PHPSEC201

ACADEMIC WRITING AND RESEARCH ETHICS

Unit I

FORMAL LETTER WRITING
HOME ASSIGNMENT/TERM PAPER WRITING
WRITE-UP/ARTICLE/RESEARCH PAPER WRITING

1. What is Research?

Ans: Everyone who seeks knowledge through systematic enquiry do not write it down. Reasons may vary about absence of such attempt to spell out what one thought about something and 'discovered' something. Nevertheless, penning down the research would benefit the larger readers and it might help others who are also in the same quest for such knowledge. It might trigger also different opinions, corrections and modifications. It might initiate also fresh study and further research in the same field. Every research follows a certain method. Any systematic study itself is a method. About this we had an elaborate study in the first year MA Philosophy, in the course called 'Research Methodology.' Some of the students might have already taken up that course. What we intend to do in this manual is merely to help the students to get a practical hints. The unit introduces the students to the basics of research in philosophy. We shall deal with the basic understanding of systematic research in philosophy.

Human Language is the medium of communication of ideas, relationships, and feeling. Thoughts are products of human faculty, and expressed through proper language. Reality is conceived, comprehended and expressed in and through language. There exists inseparable unity between language and reality. Reality cannot be thought of without language. Philosophical treatises are methodically thought out human rationality. Any philosophical endeavour involves systematic method of cognition and expression. Study of Philosophy makes one dwell within this realm of logical thinking and methodic presentation of one's own reflection and ideologies.

Francis Bacon says, "Reading Makes a Full Man; Conference a Ready Man; and Writing an Exact Man." Enquiry into fundamental cause and nature of world, human beings and God is the very act of philosophizing. A student of philosophy is hence called to be a searcher for truth, an inquirer into nature of things and as a critical analyzer.

2. What is Research in philosophy?

Ans: Understanding the meaning of the word 'Research' leads to various conceptions such as; researching, searching again and the repetition of a search. In current usage, it would mean ‘careful search,’ or ‘intense investigation.’ T.P. Ramachandran defines Research as, “a critical investigation into a chosen area within a familiar field for the purpose of furthering the knowledge about the area selected.”(Ramachandran 1984, 2) Any research therefore proceeds from the known and familiar notions through careful analysis and finally arrives at new conclusions, theories and thought patterns. Writing scientific papers or assignments is meant to acquire knowledge of the field, to understand the various concepts and theories, to revise and critically reject or accept already held theories, schools of thought and conceptual patterns.

Research has two aspects; its content and its method. The content refers to what one intends to present to a learned audience. It is the substance and subject matter of a research work. The method is how we set about dealing with the subject. Both are of importance, primarily the content and secondarily the method. Content is of primary importance in the sense that this is our contribution to knowledge. Method is instrumental in its value, for it serves adequately to the nature of the content. Thus, the criterion for the excellence of a method is its adequacy to meet the demands of the content. Hence, a research worker has to pay attention not only to what he deals with but also to how he deals with it.

Systematic research is the combination of experience and critical thinking. It is regarded as the proper approach to the discovery of truth. Systematic Research is a way to methodically approaching an issue of philosophical nature and trying to solve logically adopting different methods. Scientific inquiry into a particular notion or issue would eventually throw light on the nature of the problem itself. Using proper tools for conducting serious and useful research becomes necessary. In the post graduate level a student of philosophy, presumably, might be taking up merely certain theoretical issues for a research. The approach and the method would be definitely different from other methods of enquiry in a research. Details of such methods are in the course on Research Methodology. Here we would focus more on the practical guidelines of bringing out the result of a research in a form of a paper.

Research is not merely information gathering, shifting of facts from one source to another. In research one does a systematic processing of collected facts and information through a carefully analysed method to bring out one’s own ideological position of an issue. Research is thus about understanding an issue or asking and answering a complex question or solving a problem. So, to
start with, we need to identify an issue, question, or problem. Then we need to discuss with people who want or need your study. Listening to their suggestions and problems will help us.

Further, we need to find out what's already known about it. For this talk with experts and/or read their reviews and the other original research on the topic by different scholars. Then we need to plan, budget and proceed with our study accordingly.

Consulting an expert or the supervisor is essential for a research. Equally it is necessary to read journal articles to find out what's already known. Many authors also often point out topics for future research. This prevents doing research on an area already explored and thus prevents wasting valuable time and effort. Any research is supposed to be original investigations.

Research originates with a concrete question; requires clear articulation of a goal and a specific plan for proceeding.

Systematic research is useful and beneficial to all including the student who does the research. It advances wealth of human knowledge. It develops a critical and scientific attitude, disciplined thinking or a bent of mind to observe objectively. It provides opportunity to study a subject in depth. Doing research is the best way to learn to read and think critically and creatively.

Research definitely requires the collection and interpretation of data in an attempt to resolve the problem that initiated the research. Research originates with a question: Examples: Are philosophers accepted well in the society? Why do poor people appear happier? What is the relationship between belief in God and good moral life? It requires clear articulation of a goal: What problem do you want to solve? Moral degradation? Deepening of faith in God? Change of behaviour? Building up an adequate world-view?

Good research requires a specific plan, not groping in the dark to find a solution. In fact, it is a planned discovery with outlined steps for tackling the problem. A good research accepts certain critical assumptions. They must be valid for the research to be meaningful.

3. What is philosophical method in research?

Ans: Philosophy is the study of and the attempt to gain knowledge and truth. It is a way of looking at things. It is a collection of ideas and assumptions that are used to interpret reality. Philosophy is a quest for the best arguments. A good argument is a clear, organized, sound statement, the

reasons that cure the original doubts in a problem. Philosophy is distinguished by the methods that philosophers follow in tackling philosophical questions. Philosophical method involves a commitment to reason and argument as a source of knowledge.

Methodology process: Methodology means 'the systematic study.' The importance of methodology is that 'it helps us to avoid the wastage involved in the trial and error procedure. The final product of research varies with names like; research paper, scientific essay, special study, thesis, and dissertation. Methodology process is a systematic process of doubting or being

skeptical about the truth of one's beliefs. In methodology process methodic doubt which is a systematic process of being doubting the truth of one's beliefs, arguments to support the solutions and dialectic, which is presenting the solution and arguments for criticism by other philosophers, and help them judge their own, are involved.

Doubt and the sense of wonder: Philosophy begins at wonder. Philosophy time and again begins with some simple doubts about accepted beliefs. We get the initial impulse to philosophize from the suspicion that we do not fully understand, and have not fully justified, even our most basic beliefs about the world.

Formulate questions and problems: The next step in the philosophical method is to formulate our doubts in questions to be answered or problems to be solved. Questioning is the first weapon of a philosopher with which one works. The more clearly the question or problem is stated, the easier it will be to identify critical issues, the assessment of which undergirds any genuine progress in coming to some sort of resolution. Here it is not enough to wonder at doubt but to state as clearly as possible what exactly the source of doubt is.

