

Basic Academic Research Structure and Format Guiding Principles for Students

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Abstract

The main purpose of the guideline is to develop a basic academic research structure and format guiding principles for students with two specific objectives; to develop a coherent research structure and academic research format for the public universities in South Sudan. One hundred and seventeen dissertations were reviewed, and a total of 88 teaching staff were interviewed, giving 91% response rate. The dissertations were selected randomly, and teaching staff were selected purposively by virtue of their positions and availability. The validity and reliability of the instruments was ensured through pretesting, CVI, and triangulations. SPSS v22 was used to analyze data, both descriptive and thematic analysis were used. Permissions were sought from university administrations and one of the respondents before data collection. There is some significant variation on academic structure and format across the five universities in the republic of South Sudan. The research structural variations and inconsistencies were found in their contents and order of titles and subtitles of dissertations reviewed. In conclusion, this basic academic research guide is developed to set some standards and directions for students and their supervisors to complete the dissertation on time with less stress as it provides where to begin and the end. It will also enhance the objective grading of dissertations and evaluation levels of the university. The guideline will contribute to the development of consensus on academic research structure and format standards for students that will encourage young researchers to have an interest in research as a career.

Keywords: *Basic academic research structure, Format guide.*

Introduction

South Sudan is the newest country in the African Continent which got its independent in one decade ago on 9th July 2011 from Sudan with a population of about 13 million [1]. The Country current has five public universities, namely the University of Juba, Bhar El Gazal University, Upper Nile University, Rubek University of Science and Technology, and Dr. John Garang Memorial of Science and Technology.

This study is one the first of its kind after the independent as part of efforts to improve the higher learning system in general and academic

research quality in particular. The research focused on research structure and its format as the basic guiding principle for university students and researchers [2]. Learning to become a researcher is a process that requires step-by-step practice, which must start from basic research structure to complex one. Students need some basic standards to build a foundation for conducting research for academic purposes as a learning experience before endeavoring to real live experience research for decision making [3].

The fundamental expects of academic research are structure and format. A clearly written academic research guideline helps students and their supervisors to conduct

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research with a yardstick and a common understanding of the expected outcome [4]. The academic research structure and format layout and entails the beginning and the end of the academic research in a logically manner with sense of coherence of all its parts [5]. Writing an academic research is unique, and it is not the same as writing sermons, compositions, or a one-man write-up [6].

Academic research formatting provides consistency, user-friendly readability, focus on content, and facilitates the practice of discipline and adherence to the standards. It is the responsibility of an individual university to guide research formatting to determine font type/size, margins, pagination, among others [7].

Research format is important in academic writing because it helps to make your ideas clear, guides the reader's comprehension, and can strengthen a researcher argument [8]. Academic research structure helps in the development of ideas, skills and motivates students to identify their career path. When conducting research is made simple, the students become very interesting in research and will acquire necessary skills and knowledge that promote independence, collaboration, and innovations, which contribute to the production of new knowledge of which the society and university can benefit [9].

Basic structure of a typical dissertation or thesis contents and their sequence broadly include preliminary pages, body, and annexes. Preliminary pages contents sequentially start with cover page, inside title page, approval, declaration, dedication, acknowledgement, table of contents, list of table, list of figures, list of abbreviations and acronyms, and abstracts. Academic research body consist of section one, section two, section three, section four, and section five. The sections are titled as follows introduction 1, literature review 2, methodology 3, research findings 4, discussion, conclusion, and recommendations [10].

There is no one standard academic research structure and format across the universities

globally. The inconsistencies are seen in the contents and sequence of subtitles of dissertations. On the other hands, dissertation formats are determined by referencing style adopted by the university. The African content and regional universities are not exceptional. The five public universities in South Sudan are the worst when it comes to academic research structure and format. Content and order of dissertations are not consistent between and within the universities [11-15].

The double standard research structure and format is the source of confusing, disorganization resulting to frustration and discouragement of students to become research. In the absent of researchers and competent enough in South Sudan will have a negative impact in the wellbeing of the humanity at all aspects of live [16].

