RESEARCH METHODOLOGY

A Basic Course in the Scientific Method of Writing for Memoirs and Long Essays in Bigard Memorial Seminary, ENUGU

By

JOSEPH EZECHI, PhD

Introduction

Research Methodology as a class room course has three basic aspects that the student should concentrate on. Fundamentally, it is a writing process that involves Searching, Reporting and Documentation. Searching is about gathering materials for research. But it is also about analyzing them and interpreting them with the aim to arrive at some dependable findings. Therefore it implies not only searching for materials but also searching for valid information and truths that can only be acquired through analysis and interpretation of data. In fact, searching is often taken as Research as such. But at the end of any scientific searching, the student must write down his findings in a manner that will convey his research and its fruits to the audience. In other words, research does not end with searching alone; the search must be reported. The manner of writing down the outcome of research in articles and memoirs or Long Essays is described as Research Reporting. Reporting is important because it makes your study known and understandable to the public or targeted audience. Therefore it must be done according to universally recognized standards or the modalities enumerated by one’s target audience.

However, in the process of reporting, the student is also required to observe the rule of acknowledgement which makes him to say where he got his ideas and pieces of information – those pieces of information that he analyzed and those that he cited to support his argument. To copy a statement from a person and fail to mention the source in your work is plagiarism. The process or manner of acknowledging your source is called documentation. It implies making citation and creating a link to its source. The source of every material used in research must be documented. It is done at the foot of the page on which the citation exists or at the end of each chapter. This is called footnote or endnote respectively. A general overview of the entire sources used in the research work is also made available at the end of the whole work. This one we call Bibliography or Reference.

**What is Research?**

In a loose sense, research is the exercise of gathering information or data (singular – datum) and analyzing them with a view to drawing a conclusion that solves an existing problem or addresses a felt need. Note however, that it is not proper to apply the term research to every intellectual exercise we do. In this regard, Olaitan and Nwoke observe that the ‘mere collection of data or information, whether from reference books, readings in a library, historical documents or from a questionnaire, is not research’[[1]](#footnote-1). For example, to write an essay full of quotations without extra effort to analyze and draw conclusion, does not make the essay a scientific research work. Again, to go into the library and read up a book or books, or to go into the street and ask questions about an issue of importance is only wrongly regarded as research. Research is a scientific exercise; therefore, the above-mentioned studies cannot be regarded as research until they are ‘carried into the higher level of rigorous and scientific reasoning’[[2]](#footnote-2). Thus, in a strictly technical sense, Osuala defines research as ‘the process of arriving at a dependable solution to problems through the planned and systematic collection, analysis and interpretation of data’[[3]](#footnote-3).

Three points characterize a good research, namely, systematic process or method, problem solving, and dependable solution or finding.

1. Systematic or planned method:

Research involves a method. It is the use of a logical scientific method of enquiry to produce valid ideas and results. It follows due process of gathering information and analyzing them in order to arrive at a conclusion or finding.

1. Problem solving

Every research is oriented to solving a particular problem or felt need. That is why a mere writing of an essay is not research except if the writer has identified a problem to solve through the write-up. Besides, research is not an ad hoc response to problems or matters of the moment; but it is oriented to finding a permanent solution to problems. Thus, in addition to being scientific, problem solving is a major character of research. In other words, every research exercise has a purpose of venturing into it, and the researcher should be clear about that problem and also be able to make it known to the reader

1. Dependable solution or finding

Research involves the achievement of dependable, reliable, or valid results. Besides, the finding of a good research has an enduring effect both in space and time. Thus, the outcome of a good research to a problem in Nigeria can help to solve a similar problem in South America. For example, a research on the effect of poor economy on priestly vocation in Nigeria can help to address such problem in Brazil or India. Therefore, to achieve a dependable result, the information gathered in the field or library must undergo the systematic process of data analysis and interpretation. Data are not yet facts until they are analyzed and interpreted to yield findings or results. It is the findings or results which are dependable that can now be called facts.

Research also involves testing and verification of findings to ensure its dependability. Testing is clearer in some areas of study such as education and the sciences, than in some others. In philosophy or theology, testing may come in the form of evaluation. In other words, in applying our study to a particular cultural or practical condition, its validity or weakness may be exposed.

Research expands the frontiers of knowledge. As a scientific method of enquiry, it can be applied to any area of study – be it physical or natural sciences, art or social sciences, and so forth. However, the research method applied may vary from one field of study or type of research to another, in other words, each field of study has its own research method; and a particular form of research or even subject matter may require a particular method.

CLASSIFICATIONS OF RESEARCH

Research can be classified into various types based on taxonomies ranging from the feature of research data to the method or approach of data gathering, to the type of research questions.

1. Taxonomy based on the feature of data

The emergence of the scientific method of research is probably traceable to the 16th century and the renaissance with its new emphasis on science and verification of data. The question of verifiability became a criterion for the validity of any claim to knowledge and truth. Prior to this historic phase, philosophic truths were dependent for their certainty on logic and coherence. But science came to lay emphasis on testing and experimentation. In other words, any piece of knowledge that cannot be verified through experimentation is deemed unreliable by the scientific method. This is the hallmark of the scientific research. It puts emphasis on fact. That is, it insists on data that have been analyzed, verified, tested and trusted or confirmed, as the only dependable piece of knowledge. Its method of analysis is overly statistical and empirical. This is the birth of the **Quantitative Research.**

But statistics does not always prove helpful in ascertaining truth in some areas of study, especially in the social sciences. In fact, the problem with science is that it presumes that all sources of knowledge is measurable and tolerates statistical data. It was only in the late 1970s that scholars become more certain of the need to apply an alternative scientific method to studies in the social sciences, which are not susceptible to statistical analysis. This is the origin of the **Qualitative Research** within the scientific research regime.

Hence, there are two broad categories of research based on the nature or feature of data, namely, **qualitative research** and **quantitative research**. Qualitative research refers to those research works that deal with description of properties and ideas that cannot be quantified. This is used in the social sciences including philosophy, theology and religion. On the other hand, a quantitative research is any research that deals with numbers and calculation of quantities and statistics. It is used in most educational research projects but especially in the physical and experimental sciences such as physics, chemistry, biology, agriculture, and so forth.