Enunciate a solution: To enunciate a theory, or to give a definition or analysis, which constitutes an attempt to solve a philosophical problem is another essential part of philosophical method. In just a sentence or two a philosophical theory by itself can be stated quite briefly very often all the surrounding philosophical text is offered by way of hedging, explanation, and

argument. Here as an example let us take a philosophical theory which has to answer the question what actions are right? For this the answer is given by John Stuart Mill, an English philosopher, as the creed which accepts as the foundation of morals utility, or the greatest happiness principle, holds that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness. Consequently, according to Stuart Mill, the rightness or wrongness of actions depends on their consequences; if they tend to cause happiness they are morally right, and if they tend to cause unhappiness they are morally wrong. Whether we accept the answer or not is a different question but it does answer the question, what actions are right.

Another important part of philosophical method is philosophical justifications, or arguments. An argument is a set of statements, one of which, the conclusion, it is said or implied, follows from the others which is called the premises. We might think of arguments as bundles of reasons which are logically interconnected statements. The reasons are the premises, the claim they support is the conclusion; together they make an argument.

Normally philosophers are very good in giving arguments. They are constantly demanding and offering arguments for different claims they make. The reason for this is that it is only a good argument, a clear, organized, and sound statement of reasons to believe something that will ultimately cure us of the original doubts that motivated us to take up philosophy. Let us illustrate this point with an example of an argument. Say Susan has some doubts about religious matters, and she asks the question: Does God really exist?

Susan’s answer is, we will say, yes. How might Susan argue for her answer? Here is a very common, popular argument, called the argument from design.

The universe is made up of a huge variety of things, inanimate and living, natural and artificial from the hills and the oceans, to the houses and ships on them, from the stars and planets, to the cities and highways. All of this huge variety of things is, as scientists well know, operating in a splendid order or harmony, much like a very complicated machine, only much more complicated and well-planned than anything that we humans have ever invented. Like a machine, this order or harmony could not have just sprung into existence all on its own; like a machine, it must have had a designer. Moreover, since the universe is so complicated and well-planned, this designer must be incredibly intelligent; and since everything is so well-made for the habitation of humans, this designer must be very benevolent. And of course, as the creator and planner of the entire universe, this designer must be extremely powerful. So the universe must have had a designer which is incredibly intelligent, very benevolent, and extremely powerful; and this designer is what we call God. Therefore, God exists. This argument is called the teleological argument which is studied the philosophy of religion. It offers a series of interconnected reasons to believe that there does exist the sort of entity that in various religions is called God. This sort of argument is just exactly what philosophers want from each other. To deserve our consideration, the argument does not have to be perfect. It might have some problems. In fact, it might be a very bad argument. But on the face of it, there should be something rather persuasive about it. That gives us something to analyse and learn.

Philosophical criticism: Philosophical criticism is common in the work of philosophers. It is this philosophical criticism that makes much philosophizing a social endeavour and so on. We offer definitions and explanations in solution to problems; we argue for those solutions; and then other people come along and, often, demolish those solutions, throw us into doubt again, and force us to come up with better solutions. This exchange and resulting revision of views is called dialectic. Dialectic is simply philosophical conversation amongst people who do not always agree with each other about everything. These are the five steps that a philosophical method involves in its journey towards finding the truth. Having studied the philosophical method let us move on to know about scientific method.

4. What are the tools of research?

Ans: A tool is a specific mechanism or strategy that researchers use to collect data. For systematic research in Philosophy, the possible tools of research are: Library and its resources (most useful for philosophy students), Computer and software, and the human mind (this is the strength of philosophy students), Language.

The library: For a philosophical research the library is always the starting point. Here the following will be very beneficial: Referring to the Card catalogue, Browsing through Indexes and abstracts, Consulting the Reference librarian, if s/he is accessible. Browsing the shelves gives a first hand knowledge of the books and journals available on the topic of research.

Computer and Software: In today's context, good research cannot be done without adequate computer facilities. Computer facilitates not just writing, but collecting data (internet, online journals, libraries, etc.) and processing them. For any research today adequate and appropriate use of internet and computer is a necessary.

Language for adequate expression: Proper use of language enables us not only to communicate but also to think more effectively. Clear and concise use of language in writing is important in research. Writing down ideas helps the investigator to get clarity of mind. This, in turn, is useful to organizes thoughts systematically to give the proposed answer to the readers.

Writing down the answer is helpful in detecting gaps and logical flaws in thinking in formulating the final answer.

5. How can you choose a topic of research?

Ans: Kinds of Topics : Research topics fall into two (though not mutually exclusive) broad categories; the first type having its focal attention on a thinker or text, proceeds to discuss the philosophical / theological insights specially occurring in that thinker or text. The other has for its focus a concept and examines the nature and significance of this concept / doctrine taking into consideration the views offered by a variety of thinkers and texts. Besides this, comparative studies of two or more thinkers on certain issue and comparative studies of two schools of thought, are also
considered for scientific papers.

Choosing a topic : Choosing the right topic for research is itself a part of research. The right topic is one which suits, the taste and training of the student, the purpose of research, and the product intended. From the vast area of concern, topics are to be narrowed down to a certain issue or a concept. The range and scope of the paper are also taken into consideration along with the ability of the student to plunge into the area of research. One has to clearly define what one wants to search for. First step to choose a topic is to divide the vast discipline into limited areas. Identifying an
area of research should meet the student's interest and the object of research. One must focus on the area of interest and reduce it into definite topic. E.g. from Indian Philosophy to Concept of God in Sri Aurobindo. Preferably the papers should be based on original text or author or a specified area of study. Too generic themes are not recommended for research. The title of the paper should be as short and precise as possible with clarity. The purpose of a research paper is to explore an idea or probe an issue with the help of available resources in the library. Make a statement of thesis which states clearly the

area of your research and defines the scope of your paper. The findings of the research have to be clearly and coherently presented in an accepted scientific format. A research paper pays attention both to the content as well as to the style of presentation. Choose a definite, specific subject. The subject must be of interest to your readers. It should neither be too broad nor too specific. It must be within the limits of time and the length of paper. It must have necessary sources available. The sources available should neither be too vast nor too little. It can be author-based or theme-based. Make sure you have a competent supervisor available to you to deal with that specific subject.

Synopsis : Synopsis is a preparation of an abstract of the topic. A synopsis consists of provisional title to the topic, the aim and objective of research, the outline of the contents of the topic, the method of procedure and the source materials available. It would give clarity and confidence to the student and initiate action on the subject.

Schema : The outline of the topic is schema. The topic is divided into chapters and sub titles. This provisional title and the outline is the preliminary preparation. With the basic sources available, a working Bibliography of all the books and articles is prepared. All these - schema, synopsis and bibliography - form the preliminary activity of a research works. They are to be done with due consultation of the Supervisor chosen. In the choice of a supervisor, one has to look into various factors like interest of the person on the subject, specialization in the subject, ability to guide and capacity of the student to fulfil the demands. Supervisors are mentors, moderators, guides and directors of the papers. They inspire the student, point out appropriate literatures, show the right direction and challenge the positions and ideas brought out. They also take into consideration the ability of the student and the demands of the theme. Regular consultation and the work done by students are emphasized greatly. Submission of the writings in parts, chapter by chapter, is very much encouraged. There should be ample time for the supervisor to correct and guide. Students are not to submit everything in bulk to the moderator without any prior consultation and proper correction. The corrections suggested by the supervisor should be meticulously carried out.