The main aim of this guideline is to develop a basic academic research structure and format for students with two specific objectives; to develop a coherent research structure and academic research format. The public in Universities of the Republic of South Sudan do not consistent research structure.

This article attempted to provide a basic standard and coherent academic research structure and format for students to complete the dissertation within the time frame without frustration which can be evaluated in an objective manner. The guideline be used as a reference for the development of research policies, guidelines, and dissertation supervision, and marking guide as well.

Methods and Materials

This research adapted qualitative and quantitative approach, descriptive and cross-sectional designs to assess research structure and format in five public universities in the Republic of South Sudan. Dissertations of the students in University of Juba, Upper Nile University, Bhar El Gazal University, Rumbek University, and Dr. John Garang Memorial University of Science and Technology were the target objects

and teaching staff of the same universities. Both qualitative and quantitative approaches are useful triangulation of data [17]. Description of the existing research structure and format can be well-articulated using a descriptive design, which has the ability of providing in-depth information for a better understanding of the variables [18]. The cross-sectional design has no time dimension. This design was preferred as the information was collected from dissertations and teaching staff of the universities as they exist at the point in time. The research paradigm is epistemology because of the objectivity and subjectivity of the research design [19]. The sample size was determined proportionately based on the number of dissertations and teaching staff. A total of 225 participants and objects were participated in soliciting data. These include 25, 75, and 125 head of departments or Deans of faculties, teaching staff (Lecturers, teaching assistants etc.), and 225 dissertations, respectively [20].

Primary and secondary constituted the data source for this study. Primary data were collected from 100 teaching staff and secondary data from dissertations. Dissertations were selected randomly, while teaching staff were selected purposively by virtue of their positions and availability [21]. All participants consented verbally before they provide information. Permissions were sought from each university before accessing dissertations, policies, and guidelines from libraries.

Observation checklist, questionnaires, and interview guides were used to collect both quantitative and qualitative data. Validity and reliability of the data collection tools were ensured by pre-testing the tools, content validity index was used, and triangulation of the data collection instruments were the techniques used [22]. Descriptive analysis was used to run the frequencies for quantitative data using SPSS v21 and qualitative data was analyzed using thematic analysis [23].

This study is subjected to methodological, contents, and context limitations, these include but not limited to cross-sectional design does encounter casualty limitations, some degree of selection bias, recalled bias, social desirability bias, and scarcity of academic materials [24].

Results

All five public universities were included in the study, and Table 1 below depicts distributions of objects and participants. The number of respondents was determined proportionately.

There is significant variation in the contents and sequence of the academic research structure in the five public universities of the Republic of South Sudan. However, the major sections are consistent that's preliminary pages, research body, and appendixes. Research paper formatting generally is more consistent compared to the structure. Some of the notable disparities are seen in the cover page color of dissertations.

Table 1. Distribution of Participants and Objects by Public Universities

Name of University	% of Teaching staff	% of Dissertations reviewed	Total %
University of Juba	51%	36%	43.5%
Bhar El Gazal University	18%	23%	21.5%
Upper Nile Univeristy	15%	17%	16%
Rumbek University	10%	13%	11.5%
Dr. John Garang University	6%	11%	8.5%
Total	100%	100%	100%

Academic Research Structure

The major variations and inconsistencies of academic research structure in the public universities in South Sudan were found to be in the contents and order of titles and subtitles.

The main contents of the preliminary pages were fairly well presented in the dissertations. However, there were notable inconsistencies in the order of the contents of the preliminary pages Figure. 1.

