# A GUIDE TO RESEARCH PROPOSAL AND THESIS WRITING

# John Karanja Lecturer in Business Research Methods KIM school of Management & Kenya Prisons Service, Kenya. Karanjajohn2011@gmail.com

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# 1.1 WHAT IS A RESEARCH PROPOSAL?

# **Definition**

A research proposal is a comprehensive plan for a research project. It is a written description of a research plan that has to be undertaken. It determines the specific areas of research, states the purpose, scope, methodology, overall organization and limitations of the study. It also estimates its requirements for equipment (if necessary), finance and possible personnel.

In brief, a research proposal:-

- Is a document which determines whether a candidate is capable of carrying out independent research.
- Presents a problem, discusses related research efforts, outlines needed to solve the problems, and shows the design used to gather and analyze the data.
- It is a work plan, prospectus, outline, statement of intent, or draft plan.
- Tells the reader what, why, how, where, and to whom the research will be done and shows the benefit of doing research.
- Is used in most institutions as the main criterion to accept or reject a student's candidacy.

**Some scholars have** attempted to differentiate between a thesis and a dissertation, given that is sometimes used synonymously.

A thesis is defined as a proposition advanced and defended by argument. Also a thesis can be defined as a report on an original piece of work. In this latter definition we can deduce three attributes:

- First, 'a piece of work' meaning that during the course of carrying out research for your thesis, you will try to establish something: this is vital because it solidifies objectivity.
- Secondly, <u>'original'</u> this means that your work should be an independent, genuine and authentic contribution to the body of knowledge in the concerned discipline. It should be copied or lifted from somebody else's work without making due acknowledgement.
- Thirdly <u>'report'</u> the thesis is a consolidated report put together in a systematic and logical sequence.

We can therefore conclude that; a thesis is a product of scholarly professional study at the masters' degree level by graduate students, usually a document in a format and style specified by the particular university, while a Dissertation is a product at the doctoral level, distinguish from thesis chiefly by its steeper, more comprehensive, mature, professional and scholarly treatment of the subject.

The two have more or less the same objective:- the award of degree certificate upon successful completion of research.

American writers or trained authors call a research report which leads to a Ph.D Degree a dissertation and one which leads to masters' degree a thesis. The reverse is the case with English writers and who those from the commonwealth countries (which includes KENYA).

All in all, the thesis proposal helps you to focus your research aims, clarify the importance and the need, describe the methods, predict problems and outcomes, and plans alternatives and interventions.

The aim of the thesis proposal is to convince the university that:

- There is a need for research; its significance and importance
- You are contributing something original to the field.
- The topic is feasible in terms of availability of data, funding, equipment and supervisors.
- The research can be completed in the expected time period
- Ethical issues have been considered and approval has been obtained from all relevant bodies (parties)
- The topic matches your interests and capabilities

In summary, one should always attempt to be original. Your work will make a worth while contribution to the field if it fulfils one or more of the following:

- It provides evidence to support or disprove a concept, theory, or model.
- It contributes new data/information, new or improved research methodology
- It results in a new or improved concept, theory or model.

### 1.2 THE PURPOSE OF A RESEARCH PROPOSAL

- To present the research question to be researched on and relate its importance.
- To discuss the research efforts of others who have worked on related research question.
- To suggest the data necessary for solving the research question and how the data will be gathered, treated and interpreted.

- The proposal displays the researchers discipline, organization and logic and hence allows the reader the researcher and the proposed design.
- Serves as a basis for discussion between the researcher and the instructor.
- The process of writing a research proposal encourages the researcher to plan and review the study's logical steps.
- The researcher is also able to assess previous approaches to similar research questions and revise the revise the research plan accordingly.
- The researcher is able to spot flaws in the logic, errors in assumptions or even a research question that is not adequately addressed by the objectives.
- The researcher will use the approved research proposal as a guide throughout the study and can monitor progress and completion of the study, the proposal will also provide an outline of the final research report.
- The research is able to establish the time and the cost of the study which helps in planning so as to work steadily towards the deadline and completion of the study.

# 1.3 IMPORTANCE OF A THESIS PROPOSAL

The thesis proposal is of great significance both to the researcher and the readers:

- It makes known one's intention of getting involved with research work and this is done through the researcher spelling out the objectives of this his /her study.
- The process of writing a proposal allows the researcher to plan and review the steps that will be undertaken in the project. It gives the researcher an opportunity to spot flows in the logic, errors in

assumptions and even problems that are not adequate addressed by the objection and design of the study.

- In general, it provides justification for funding, assuming one was looking for a potential sponsor. One has to justify the use of resources.
- The proposal also provides justification for acceptance as contributing to either exciting knowledge or adding to it (i.e. either extending the current field or providing additional knowledge to the existing field).
- A well designed thesis proposal helps the researcher to avoid the tiring and time consuming alternatives once the research thesis takes off.
- The proposal provides basis for the evaluation of the final report. It gives the supervisor a basis for assisting the researcher.
- A [proposal is also able to suggest the methodology and data necessary for solving the problem. It can provide details on how the data will be collected, treated and interpreted.
- · Once the proposal has been approved;
  - \* The document serves as a guide for the researcher throughout the investigations' i.e. progress can be monitored.
  - \* It becomes a bond /contract. The approved proposal describes a study that, when conducted competently and completely, should lead to an acceptable report.

#### 1.4 QUALITIES OF A STANDARD PROPOSAL

It worth noting that many proposals are turned down for failing to meet the required standards. If you examine them critically you will discover that the candidates themselves are to be blamed for making unwarranted mistakes. The purpose of a proposal is to **explain**, **justify** and report in a **concise**, **simple** and **coherent** language what you are intending to do.

#### (i) Explain

Explain in a lucid systematic language to your target readers what you intend to do. The most important thing here is to sell your plan

of action but unless the buyers understand what it is, they may not be ready to consent.

# (ii) Justify

"What is the rationale of doing this research, can you substantiate?" Most poorly described proposals are rejected because the candidate fails to clearly explain why s/he wants to do the study. Always bear in mind that you are presenting a proposal to experienced people who have gone through so many other proposals and at a glance can make out the quality of a proposal.

#### (iii) Concise

You should understand your proposal study properly. Avoid so many unnecessary quotations that may not directly contribute to shaping your proposal. Many a time proposals are rejected because they are just so much rhetoric.

A proposal is not a place to display your command of the English Language, general knowledge of the literature, your theoretical or methodical sophistication. You can preserve that for your oral literature. Your reviewers are only interested in determining if your proposed study makes sense. *The bottom line here is be simple, systematic and to the point.* 

#### (iv) Coherent

The essential feature of a good argument is coherent in two different senses of this term

- \* First, the matter should flow logically from one point to the next and hold together as an integrated whole.
- Second, it should be coherent in the sense that your reviewers can grasp what you intend to do in the way you want them to (i.e. avoid inconsistencies)

A research student should understand that good academic proposal should have the following characteristics.

- (i) It should be contestable: that means that, it should propose an arguable point with which people could reasonably disagree.
- (ii) It should be provocative: it takes a stand and justifies the discussions and conclusions the author presents, but also allows readers to analyze the findings and make their own conclusions either in support or against.
- (iii) It should be specific and focused: There is a systematic link from the research title, problem statement, objectives, literature review, data collection and analysis and the conclusion.
- (iv) It should be flexible: The evidence may lead one to a conclusion one did not expect.
- (v) It avoids vague language (like 'It seems') and avoids the first person ('I believe', 'In my opinion').

# 1.5 DEVELOPING A RESEARCH PROPOSAL – GETTING STARTED

Before one embarks on preparing a proposal, they should have a research topic. If you select the wrong topic you are bound to face problems and hence produce substandard results. The popular adage that "many a man on the road to success fails because he sets off from the wrong station, is true in this case.

Therefore, the importance of a topic cannot be overemphasized i.e.