1. Taxonomy based on Significance of Research which is knowable from the type of Answers provided to the Research Questions

The type of answers provided for the questions projected for research may also indicate the direction that a researcher is about to take and also the type of research that he is embarking on. For example, some researches focus on what we should know while some focus on what we should do. Yet others focus on the two at the same time. All these may also indicate the background of the researcher; that is, whether he is a philosopher, a scientist or both. Thus we have

* Conceptual research, which tries to tell us what we should know or think about any issue. Its aim is to furnish us with theoretical knowledge about the nature of things. Most research works in philosophy and theology end up in this class. they often end up academically.
* Practical research, which focuses on what we should do. Its aim is to produce practical solutions to problems. Many researches done in the medical and physical sciences belong to this class.
* Applied research which tries to tell us what we should know in addition to what we should do. It involves combining academic work with practical experimentation. Applied research can also be used in philosophy and theology if the researcher intends his work to have a practical bearing on society.

1. Taxonomy based on approach or method

Researches can also be classified according to the method employed, and this may also depend on the field of study. Thus we have

1. Historical research – dealing with the study of events - past and present - in other to anticipate the future. E.g. ‘The Growth of Priestly Vocation in Eastern Nigeria’
2. Ethnographical research – dealing with the life and culture of particular ethnic groups. Example, ‘The Igbo of South-East Nigeria’
3. Case-study research – studying a particular case to arrive at conclusions regarding a general situation. Example, ‘Difficulties Facing the Study of Philosophy in Nigerian Seminaries: The Case of Bigard Memorial Seminary Enugu’
4. Survey research – deals with selected samples to study relative incidences and distribution of sociological or psychological variables. Example, ‘The Increase of Prostitution Among Low Cost Housing Estate Dwellers in Nigeria’. In this case, the researcher cannot visit all the low-cost housing estates in the country, but he can select some samples across the board to illustrate his argument.
5. Experimental research – deals with practical experimentation and testing as in the sciences
6. Phenomenological research – studies visible phenomena in other to arrive at invisible essences
7. Descriptive research – studies the describable aspects of reality

**RESEARCH AND PHILOSOPHY**

Research and philosophy appear to be synonymous, for they all are involved with SEARCH for reliable knowledge. However, their emphasis seems to be different for philosophy and research. For example while philosophy focuses on knowledge research focuses on method. Yet, none of them is isolated. They must work together to achieve reliable knowledge. Philosophy seeks knowledge and research provides the method of acquiring knowledge. In other words, research is a tool of philosophic enquiry. Philosophy is the love of wisdom. But it is not a passive love. It is an active love of wisdom in the sense that the lover of wisdom tends towards that which is loved. It is a search for that wisdom which is claimed to be an object of love. According to the World Book Encyclopedia, philosophy is

A study that seeks to understand the mysteries of existence and reality. It tries to discover the nature of truth and knowledge and to find what is of basic value and importance in life. It also examines the relationship between humanity and nature and between the individual and society. Philosophy arises out of wonder, curiosity and the desire to know and understand. Philosophy is thus a form of enquiry – a process of analysis, criticism, interpretation and specialization.’[[4]](#footnote-4)

Note that this tendency towards wisdom or search for the true nature of things is a rational process. That is, it is based not on emotion, faith or traditional lore but on reason. As a social science, philosophy adopts the qualitative research method and pays a lot of attention to ANALYSIS and INTERPRETATION. The philosopher does not depend on mere gathering of information but tries to analyze them. The knowledge of Logic is very useful in his or her work of analysis. But we must note that the method of analyzing data is not the same for philosophy and other fields of enquiry. The philosopher pays attention to the analytic methods provided by Logic.

**The Nature of Rational Enquiry**

The concept of rational enquiry entails the systematic method of acquiring reliable knowledge. Knowledge is reliable not only when it can be proved but also when the process of acquiring it is explainable or defensible. Philosophic enquiries apply a number of methods that make its truths reliable, including the empirical and the apriori, induction and deduction, analogy, observation, probability, and hypothesis.

**Subject-Object Relationship**

In a philosophic research, the subject is a being who has unique consciousness or personal experience, a knowing mind or a mind capable of extending itself into another being. An object is the thing known or knowable. The object is usually outside the knowing mind – extra-mental.

the relationship of the subject (the knowing mind) and the object (the knowable entity) is important. Since the object is other than the subject, it is important that the subject shows a capacity to access the inner nature of the object in order to possibly be able to say anything reliable about it. things are not usually what they seem from the outside. Thus the research must take clear steps to penetrate the world of the object. He may talk to the object, observe its activities, refer to its users or to other researchers on the object, and by all means try to go beyond the surface value. The inability of researcher to engage his or her topic or object properly could tamper with the reliability of his or her research finding or report.

**Features of Philosophic Writing**

1. Coherence
2. Clarity
3. Concision

**Tools of Philosophic Research**

To be able to achieve the above features, the researcher must be good in the use of the following tools:

1. Language – a good control of any language in which the research is to be conducted is required. For example, the researcher should be conversant with the language of the sources in which his data are to be gathered as well as the language in which the research report is to be presented.
2. Logic – proficiency in logic is an advantage in presenting a report that is coherent, clear, and concise
3. Criticism – this refers to the researcher’s ability to make constructive criticism of any data
4. Analysis – the process or act of establishing the validity of any claim or proposition

**What is ANALYSIS**

The data gathered for research remain raw data until they are analyzed and interpreted to provide answers to research problems. If you do not interpret any data you cannot use it effectively; and if you do not analyze, you cannot do proper interpretation. Analysis is about establishing the validity of any proposition. It is defined by Osuala as ‘the ordering and breaking down of data into constituent parts.’[[5]](#footnote-5) According to him, it consists of the statistical calculations performed with the raw data to provide answers to the questions initiating the research. But the statistical calculations are mainly done in quantitative researches that deal with numbers and quantities.

For the qualitative research such as those in the area of philosophy or theology, analysis is usually in the form of logical evaluation. The data or proposition is broken down into its component parts and each part studied separately, compared to other parts, and then correlated with all the parts. For example, in the study of masquerade from the point of view of religious practice or culture, the researcher can listen to the explanations made by those involved in the celebration to gather an account of the phenomenon. Then he proceeds to break down the account of the phenomenon into its constituent parts or dimensions such as the social, the artistic, the cultic, the entertainment, the governance, the educational, and so forth. This dissection of the masquerade and subsequent correlation of parts into the whole would help him to evaluate and interpret or draw conclusion on the true meaning and value of masquerade.