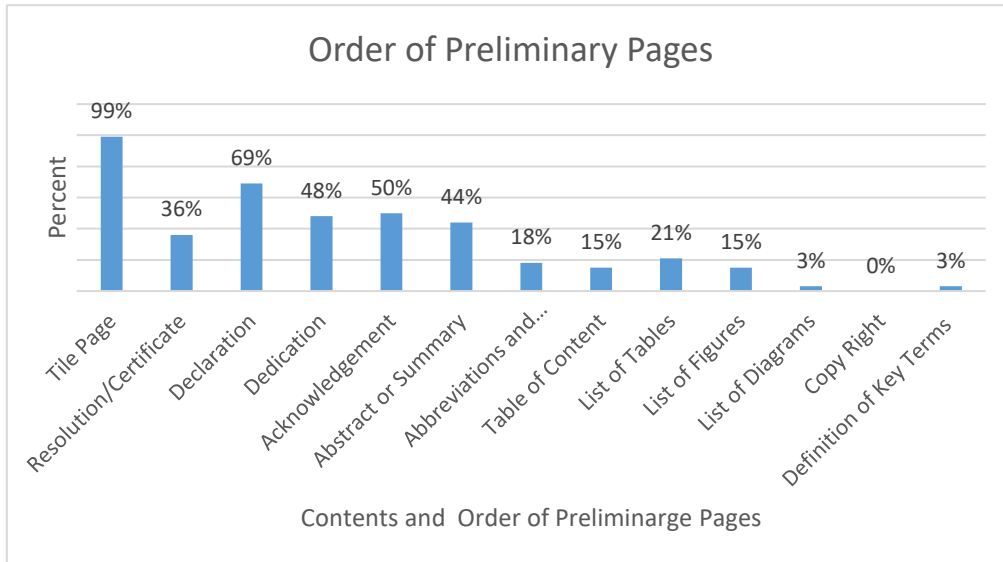


Figure 1. Order of Preliminary Pages Contents

The availability of the main sections in the dissertations written by students in the five public universities was observed using observation checklist. Figure 2 below shows the

distribution. Only 50% of dissertations reviewed have references and appendixes. Majority of dissertations have five sections only.



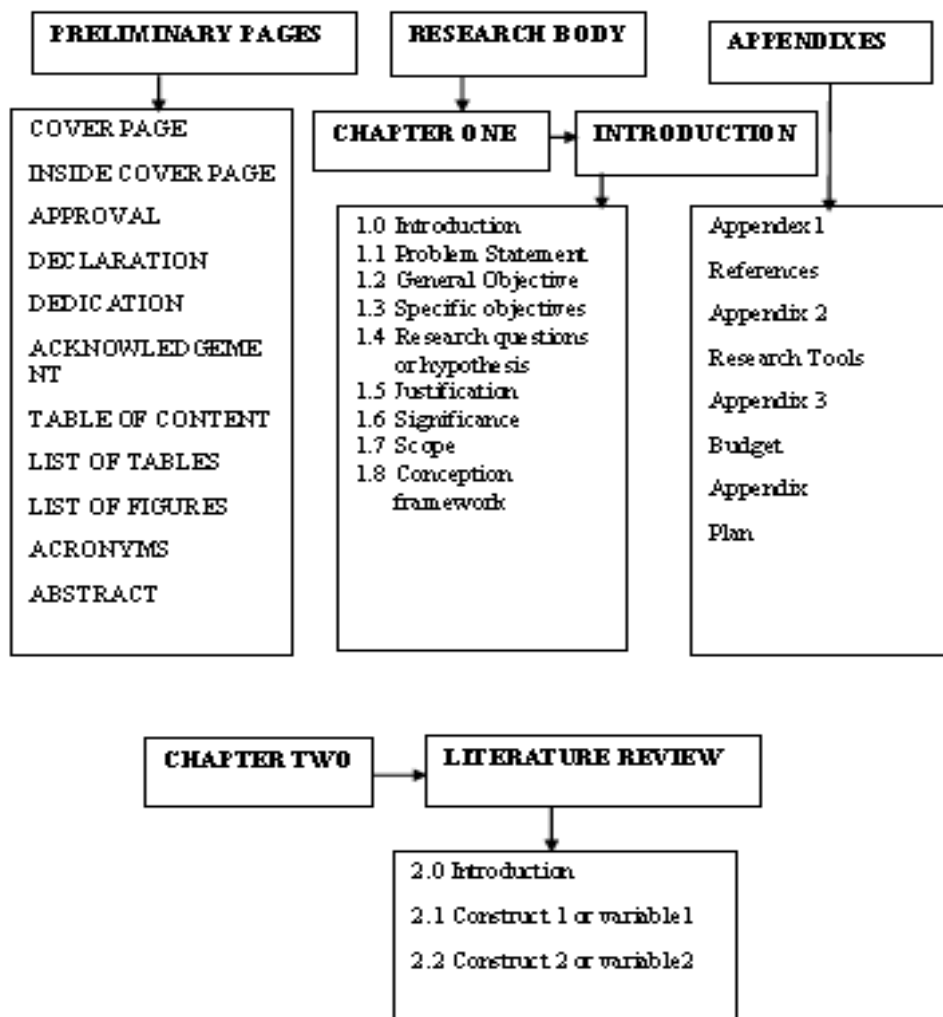
Figure 2. Availability of the Main Sections in the Dissertations