- Does it address any topic issues/interests?
- What contributions will it make?
- What likely support do you anticipate to get (i.e. funding; supervisor's knowledge in the area)
- Is the topic original?
- Do you possess the technical ability and skills in that discipline?

- What is the time frame available i.e. if time is limited, the potential topic should be narrow and specific instead of broad and nebulous?
- Is the topic researchable and attainable? (i.e. given time, resources and available data?)

There are so many sources of potential research topics:-

- Previous knowledge:- Books, academic courses and previous research projects are helpful.
- Social and Academic Interaction if you are in contact with researchers or academicians, you would always have something to discuss or even argue on issues that may be of interest to you. This can be the genesis of your research topic.
- Published Abstracts:- These indicate the types of studies completed by other graduate students. It is advisable, as a doctoral students, you go through these materials.
- Current Journals update you on the latest research undertakings.
- Current theories.
- Approved Thesis and Dissertations.
- Internet.

Always remember that the title of the proposal or the thesis is important as it is the label by which your work will henceforth always be known.

#### Therefore the title:

- Should be clear, accurate, comprehensive and concise.
- Should communicate to potential readers what information they can expect to find.
- It should not claim more for the study than it actually delivers.

 It should have the fewest possible works that adequately describe the content of the work. Two lines of not more than 12 works are adequate.

### The Abstract

The abstract is a condensation of the major ideas in a report or a work book or a proposal. It is the first section of a proposal following the title page. It is the most important section of the proposal and the most important section of the proposal and the most difficult to write. Abstracts are generally less than 250 words in length, very concise and precisely worded although the length various from discipline to discipline.

An abstract is prepared in the cause of proposal development to serve several purposes:

- It enables the reader to obtain the essence of the paper without the details of the full text.
- It may focus thinking of individuals developing the proposal by establishing a clear and explicit goal to which all subscribe.
- Enables the reader to determine quickly whether the content of the proposal will meet his particular needs.
- An abstract can be used for internal purposes to obtain preliminary administrative approval to solicit support and cooperation from other units
- Abstract announces what you think are the salient points of your proposal.

The abstract should explain in a clear sucant and logical sequence:

- The problem to be investigated or purpose of the research
- Objectives, scope and limitations
- Basic methodologies used/data
- Summary of the expected results

In essence, the abstract should contain the summary of the whole proposal. In an abstract, there is no space for waste of words. Each word and sentence must convey a precise message to the reader.

#### 1.6 ESSENTIAL COMPONENTS OF A PROPOSAL

A good research proposal has three (3) main sections which actually form the three (3) chapters of the proposal.

#### CHAPTER ONE - INTRODUCTION

- 1.1 Background information
- 1.2 Statement of the problem
- 1.3 Objectives of the study
- 1.4 Justification/Purpose of the study
- 1.5 Significance of the study
- 1.6 Research questions
- 1.7 Hypothesis / Assumptions
- 1.8 Scope (Delimitations) of the study
- 1.9 Limitations of the study
- 1.10 Definition of terms (Operational definitions)
- 1.11 Organization of the thesis

#### CHAPTER TWO: LITERATURE REVIEW

- 2.1 Introduction
- 2.2 Theoretical literature
- 2.3 Empirical Literature
- 2.4 Conceptual Framework
- 2.5 Summary of literature

#### CHAPTER THREE: METHOLOGY AND RESEARCH DESIGN

- 3.1 Introduction
- 3.2 Data types and sources
  - \* Primary \* Secondary

- 3.3 Methods of data collection / Research Design
- 3.4 Sampling frame
- 3.5 Sampling Techniques / Procedures
  A choice between probabilistic techniques and non-probabilistic techniques
- 3.6 Data presentation and Analysis techniques
- 3.7 Time frame work (Schedule of activities)
- 3.8 Budget for the research

#### DATA ANALYSIS SECTION

- This is a brief section on the methods used for analyzing the data
- Data analysis is the process of interpreting the survey data
- Describe your proposed handling of the data and the theoretical basis for using the selected technique.
- Use sample charts, tables to make it easier to write, read and understand tour data analysis.

#### RESEARCH TIMETABLE

- Plan systematically right from the start
- CPM of scheduling can be used to show connections between various tasks which is an effective technique for time control and management
- Self discipline is very crucial where time is concerned in your Ph. D research.

#### REFERENCES

- This is necessary for all projects that require a literature review
- List all sources whose ideas were utilized directly or indirectly in your study
- This is listed at the end of your text

- Other source that are not mentioned in your study but you read them and were useful in carrying out your research should be listed in the references.
- Your sources should be listed alphabetically since most institutions of higher learning accept APA style of referencing.

#### **APPENDICES**

- This is the glossary of terms where there are many words unique to the research topic.
- Consist of terms and definitions.
- Define any acronyms used.

#### CHAPTER ONE: INTRODUCTION

The first section of the proposal is referred to as **The Introduction**. It serves to discuss the background for the proposed research, state and define the problem that the proposal/thesis is attempting to address or solve, state the aims and objectives of the research work and give an indication of how the work will progress. This section is referred to as the introduction since it can be regarded as the opening of the study. It attempts to establish that a problem exists and there is need for a study to be carried out. It also justifies the study. The author in this chapter attempts to analyze the study in these divisions: background to the study, statement of the problem, aims and objectives of the study, research hypothesis, research questions, significance of the study, limitations of the study and the conceptual and theoretic frameworks.

#### 1. BACKGROUND TO THE STUDY

In research the term "background" refers to the setting or position of the study. It is a brief overview of the problem the researcher aspires to tackle. Background information plays a major role in research.

This includes the following:

It helps clarify what has brought about the need for the study.

- It points out the challenges faced due to the identified issue.
- It indicates the opportunities for improvement.
- It demonstrates the researcher's view of the research problem.
- It helps to convince the readers that the problem or opportunity exists and that it should be addressed.
- It shows the reader that the researcher knows the study area as he/she is familiar with what has preceded.

# Qualities of an Effective background to the Study

An effective background to the study has the following qualities:

- It is brief and specific. Though it borrows a lot from the literature review, it is a summary of the information in the literature review.
- It engages the interest of the reader. An effective background should get
  the reader concerned about the problem, excited about the opportunity of
  having the problem addressed and interested in the eventual solution
  proposed by the research.
- It gives the reader a glimpse of the research problem.
- It gives the reader an idea of how the proposal is structured.
- The language used is simple and straightforward.
- It is informative and persuasive since it attempts to enlighten the reader about the research problem and the urgency of addressing the problem.

# Steps in Writing an Effective Background to the Study

The following steps are essential in writing an effective background.

a) Reflection – Before writing the background to the study, the researcher should analyze the selected topic and title and identify the variables. The identification of the variables will assists in locating the relevant literature related to the research problem. This literature will assist in background formulation.

- b) **Brainstorming** The researcher should think about the relevant literature related to the topic that will specifically bring out the need for the study. The challenges related to the selected topic should also be reflected in the selected literature.
- c) Material compilation The researcher should use the library to peruse through and read various books and articles related to the topic. The researcher should note down essential information related to the topic.
- d) **Formulation** The researcher should use part of these materials, which will later on be used in the literature review to write the background to the study. The researcher should cite previous studies that are similar to what he/she is proposing.

# Challenges Faced in Writing an Effective Background.

There are various challenges that researchers experience in writing an effective background. This includes the following:

- Lack of differentiation between the background to the study and the
  literature review. While the literature review expounds on various studies
  related to the area of study, the background should be a short summary
  briefly expounding on factors that have brought about the need for the
  study and opportunities for improvement.
- Some researchers use the background content to justify the need for the study. Yet this section should give a brief overview of the research problem.
- Lack of clarity due to poor language use. This involves the use of jargon such as slang, trendy words, abbreviations, colloquial expressions, redundant phrases and confusing language.
- Quoting studies but not explaining how they fit in the background section.