Unit II

Research Methodological Perspective in Philosophy: Thinker Based, Concept Based, Comparative

Dissertation/ Thesis Writing (Statement of the problem, Objective, Survey of Literature, Chapterization, Bibliography)

1. What is a bibliography? What is its purpose?

Ans: A bibliography means a list of written sources consulted in preparation of the report during the course of research. It lists all published and unpublished references used by the writer in preparing the report. It may refer to all documents like books, periodicals , articles, government documents, pamphlets, lectures, interviews etc, which have bearing on the thesis irrespective of their being actually referred to or not, in the text. The aim is to permit the reader to find the exact items the writer consulted. There are different kinds of bibliography like, References or literature cited comprises a list of documents which is confined only to those works actually cited in text or the footnotes of the report. Sources consulted consist of a comprehensive listing of books and papers consulted including those which are not strictly relevant to the subject of the thesis.

Selected bibliography contains those sources cited, together with the more relevant of the works which have been consulted. Bibliographical notes is a brief annoted bibliography where the references are combined with the bibliography list.

Bibliography may be arranged according to the alphabetical order, chronological order, divisions of the subject etc. Generally the simplest and best arrangement for a short bibliography is the alphabetical order. Here the last name of the author (surname) is listed first, separated from the full name and arrange it alphabetically by surname. Some list of books is most convenient if arranged in the chronological order of the publication. This is suited for works in history. Writers sometimes desire to make separate divisions for primary and secondary sources. But usual practice favours one comprehensive listing of both the sources together. Alternatively, the bibliography may be classified into three or four sections- (1) Books (2) Articles (3) Reports and (4) Other documents and in each section relevant references may be arranged in alphabetical order. The purpose of bibliography is different from that of footnotes. While bibliography is a list of all materials related to the topic of research, the footnotes specifically paraphrased materials are found. Care should be taken by the researcher while bibliography listing and it should be done in the proper format.

2. Briefly explain the main components of the preliminary section of a Research report.

Ans: Bibliography : A bibliography means a list of written sources consulted in preparation of the report during the course of research. It lists all published and unpublished references used by the writer in preparing the report. It may refer to all documents like books, periodicals , articles, government documents, pamphlets, lectures, interviews etc, which have bearing on the thesis irrespective of their being actually referred to or not, in the text. The aim is to permit the reader to find the exact

items the writer consulted. There are different kinds of bibliography like, References or literature cited comprises a list of documents which is confined only to those works actually cited in text or the footnotes of the report. Sources consulted consist of a comprehensive listing of books and papers consulted including those which are not strictly relevant to the subject of the thesis. Selected bibliography contains those sources cited, together with the more relevant of the works

which have been consulted. Bibliographical notes is a brief annoted bibliography where the references are combined with the bibliography list. Bibliography may be arranged according to the alphabetical order, chronological order, divisions of the subject etc. Generally the simplest and best arrangement for a short bibliography is the alphabetical order. Here the last name of the author (surname) is listed first, separated from the full name and arrange it alphabetically by surname. Some list of books is most convenient if arranged in the chronological order of the publication. This is suited for works in history.

Writers sometimes desire to make separate divisions for primary and secondary sources. But usual practice favours one comprehensive listing of both the sources together. Alternatively, the bibliography may be classified into three or four sections- (1) Books (2) Articles (3) Reports and (4) Other documents and in each section relevant references may be arranged in alphabetical order. The purpose of bibliography is different from that of footnotes. While bibliography is a

list of all materials related to the topic of research, the footnotes specifically paraphrased materials are found. Care should be taken by the researcher while bibliography listing and it should be done in the proper format.within the body of the report, and the presentation should be so clear that the reader be able to grasp the finding either by reading the text or looking at the table or chart.

The results should be reported as accurately and completely as possible. The data themselves should be described fully, they should be analysed in detail and all the evidence resulting from the analysis should be presented. These chapters are primarily for the use of the reader who wishes to make a detailed study of the problem. So every bit of relevant evidence should be supported by logical reasoning and empirical facts. Materials should be organised systematically and presented under appropriate headings and subheadings. Each chapter should end with a summary and lead into the next section or chapter with a smooth transition sentence.

3. Explain briefly the various elements included in a research report.

Ans: MAIN BODY OF THE THESIS : This is the heart of the research report and probably the largest section of the report. It should be an organised presentation of the results and each major division of the problem should be presented in a separate chapter. The chapters should be well- balanced, mutually related and

arranged in logical sequence. Each chapter should be given an appropriate heading. The chapter should include a discussion of the issue or part of the problem investigated and evidence used in its solution. If this becomes lengthy a summary of the evidence may be made at the end of the chapter. Through textual situation and tabular and graphic devices, the data are critically analysed and interpreted. Every table or chart should be self-contained and self-explanatory unit within the body of the report, and the presentation should be so clear that the reader be able to grasp the finding either by reading the text or looking at the table or chart.

The results should be reported as accurately and completely as possible. The data themselves should be described fully, they should be analysed in detail and all the evidence resulting from the analysis should be presented. These chapters are primarily for the use of the reader who wishes to make a detailed study of the problem. So every bit of relevant evidence should be supported by logical reasoning and empirical facts. Materials should be organised

systematically and presented under appropriate headings and subheadings. Each chapter should end with a summary and lead into the next section or chapter with a smooth transition sentence.

CONCLUSION, SUMMARY AND RECOMMENDATIONS : This is the last part of the text of the thesis. This chapter is more extensive than the abstract given in the beginning of the report. This chapter should be a self contained summary of the whole report, containing a summary of essential background, information, findings and conclusions and recommendations. It consists of the summary, conclusions or generalisation, suggestions and recommendations. The summary may be more or less a restatement of the topical sentences of the various findings. Summaries of findings may be subordinated under the conclusion statements. All these statements may be numbered or coded in some way so that they refer to pages or tables in the findings sections, upon which they are based. After a brief statement of the problem, the purpose of the study and the methodology used in the investigation, the findings and conclusions are presented. Findings are statements of factual information based upon the data analysis. Conclusions are inferences or generalisations drawn from the findings and relate to hypotheses. They are answers to the questions of the hypothesis proposed . The formulation of conclusion is the most difficult aspect of report writings. A research may sometimes be tempted to over generalise . Hence it is necessary to be modest. Besides summary and conclusion, recommendations are also required from the investigator . Recommendations are typically brief statements of a limited number of suggestions for further consideration. These should flow from the findings and conclusions. They should be specific and should not be mere vague statements. Suggestions must be practicable and based on logical reasoning and are to be given at the end of the report. The research report should aim to give leads to future research scholars. The researcher should be able to give directions to the future researchers from the insights he has gained during the investigations. Hence, it may be appropriate in concluding this part of the report to indicate topics which need further research, i.e., the reporter should explain in the beginning the relationship of his research to previous work on the subject (review literature) and at last suggest what part of the field would more benefit, perhaps on a bigger scale or from a different angle.

REFERENCE MATERIAL : The core part of the thesis is followed by the end part containing the appendices and the bibliography. Thus the end part of the report is made up of : Bibliography (2) Appendices (3)
Index.

