends for their support, particularly, my wife, my wife Jane Mensah, and children, Jonathan Mensah, and Emmanuel Mensah.

Finally, I also express my profound gratitude to every individual who directly or indirectly supported with the development of this work.

APPENDIX J:

SAMPLE: DEDICATION

DEDICATION

To my brothers,
Elvis, Prince, Saviour

APPENDIX K:

SAMPLE: TABLE OF CONTENTS

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APPENDIX L

SAMPLE: LIST OF REFERENECS

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