There are different titles used for the main headings of the body of the academic research. Section one the following headings were used to represent the Section. Introduction and background 38%, introduction 38%, literature review 14%, background 3% and other titles used 7%. Section two headings were literature review 74%, methods and materials 15%, theoretical framework 3%, conceptual framework 2%, and 7% for others. Section three headings only 28% and 22% of dissertations wrote research methodology and methodology respectively as titles for the section. The remaining 50% of dissertations reviewed missed the right heading. The following are some of the headings used by the students instead to represent section three heading; results 21%, designs 9%, methods, and materials 7%, procedure 7%, and methods 6%. About 50

different titles were used by students to represent section four in the dissertations. The two most frequent titles were data results and discussion 21% and result 10%. The other 45 titles constitute 69%, with an average of 2% each. Surprisingly 22% of dissertations did not have section five. One of the common title used was summary and conclusion 31% as the title for section five. The other titles were summary and findings 6%, recommendations 5%, discussions 3%, and 32% others.

The below basic academic research structure is developed based on the findings and literature to be used by students and their supervisors as a guiding principle [24].

Figure 3 illustrates the structure of academic research showing major sections, titles, subtitles, and their sequential order from top to bottom.



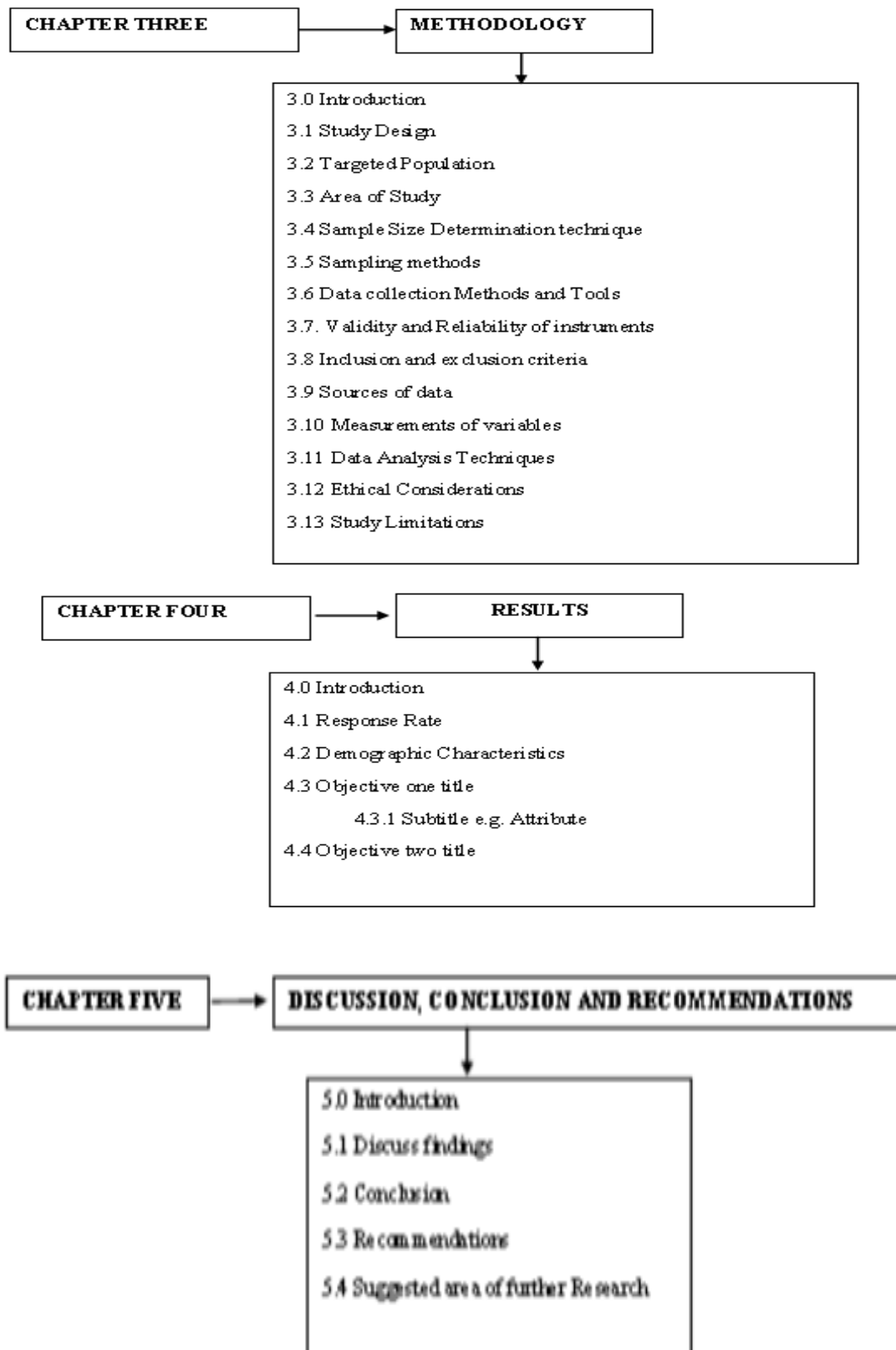


Figure 3. Basic Academic Research Structure

Table 2 depicted the recommended subheadings and order of preliminary pages. The

variations were in order rather than the content. Table 3 propose the length of a research paper be

estimating the number of pages for each title and subtitle as a guide.

Body of the Research is the largest part of the research paper. It consists of five sections that constitute a dissertation.