In its details, analysis also involves comparisons. What you get from one source can be compared to other sources on the same subject matter or related subject, to identify similarities and differences of opinions. Therefore you need various sources for the same object or proposition and you equally need various views or sources on related objects or propositions. When these various views are compared and contrasted, the researcher is enabled to draw balanced conclusions that are also close to the truth regarding the object or proposition being studied.

Approaches in Philosophic Writing

1. Exposition
2. Appraisal

Types of Philosophic Writing

1. Research reports
2. Summary paper
3. Review paper

**STEPS IN THE PROCESS OF A SCIENTIFIC RESEARCH**

1. Identify a problem

Since philosophy deals with all things, everything is a possible target for philosophical enquiry or research. It could be in the area of Metaphysics, Epistemology, Sociology, Religion, Local Medicine, Politics, or any other branch of philosophy. Whatever area one finds interest, the enquiry or research must be thoroughly philosophical in terms of logic and analytic capacity. The student should be able to identify a problem that is sufficiently in need of solution in any area or field of study. That is, he should be able at the start to identify an area where he sees a problem for research. The problem must be such that can be handled by the scientific method. Sometimes, asking research questions can aid a beginner in identifying a problem for research. In this case, the researcher questions even the most obvious things. He has the ability to see what is odd in the commonplace. He is puzzled by ordinary things; therefore his ability to find problem in anything makes everything a researchable theme.

1. Choosing or selecting a philosophical topic

To identify a problem and to choose a topic often goes hand in hand. Yet, to choose a topic is to develop a theme that will form the topic of writing from the field where the student has already identified a problem. For example, a student may identify Nigerian politics as a problem. Then he will go on to coin a topic such as ‘The failure of democracy in Nigeria’. Another student may identify a problem in the area of local medicine, and then go on to construct his topic as ‘The dangers of using herbal medicine in Africa’. Identifying an area of problem and choosing a topic often pose great puzzle for beginners. Thus, there are at least five common problems that beginners often face:

* First, choosing a topic before identifying a problem.

Some students often think that they should choose a topic before seeing the problem in that topic. But that is putting the cart before the horse. In other words, one must identify the problem or area where there is problem before constructing a topic based on that problem.

* Second, choosing a topic that is not philosophical.

The topic of one’s thesis should depict the study of philosophy. In fact, it is in the long essay or memoir that the student showcases his skill and depth in the study of philosophy. It does not matter the area or nature of the problem but the handling brings out the philosophic skill.

* Thirdly, vagueness and lack of limit**:**

Another problem that students find in choosing a topic is vagueness. They construct a topic that is vague and unclear in their minds. But if the topic is not clear to the researcher how can he make it clear to his reader? Thus, they choose a topic that they cannot sustain in writing; and, at the middle of writing they run out of ideas. To avoid vagueness, the student must choose or construct a topic that he is very conversant and familiar with.

Similarly, some beginners choose a topic that is not manageable because they are too wide. If you want to write on Human Freedom, it will be better to restrict your topic to a particular philosopher’s idea of freedom instead of taking up freedom in general. So you can say, Freedom in Satre. This does not mean that you cannot bring in other people’s idea of freedom. It means that you have a limited scope to focus. So you can set a limit to your research to make it manageable for you by focusing on one philosopher or on one aspect of his work. If you are researching on a concept such as human rights, it is advisable to identify an aspect of human rights that strikes you and focus on it. In this case, you may ask yourself questions to find out what attracted you to the idea of human right in the first place. That will help you determine the aspect of human right to focus on. The point is that you cannot possibly exhaust the idea of human rights in all its ramifications within one research project. And unless you set a limit ab initio, you will find yourself mixing up all the aspects and doing justice to none of them.

* Fourthly, lack of materials.

Some students choose topics in an area that they have no materials or they cannot easily access relevant materials. The student must not choose a topic or a philosopher unless he has at least three books on that for a start.

* Fittly, application or applicability of themes.

Some students of philosophy also choose topics without thinking of how to apply it to real life situation. For example, somebody choses to write on the topic ‘The Concept of Time in Heidegger’. At the end of a beautiful study of Heidegger, he gets into trouble trying to write conclusion or the part on evaluation in a way that might show his input. It may not be easy for a young student to discover something to criticize in Heidegger. But it becomes easier to criticize Heidegger in practical contexts; that is, when you bring Heidegger into a particular cultural or philosophical context that you are conversant with. Therefore, it is advisable to channel one’s topic to a practical area where one can easily make an input. Thus, the topic on Heidegger would be better as ‘The Concept of Time in Heidegger: an African Perspective’. You might begin to see the weakness or strength of Heidegger’s thoughts if you apply it to the African situation.

Again, to choose a topic on ‘The Impact of Corruption in Nigeria’, the student may add with hyphen or colon, ‘the case of WAEC in the secondary school of Enugu State’. By so doing his discussion on Nigerian corruption will have a clear bearing on how students write WAEC. This makes it easier for him to discuss corruption in Nigeria and apply it to a particular context in a meaningful and specific manner. The point on application can also help to set a limit to the research. Since the student cannot possibly handle the entire issue of corruption in Nigeria, he needs to focus on an aspect of it.

It is also possible to do application in the research without indicating the contextualization in the topic. In other words, one can choose the topic ‘Heidegger’s Concept of Time’ without adding ‘an African Perspective’, but in the body of the research he would still reflect the African perspective to contextualize his study.

1. Develop research questions.

Research questions are the questions that guide the researcher after choosing a topic to know the proper directions to focus his search, by anticipating the possible questions that his readers may ask. These questions may appear rhetorical but their answers help the researcher to understand his topic and be better prepared to make his future readers including his supervisor to understand his work. So research questions are primarily asked in the interest of the researcher himself. For example:

* What is your topic : my topic is kolanut in igboland and cultural ignorance among the youth today
* Why do you want to write on this topic? : because I want to understand the meaning and use of kolanut in igboland (or because I want to know why or how…)
* So if you understand it what happens? : so that I can help the youths to understand Igbo worldview or philosophy of life in general

Note that these are not the only questions constituting research questions, but they are the basic. By these simple set of questions, your research seems already to get a clear focus of what you are embarking on (The Problem) and what you intend to achieve by embarking on such thing (The Purpose or Aim) even before you start.