#### 2. STATEMENT OF THE PROBLEM

After making up your mind about the topic your researching on, isolate the problem or question about it that you find perplexing, then proceed to attempt to find a solution to the problem.

A research problem refers to an issue or concern that puzzles the researcher. This may be due to its effect or consistence despite measures taken. For example, a researcher may be puzzled as to why beer consumption is still high despite the increase in prices. A researcher may also wonder why the rate of schools dropouts is still high in rural areas despite free primary education. These are concerns that may result in the formulation of a research question. The statement of the problem captures in a single sentence or paragraph the essence of your study. Hence a research problem will exist whenever there is a gap between what the researcher knows and what she/he does not know.

#### Qualities of an Effective Research Problem

The following qualities are reflected in an effective research problem:

- The research problem is clearly stated. It is concise. The reader is made aware that there is a definite issue that needs to be solved. This is mainly because the problem stands out clearly and is easily recognized.
- The research problem has an impact on the whole topic being investigated.
- The research problem clearly indicates the urgency of the research and shows that the research is definitely needed.
- The problem is 'researchable' it is a problem that can be investigated through the collection and analysis of data.
- The problem has supported statements.
- The language used is simple and objective. No poetic, comical or emotional language is used.

# Steps in Writing an Effective Statement of the Problem

There are various steps that should be taken in order to write an effective research problem.

- a) Reflection The statement of a problem usually starts with an idea the researcher might have as to what kind of a problem he/she wants to solve or what questions the researcher wants to answer in a selected topic. Everyday practices and experiences usually bring up questions the researcher wants to answer. These are fertile ground for identifying the research problem. The researcher should write down some research ideas/puzzles he/ she has been debating based on selected topic. Reflection involves assessing the selected research topic and title and thinking of the best way to reflect the riddle in the topic/title. The researcher should also attempt to reflect on key issue in the topic and the independent and dependent variables of the study.
- **b) Identification** After identifying the key variables, the researcher should attempt to identify the key uncertainties. The researcher should attempt to answer the following: Is there something wrong or disturbing in society, theoretically unclear or in dispute related to the topic/title selected. Why is this a problem?
- *c)* Formulation After identifying the problem, the researcher should formulate it by clearly explaining why this is a problem and how it affects people or institutions. The researcher should indicate what he/she knows about the problem, through personal observations and research.
- *d)* Justification After stating what the researcher thinks is the problem, he/she should explain briefly the repercussions likely to follow in the long run if the problem is not addressed. The researcher should use the statement of the problem to show that the research is definitely needed.

### PARAMETERS OF A GOOD RESEARCH PROBLEM

- Within the researchers discipline or area of specialization
- Must be unsolved so that its solution can contribute to the body of knowledge.
- Must be real. Its solution is felt need. Capable of definite solution based on adequate actual data.
- Must make a significant contribution to the profession or indiscipline in that it:-
  - Discovers additional facts or new practices
  - Substantiate questioned facts theories or practices.
  - Perfect the previously discovered techniques.
- Must be definite conclusions have real value
- Must be sufficiently limited to permit exhaustive treatment
- Must be of sufficient value to justify the effort time and resources employed in the research.

Significance of the problem must confirm to one or more of the following criteria

- Timely
- Relates to practical problem
- Relates to a wide population
- Relates to an influential or critical problem
- Fills a research gap
- Permits generalizations to broad principles of social interaction or general theory
- Sharpens the definitions of an important concepts or relationship

# **Challenges Faced in Articulating the Research Problem**

- a) Defining the research problem One problem faced by researchers is stating the research problem is lack of clarity. The issue being addressed is hardly noticeable in the research problem. Let us take the example of **Problems faced by street children in Nairobi**. In this statement the reader will not be made aware of the definite issue that needs to be solved. This is mainly because the problem is not clearly stated. There are many problems faced by street children both social, economic and health related.
- b) Lack of unity between the research problem, objectives and literature review Sometimes there is hardly any relationship between the research problem, the objectives and the literature review. For example, in the study on the *impact of abortion on education*, the problem may be that little has been done to create awareness on the effect of abortion in schools. However, if the literature review simply concentrates on the health implication of abortion then it is not addressing the research question raised. The literature review should attempt to clarify what is raised in the problem statement. The research problem should have an influence on the topic being investigated.
- **c) Lack of urgency** Some research problems do not reflect urgency for the study. The problem at times lacks any supportive evidence that is not tackled; the repercussions could be serious for the country in general and individuals in particular.
- **d) Emotional language** Some research statements lack objectivity and only reinforce the researcher's emotional views over the selected topic. Some of the emotionally identified problems cannot be easily investigated through the collection and analysis of data.

# **Sample Statements of the Problem**

Abortion in Kenya: An examination of its causes and effects on female students in secondary schools and colleges.

The overall research problem addressed in this study is that despite an increase in the number of female students in secondary schools and colleges procuring abortion, little had been done to analyze the impact of abortion on education. Studies carried out in Kenya indicate that roughly 252,800 abortions occur annually in Kenya among adolescents of ages 15 to 19 (Njau and Radney, 1995). Abortion is also documented as one of the most common reasons for admission of female teenagers in Kenyan hospitals, with about 700 women dying each week as a result of complications arising from illegal abortions (Lema and Njau, 1991). Nevertheless, the impact of abortion on schools retention and performance has hardly been analyzed. If the issue of abortion among students is not treated with the seriousness it deserves and its increase curbed, opportunities that would have otherwise been available for female students to advance academically will become foreclosed due to abortion complications. This in the long run will make it difficult for Kenya to achieve gender equity in education.

# Factors influencing effective communication in event management services industry in Kenya: A case study of Safariquip Limited.

The hiring service sector in Kenya is a business sector that fully depends on its clients for its success and development. The attitude of clients towards the companies can either help increase or decrease the profit margin. Several meetings and workshops have been held within the hiring sector to improve on communication techniques.

However, despite various meetings, complaints have been made in relation to poor language use among the workers and between the

workers and clients. There have also been complains due to unhealthy competition among workers and among the various departments. This has contributed to poor teamwork and hostility. It was pointed out that the various departments were not communicating effectively and these had contributed to low sales. Some of the seasoned customers had opted for other hiring firms (Safariquip Magazine, 2004). The company was losing a lot of sales. There were also delays and damages caused in delivering items, broken promises and lack of cooperation among various departments.

Although training had been carried out by Safariquip to develop and help workers achieve appropriate interaction amongst themselves and among clients, factors contributing to poor communication and its effect on the industry has not been assessed. However, since communication had a lot of influence on sale of services within this industry, it was necessary to find out the factors affecting effective communication at Safariquip Limited.

# **FUNCTIONS OF A RESEARCH PROBLEM**

- Essential basis for the construction of research proposal.
- An integral part of selecting a research topic.
- Will guide and put into sharper focus the research design being considered for solving the problem.
- Allows the researchers to describe the problem systematically to reflect on its importance. Its priority in the country and in the local area and to point out why the proposed research on the problem should be undertaken.

### **EVALUATION OF THE RESEARCH PROBLEM**

 Significance and importance of the problem area in the basic of applied research.  Spell out specific factors giving rise to the basic problem, their interrelationships and their relevance to the problem are.

#### 3. SIGNIFICANCE OR PURPOSE OF THE STUDY

- Demonstrate how the study will contribute to professional extension of existing knowledge, change prevailing belief or suggest some relationship between phenomena
- Describe the explicit benefits that will accrue from your study and emphasis the importance of doing the study now.
- Show how the study will help formulate a practical approach to the method adopted for investigation.
- Show how the study will bring about suggestions that might improve the existing policy theory.

#### 4. OBJECTIVES

Research Objectives are those specific issues within the scope of the stated purpose that the researcher wants to focus and examine in the study. Objectives help the researcher to keep to the scope of the study by defining the area of knowledge that the researcher is focusing on.