Appendixes are some parts of a dissertation that cannot be included in the main text. Table 4 shows some of the most common parts of an appendix in academic research.

Academic Research Format

The research paper format is largely determined by referencing style adapted by the university. However, some of the most common referencing styles, such as the American Psychological Association, AMA, Harvar, Chicago etc., use almost the same formatting with very minimal discrepancies. Table 4 depicted research format standards [25].

Table 2. Order and Contents of the Preliminary Pages

Sections	Recommended Headings	Contents and their Order	Number of Pages
None	Initial Pages do not have a Section	Title	1 page
		Approval	1 page
		Declaration	1 page
		Dedication (Optional)	1 Page
		Acknowledgement	1 page
		Table of content	Depend
		List of Tables	Depend
		List of Figures	Depend
		List of Equations (Optional)	Depend
		Abbreviations	Depend
		Abstract	1 page

Table 3. Contents and Order of Research Body

Sections	Recommended Headings	Contents and their Order	Number of Pages
Section One	Introduction	Introduction	1 - 2 Pages
		Statement of the Problem	2 - 4 pages
		Broad Objective	
		Specific Objectives	
		Research Question or Hypothesis	
		Justification	
		Scope	
		Conceptual or Theoretical Framework	
Section two	Literature Review	Introduction	3 - 6 pages
		By objectives and variables or Constructs and Attributes	
Section Three	Methodology	Research Designs and approaches	3 -6 Pages
		Study targeted Population	
		Study area	
		Sample Size Determination	
		Sampling methods and techniques	
		Inclusion and Exclusion Criterion	
		Ethical Considerations	

		Data Sources	
		Measurement of variables	
		Data Analysis techniques	
		Research Limitations and Delimitations	
Section Four	Research Finding and Interpretation	Introduction	6 - 10 Pages
		Response Rate (Optional)	
		Demographic Characteristics (Optional)	
		By objectives and variables or Constructs and Attributes	
Section Five	Discussion, Conclusion and Recommendations	Introduction	Max 3 pages
		Conclusion	
		Recommendations	
		Further Research	

Sources of data: Primary and Makerere University 2011 [26].