**Three Kinds of Questions**: As you can see, research questions and the tentative answers you provide for them before starting your research help to indicate the purpose of your research. But those answers particularly help to indicate its significance. Thus, there are three kinds of question which indicate three levels of purpose or significance depending on their answers, namely, conceptual, practical, and applied questions. We can use the following topic to illustrate the three kinds of questions and how their answers may indicate different level of purpose or significance: The Influence of the Civil War in Modern Nigerian Politics

|  |  |  |  |
| --- | --- | --- | --- |
| Question | **Answer to Conceptual questions** (focus on understanding some issues - what should we think) | **Answer to Practical questions** (focus on providing solution to fix a problem - what should we do) | **Answer to Applied questions** (focus on both understanding the issue and providing solution - what must we understand before we know what to do |
| What is your topic? | the influence of the civil war in modern Nigerian politics | the influence of the civil war in modern Nigerian politics | the influence of the civil war in modern Nigerian politics |
| Why do you want to write on it? | because I want to find out the cause of the civil war | because I want to find out the cause of the civil war | because I want to find out the cause of the civil war |
| So if you find out, what happens? | so that I can help others to see why our democracy is still not working many years after the war | So that I can tell my readers what to do to improve democracy or how to avoid another war | So that I can help my reader to understand the impact of civil war and how to avoid it or improve democracy |

Note that while the questions are the same, it is the answers especially the third that determine the level of significance of the research. Many philosophical researches tend to be satisfied with asking conceptual kind of questions and so end up just telling us why things happen. But they do not provide solutions as in the practical kind of questions often asked by scientists or engineers. This has made philosophy appear to be irrelevant to society – because it does not seem to solve any problem.

But this is not always the case. Philosophical researches can solve problems. In the first place, to say why things happen is to pave the way to its solution. But beyond this, philosophical researches can also offer solutions in addition to giving explanations. In this case, it involves itself with the third or applied kind of questions which provides both theoretical explanations and practical solutions. For example, Thales solved a social problem in Athens by positing water as Urstuff and projecting navigation and commerce to fix Athen’s economy. By so doing he rescued the people from their undue trust in the activities of the priests and their gods and promoted commerce for economic advancement of Athens.

Sometimes, research questions are asked before the topic is chosen. In this case, they help the researcher to identify a problem area to focus or select research topic. The researcher does not get tired of asking questions to his topic. The following are guide to research questions for a possible topic like “The Impact of the Civil War on Political Development in Modern Nigeria”:

* Ask questions regarding how this topic fit into a larger picture, e.g. how does the civil war relate to the history or economy or composition of Nigeria, what is the difference between Nigeria civil war and other civil wars in Africa, etc
* Ask questions regarding the nature of your topic, eg. What is the meaning of civil war, who fought the war, what impact, etc
* Ask ‘what if’ questions, eg. What if the war was not fought in the first place
* Ask questions that reflect disagreement, eg. Why should the war be associated with failure of democracy
* Ask questions that support your argument

1. Determine your methodology and reference style

The researcher should decide at the outset which method of documentation to use in the research. For example, are you going to use APA style or Turabian or even MLA? The chosen method should be used in recording his data.

1. Reading versatile and creatively

After choosing a researchable topic, the student should start reading around that topic. He should read books, journal, magazine articles, and any sources of information on the subject matter. He should particularly read works that have treated the topic or related topics before him, pick out important ideas in them and summarize them. His aim is to see what previous writers or researchers have said on the subject matter and to ascertain what aspect of that topic needs clarification or new input. This will help him in the ‘literature review’. The student should not rely on only one book. Read as many books and material sources as possible and review them. Note that literature reviews do not include oral sources. Only books or written materials are reviewed for research.

In the same vein, the student is not allowed to review certain authoritative works such as the bible, church documents, encyclopedias, codes of laws, as well as classical works of the founding fathers of philosophy and theology like Socrates, Plato, Aristotle, Augustine, Thomas Aquinas, etc. It is safer to avoid reviewing any work written from the medieval period down to the ancient period. Shakespeare should also not be reviewed.

Finally, the student reads widely in order to understand his topic well, but he should also read critically to be able to engage other authors and evaluate their views. Versatile reading must include both books that are in agreement with his proposition in the chosen topic and those that are in disagreement with it. Agreeable books offer you materials and arguments to support your own argument while disagreeable books offer you alternative thinking and force you to criticize or review your own position. The combination of both makes your research rich and balanced.

1. Note taking

Reading goes with note-taking. A good reading habit entails note-taking in the form of jotting or summarizing what has been read. When you are jotting important pieces of information on the subject matter of your research, you are actually gathering data for that research. Data can also be gathered from the field through direct communications or interviews or by personal observation of the subject matter. Note-taking must be done systematically to aid the researcher in finding them when necessary and making effective use of them in the work. The following guides are useful to beginners:

* Create templates for taking notes with cards or create special file in your laptop for it. If you adopt the card system, buy a file to preserve your note-cards
* Each note-card should indicate the quotation, the source, your immediate comment, and a keyword for easy sorting
* Know when to paraphrase
* Avoid plagiarism by being clear on what is your own comment and what is being quoted. With the passage of a long time between taking note and using it in research, the researcher may not remember if the note is his personal comment, paraphrased work or verbatim quotation.
* Remember to engage the quotation you make by criticizing or drawing from it. Do not drop it and go on with new thought
* Take notes that are relevant to your argument, either in support or against
* Categorize your notes for easy sorting based on keywords or chapter headings and sub-headings
* Write as you read. Do not wait till the end of reading before writing the notes to be taken. You may forget them
* Occasionally read your notes in relation to your topic. This will help you think of aspects of the topic that you are yet to touch in reading and data gathering

1. Writing the Memoir: drawing up chapter of the work

The main chapters are predetermined by the methodology, with their specific contents. But sub chapters may suggest themselves as the researcher reads wide.

**DATA, DATA GATHERING AND SOURCES**

Data refers to pieces of information which the researcher collects from books in the library or from people in the field in relation to the subject-matter of his research. These pieces of information may be correct or incorrect. But the researcher should not presume their correctness or otherwise. Analysis is needed to confirm or verify their validity or correctness. When data is verified as valid by the researcher, he can then treat them as facts or as reliable or dependable material for publication. In other words, a ‘fact’ is a piece of datum that has been verified through analysis.