Objectives are the goals or aims to be achieved by a research report (project).

Objectives are intentions or purposes stated in specific measurable terms. They provide opportunities for evaluating the end results. In research, an objective *is a specific statement relating to the defined aim of the study.* Specific objectives constitute the means by which the aim/ goal of the study could be achieved. They specify what the researcher will do in the study. Objectives are operational. They state specific tasks that will be carried out by the researcher to accomplish the aims of the study. The

tasks that will be carried out by the researcher to accomplish the aims of the study. These tasks are measurable.

#### IMPORTANCE OF OBJECTIVES

Objectives play a vital role in this research. This includes the following:

- Objectives guide decisions in the selection of respondents, research instruments and the study area. This assists the researcher to avoid the collection of data, which are not strictly necessary for understanding and solving the problem identified.
- Objectives influence all components of the research design including data analysis and report writing.
- A clear statement of objectives helps to limit the scope of the literature review. This is necessary for valid outcomes. They assist the researcher to be precise about what to accomplish. They help organize the study in clearly defined parts or phrases.
- Objectives serve to clarify the variables of the study. This helps in the evaluation of the study.
- Objectives break up the aim into achievable and measurable components. They serve as a guide for evaluation.
- Objectives provide a common consistent focus for the many activities in research. Some unity in emphasis and some common focus are needed to achieve the goal of the study. This facilitates sequencing.
- Objectives are the basis for judging the reminder of the research proposal.

#### QUALITIES OF EFFECTIVE OBJECTIVES

Effective objectives display the following qualities:

(a) They are specific – this means that the objectives selected clearly state what the researcher will do in order to fulfill the purpose of the study.

- (b) **They are measurable** thus can be evaluated.
- (c) They are focused The objectives should narrow the study to essentials. They should also cover the different aspects of the problem and its contributing factors in a coherent way and in a logical sequence. They should systematically address the various aspects of the problem, particularly the key factors that are assumed to influence or cause the problem.
- (d) **They are operational** They should be clearly phrased in operational terms, specifying exactly what the researcher will do.
- (e) **They are realistic** therefore achievable.

Hence, the criterion of assessing a good objective is that the objectives must conform to the 'SMART' criteria commonly used in management:

- Specific
- Measurable
- Attainable
- Realistic/Researchable
- Time Bound

#### **GUIDELINES IN WRITING OBJECTIVES**

In order to write specific objectives that will be effective to the researcher, the following guidelines should be followed:

**Reflection** – This involves analyzing the aim of the study, the topic, and title before formulating the specific objectives. Specific objectives should relate to all these aspects.

**Formulation** – The researcher should write down the specific objectives ensuring that they are measurable and if accomplished will answer the research question.

**Evaluation** – After the formulation of objectives, the researcher should attempt to answer the following questions: Do the objectives address all parts of the research problem? Do the objectives measure what is being

researched? Are the objectives feasible? If too ambitious, could the scope of the study be reduced? Answers to these questions will assist the researcher formulate effective objectives.

#### CHALLENGES FACED IN SPECIFIC OBJECTIVE FORMULATION

There are various challenges faced in objective formulation. These include the following:

- (a) **Lack of clarity** In some studies, the objectives are not clearly articulated. The objectives do not focus clearly what the study hopes to accomplish.
- (b) Overambitious objectives At times the objectives stated by the researcher are too many and cannot be achieved within the time frame stated and the finance implied. The scope may also be too wide.
- (c) The objectives do not follow a logical order.
- (d) **Unrelated objectives** Formulating objectives that do not deal with all aspects of the research problem.
- (e) Not specific Some stated objectives are not specific and therefore difficult to evaluate. Objectives stated by non-action verbs such as, to appreciate, to understand or to study, are difficult to assess.

# Sample objectives

# Girl parents in secondary schools in Kenya: An evaluation of pre and post pregnancy performance

The specific objectives of the study were to:

- (a) Identify factors responsible for the increase of abortion among female students in secondary schools and colleges.
- (b) Investigate the effect of abortion in learning.
- (c) Examine the role played by society in addressing the problem of abortion among students.

(d) Suggest appropriate strategies that would help reduce abortion among female students in Kenya.

# An investigation of resources women farmers use to enhance household food security: A case study of Embu district, Kenya.

In this study, the specific objectives were to:

- (a) Determine the demographic characteristics of the respondents,
- (b) Determine the status of food availability in Embu district.
- (c) Determine human and material resources women used to ensure food sufficiently.
- (d) Determine the constraints women encounter in providing adequate food for the household.
- (e) Investigate how resources should be used efficiently to enhance household food security.

# Factors affecting food selection, intake and nutritional status of the elderly in Mathare slums in Nairobi, Kenya.

In this study the objectives were:

- (a) To determine the nutritional status of the elderly in Mathare slums.
- (b) To determine the food preferences, satisfaction/dissatisfaction with foods available in the market for elderly in Mathare slums.
- (c) To determine factors that influence food selection among the elderly in Mathare slums.
- (d) To establish the dietary intake of the elderly in Mathare slums.

One notable fact among these objectives is that they are specific. There is something the researchers want to determine, to establish, to identify and to investigate. The objectives therefore clearly state what the researchers will do in order to fulfill the purpose of the study. These objectives can be evaluated. These objectives also narrow the study to essentials. They are phrased in operational terms, specifying exactly what

each researcher will do. The objectives stated are realistic and achievable. An aim is a general statement, which reflects the intention or purpose of our chosen area of research, whilst an objective is a specific statement relating to the defined goal/aim of your research. It is not uncommon to have more that one objective to satisfy your research aim.

In simple terms the aim and objectives are interrelated. The aim is what you want to achieve, and the objective describes how you are going to achieve that aim.

### 5. RESEARCH QUESTIONS

These are issues that the researcher seeks to answer. They are related to the research objectives. These questions guide the research process by addressing the variables of the study.

Research questions for quantitative study must meet three (3) tests of clarity and inclusiveness:

- They must be free from ambiguity;
- They must express the relationship among variables; and
- They must imply empirical test.

As a rule of thumb, it is appropriate to have as many research questions as there are objectives (i.e. Match each objective with a research Question).

### 6. Research Hypothesis

A hypothesis is a guess or an assumption. It is a tentative explanation for certain behaviour patterns, phenomena, or events that have occurred or will occur. For example, *price increase influences commodity consumption.* This is only a guess. It may or may not be true, or it may be applicable to some commodities and not others. In this guess, a relationship is perceived between price increase and commodity consumption. It therefore has to be verified. In research, a hypothesis *is* 

a statement that describes an unknown but tentatively reasonable outcome for the existing phenomenon. It is a tentative answer to what the researcher considers as ought to be the possible outcome of an existing problem or phenomenon. It is likely solution to a problem being studied, which is advanced before the actual research is undertaken. We can therefore conclude that hypothesis as educated guesses about possible differences, relationships or causes of research problems. They state what the researcher thinks the outcome of the study will be.

# Types of Hypothesis

There are three types of hypothesis: the conceptual, research and statistical hypothesis.

#### **CONCEPTUAL HYPOTHESIS**

This is a statement about the relationship between theoretical concepts. These are mainly ideas that can never be directly tested because they cannot be measured. They must be operationalized or made measurable before they are tested. For example, discipline facilitates academic achievement or negative attitudes retard development.

#### RESEARCH HYPOTHESIS

This is a statement about the expected relationship between observable or measurable events. An experimental research hypothesis states expected relationships between independent and dependent variables. For example, rewards after an accomplishment of a task will increase the frequency of the performance of the task. This is an example of an experimental research hypothesis.

For example, a teacher notes that students who complete the mathematics examinations half an hour before the expected time usually perform poorly as compared to those who complete in the expected time.