4. Describe the layout or format of a research report.

Ans: The title page : The first page of the report is the title page. It should carry a concise and adequately descriptive title of the research study. It should be precise and reflect the core of the problem under study. Even though the format of title page differ from one to another , they usually include- (1) the title of the study (2) the name of the degree for which it is submitted (3) name of the author (4) the name of the institution where the report is to be submitted and (5) the date of presentation of the report. The entire title should be typed in all capital letters, single spaced and centred between the right and left margins of the page. Where more than one line is required , it should be broken and arranged to make a pleasing appearance on the page. The statement with respect to the University ,Course and the Academic degree for which the thesis is submitted should be typed in lower case with capitalised initial letters below the title line. The name of the researcher should be typed in capital letters leaving 6-2 cm from the previous statement. The name of the institution where the report is to be submitted and the date of of presentation of the report are typed in double space leaving 7-5 cm distance from the name of the researcher and 2.5 cm from the bottom of the title page.

Researcher's declaration : In case the research is undertaken by a student in fulfilment of the requirement of a degree, he may be required to make a declaration.

Researcher's supervisor's certificate : Again, in case of a student's research work , his research supervisor has to certify that it was a

record of independent research work done by the student.

Preface including acknowledgements : A preface may include reasons, why, in the first place, the topic was selected by the researcher.

The relevance of a study may also be mentioned here. If the researcher has opted to discuss the significance and nature of his research in 'introductory chapter' then he may not write preface. But he can use the page to make acknowledgements. Here the researcher acknowledges the assistance and support received from individuals and organisations in conducting the research. Here thank all those who have helped him for a variety of reasons including guidance, during the period of study. It is thus intended to show his gratitude. The comments , given in acknowledgements should be brief, simple , temperate and modest and given only for substantial assistance and cooperation of a non- routine character which warrants public recognition.

Table of contents : The table of contents appear after the preface and it gives an outline of the contents of the thesis. It contains a list of the chapters and their sub-titles with page numbers. Subtitles, however, should be indented under each chapter title and be followed by the specific page or section references. If reference to specific pages for subtitles is not desired, the subtitles may run together and separated by semi- colons or dashes. When so many subheadings exist it may give an overcrowded look if all these are included in the table of contents. Hence, these may be placed at the beginning of that particular chapter below the title. It thus facilitates ready location of topics in the report. The table of content also include the preface/ acknowledgement, list of tables and figures etc. The heading "Table of Contents" should be the centre at the top of the page and in capital letters. The chapter headings may be typed in capital letters and subtitles in small letters. Small letters should be used for the subheadings except for the initial letter and of all nouns, pronouns , verbs etc. On the right hand side should be typed the heading "Page" at the right margin below which page numbers will appear. On the left hand side will appear the headings in the sequence in which they actually appear in the thesis.

List of Tables and figures : If table and figures are included in the report, separate pages for them should follow the table of contents. Figures refer to map, drawings, graphs, charts, diagrams etc. The full titles of tables and figures, worded exactly as they appear in text, arte presented with corresponding /consecutive numbers and page locations. Arabic numerals are usually used for identifying tables, figures etc. In the list of table and figures, the titles should be typed with initial capitals , rather than all capital letters.

Abstract or synopsis : An abstract is a summary of the findings of the research work. It should be as brief as possible and run about only one or two pages. It is placed at the prefatory part of the report so that a reader can get a quick overview of the report. Along with the summary of the findings or result of the investigation, it states in brief the purpose and scope of the study and also the method used for the research work. Here care should be taken that there is no over emphasis of the minor points and also that important points has to be treated adequately.

Abbreviations: Only such names are to be abbreviated which are likely to appear too often in the report. Name of persons are never abbreviated. Most of the forms of abbreviations are universally accepted because of the international readership of the scholarly dissertations and thesis. The list of abbreviations should appear before the beginning of the main text.

5. Explain briefly how a research report should be presented.

Ans: After the prefatory items, the body of the report is presented. It is the major part of the report. In a comprehensive report, the body of the report will consist of several chapters. The division of the report into chapter or sections should reflect the organisation of the parts with one another and with the whole; i.e.; the division should be logical to make the contents meaningful. The text usually consists of- (1) Introduction (2) Design of the study (3) Main body of the report (4) Summary, conclusions and recommendations.

Introduction : This is the first chapter in the body of a research report. It is devoted for introducing the theoretical background of the portion, its definition and formulation. It should be presented in such a way that it interests the reader in the subject matter of research. It must not be dull and lack in precession. It may consist of the following sections.

Theoretical background of the topic: Here the researcher introduces the background and the nature of the problem so as to place it into a larger context to enable the reader to know its significance in a proper perspective. This section summarises the theory or a conceptual frame work within which the problem has been investigated.

Statement of the problem : In this section the researcher has to point out why and how the problem under research was selected. There is a need of clear statement of the nature of the problem with specific questions to be answered or hypothesis to be tested. A consideration of significance of the problem and its historical background is also a need. Hence in this section the problem is clearly defined and its facets and significance are pointed out. For this the problem may be broken down into constituent elements or major subdivisions.

Review literature : This is an important part of the introductory chapter. Here a brief review of previous studies on the problem and significant writings on the topic under study is stated. Thus it is summarising the current status of research work already done in the research area sought. Previous research studies are abstracted and significant writings of authorities in the area under study are review. Such a review provides a background for the development of the present study and makes the reader up to date. Brief summary indicating areas of agreement or disagreement in findings or gaps in existing knowledge should be included. How the research work is an attempt to fill that gap is highlighted in this part of the introduction.

Significance of the study : The significance of the problem, the contribution that the study is expected to make, its practical importance and the national relevance is specifically indicated in this section.

The scope of the study : The dimensions of the study in terms of the geographical area covered, the designation of the population being studied or the exact coverage of the study is mentioned here.

The objectives of the study : The objectives of the study and investigative questions relating to each of the objectives are presented.

Hypotheses : The specific hypotheses to be tested are stated. The sources of their formulation may be
indicated.

Definition of concepts : The operational definitions of the key concepts of the study are presented here. i.e., various concepts or domains proposed to be used in a research requires to be stated. Definitions or special meanings of all important terms so as to enable the reader to understand the concepts underlying the investigation is to be indicated. How those concepts are defined by early writers and how the definition of the researcher were an improvement over earlier definition may be explained.

6. Why is a 'review of literature' included in a research report? What is its purpose?

Ans: Review literature : This is an important part of the introductory chapter. Here a brief review of previous studies on the problem and significant writings on the topic under study is stated. Thus it is summarising the current status of research work already done in the research area sought. Previous research studies are abstracted and significant writings of authorities in the area under study are review. Such a review provides a background for the development of the present study and makes the reader up to date. Brief summary indicating areas of agreement or disagreement in findings or gaps in existing knowledge should be included. How the research work is an attempt to fill that gap is highlighted in this part of the introduction.

7. What is Research methodology?

Ans: In this section, the overall typology of research used and the data collection methods employed are described. It also describes how the field work was carried out, the reliability of instruments selected and the statistical tools and procedures used in the analysis.

1. Sources of data:- The sources from which the primary and secondary data were gathered are stated. The limitations of secondary data also should be indicated.

2. Sampling plan:- The size of the universe from which the sample was drawn, the sampling methods adopted and the sample size and process of sampling are described in this section.