Table 4. Order and contents of the Appendixes

Major Categories	Sections	Recommended Headings	Contents and their Order	Number of Pages
(3) Appendixes	Appendix 1	List of References	Complete references using APA or Harvard Referencing style	Depend
	Appendix 2	Recommended Tools	Questionnaires (Optional)	Depend
			Interview Guide (Optional)	1 Page
			Observation Checklist (Optional)	Depend
	Appendix 3	Plus, others not limited to these items	Plan	1 Page
	Appendix 4		Budget	1 Page
	Appendix 5		Map (Optional)	1 Page

Table 5. Academic Research Format

Components	APA	Harvard
Font type	Time New Roman	Time New Roman
Font size	11 – 12 points size	10 – 12 Points size
Font color	black	black
Page size		8.5 – 11 inch
Page margins	2inch top	1 inch
Top margin	50	1 inch
Bottom margin	25	1 inch
Both sides margins	Left 50	1 inch
	Right 25	
Spacing	double	double
Line space	1.5	2

Alignment	justified	justified
Preliminary pages	Roman numbers	Roman numbers
Research body	Arabic numeral	Arabic numeral
Page size	A4	
Page # position	Bottom Centered	Top or bottom centered
How to print	One side	One side

Source: Primary data, Emma [27] and Harvard University.

Discussion

Academic Research Structure

The major sections of the academic research include Preliminary Pages, body, and appendixes. These main categories are the same for all universities globally.

Preliminary pages also differ much in the contents, however, the sequence of the contents vary significant. Here are the most common contents and their sequential order. Cover page, inside title page, approval, declaration, dedication, acknowledgement, list of contents, list of table, list of figures, abbreviations, and abstract [20].

The body of academic research consists of five main sections, and these are 1 introduction, 2 literature review, 3 methodology, 4 results, and 5 discussion, conclusion, and recommendations. Though there are some variations in the titles of the main sections, but the sequence is the same largely.

The basic contents of section one and their order are the introduction, problem statement, general objective, specific objectives, research questions or hypothesis, justification, significance, scope, and conception framework or theoretical frame.

Methodology describes section three perfectly compared to the other titles being used for the same section. This section may have many contents depending on the type of research. However, the following generic contents and order provide guiding principles for students. Research design (s), population, area of study, sample size determination, sampling methods, data collection techniques, sources of data, inclusion and exclusion criteria, validity

and reliability of data collection tools, measurements of variables, data analysis techniques, ethical considerations, and limitations.

For simplicity and consistency, section four title is results, and the subtitle should be based on the objectives/attributes/variables after demographic characteristics of the respondents. The students in the public universities in the Republic of South Sudan use more than ten different titles for section four. These findings are also seen from Nairobi, Harvard, Makerere universities [22].

Discussion, conclusion, and recommendations constitutes section four, though other universities or faculties divide the section into section five and six, where discussion becomes section five and section six takes conclusion and recommendations.

The appendix is the last part of academic research that could contain any other part of research that cannot be included in the main text. Appendix should include references, data collection tools, plan, and budget.

Academic Research Format

Format of the academic research is largely determined by the referencing style adopted by the university or faculty. The format covers wide range of font, spacing, margins, pagination, paper, printing, and book color.

Research is preferred to be writing clearly and avoiding fancy styles at all form. The acceptable and recommended format are that one of APA, Harvard, etc. referencing style [23].

Type of font should be new time roman and font size 11 - 12-point size and text of a research body justified. The first level heading font

should be 14-inch, second level 13 inch, and third level 12 inch. First-level heading capitalized and centered. Second level subheading aligned left with the first letter of each word capitalized, the same to third-level subheadings.

This is the most common, less complicated academic research format and promotes the readability of the text [24].

Conclusion

In conclusion, this basic academic research guide will give direction to students and their supervisors to complete the dissertation on time with less stress as it provides where to begin and the end. It also enhances objective grading of dissertations and evaluation level of the university. The guideline will contribute to the development of consensus on academic research structure and format standards for students that will encourage young researchers to have an interest in research as a career.

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Conflict of Interest

I, Aquila Hakim M. Jongroor, declare there is no conflict of interest in all forms.

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