The teacher may decide to investigate the relationship between the number of minutes needed to complete an examination and the score on the examination. The teacher may use the data to determine whether there is a significant negative relationship between these two variables. The research hypothesis may be formulated as follows: *The length of time needed to complete the mathematics examination will be negatively correlated with the score on the examination for students.* 

#### STATISTICAL HYPOTHESIS

This hypothesis states an expected relationship between the numbers representing statistical properties of data such as the mean, variance and correlation. This hypothesis is a guess about the value of a population parameter or about the relationship between values of two or more parameters the hypothesis is testing. The statistical hypotheses consist of the null hypothesis (H<sub>0</sub>) and the alternative hypothesis (H<sub>1</sub>). An example of a statistical hypotheses can be stated as following:

The mean different scores in Sociology by students in the Institute of Open Learning and those in the Department of Sociology at Nairobi university is zero.

# Ways of stating the Hypothesis

There are two forms of stating the hypothesis: the null and alternative forms.

#### THE NULL HYPOTHESIS

The null hypothesis sates that these is no difference between the variables studied. The aim of testing is to show that the hypothesis is false and thereby accept the alternative hypothesis. The null hypothesis refers to the guess the researcher tests and hopes to prove wrong, reject or nullify. The null hypothesis states that no relationship exists between the variables studied. Confirmation of the research hypothesis is based

on rejecting the null. For example, there is no significant difference in the academic performance of students who attend private schools and those who attend public schools in national examinations.

If the researcher wishes to show that a difference exists in national examination performance among students in *public* and *private* schools, then the researcher must prove that there are no differences. The null hypothesis specifies the expected value of a single population parameter or the expected relationship between two or more parameters.

The first step in testing a hypothesis is to make the assumption that there is no significant difference between variables or conditions being studied. This assumption is called null and it refers to nothing or no relationship. Null is symbolized by  $(H_o)$ 

The aim of testing is to show that the hypothesis is false and thereby accept the alternative one. The null hypothesis states that no relationship exists between the variables being studies. Confirmation of the research hypothesis is based on rejecting the null.

# **Examples:**

H<sub>o</sub>: There is no significant difference in the academic performance of students who attend private schools and those who public schools in national examinations.

If the researcher wishes to show that a difference in performance exists in national examinations among students in public and private schools, then he/she must prove that there are no differences.

Other examples are;

H<sub>o</sub>: There is no significant difference between an individual's success in life and his/her academic certificates.

H<sub>o</sub>; There is no significant difference between business location and profit margin.

H<sub>o</sub>: There is no significant difference between the behaviour of female and male pastors.

H<sub>o</sub>: There is no significant difference in performance between female and male entrepreneurship.

H<sub>o</sub>: There is no significant difference between managerial skills of male and female managers.

Null hypotheses specify the expected value of single population parameter or the expected relationship between two or more parameters. Therefore, it is important to note that all the hypotheses should be tested. There is no way a verdict can be passed without an investigation.

#### THE ALTERNATIVE HYPOTHESIS

This hypothesis states a value or relationship and it is different from the null. It asserts that the value of relationship in the null is not true. In research, the null hypothesis is tested, and if rejected, the alternative is accepted. There is no way a verdict can be passed without an investigation.

Alternative hypothesis if the opposite of null and it is symbolized by H<sub>1</sub>. Examples:

H<sub>1</sub>: There is a significant difference between the perception and attitude of entrepreneurs.

H<sub>1</sub>: There is a significant between success in business and determination.

H<sub>1</sub>: Teachers determine the success or failure of their students in life.

All stated hypotheses require testing. Therefore, it is imperative for a researcher to know that all the hypotheses should be backed up by evidence.

#### **DIRECTIONAL HYPOTHESIS**

If the researcher's interest is in finding a difference only in a particular direction, then a directional hypothesis is used. A directional hypothesis states the relationship between the variables being studied or difference between experimental treatments that a researcher expects to emerge. For example if a researcher is interested in finding out how teacher qualifications influence students' performance in mathematics in secondary schools, the directional hypothesis can be stated as following: There is a positive and significant relationship between the qualification of teachers and student performance in mathematics in secondary schools.

Alternative hypothesis that are neutral are called Alternative non-directional hypothesis, and those that are not neutral, are termed as alternative directional hypothesis. This classification is very important especially when it comes to statistical testing – i.e. one tail – or two tail analysis.

# Importance of Hypotheses in Research

The hypothesis plays a vital role in research. This includes the following:

- It states the researcher's expectations concerning the relationship between the variables in the research problem.
- By defining the variables in the study, the hypothesis enables the researcher to collect data that either supports the hypothesis or rejects it.
- Hypothesis enables the researcher to assess the information collected from the stand point of both relevance and the organization.
- Ensure collecting of the evidence necessary to answer the question posed in the statement of the problem.
- Guide the collection of data and provide the structure for their meaningful interpretation in relation to the problem under

- investigation.
- Forms the framework for the ultimate conclusions of a study.
   Researchers usually base their conclusions on the results of the tests of their hypothesis.
- Hypothesis provide direction, they bridge the gap between the problem and evidence needed for its solution.
- The hypothesis refines the research problem, permitting the researcher to understand the problem with better clarity and use the data collected to find solutions to the problem.

# Qualities of an Effective Hypothesis

An effective hypothesis has the following qualities:

- It must have both the independent and dependent variables.
- It states as clearly and concisely as possible the expected relationship (or difference) between two or more variables.
- It defines the selected variables in operational and measurable terms.
- It is testable and verifiable. It is possible to support or not support the hypothesis by collecting and analyzing data.
- The wordings are clear and precise.
- It is consistent with the existing body of knowledge, i.e.
   It must be based on a sound rationale derived from theory or previous research or professional experience.
- It must give logical arguments, i.e. it must be consistent with common sense or generally accepted traits.
- It must be related to empirical phenomena (phenomena that is testable).
- It must be testable within a responsible time.
- Variables tested in the hypothesis must be consistent with the purpose, statement and objectives of the study.

A hypothesis is not testable if it calls for techniques that are not available with the present state of the art. A hypothesis is also untestable if it calls for an explanation that defies known physical or psychological laws.

# Sample research Hypothesis

# Farming related transport needs and provision in Mwea Tebere irrigation Scheme, Kirinyaga district, Kenya

The following hypotheses were tested in the study:

- (a) There is no significant difference in average trip lengths traveled daily by farmers in different sites of Mwea Tebere irrigation Scheme.
- (b) There is no significant difference in average time spent on farming related movement in different sites in Mwea Tebere Irrigation scheme.
- (c) There is no significant difference in average distances covered between the homestead and the farm by farmers in Mwea Tebere Irrigation Scheme.
- (d) There is no significant difference in average distances covered between the homestead and the farm by farmers in Mwea Tebere Irrigation Scheme.
- (e) There is no significant difference in the means of transport used by men and women.
- (f) There is no discernible pattern in rating of transport constraints experienced by farmers in Mwea Tebere Irrigation Scheme.

# Relationship between mathematical language and students' performance in mathematics in public secondary schools in Nairobi County, Kenya.

There is a significant relationship between mathematical language and students' performance in mathematics.

The most important role of hypothesis is to guide the direction of the study. A frequent problem in research is the proliferation of interesting information. Unless the researcher curbs the urge to include additional elements, a study can be diluted by trivial concerns that do not answer the basic questions posed. The virtue of the hypothesis is that, if taken seriously, it limits what shall be studied and what shall not. It identifies facts that are relevant and those that are not; in so doing, it suggests which form of research Design is likely to be more appropriate. A final role of the hypothesis is to provide a framework for organizing the conclusions that result.

### 7. SIGNIFICANCE OF THE STUDY

The section outlines the significance or importance of the issue a hand. If for example the researcher is investigating poor prices, there significance would be related to improvement of prices. It could also involve creation of awareness of market forces that influence prices of commodities. Significance highlights the reasons for conducting the research, i.e. what gaps in knowledge has the study addressed? Has it contributed to the solution of an immediate problem? Who will the research benefit (i.e. in terms of the various stakeholders identified in the study) e.t.c.