The estimate of sampling error and what were originally planned and what were achieved are also to be given. These details are essential for determining the limitations of the funding.

3. Data collection instruments:- The types of instruments used for data collection and their contents, scales and other devices used for measuring variables and the procedure of establishing their validity and reliability are described in this section.

4. Field work:- When and how the field work was conducted and what problems and difficulties were faced during the field work are described under this sub-heading. The description of field experience will provide valuable lessons for future researchers in organising and conducting their field work.

5. Data processing and analysis plan:- The method adopted for data processing and an account of methods used for data analysis and testing hypothesis must be out lined and justified. If common methods are used there is only a need to mention about them. But of an unusual method was used, sufficient details of them has to e described so as to enable the reader to understand it.

Chapterisation or the scheme of chapters in the main body of the thesis and their interrelationship is briefly described in this section in order to give an overview of the presentation of the results of the study.

All research designs have limitations and so do all research implementations .Such limitations may vitiate the conclusions and their generalisations. The sincere investigator faces these problems and he reports them carefully and honestly in the introduction itself. This will help the reader to judge the validity of the conclusions and the general worth of the study in the proper perspective.

Unit III

Preparation and Presentation of Research: Use of Diacritical Mark, Footnote and Endnote Referencing Styles: MLA and APA

1. What is MLA?

Ans: The Modern Language Association of America is often called the Modern Language Association (MLA). It is the principal professional association in the United States for scholars of language and literature. It began as a gathering of professors rebelling against the traditional college curriculum, which centred on classical languages such as Greek and Latin. The Modern Language Association was founded in 1883 and Aaron Marshall Elliott, an American novelist and professor at Johns Hopkins University who lived from 1844-1910, is considered the founder of the Modern Language Association. The MLA was founded as a discussion and advocacy group for the study of literature and modern languages, that is, all but classical languages, such as ancient Latin and Greek. According to its profile featured by the American Council of Learned Societies (ACLS), The Modern Language Association is formed for educational, scientific, literary, and social objects and purposes, and more specifically for the promotion of the academic and scientific study of English, German, French, Spanish, Italian, and other so-called modern languages and literature.

The MLA being steered by its membership, the Executive Council, and the Executive Director, supports the humanities community through engaging programmes, publications, the annual convention, and advocacy work. Its aim is basically to strengthen the study and teaching of language and literature. Initially,

MLA members established a journal for the publication of research in the field and organised an annual meeting to discuss scholarly and pedagogical issues. As the study of the modern languages grew increasingly important in both higher education and the schools, the MLA also grew.

2. Explain Some Variations in the MLA from the 8th Edition to the 9th Edition .

Ans: The Modern Language Association (MLA) establishes values for acknowledging sources used in a research paper. MLA citation style uses a simple two-part parenthetical documentation system for citing sources. Citations in the text of a paper point to the alphabetical 'works cited' list that appears at the end of the paper. Together, these references identify and credit the sources used in the paper and allow others to access and retrieve these materials.

The MLA has advanced from the 8th edition to the 9th edition with some variations on grammar, inclusive language especially racial or gender sensitive ones, expansion on endnotes and footnotes as well as new guidelines for annotated bibliographies. With reference to surnames when they are composed of more than one element, they can now be typically shortened to the last element. For example;

Full name Surname Used alone

James Fenimore Cooper Cooper

Daniel Defoe Defoe

Walter de la Mare de la Mare

Don DeLillo DeLillo

Thomas De Quincey De Quincey

W. E. B. Du Bois Du Bois

This 9th edition does not encourage the use of an apostrophe to form the plural of an abbreviation or a number such as:

i. PhDs

ii. 1960s

iii. fours

iv. TVs

The 9th edition of the MLA Handbook mentioned that the use of italics for emphasis should be sparingly since italics are used in prose to indicate when words and letters are referred to as ‘words and letters’ and to distinguish words in languages other than English. For example; the word albatross probably derives from the Spanish and Portuguese word Alcatraz (MLA Handbook, 2021).

On the use of capital letters for English-language terms, the Handbook emphasised capitalizing the following;

i. The first letter of the first word of a sentence

ii. The subject pronoun ‘I’

iii. The names and initials of persons (except for some particles)

iv. The names of months of the year and days of the week

v. Titles that immediately precede personal names (Senator McCain) but not a person’s title used alone (the senator, a professor of English)

vi. Proper nouns (Canada)

vii.Most adjectives derived from proper nouns (Canadian wildlife)

viii. Musical notes (middle C)

ix. Academic grades (I got a B in algebra)

Lowercase should be used for generic forms of proper nouns like;

i. The United States Army, (the army)

ii. President Kennedy, (the president)

iii. The Brooklyn Bridge, (the bridge)

iv. The Housatonic River, (the river)

The Handbook also stated that, in general, most persons’ names should be stated in full when they first appear in your prose and surnames alone given thereafter. Common sense sometimes dictates exceptions to this rule. Very famous persons, such as Cervantes and Shakespeare, may be referred to by their surnames only.

Some full names are very long and, by convention, rarely used- Hegel, for example, is rarely called Georg Wilhelm Friedrich Hegel. Dante Alighieri is conventionally referred to by his given name only. Considerations like clarity, consistency, the relative prominence of names in disciplines, and the desire to avoid the appearance of discrimination may argue for the inclusion or exclusion of first names in certain contexts. When you state someone's name fully, write the name as it appears in your source or in a reference work, including any suffixes, accent marks, and initials such as:

Henry Louis Gates, Jr. Ramón del Valle-Inclán

Do not change the name Henry Louis Gates, Jr., to Henry Louis Gates, or drop the hyphen or omit the accents in the name Ramón del Valle-Inclán. In subsequent uses, you may refer to a person by the surname only such as; Gates and del Valle-Inclán unless, of course, you refer to two or more persons with the same surname.

3. Explain in brief the history of Referencing.

Ans: This unit will give a brief history of style sheets and reference methods, explain the different purposes of referencing and list those information and items that require referencing. References give the list of consulted sources by a researcher and this enable the reader to identify with the original source of information.

Referencing gives validation, support and strength to the ideas used in the research, it shows the scope and depth of a research work as well as acknowledges the works of original contributors as a way of avoiding plagiarism.

In a properly researched essay, all borrowed ideas from published and unpublished sources should be acknowledged and referenced properly. When an author cites an earlier work, he or she usually gives a detailed bibliographic description of the work according to accepted conventions or style of the periodical. This may include the author or authors of the cited work, the title, journal or book title, volume, page and year. These can be grouped at the end of the document, or interspersed as footnotes at the bottom of each page. But because references are embedded in an author's text, references also characterise or comment on the prior text. Thus, references usually convey who authored the text, the source or where we can find it, and what it signifies to the citing author. Anthony Grafton is considered the first person to have carried out a history of academic footnoting as used in history. He sees footnotes as the rough equivalent of the scientist's report on data. He is of the opinion that footnotes offer the empirical support for stories told and without them, there will be no way of verifying the arguments being presented. He however stressed that the practise did not originate from science but from the ancient Christian tradition of documenting church history, as well as dating back to the ancient Greeks too. Grafton also noted that during the Enlightenment, also known as the Age of Reason, the footnote was particularly popular amongst writers of fiction as well as historians (Grafton, 1997: 168).