Now, data gathering refers to the collection of materials for research purposes. It can be done through reading books, interviewing people, and personal observation, and through any source that can furnish the researcher with such necessary materials for his writing. Beginners may follow the following steps as guide to sources of reliable or helpful materials for their research:

* Think of primary sources first
* Ask somebody who knows about your topic
* Read up the keywords in your topic from reference books such as dictionaries and encyclopedias
* Search the internet for related information
* Talk to the librarian
* Check out the bibliographies of related books and journals
* Look into the library catalogue for keywords in your topic
* Search the shelves of private and public libraries
* Look for periodicals, journals and magazines

**What is a SOURCE**

Anybody, thing, or place where information is collected for research is called a SOURCE. There are two major sources of information for philosophical research writing, namely, **primary sources** which provide evidence to support one’s argument, and **secondary sources** which help the researcher to learn from other earlier researchers on the subject matter. Sometimes, too, researchers talk of **tertiary sources**. This category refers to introductory overviews such as the general definitions and explanations offered in encyclopedias and dictionaries on different topics, written for non-specialists in the field. Students often use them as secondary sources but they are not secondary sources strictly speaking. They may be drawn from secondary sources but they do not usually go in depth to discuss the topic as secondary sources often do.

**(a). Primary Sources** – this refers to all sources, individuals or things that can give first-hand information to the researcher, regarding the subject matter. They can be described as sources of ORIGINAL information on the subject matter. Primary sources differ according to the subject matter. In fields such as philosophy or theology, primary sources may include original works, diaries, letters, and manuscripts, interviews and recordings by the scholar under investigation. Thus, if a student is writing on any aspect of Aristotle’s ideas, primary sources would include books written by Aristotle himself even if they are translated by another person. In the same vein, a research on prostitution would require primary sources that include comments by and interviews with prostitutes and porn managers. If you are doing a research bordering on celebration such as the Holy Mass or masquerade festival, primary sources would include objects, pictures, and recordings as well as the persons directly associated with the celebration.

Any information from primary sources is called PRIMARY DATA. Primary data can be gotten from the library or the field depending on the nature of the subject. Example, if you are researching on African masquerade, the primary data would come mainly from field-work; and the sources would include the very users of the masquerade, and the mask itself, as well as the museum (to some extent, since the museum is not a primary habitat for African masquerades). Thus, books or articles written on the masquerade would not be primary but secondary data. It is advisable that the student seeks primary sources for primary data always.

**(b). Secondary Sources** – this refers to all sources, individuals and books or written materials that analyze the primary sources or give ‘second-handed’ information on the subject matter. They are secondary because they are not original version of the subject matter. On the contrary, they are second or third person’s view on the original version. Example of secondary sources of research on the masquerade would include the following – books, journal articles, magazines, and so forth. Similarly, books written by other authors on Aristotle would be secondary sources for a research on Aristotle. Secondary sources are important for three main reasons:

* to keep up with current research. You must read the works of other researchers to inform you, motivate you, refine your own thinking, and update you on the subject matter.
* to find other points of view. You can find an opinion that is alternative or different from your own by reading other people’s research works. To include them and respond to them in your work makes your research balanced and sound. People’s positions, whether divergent or agreeable, can help in shaping our thought during research
* to find models for your own research or analysis. You can also learn from other research works not just what they said but also how they have said it. In particular, the way an earlier researcher handled the analysis of a subject may inspire you in dealing with your own subject.

Materials from secondary sources are called secondary data. Can oral information under any circumstance be a secondary source or secondary data? Yes! If the oral information is given by one who is not directly involved with the subject matter then it technically falls under secondary data. A lay person who desires to know about the academic life of seminarians may choose to interview the seminary cooks. The pieces of information thereof would qualify as secondary data because though probably valid, they do not come directly from seminarians or priests who live seminary life themselves. Primary and secondary sources can therefore be identified based on their originality or closeness to the original version of the subject matter. Thus, each subject matter has its own primary and secondary sources.

Sometimes also, people talk of secondary sources when they copy a quotation from an author who had copied the same quotation from another author or the original source. For example, Joe is writing on Olaudah Equiano. He sees a verbatim quotation from Equiano in Afigbo’s book. Then he goes ahead to copy that Equiano’s quotation from Afigbo as if he got it from Equiano’s original. In this case, however, Joe must indicate in the body of his work that he is quoting Equiano as quoted by Afigbo. For example, ‘according to Equiano, as quoted by Afigbo1, ….’ Thus, having put a superscript on Afigbo – not on Equiano – he goes to the reference or footnote to document Afigbo’s book from where he got the Equiano’s quotation. Some points must be taken into consideration while making use of this form of secondary source:

* do not pretend that you are making use of the original source when you are only copying the quotation from another copyist. Show your honesty by proper documentation as indicated above
* always look for the original source where your author has copied from so that you can cite directly or at least verify the correctness of any quotation

Some authors make mistakes or even add emphasis in their quotation of original sources. You risk copying the mistake or ascribing the emphasis to the original author if you do not verify the authenticity of such secondary quotation. In this way, an error may be continued in our scholarship as subsequent writers copy from mistaken copies.

**The Need to Evaluate our Sources**

Note that every research work must make use of both primary and secondary sources. However, you must evaluate the reliability of the sources you find. Students tend to make use of any materials they can lay hands on. This may be due to insufficient materials or naivety on the part of the student. But it is not every piece of information you come across that is worthy to be used for serious researches. Some of them are just too cheat while some are unreliable or even false. There are four factors to consider in evaluating our sources:

1. Avoid online junk

The need to evaluate our sources is particularly true in the case of online sources. Many online sources are either unreliable or too cheap for a scientific work. A good example is the Wikipedia. Materials from this and similar posts must not be admitted in serious research works. But there are online materials with good quality including but not limited to online journals and e-books.

1. Look for higher stuff

You may also need to evaluate printed sources to separate chaff from wheat. If you can find sources from experts in the area of your study, why wasting your time with sources from non-specialists or inexperienced writers? If you can find materials written by professors on the Holy Mass, for instance, why make reference to a book written by a Mass Server on the same topic?

1. Be sure of the originality of source

Students often copy quotations from older works without bordering to verify their authenticity. Note that data used by another researcher in a secondary source can only be used when you cannot find their primary sources for yourself. But one must be careful of copying quotations made in secondary sources since the earlier researcher may have incurred some error in reporting that data.