# 8. LIMITATIONS OF THE STUDY

This section indicates challenges anticipated or faced by the researcher. This includes time and financial constraints that influences the scope of the study, data inaccessibility, and unanticipated occurrences. However the researcher should make an attempt to state how the challenges were overcome, since to ignore the limiting factors in both unscientific and unethical on the part of the researcher.

Limitations need to be differentiated form Delimitations of the study. On the one hand limitations, as already noted refers to limiting conditions or restrictive weakness which are beyond the control of the researcher. in other words, limitations are an aspect of the study that may influence the research negatively or positively but over which the researcher has no control. On the other hand, delimitations refer to factors which can be controlled by the researcher, (i.e. sample size) and should not be included as limitation, unless a good rationale is provided.

Delimitations set parameters on the scope of the study, telling the reader what will be included and what will be included and what will be left out and why.

#### 9. DEFINITIONS OF TERMS

- Provide a definition (explanation) of all unusual terms that could be misinterpreted.
- Hence clarity and precision in usage of concepts are achieved by definitions.

Definitions are either

- Operational
- Conceptual

#### 10. ORGANIZATION OF THE STUDY.

Gives the number of chapters contained in your project (thesis),
 and briefly describes each chapter.

The formats of the Project (thesis) may vary from Institution to another but all conform to the following chapters.

- Introduction.
- Literature Review.
- Research Methodology.

- Results and Discussions of findings.
- Summary, conclusions and recommendations.

# 11. REVIEW OF RELATED LITERATURE

The term "literature" refers to the analysis of textbooks or manuscripts. Although many people rightly associate literature with novels and poetry, in research the term is more specific. In terms of a literature review, "the literature" means the works the researcher consulted in order to understand and investigate the research problem. A literature review therefore is an account of what has been published on a topic by accredited scholars and researchers. It is a critical look at the existing research that is significant to the work that the researcher will be carrying out. It involves examining documents such as books, magazines, journals and dissertations that have a bearing on the study being conducted.

Hence, Literature review involves the systematic identification, location and analysis of documents containing information related to the research problem.

### Importance of Literature Review in Review

Literature Review is essential in research. This is due to the following:

- It sharpens and deepens the theoretical foundation of the research.
   Literature review enables the researcher to study different theories related to the identified topic. By studying these theories, a researcher gains clarity and better understanding of the theoretical foundations related to the current research.
- It gives the researcher insight into what has already been done in the selected field, pinpointing its strengths and weaknesses. This information guides the researcher in the formulation of a theory that aims at addressing the identified gaps.
- 3. It enables the researcher to know the kind of additional data needed in the study. This helps avoid duplication of work.

- 4. An understanding of previous works helps the researcher to develop a significant problem which will provide further knowledge in the field of study. It also helps in delimiting the research problem. This is through portraying what has already been done and what would be useful to focus on in the current study.
- 5. It helps in developing an analytic framework of a basis for analyzing and interpreting data.
- 6. A thorough review will reveal what strategies, procedures and measuring instruments have been found useful in investigating the problem in question. This information helps one to avoid mistakes that have been made by other researchers and helps one to benefit from their experience.
- 7. A good review may also help to clarify how to use certain procedures which one may have learned in theory and was still unsure how to execute them.
- 8. In most cases, literature review will suggest other procedures and approaches, and this is very useful information because a researcher could try our these suggested approaches, especially if they will improve the research study.
- 9. A thorough review makes the researcher familiar with previous studies and thus facilitates interpretation of the results of the study. For example, results can be discussed in terms or whether they support of contradict previous findings. If there is a contradiction, the review might provide a rationale for the discrepancy.
- 10. A thorough review exposes the researcher to a variety of approaches. Hence, approaches that have proved to be futile will be revealed helping the researcher to avoid these approaches, and this contributes to a welldesigned methodology, and thus a significant study.
- 11. In some cases, a researcher may not have narrowed down to a topic at the start of literature review. In such cases, the review helps the researcher to limit the problem and to define it better. The review will give

- the researcher the insight (knowledge) needed to convert a tentative research problem into a detailed and concise plan of work.
- 12. Literature review helps to determine new approaches and stimulates new ideas. The researcher may also be alerted to research possibilities which have been overlooked in the past.
- 13. In most cases, authors of research articles include specific suggestions and recommendations for those planning further research. These suggestions are usually found when reviewing literature and should be considered very carefully.
- 14. The literature review may also explain the need for the proposed work to appraise the short coming and /or information gaps in secondary sources of previous studies.

#### Qualities of an Effective Literature Review

The following are qualities expected from an effective literature review.

- (a) It is critical, organized and analytical in orientation In an effective study the literature review is used to analyze issues such as: whether the hypotheses in the studies reviewed were logically formulated. The methodology used in the studies and the quality of interpretation of the findings are also analyzed. Other issues addressed by the researcher while reviewing literature relate to the sampling procedures adopted and their appropriateness for the study. The interpretation of data particularly on whether if is based on logical deduction of findings is also examined. An investigation is also made of research findings and their statistical significance. The applicability of the research findings to a wide population is discussed.
- b) It justifies the need for the study An effective literature review identifies the gaps in the studies quoted. By identifying these gaps and highlighting the identified controversies, it helps to indicate that further research needs to be carried out on the identified topic. It also points out how the current study will contribute positively towards filling the identified gaps.

- c) It highlights the relationship between the past and the current study

   An effective literature review links the current study with the past studies. It
  evaluated and shows the relationships between the work already done by other
  scholars and the researcher's work. This link brings consistency and continuity
  in relation to the identified topic.
- d) It puts the research problem into perspective By quoting and analyzing various studies related to the selected topic, the literature review helps define the research problem. It also acts as a guideline in assessment of the research questions.

## Guidelines in Formulating an Effective Literature Review

The following techniques are essential in reviewing literature:

- (a) Identify key issues to be assessed by the literature review — Before the researcher begins to search for articles and materials relevant to the research topic, he/she should identify the key issues that will guide the literature search. These key issues can be formulated by the researcher clearly identifying the research topic, title and the relationship between the dependent and independent variables. The objectives of the study should also be identified. The researcher should also be certain of the specific problem the literature review will help address. The researcher should know what type of literature review he/she is conducting. That is, does it deal with issues of theory, methodology, policy or social issues? For example in a study by Kombo (2005), Abortion in Kenya: An examination of its causes and effects of female students in secondary schools and colleges, the research topic was on abortion and its influence on education. The key issues to be tackled therefore were "abortion, its causes and its effects". The literature review therefore focused on these aspects.
- b) Formulate a preliminary statement of the problem The researcher should formulate a preliminary statement. This will assist the researcher to be focused in material selection. For example, what are the causes and effects

of abortion on the education of female students in secondary schools and colleges? What has been done and can be done to assist these students? After the preliminary statement, the researcher can now begin to identify sources of information relevant to the research topic.

**Identify sources of information** – The researcher needs to identify books, articles, professional papers and other relevant publications that relate to the research title and the research problem. There are a wide variety of sources available for locating articles for the review of literature. Many of these sources are available in the libraries. The internet can also be used to locate articles. Some of the sources of information include *journal articles*. These are good especially for up-to-date information. They are frequently used in the literature reviews because they offer a relatively concise, up-to-date format for research, and because all reputable journals are peer reviewed and refereed (that is, editors publish only the most relevant and reliable research). **Books** offer a good starting point from which to find more detailed sources. Conference proceedings are useful in providing current research findings or research that has not been published. Information can also be gathered from government/corporate reports. Many government departments corporations or commissions carry out research. Their published findings can provide useful source of information, depending on the researcher's field of **Newspapers** can also offer useful information about recent trends, study. discoveries or changes e.g. announcing changes in government policy. Specialized magazines are very useful (for example business magazines for management students) in providing general information about new discoveries and policies. Theses and dissertations can be useful sources of information. The researcher should identify the scope of the literature review. He/she should be clear on what types of publications will be used (for example, journals, books, government documents). The researcher should also identify the discipline he/she is working in (Sociology, Psychology, Curriculum, Medicine, Business Studies e.t.c). This will hasten the search for materials.