Eli Chernin noted that the first parenthetical reference occurred in an 1881 paper about slugs written by Harvard zoologist Edward Laurens Mark. Mark, he said, was recognised for this innovation during a 1903 festschrift book and/or event which honours the work of an academic while they are still alive. Although Mark's use of the system was new, it appears to have been an adaptation of a cataloguing system at Harvard's Ernst Mayr Library of the Museum of Comparative Zoology, founded in 1861 by Louis Agassiz (Chernin, 1988).

Henry Small noted that the collected works of Aristotle comprise some 40 or so books covering over 2,000 pages. He acknowledged that, although there is no way of knowing for certain all the books or treatises he wrote, however, the study of these texts provides insights into what might be considered early reference practice. He stated that Aristotle's writings were influential in the subsequent centuries and were critical for the development of science in Europe. A tally of the indexing entries in the revised Oxford translation of Aristotle's works in 1985 shows that numerous authors are mentioned in the texts and the frequency of entries follow the familiar skewed distribution. In the work, it was noted that there was the predominance of what we now refer to as self-citations, or in this case more properly self-mentions. Only his mentor Plato receives a comparable number. Usually, these self-references are simply pointers to other places in his writings where some issue is discussed in greater detail, as in: 'this has been done with great precision elsewhere (Small, 2010).

Henry Small also noted that by the 17th century and what has been called the scientific revolution, we find the beginnings of the modern scientific ethos, with the formation of scientific societies, the invention of scholarly journals, priority disputes, and claims of intellectual ownership. During this period, Isaac Newton was the main figure and was someone who had an extremely strict sense of ownership of ideas as he was becoming entangled in several bitter priority disputes. But, by the time of Charles Darwin, referencing had been transformed from having authors names mentioned and occasional sources embedded in the text, to footnotes at the bottom of the page with complete source information and pagination. However, we do not find a single footnote in Darwin's magnum opus. The Origin of Species published in 1859. In fact, Origin is his only publication that did not contain footnotes (Small, 2010).

4. What is referencing in research?

Ans: A research without references or with inadequate ones, falls below the required standard for scholarship and will not be taken seriously. So, references are meant to serve different purposes such as;

i. Persuading the reader that sufficient work has been done by the writer to make their case.

ii. Giving credit where credit is due, that is, acknowledging where ideas and information have come from. This is necessary because, new ideas, theories, and discourses do not emerge from nowhere but, from somewhere.

iii. Providing roadmaps to the relevant literature.

Referencing a research work is an indication that the researcher is not the first person to engage in that project or subject matter, and that he or she is using other people's ideas to build a new one. Therefore, people could track those references to learn more about a particular point you have made. Murali Prasad is of the view that references clearly distinguish a researcher's ideas and arguments from existing research. References give the list of consulted sources by a researcher and enable the reader to refer to the original source of information. They give validation, support and strength to the ideas of present research and show the scope and depth of a research work as well as acknowledge the works of original contributors as a way of avoiding plagiarism (Prasad, 2017).

Other purposes of references include:

i. Being seen within particular scholarly communities for the purposes of

networking.

ii. Establishing the validity of research claims

iii. Providing a methodology for working with data,

iv. Providing sources and ways of working with data

v. Building credibility and reputation for the author,

vi. Providing support and rebuttal,

vii. Establishing proprietary claims on ideas and discoveries,

viii. Building coalitions and oppositions among colleagues

ix. Securing institutional and political support of their opponents

x. Accurate references enable the reader to go back and check the exact sources and the evidence that led you to your conclusions.

Giving credit to the original author by citing sources is the only way to use other peoples' work without plagiarizing. But there are a number of other reasons to cite sources such as:

i. They are helpful to anyone who wants to find out more about your ideas

ii. Proper citation saves a person from taking the blame for someone else's bad

ideas

iii. It shows the amount of research that have gone into the work

iv. It strengthens your work by lending outside support to your ideas

Information that Require References

Sometimes, people get confused about the kind of information they need to reference. As have been said earlier in this unit, any idea that is not yours must be acknowledged by way of referencing. These ideas are not only found in printed books, they are documented in several other means such as:

i. Books and journal articles

ii. Newspapers and magazines

iii. Pamphlets or brochures

iv. Films, documentaries, television programs or advertisements

v. Websites or electronic resources

vi. Letters, emails, online discussion forums

vii. Personal interviews

viii. Lecture Notes in some cases

ix. Reports

x. Government publications

xi. Gazetteers

xii. web pages

xiii. e-publications

It should be noted as well that reference is required for unpublished information sources like:

i. Thesis

ii. Dissertations

iii. Monographs

iv. project reports

v. Copied or quoted exact words or phrases of others

vi. Figures

vii. Tables

viii. Diagrams

ix. Pictures

x. Paraphrased or summarized ideas, facts or works of others (Prasad, 2017).

It should be noted as well that there are instances where referencing may not be required. Examples of such include;

i. When writing your own observations or experiment results

ii. When writing about your own experiences

iii. When writing your own thoughts, comments or conclusions

iv. When evaluating or offering your own analysis

v. When using common knowledge, that is, facts that can be found in numerous places and are likely to be known by a lot of people

vi. When using generally accepted facts or information.

5. What do you mean by The MLA (Modern Language Association) Style Sheet

Ans: The MLA has a template for referencing as listed below. To use the template, record the publication information given by the version of the work you consult by first evaluating the work you are citing to see which elements apply to the source. Then, list each element relevant to your source in the order given on the template. Omit any element that does not apply except 'Title of Source'. If no title is given, use your own description of the work as the title. Conclude each element with the punctuation mark shown in the template, but always end your entry with a period (full stop).

Template

- Author.
- Title of Source,
- Title of Container,
- Contributor,
- Version,
- Number,
- Publisher,
- Publication Date,
- Location.

AUTHOR

In the Author element, list the primary creator of the work you are citing. In the example below, Toni Morrison wrote the novel Song of Solomon and is therefore its author: Morrison, Toni. Song of Solomon. Vintage, 2004. The author of a work can be a writer, artist, or any other type of creator. The author can be an individual, a group of persons, an organisation, or a government. Some examples of authors are the author of a play, such as Euripides; the author of an essay, such as Benjamin Franklin; a painter, such as Berthe Morisot; a music group, such as the Beatles; and an intergovernmental body, such as the United Nations. Include pseudonyms, stage names, online usernames, and the like in the Author element, especially if the person is well known by that form of the name (e.g., Stendhal, Mark Twain, and Lady Gaga). Sometimes a label must be used to describe the role of the person or persons listed in the Author element. This most often occurs when the person is not the primary creator, such as for editors of collections of essays written by various authors, since editors shape the content of the volume. In the example below, Olusegun Oladipo is the editor of the book, not the writer of all the essays, so his name is followed by the label editor: Olusegun Oladipo, editor. Core Issues in African Philosophy. Hope Publications, 2006.

Single Author

Baron, Naomi S. "Redefining Reading: The Impact of Digital Communication Media." PMLA, vol. 128, no. 1, Jan. 2013, pp. 193–200.

Two Authors

Dorris, Michael, and Louise Erdrich. The Crown of Columbus. Harper Collins Publishers, 1999.