1. Make your research count, be current

If you want your research to be current and relevant to modern discussions, make more use of recent publications and involve older books only when necessary. The age of your sources determines the currency of your research. Old books lead to out-dated conclusions while recent publications make your work updated, current and relevant to the modern discussion. A research work can become stale news if their ideas are outdated and do not reflect current developments. Thus, even if your topic deals with a phenomenon of the ancients, you can give it contemporary relevance by bringing it into recent developments and using recent sources.

**Modes of Gathering Data for Philosophic Research**

The main source of data for philosophical studies is the library or books. Some topics however may demand direct personal communication or interviews from field work. Therefore there are two major modes or patterns of data gathering for scientific research, namely, the use of library and field work.

(a). **Use of Library** – library refers to books or any storage of written sources of information. Since not all books are printed in hard copy, library should extend to internet and other sources where one can access soft copies of books and written materials. Note that many materials from the internet such as Wikipedia are considered as junk and unsuitable materials for serious research. But there are quality online materials such as journal articles and books that are useful for research. The mode of gathering data from the library is generally by reading and taking note. The following steps are helpful for good use of the library:

1. Reading versatile. Read as many books as possible on the subject matter and do not rely on one source
2. note-taking. Jot down important and striking points as you read, remarking where you got them from, that is, your sources
3. summarize. Try to recap what you have jotted at the end of every reading. You can also summarize by picking out salient points in each source or chapter as you read
4. evaluate or analyze. Try to compare the idea you got from one source to the ideas you got from other sources, with regard to the same subject matter. This will help you enlarge your data base or wealth of knowledge about a subject. If you end up with only one source, your idea will be limited to that source and you cannot make any comparisons. This comparison is also a form of data analysis – that is, using other opinions to evaluate what you got from a particular source in order to verify its validity or reliability. Note that you should not condemn what any author has written on the subject. On the contrary, you can point out how it is related to other sources or different from them, and then you state your own conclusion
5. finding. At the end of any data analysis, the student should remark his findings. That is, state what he realizes from reading the subject in a source and comparing it with other sources, including their differences and similarities, as well as the loopholes he found in the book, if any.

(**b). Use of Field Work**. Another important mode of gathering data or information for research is by field-work. Field work refers to the act of encountering the subject matter directly as it lies out there in the environment, so that the researcher can meet and communicate with the subject face to face and gather first hand information. It is usually done through personal interview or group discussion with persons involved with the subject matter or by sending out questionnaires, or through direct personal observation of the subject matter in action. If the subject matter is a person the researcher would have personal communication with the person. But if the subject matter is an object, the researcher would observe how such object operates, how it is used, and also communicate with those using it, in order to gather information on it. Note however, that not all subjects especially in philosophic enquiries, demand much field work.

The field is full of materials for any research work you can think of. This is particularly true in Africa where books are often in short supply on some subjects. Researching on African culture, for instance, the researcher will discover that it is human beings not books that possess much of the needed information. Therefore, field work cannot be limited to interviewing only one person. The student must visit as many persons and places as possible and record his communication and observations. Field work gives you what the library may never give you on certain subject matters. The following steps or methodology are helpful for fruitful field work:

* interview. In interviews the student engages the person in a personal communication by asking questions directly and taking notes. It is better to use the language understandable to the person being interviewed. Questionnaires may be useful in collecting data where the person interviewed is literate. Sometimes, too, group discussions are allowed for wider discussion. However, the student should be mindful of the status of the person or persons being interviewed. There are two categories of persons interviewed, giving rise to two levels of information accessed from interview, namely **esoteric** and **exoteric** levels. The first is the level of the insider who gives you deeper information about the subject matter. For example, a chief priest will give you insider information about a masquerade if he chooses to. The second is the level of the layman or man-in-the-street who tells you what everybody already knows about the subject matter. It is better to go for insider information in research whenever you can.
* Note taking or recording. Whatever the people are saying must be recorded immediately on the field work. It is wrong to postpone recording for a later time since one can forget the details. Recording of data can be done in many ways including the following:
* Writing or jotting in the case of spoken or verbal materials
* Video taping in the case of visual materials
* Audio taping also for verbal materials
* Photography for concrete objects
* Collecting specimen in the case of concrete objects where possible
* Data analysis. All you get from the field is liable to analysis – whether with video, audio, or jotting. This means that you look into what people have said in the interview critically, compare them with other interviews on the same subject, and seek out contrary positions and agreeable points. In research, you may quote an interview verbatim and acknowledge the source; however, you may go further to criticize the quotation to show that you do or do not accept it.

**Writing the Research Work**

There are certain basic questions that an intelligent reader seems to ask silently when he or she picks up a research work. The researcher presumes these questions and endeavours to supply answers to them. He does this by including certain sub-headings in his table of content and furnishing their requirements. Therefore, any research work should include these contents no matter how brief, whether it is a thesis, dissertation, memoir, project, term paper, journal or magazine article. They make the research work to be systematic, orderly and clear not only in the interest of the reader but of the writer. In larger works like thesis and memoir, these contents appear as sub-headings clearly spelt-out and identified in the chapters. But they may appear as paragraphs or single sentences in shorter works like articles. Yet their importance in clarifying the order of research and thought of the researcher is the same in both cases.

**Major Contents of a research work**

By addressing the following contents, the researcher is actually addressing those presumed but important questions that clarify his research. The contents are stated below with their basic requirements:

1. Abstract – how best can you summarize your study to indicate the problem, the methodology, the finding and conclusion all in brief for your reader’s quick glance. Abstract is done only in one paragraph.
2. Background of the study –what experiences or sorry situation did you notice that warranted or attracted you to write on this theme? The background of the study is a kind of introduction to the problem which the research topic poses for the research work to solve.
3. Statement of the problem – what is the particular problem you envisage or intend to study through your topic, the problem you think is looking for solution. In brief, statement of problem summarizes the problem that the researcher seeks to solve, the problem posed through his topic, which should be resolved in the research work. You can do this by questioning your topic (research questions) or by describing the theme projected in your topic. Statement of Problem should describe the topic under one’s study, taking note of the major themes in it, as well as the issues involved in it – issues that in your opinion demand explanations or solutions.
4. Purpose of the study – what aim do you hope to achieve with the study, what is the objective of your study. Here, the researcher should be able to say the ultimate target of his research or what he intends to achieve if the explanations or solutions projected in the Statement of Problem is arrived at.
5. Scope – where is your main focus in terms of geography or ideology, which area will your study cover or concentrate on. Set a limit to your research by focusing on a philosopher or an element of his thought, or an aspect of philosophy or culture or a small geographical area
6. Significance of the study – what is the importance or relevance of carrying out this your work to humanity or to scholarship
7. Methodology – how do you intend to go about the study, what particular scientific method are you going to use to achieve your aim
8. Definition of terms – what are the major terms in the work that need clarification in the way you will use them in the work
9. Literature review – what did other authors or books say on the same or related topic before now? See the section on Drawing of the Chapters of Research Work for greater details on Literature Review.
10. Summary of finding – what are your findings during the research analysis
11. Recommendations – what are your proposals or recommendations as solution to the problem already stated by you
12. Contribution to knowledge – at the end of this research, what do you think you have succeeded in contributing to already existing knowledge on the subject matter, any new piece of knowledge or information from your study on the subject
13. Suggestion for future research – which dimension of your research do you think needs further enquiry
14. Conclusion – what is your final word on the topic
15. Reference or bibliography – what are your sources, where did you get your materials from