- **d)** Analyze critically the articles identified After identifying the articles to be used, the researcher should critically analyze each book or article selected by reflecting on the following:
  - Has the author formulated a problem/issue? Is it clearly defined?
     Is its significance clearly established?
  - Has the author evaluated the literature relevant to the problem/issue?
  - Is there an objective basis to the reasoning or is the author merely "proving" what he or she already believes?
  - How does the author structure the argument, for example, does it establish cause-effect relationships.
  - How does the book or article relate to the specific objectives or questions the researcher is attempting to study.

To answer these questions, the researcher should read the article's abstract or summary. This will enable the researcher to deduce how applicable the article is to the current study. In the selection of articles, the most recent works on a subject area must be identified. This shows or demonstrates how the researcher is conversant with current trends in knowledge in the subject area.

e) Classify and code the article – The researcher should abstract and code each relevant article based on a system of his/her devising. This includes taking notes and paraphrasing any relevant literature that the researcher would want to include in the literature review. The researcher should mark these notes with some codes for easy retrieval. This involves putting the code on an index card or on the photocopied article (if you photocopied it). The researcher should add on the coded article any thoughts that come to his/her mind about the article. The author should indicate any statements that are direct quotations (use quotation marks and also jot down the page number). The researcher should keep personal reactions separated from direct quotations. The details of the source e.g. author, title, date of publication and the publisher should be indicated.

- *Create an outline for the review* To create an outline of the literature review, the researcher should identify the main points in the order they should be presented. The article codes will assist in this. The researcher should also differentiate each main heading into logical subheadings. Points that are similar should be grouped together.
- g) Synthesize the information gathered The researcher should synthesize the information gathered before writing the literature. This involves analyzing each reference in terms of the research variables. The researcher should also analyze all references identified for the relationships or differences between them.
- **h)** Write the review of related literature —In reviewing literature, the author should do the following:
  - Select studies that relate most directly to the problem at hand.
  - Tie together the results of the studies so that their relevance is clear.
  - Indicate that the research area reviewed is incomplete or requires extension.
  - Organize the review along major points relevant to the problem.
  - Give the reader some indication of the relative importance of the results from the studies reviewed.

One way of reviewing literature in an organized manner is by viewing it according to the objectives. The researcher selects an objective and reviews information related to the achievement of that particular objective under the sub-headings of the objective itself. The objectives provide guidelines on what should be put under them and how it should be.

#### **EVALUATION**

After carrying out the review and writing, the researcher should react on the following:

How effective was the information search? To answer this, the

researcher should reflect on whether the search was wide enough to ensure he/she had found all the relevant material. The researcher should also reflect on whether the search was narrow enough to exclude irrelevant material. The researcher should also reflect on whether the number of sources used was appropriate in tackling the issue under discussion.

- Has the literature used been critically analyzed? The
  researcher should find out whether he/she has followed through a
  set of concepts and questions, comparing items to each other. The
  researcher should find out whether instead of just listing and
  summarizing items, he/she has assessed them, discussing their
  strengths and weaknesses.
- Will the reader find the literature review relevant, appropriate,
   and useful? The researcher should also reflect on the relevancy of the information given to the readers.
- Does the literature help clarify the research problem? The literature should help put the research problem into perspective.

#### **EVALUATION OF CHECKLIST FOR LITERATURE REVIEW**

- Does your review start at a more general level before narrowing down to the specific areas?.
- Is the literature reviewed related to your research objectives and Questions?
- Has it covered the key theories of recognized experts in the areas of the problem?.
- Are there issues highlighted where your research will provide fresh insights?.
- Is the literature included balanced between historical facts and current trends?
- Have you been objective in your discussion and assessment of other peoples work?

- Have you included references that are current to your own opinion?
- Have you distinguished clearly between facts and opinions in your review?
- Is your argument coherent and cohesive i.e. do the ideas link together?
- Does your review lead the reader into subsequent sections of your research project.

### Challenges Faced in the Formulation of Literature Review

There are many challenges researchers encounter while writing the literature review. This includes the following;

## a) Failure to connect the reviewed studies with the current study –

Some literature reviews are simply listings of one piece of literature after the other without any discussion and analysis. The researcher hardly relates the studies to his/her study. These make the studies unrelated to the current study.

The researcher should show the relationship between the works of different researchers, showing similarities/differences and how each set of studies, theories or methodologies in the previous research impacts on his/her study.

b) Poor presentation – Some researchers create too many paragraphs in their work by treating each article in a separate paragraph. This makes the work disjointed particularly if separate paragraphs are addressing a similar point. The researcher should ensure that similar points are grouped together or combined. Some researchers start each article with the name of the researcher. This repetition can become tiresome for readers. This can be varied by quoting the author after writing about the article. Some researchers devote the same amount of space to each study without regard to importance or relevance. The review should be organized according to major points relevant to the research problem.

- Some results have more bearing on the problem than others and should be expounded on adequately.
- c) Large quantities of studies to review Some researchers attempt to read and review all the materials related to their topic. This is impossible. The idea of the literature review is not to provide a summary of all the published work that relates to one's research, but a survey of the most relevant and significant works. The researcher should therefore read abstracts of the selected articles, and select materials that are most relevant to his/her study.
- d) Lack of documentation Some researchers read articles without writing until they have "finished" reading. This at times results in forgetting or omitting important points. A researcher should note down important points in the course of reading.
- e) Lack of referencing Some researchers rarely note down the references in their work while reading. Some are therefore forced while compiling the literature review, to spend a lot of time in the library tracking down the references to all the sources that they quoted. They may also have to go through their writing to find which information came from which source. To avoid this, researchers should always put references into their writing.
- f) Lack of critique Some researchers blindly accept research findings and interpretation without critically examining all aspects of the research design analysis. The researcher should critically analyze the work, pointing out contrary findings and alternative interpretations.
- g) Failure to review current studies Some researchers base their reviews on works that were carried out over twenty years ago. Though these studies may have valid information and cannot be ignored, the researchers should attempt to base most of the review on current studies. The researcher should make attempts to analyze studies carried out less than five years ago in relation to his/her study.

After reviewing literature the researcher should discuss the identified gaps.

#### Conclusion

The review of literature is critical in any research work. This is because it enables the researcher to study different theories related to the identified topic and gain clarity of the research topic. It also enables the researcher to know the kind of additional data needed in the study. However a good literature review is critical, organized and analytical in orientation. It also justifies the need for the study and highlights the relationship between the past and the current studies. There are varied challenges faced by researchers in reviewing literature. this include failure to connect the reviewed studies with the current study, poor presentation, lack of documentation and referencing, lack of critique and failure to review current studies. the researcher should make attempts to avoid these mistakes. This is by taking sufficient time to keenly work on this section.