Gilbert, Sandra M., and Susan Gubar, editors. The Female Imagination and the Modernist Aesthetic. Gordon and Breach Science Publishers, 1986.

Three or More Authors

Charon, Rita, et al. The Principles and Practice of Narrative Medicine. Oxford UP, 2017.

Government Authors

U.S. Department of Labor. Occupational Outlook Handbook, 2014–2015. Skyhorse Publishing, 2014.

Online Handles

Fogarty, Mignon [@GrammarGirl]. "Every once in a while, that Gmail notice asking if you meant to reply to a 5-day-old message is quite helpful." Twitter, 13 Feb. 2019, twitter.com/GrammarGirl/status/1095734401550303232.

TITLE OF SOURCE

In the Title of Source element, list the title of the work you are citing. In the example below, Insurrecto is the title of a novel by Gina Apostol. Apostol, Gina. Insurrecto. Soho Press, 2018. If the work does not have a title, provide a concise but informative description of the work. For example;

Advertisement for Upton Tea Imports. Smithsonian, Oct. 2018, p. 84.

Tweet

Chaucer Doth Tweet [@LeVostreGC]. “A daye wythout anachronism ys lyke Emily Dickinson wythout her lightsaber.” Twitter, 7 Apr. 2018, twitter.com/LeVostreGC/status/982829987286827009.

A Non-textual Part of the Post such as a Photograph Hughes, Langston. “I look at the world.” Poetry Foundation, www.poetryfoundation.org/poetrymagazine/poems/52005/i-look-at-the-world. MacLeod, Michael.

A Video

Cover of Space Cat and the Kittens, by Ruthven Todd. Pinterest, 2020, www.pinterest.com/pin/565412928193207246/. Wilson, Rebel. Video of tireflipping exercise. Snapchat, 14 July 2020, www.snapchat.com/add/rebelwilsonsnap.

Quoted Text in Place of a Title

When using text from the work itself to identify an untitled work, use the first line of the work (as for a poem), the full text (exactly as it appears in the source) if it is very short, or a short introductory fragment. Enclose the quoted text in quotation marks and conclude it with a period, placed inside the final quotation mark. Reproduce the text as written, styled, and capitalised in the source. For example;

Dickinson, Emily. “I heard a Fly buzz—when I died—.” The Poems of Emily Dickinson, edited by R. W. Franklin, Harvard UP, 1999, pp. 265–66.

Persiankiwi. “We have report of large street battles in east & west of Tehran now - #Iranelection.” Twitter, 23 June 2009, twitter.com/persiankiwi/status/2298106072.

Wyatt, Thomas. “They flee from me, that sometime did me seek.” The Columbia Anthology of British Poetry, edited by Carl Woodring and James Shapiro, Columbia UP, 1995, p. 30.

PUBLISHER

The publisher is the entity primarily responsible for producing the work or making it available to the public. In the example below, Oxford University Press is the publisher of the book “Who Set You Flowin’?” The African-American Migration Narrative. Griffin, Farah Jasmine. “Who Set You Flowin’?” The African-American Migration Narrative. Oxford UP, 1996.

PUBLICATION DATE

The Publication Date element tells your reader when the version of the work you are citing was published. In the example below, 2018 is the publication date of the novel There There.

Orange, Tommy. There There. Alfred A. Knopf, 2018.

In addition to an actual date of publication, this element may include the following:

The date of composition for unpublished material (such as letters)

The date of revision or upload if that is more pertinent (e.g., the date a wiki post was last updated rather than the date it was started)

The label forthcoming for works not yet published

The date on which a source was viewed or heard firsthand (e.g., the date that you attended the performance of a play)

The Publication Date element may include one or more of the following components:

A year

A day and month

A season

A time stamp

A range of dates or years

Works may be associated with more than one publication date. You should record the publication date provided by the version of the source you consult.

JOURNAL ARTICLES

If you are citing a print article, you can usually find the date on the title page of the journal or in the header or footer of the article. For example;

Riddle, Julie. "Shadow Animals." The Georgia Review, vol. 67, no. 3, fall 2013, pp. 424– 47.

If you access a digitised version of the print article online, you can usually find the date in the publication information supplied by the website or on a cover sheet accompanying the PDF download. Such as;

Riddle, Julie. "Shadow Animals." The Georgia Review, vol. 67, no. 3, fall 2013, pp. 424–430 JSTOR, www.jstor.org/stable/43492249.

Dissertations and theses

The institution conferring the degree and the type of thesis or dissertation (BA, MA, or PhD) are essential to defining the work and should appear as a final supplemental element.

Njus, Jesse. Performing the Passion: A Study on the Nature of Medieval Acting. 2010. Northwestern University, PhD dissertation.

Television Episodes

The publication date for a television episode you access through a streaming service or website can generally be found on the page from which you download the episode. For example;

“The Final Problem.” Sherlock, created by Steven Moffat and Mark Gatiss, season 4, episode 3, BBC, 15 Jan. 2017. Masterpiece, WGBH Educational Foundation, 2019, www.pbs.org/wgbh/masterpiece/episodes/sherlock-s4-e3/.

“Manhattan Vigil.” Directed by Jean de Segonzac. Law and Order: Special Victims Unit, created by Dick Wolf, season 14, episode 5, Wolf Films, 24 Oct. 2012. Netflix, www.netflix.com.

Attention should also be given to the following;

Year

If your source presents roman numerals for the year, convert them to arabic numerals (e.g., MCMXCII in the credits of a television show should appear as 1992 in your entry). If a range is needed, style it as you would in prose.

Season

Lowercase seasons of the year when they are part of a publication date in the works-cited list, just as you would in prose. Example is;

Belton, John. “Painting by the Numbers: The Digital Intermediate.” Film Quarterly, vol. 61, no. 3, spring 2008, pp. 58–65.

TIME

When a time is given and helps define and locate the work, include it. Times should be expressed in whatever form you find them in the source: the twelve-hour-clock form (2:00 p.m.) or the twenty-four-hour-clock form (14:00). Include time zone information when provided and pertinent.

Max the Pen. Comment on “Why They’re Wrong.” The Economist, 29 Sept. 2016, 6:06 p.m.www.economist.com/node/21707926/comments.

LOCATION

How to specify a work’s location depends on the format of the work. For paginated print or similar fixed-format works (like PDFs) that are contained in another work (e.g., an essay in a print anthology or the PDF of an article in a journal), the location is the page range.

Copeland, Edward. “Money.” The Cambridge Companion to Jane Austen, edited by Copeland and Juliet McMaster, Cambridge UP, 1997, pp. 131–48.

Soyinka, Wole. “Twice Bitten: The Fate of Africa’s Culture Producers.” PMLA, vol. 105, no. 1, Jan. 1990, pp. 110–20.

Numerals for Page Numbers

Use the same numeric symbols for page numbers that your source does (e.g., arabic, roman, alphanumeric) and the same case, whether lowercase roman numerals (i, ii, iii), uppercase roman numerals (I, II, III), or upper- or lowercase alphabetic letters (A1, 89d). Such as;

Felstiner, John. Preface. Selected Poems and Prose of Paul Celan, translated by Felstiner, W. W. Norton, 2001, pp. xix–xxxvi.