**Drawing up the chapters of research**

A good research, or memoir, can be completed in four or five chapters including the introduction and conclusion.

CHAPTER ONE

GENERAL INTRODUCTION

The first chapter is basically an introduction. In some schools, it actually appears with the heading ‘Chapter One: Introduction’. However, some other institutions would want the introduction to be a separate heading from chapter one. In that case, chapter one would be headed with any other suitable caption. Although it is called introduction, chapter one is not intended to make a rigmarole of the entire work or a summary that repeats what the work would say in other chapters. It is a technical chapter which clarifies the theoretical framework of the study, that is, the author’s intentions in the research including the problem of research and his methodology. Therefore, chapter one is outlined to provide information to the following technical questions:

* 1. background of the study
  2. statement of the problem
  3. purpose of the study
  4. scope of the study
  5. significance of the study
  6. methodology
  7. definition of terms

In shorter essays like journal or magazine articles, the above sub-headings can actually be summarized to form the introduction, before the writer delves into the main part of the discussion.

CHAPTER TWO

LITERATURE REVIEW

The second chapter of a research work is equally technical. It does not yet tackle the problem of the study but deals with the review of already existing literature on the subject matter. The researcher is expected to read as many books and essays as possible in relation to his topic in order to know but also indicate earlier information on it. He will be helped a lot with such reading and review because they supply him with materials as well as help him get a focus and clarification on the topic. Research develops knowledge only if the researcher takes note of what has been done earlier. He should also take note of books that make arguments in favour of the topic and those that argue against it. The following guides can help the student in proper literature review:

1. introduce each review with the name of the book and its author using the appropriate style for your adopted methodology
2. describe the basic idea in the book; that is, a brief presentation of the author’s view. This means that you must have read the book or at least, the part that relates to your study
3. point out the strength and weakness of the book in relation to your topic. The student is free to quote other authors in weighing the opinion of the author being reviewed, for proper analysis
4. link what the book is saying to your topic of research showing what you have observed in the book whether in favour or against your opinion
5. each book reviewed should form one paragraph in the literature review
6. do not draw conclusion on each book reviewed; summery, not even conclusion, is drawn at the end of the entire review
7. do not review classical books like Shakespeare or authority books like encyclopedias, bible, koran, dictionaries, or traditional authorities like St Augustine, Thomas Aquinas, Aristotle, etc
8. note that we review books not authors or persons. So attention is paid not to authors but their books.
9. if you are studying a philosopher, his books are not part of the literature review to avoid repetition when they are taken up squarely in chapter three.

Note that literature review can also be outlined in sub-headings like 2.1, 2.2, depending on the classes of books reviewed. In that case, each sub-heading should have a caption. On this note, it must be noted as well that literature review can follow different patterns including historical or thematic patterns.

*Historical Review*

In a historical review, a reviewer aims at a historical study of the problem or subject matter. This implies that the review is broken down according to epochs and the researcher studies the books pertaining to each epoch. Such a formula helps to create insight into the historical development of the problem under study. For example, writing on the Problem of Evil, the researcher may decide to break down the review of literature by creating sub headings such as

2.1: the ancient period

2.2: the patristic period

2.3: medieval period

2.4: modern period

But care must be taken not to confuse this form of review with mere historical account of the problem. To be sure, some researchers merely trace the history of a problem, probably citing many authors in the process, in the name of book review. But that is wrong perception of literature review. Historical review is a review of books that treated the subject matter in relation to various historical epochs. Thus, in 2.1, the researcher reviews modern books or articles that reflected on people and events in the ancient period with regard to the problem of evil. It is never a mere historical account of evil in the ancient period.

*Thematic Review*

In thematic review, the research is concerned with themes. This form of literature review breaks down the topic under discussion into sub themes that offer greater detail to the study and also help him do justice to the main theme. Thus, instead of breaking the topic down into historical epochs for the Problem of Evil, the following sub themes can be applied in a thematic review:

2.1: the nature of evil

2.2: evil as privation

2.3: evil and freewill

2.4: evil and sin

In all these, the research does not give us his own opinion but makes a review of books that have something to say in relation to each of the sub themes.

CHAPTER THREE

THE MAIN THEME OF YOUR RESEARCH

Having done all these background works, the third chapter of the research now concentrates on the main topic of the work. The researcher is expected to say all he knows and wants to say on the main theme of his topic in an exhaustive manner. It is time for the exposition of the subject matter. Let your reader understand what your topic is all about. If he is writing on a philosopher, he should do justice to the philosopher’s biography, writings, and especially to the particular area of the philosopher’s thought he intends to study.

Sometimes, a researcher’s topic may essential involve an appraisal. Some research topics actually seek to appraise a philosopher’s standpoint or thesis. For example, a student may decide to write on the topic: Evil as Privation in Augustine – an appraisal. In this case, instead of mere exposition of Augustine’s idea of evil as privation, chapter three is also dedicated to the unbiased critical study or assessment of Augustine’s idea on evil as privation. But the student does not do this without invoking the opinions of other authors on the subject matter. Thus chapter three takes the form of a critique in this case. This is because the main burden of writing with regard to the sample topic above is to appraise. It goes without saying that chapter three deals with the main issue envisioned in the topic.