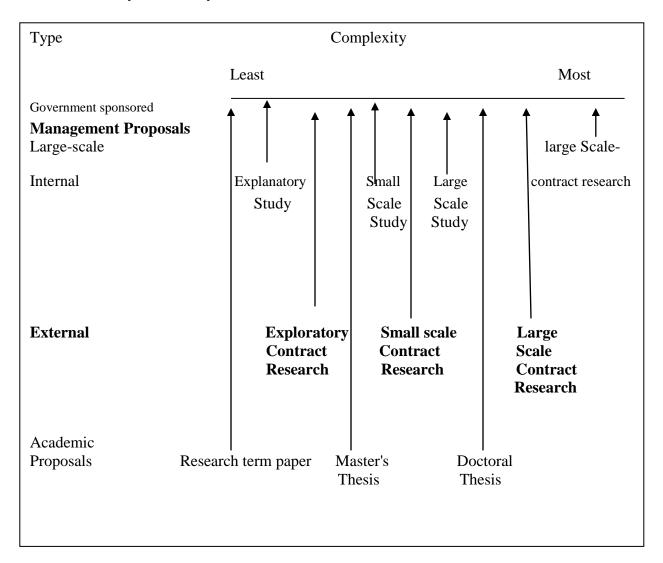
## A note on types of research proposal

In general, research proposals can be divided between those generated for internal and external audiences. An internal proposal is done by staff specialists or by the research department within the firm. External proposals sponsored by university grant committees, government agencies; government contractors, not-for-profit organizations, or corporations can be further classified as either solicited or unsolicited. With few exceptions, the larger the project, the more complex the proposal. In public sector work, the complexity is generally greater than in a comparable private sector proposal.

There are three general levels of complexity: exploratory studies, small-scale studies, and large-scale studies. These are noted in Exhibit 4-2. The explanatory study generates the most simple research proposal. More complex and common in business is the small -scale study - either an internal study or an external contract research project. The large -scale professional study, worth up to several million dollars, is the most complex proposal we deal with here. Government agency large-scale project RFPs usually generate proposals

running several hundred pages and use the same modules that we discuss next. However, each agency has unique requirements, making generalized coverage beyond the scope of this text.

**Exhibit 4-2 Proposal complex** 



# 1.8 Suggestions: Notes on Writing Thesis

Know your audience and write for that specific audience: scientific
and technical writing can almost never be general purpose. It must be
written for a specific audience. This audience is represented by your

- professors and peers. Therefore, you must adopt the style and level of writing that is appropriate for your audience.
- 2. Your supervisor/professor is not here to teach you basic grammar and spelling: the more time and emotional energy s/he spends on correcting Basic English usage, the less remains of content or fine –tuning. You are responsible for mastering the basis of the language; save your supervisors time for more substitutive issues. A few glitches and non-parallel tenses will sip through your own careful editing but there is no excuse for frequent ungrammatical sentence; especially during thus age of word processes and spell checkers.
- 3. <u>Do not turn in a first draft:</u> it is a waste of supervisors or editor's time to read material that is not yet ready to be presented and it is disrespectful to expect them to do so. When a supervisor receives a thesis in which the writing is poorly developed, expect them to go through enough of it to demonstrate the kind of changes required and return it with the rest unread. Consider forming a mutual editing team with other students to review each others work. You should be come accustomed both to other peoples work and having your own reviewed.
- Do not use more words where fewer will do: attempt to be brief and to the point. Do not use special words to make your writing seem more technical, scientific or academic when the message is more clearly presented otherwise.
- 5. Think about the structure of paragraphs: poorly structured paragraphs are one of the most common problems found in student writing. Though most students can write reasonable sentences, a surprising number have difficulty organizing sentences into paragraphs. A paragraph should begin with a topic sentence that sets the stage clearly for what will follow. One of the most comments on student papers is that contents of a paragraph do not reflect the topic sentence. Many writers try to finish each paragraph with a sentence

- that forms a bridge to the next paragraph. Avoid paragraphs that contain one or two sentences, this is because they cannot develop ideas adequately. Two-sentence paragraphs usually represent either misplaced pieces of other paragraphs or fragments of ideas that should be removed or expanded.
- 6. <u>Pay attention to tenses</u>: problems of inappropriate or inconsistent tenses are common in student writing. What you or others did in the past should be stated in the past tense (e.g. data were collected). Events or objects that continue to happen or exist can be described in the present tense (i.e. in this paper, I examine ...). Events that will take place in the future can be in the future tense. Whatever tense you choose, be consistent.
- 7. <u>Captions should not merely name a table or figure</u>; they explain how to read it: a caption (figure or table heading) should contain sufficient information so that a reader can understand a table or figure in most cases without reference to text.
- 8. Write about your results, not your figures and static's: confusing and disjointed results sections often arise because the writer does not have a clear idea of the story s/he intends to tell. The frequent consequences of this is a result section consisting of long seemingly unrelated sequence of tables and figures. Novice writers of scientific papers frequently pay little attention to discussing the content of the tables and figures. They sometimes merely present a list of references (e.g. table 1 shows this results, table 2 shows that result, figure 1 shows that other...). When writing results sections you should use the tables and figures to illustrate points in the text, rather than making them the subject of your text. Rather than writing, figure 4 shows the relationship between the numbers of species A and species B. The abundances of species A and B species were inversely related.
- 9. <u>Introductions and conclusions are the hardest parts:</u> plan on spending a lot of time on them.

10. <u>Use word processors effectively and back up your work religiously:</u> almost everyone seems to require their own personal disaster to convince them of the need for backing up important files regularly. The frequency of 'lost file' based excuses for late papers is remarkable

# 1.9 APA Referencing Style

APA Referencing was developed by the American Psychological Association is mostly used by many institutions of higher learning and Universities.

### 1.9.1 General format of the reference list

- 1. Start the reference list on a new page, with the word References centred at the top of the page
- Second and subsequent lines of each reference should be indented (hanging indent format)
- 3. The reference list should be listed alphabetically by author and then by year
- 4. Book titles and journal titles should be in italics (preferably) or underlined
- 5. The date is the year of publication, not printing
- 6. For a book, the edition is only mentioned if it is other than the first
- 7. The place of publication is the town or city, not the country
- 8. Journal titles should be given in full, not abbreviated
- 9. Do not put a full stop after a website URL
- 10. Be consistent in format, layout, type-face and punctuation

#### 1.9.2 Citations in the text

Brief citations are inserted within the text wherever you incorporate another's words, facts, or ideas. Each citation contains only enough information, usually just the author's surname and the year of the source, to enable the reader to find the corresponding source in the reference list. Example;

• This same point is made by others (Smith & Davies, 2006).

• Smith and Davies (2006) made this same point.

# 1.9.3 Compiling a Reference List

### Books, single author-

Boddy, D. (2005). *Management: An introduction (3rd ed.)*. Harlow: Financial Times Prentice Hall.

# • Books, multiple authors

Clarke, S., & Cooper, C. L. (2004). *Managing the risk of workplace stress:* Health and safety hazards. London: Routledge.

# Books, multiple authors (In text)

Use the first author et al. for all citations including the first.

e.g Stewer et al., (2003)

#### Journal articles

Author's Surname, initials. (Year of journal issue in which article appeared). Full title of article. *Full Title of Journal, Volume Number* (Issue Number\*), page numbers of article.

### Example;

Karanja, J. & Nyambura, E. (2014). Factors Influencing Implementation of Integrated Financial Management Information System in Kenya Government Ministries. Research Journal of Finance and Accounting, Vol 5, No (7). pp 10-17

Note: In Journal articles, we put in italics the *Title of Journal and Volume*Number and NOT the Title of Article.

#### 1.10 REFERENCES

- Shahajan, S. (2009). Introduction to Business Research. Jaico Publishin House.
- Kombo and Tromp (2006) *Proposal and Thesis writing*: An introduction, Nairobi: Paulines Publication Africa
- Kothari, C. (2010). Research Methodology (2<sup>nd</sup> Edition): New Delhi, kk Grupta of new age international. Ltd
- Patoon, C. (2002) *Methods in behavioral research*, Fulerton, Mayfield publishing company.
- Neville, C. (2007). Research Methods for business students (4th edition); University of Bradford School of Management Press.
- Orodha, J. (2009); *Elements of education and social science research methods*. Nairobi, Kenya.
- Rugg G. et. al,. (2007). A guide to Research Methods. McGraw-Hill Education
- Saunders, M. (2007). Research methods for business student's. 3<sup>rd</sup> edition. London Prentice Hall.
- Wooldridge, J. (2009). *Introductory econometrics regression analysis with cross sectional data*. Michigan, State University, Cengage Learning.