CHAPTER FOUR

APPLICATION OF THE STUDY (or EVALUATION)

In chapter four, the researcher is expected to apply the topic he has studied to a particular practical context, his village for example or any other practical scenario in the country’s life experience. In some cases, this chapter takes the form of an evaluation of the study, in which case, the study in tested at the background of a particular cultural or philosophical tradition. For example, a study on Thomas Aquinas’ concept of natural law can be used to evaluate abortion acts in Nigeria. Thus, while the researcher discusses Aquinas’ natural law in chapter three, he now applies it in chapter four to abortion acts in Nigeria. It is in this chapter that the researcher easily makes his contribution and shows the originality of his work.

CONCLUSION

In some cases, the conclusion constitutes a separate chapter in the work; hence it may appear as CHAPTER FIVE as the case may be. Its aim is to state the findings of the research and other relevant pieces of information regarding the research as a scientific exercise. Therefore, the conclusion is a technical chapter with the following sub-headings:

* 1. Summary of finding
  2. Recommendations
  3. Contribution to knowledge
  4. Suggestion for future research
  5. Conclusion

DOCUMENTATION

REFERENCE OR BIBLIOGRAPHY

At the end of one’s study, a list of the books and other material sources used in the research is made for the information of the reader. The manner of listing these sources is determined by the research method or style employed. For example, while **APA style** makes use of ‘Reference’, **TURABIAN** style uses ‘Bibliography’, and **MLA** style uses ‘Work Cited’. The content may be the same but the arrangement is definitely different. In the case of Turabian method, the bibliography is listed under such headings as: a) Primary Sources, b) Secondary Sources, c) Other Sources. Alternatively, it can be listed as: a) Books, b) Journal articles, c) Other sources. MLA may also use this arrangement, but APA does not. It simply lists everything together in alphabetical order, without separating journal articles from books.

We must also note another difference between bibliography and Work Cited. The former may include books that are not cited directly in the body of the work but having strong influence in the shaping of the researcher’s thought. The latter, on the contrary, does not include any other material source except those directly cited in the work

Moreover, in many Nigerian Universities, a chart of the interviews made in the course of the study is needed at the end of the reference section. But this is not demanded by most international institutions. The latter argue that oral interviews are not retrievable data and should not be referenced outside the body of the work.

RESEARCH METHODOLOGY

Methodology refers to the manner of collecting information as well as the various forms of citing and referencing the information in the work, as used by various schools in research. There are many research methods each with its own manner of making references to sources and citation of materials in a research work. Some of the methodologies with international acclaim are the American Psychological Association style (APA), the Kate Turabian style, the Chicago style, and the Modern Language Association style (MLA). Note that Kate Turabian style is derived from the Chicago style with modifications. The seminary has settled for the Turabian style; but in the interest of learners in research methodology, we shall study two of the above, namely, the APA and Turabian.

**Key issues in scientific methodology**

1. Citation

This is the manner of introducing quotations verbatim in the body of the essay with appropriate link to source. In Turabian style, the link appears as serial superscripts in Arabic numerals; but in APA the link to source is indicated by stating the author and year of publication as well as page cited, all in bracket. In both cases, the quotation is indented in the left and flushed to the right margin

1. Paraphrasing

This is a manner of quoting a source non-verbatim. In this case, the researcher summarizes the material in the source and presents it in his own grammar in the body of the essay with partial link to source. In Turabian, paraphrasing is partially linked to source by simply listing the author’s name and book title; while in APA partial link is achieved by noting the author’s name and year of publication of the book in bracket, without page number.

1. Plagiarism

This is the wrong practice of making a verbatim statement that obviously derives from another person without proper link or reference to the originator. Here, the reporter presents the statement as if it is his or her own.

1. footnote / end-note

This is a manner of introducing the source of materials quoted in the body of the essay at the foot of the page (or the end of the chapter) as they arise in the essay. APA does not use footnote or end note. In Turabian, footnote is automated by computer numbering. Here, the number corresponding to the superscript in the body of the essay is listed by computer at the foot of the current page, where the researcher should enter the following in the order below

* name of author beginning with first name(s) and ending with surname, all written in full (or abbrevied, if it appears as such on the cover of the book being cited)
* title of book or essay quoted, in italics (Capitalize Major Words in the Title)
* city of publication
* publisher
* year. Note that the city, publisher and year are in one bracket
* page numberoutside the bracket

Example of footnote in Turabian:

1. Goodluck Ebele Jonathan, *My Transition Hours* (Kingwood: Ezekiel Books, 2018), 20

Note the application of punctuation marks such as coma ‘,’ – after the author’s names; colon ‘:’ – after the city in bracket; and period or dot ‘.’ – after p for page number

1. reference / bibliography

This is the formal presentation of all the sources used in a work at the end of the study. Turabian uses bibliography while APA uses references. But their arrangement is different. The order of arrangement for bibliography in Turabian is:

* Name of author with surname first and other names written in full or as in the book cover
* Book Title, in italics (Always Capitalize the Major Words in the Title)
* City: Publisher, Year – without bracket

Example of bibliography in Turabian:

Jonathan, Goodluck Ebele.*My Transition Hours.* Kingwood: Ezekiel Books, 2018

The order of reference for APA is as follows:

* name of author with surname first and abbreviated other names
* year in bracket
* book title in italics
* city: publisher without bracket

Example of reference in APA:

Jonathan, G. E. (2018). *My Transition Hours*. Kingwood: Ezekiel Books

Note the use of punctuations in bibliography and reference and compare it to the footnote Example:

1. Goodluck Ebele Jonathan, *My Transition Hours* (Kingwood: Ezekiel Books, 2018), 20

1. S. O. Olaitan and G. I. Nwoke (Eds), Practical Research Methods in Education (Onitsha: Summer Educational Publishers Limited, 1988), 1 [↑](#footnote-ref-1)
2. Ibid. [↑](#footnote-ref-2)
3. E. C. Osuala, Introduction to Research Methodology (Enugu: Cheston Books, 2005), 1 [↑](#footnote-ref-3)
4. The World Book Encyclopedia, s,v. ‘philosophy’, cited by Bona Uchenna Umeogu, *Kolanut in Igbo Metaphysics: A Phenomenalysical Research into its Symbolismic Universe*, 50th Inaugural Lecture of Nnamd Azikiwe University Awka (Awka: Nnamdi Azikiwe University, 2019), 5 [↑](#footnote-ref-4)
5. Osuala, Introduction to Research Methodology, 170 [↑](#footnote-ref-5)