Magra, Iliana, and Andrea Zaratemay. "Hikers' Love of a Rarity in the Andes Takes a Toll." The New York Times, 3 May 2018, p. A7.

6. Write briefly the history of APA (American Psychological Association) Style Sheet.

Ans: Several studies have shown that citations in scientific works do far more than identify the originators of ideas and the sources of data. Grafton noted that citations reflect the intellectual styles of different national scientific communities, the pedagogical methods of different graduate programs, and the literary preferences of different journal editors. He is of the view that citations in scientific works regularly refer not only to the precise sources of scientists' data, but also to larger theories and theoretical schools with which the authors wish or hope to be associated (Grafton, 1999: 12-13; See also https://www.academia.edu/799204).

Paul Price et.al noted that, APA style is a set of guidelines for writing in psychology and related fields, insisting that the guidelines are set down in the Publication Manual of the American Psychological Association. This Publication Manual as we stated in the introduction of this unit, originated in 1929 as a short journal article that provided basic standards for preparing manuscripts to be submitted for publication. It was later expanded and published as a book by the association. The primary purpose of the APA style is to facilitate scientific communication by promoting clarity of expression and by standardising the organisation and content of research articles and book chapters. It is easier to write about research when you know what information to present, the order in which to present it, and even the style in which to present it.

Likewise, it is easier to read about research when it is presented in familiar and expected ways (Price, Jhangiani, and Chiang). The APA format uses relatively loose language in describing the circumstances for including the page numbers in in-text citations. In particular, the incorporation of page numbers in in-text citations is limited to direct quotations alone. However, it lacks the documentation of page numbers for summaries and paraphrases in the APA referencing. In this case, the wording of this guideline suggests that the inclusion or exclusion of page numbers for summaries and paraphrases is not mandatory. Besides direct quoting, people do not practice the provision of page numbers in other instances of in-text citations.

7. What are the features of APA (American Psychological Association) Style Sheet

Ans: It is understandable that in referencing, not every sentence has to be cited. Nevertheless, we cannot lift someone's ideas without proper acknowledgment of the author. As a fact, if a person fails to do so, such will be accused of plagiarism. Therefore, one has to understand what has to be cited first. Also, the APA citation format provides the exact guidelines on how the APA citation has to acknowledge the author. In like manner, when you summarise someone's ideas, it is advisable to always put the parenthesis at the end of the sentences with full acknowledgment of the author. People usually mistakenly think that when they read something and then write a summary of what they read, it must not be cited. However, the summary assumes that you provide zero personal analysis and just state a summary of ideas you had not to deal with. Therefore, you must cite such ideas. Some examples of APA In-Text Citations as adapted from 'APA Style Reference

Citations Library' are listed below:

Samples of APA In-Text Citations

If author's name occurs in the text, follow it with year of publication in parentheses. Example:

Piaget (1970) compared reaction times...

If author's name is not in the text, insert last name, comma, year in parenthesis. Example:

In a recent study of reaction times (Piaget, 1978)…

If author's name and the date of publication have been mentioned in the text of your paper, they should not be repeated within parentheses. Example:

In 1978, Piaget compared reaction times...

Because material within a book or on a web page is often difficult to locate, authors should, whenever possible, give page numbers for books or paragraph numbers for web pages in body to assist readers. Page numbers (preceded by p. or pp.) or paragraph numbers (preceded by ¶ or para.) follow the year of publication, and are separated from it by a comma. For websites with neither page numbers nor paragraph numbers, cite the heading and the number of the paragraph following it.

Examples:

Hunt (1974, pp. 25-69) confirms the hypothesis... (Myers, 2000: 5) (Beutler, 2000, Conclusion section, para. 1)

If a work has two authors, always cite both names every time the reference occurs in the text. Connect both names by using the word "and." Examples:

Piaget and Smith (1972) recognize... Finberg and Skipp (1973, pp. 37-52) discuss...

If a work has two authors and they are not included in the text, insert within parentheses, the last names of the authors joined by an ampersand (&), and the year separated from the authors by a comma. Examples:

...to organise accumulated knowledge and order sequences of operations (Piaget & Smith, 1973) ...to organise accumulated knowledge and order sequences of operations (Piaget & Smith,1973, p. 410)

If a work has more than two authors (but fewer than six), cite all authors the first time the reference occurs; include the last name of the first author followed by "et al." and the year in subsequent citations of the same reference. Example:

First occurrence: Williams, French and Joseph (1962) found... Subsequent citations: Williams et al. (1962) recommended...

Quotations: Cite the source of direct quotations by enclosing it in parentheses. Include author, year, and page number. Punctuation differs according to where the quotation falls.

If the quoted passage is in the middle of a sentence, end the passage with quotation marks, cite the source in parentheses immediately, and continue the sentence.

Example:

Many inexperienced writers are unsure about "the actual boundaries of the grammatical abstraction called a sentence" (Shaughnessy, 1977, p. 24) or about which form of punctuation they should use.

If the quotation falls at the end of a sentence, close the quotation with quotation marks, and cite the source in parentheses after the quotation marks. End with the period outside the parentheses. Example:

Fifty percent "of spontaneous speech is estimated to be non-speech" (Shaughnessy, 1977, p. 24). If the quotation is longer than forty words, it is set off without quotations marks in an indented block (double spaced). The source is cited in parentheses after the final period. Example:

This is further explained by Shaughnessy's (1977) following statements: In speech, pauses mark rates of respiration, set off certain words for rhetorical emphasis, facilitate phonological maneuvers, regulate the rhythms of thought and articulation and suggest grammatical structure. Modern punctuation, however, does not provide a score for such a complex orchestration. (p. 24)

If citing a work discussed in a secondary source, name the original work and give a citation for the secondary source. The reference list should contain the secondary source, not the unread primary source. Example:

Seidenberg and McClelland's study (as cited in Coltheart, Curtis, Atkins, & Haller, 1993)

8. Explain the APA (American Psychological Association) Style Sheet.

Ans: Examples of Items in a Reference List

Although the format for books, journal articles, magazine articles and other media is similar, there are some slight differences. Items in a reference list should be double- spaced. Also, when using hanging indents, entries should begin flush left with subsequent lines indented. Reference formats as adapted from ‘APA Style Reference Citations Library’ are listed below.

BOOKS:

One Author:

Castle, E. B. (1970). The teacher. London: Oxford University Press.

Two Authors:

McCandless, B. R., & Evans, E. D. (1973). Children and youth: Psychosocial development. Hinsdale, IL: Dryden Press.

Three or More Authors:

(list each author) Smith, V., Barr, R., & Burke, D. (1976). Alternatives in education: Freedom to choose. Bloomington, IN: Phi Delta Kappa, Educational Foundation.

Society, association, or institution as author and publisher:

American Psychiatric Association. (1980). Diagnostic and statistical manual of mental disorders (3rd ed.). Washington, D.C.: Author.

Editor or Compiler as Author:

Rich, J. M. (Ed.). (1972). Readings in the philosophy of education (2nd ed.). Belmont, CA: Wadsworth.

Chapter, essay, or article by one author in a book or encyclopedia edited by another:

Medley, D. M. (1983). Teacher effectiveness. In H. E. Mitzel (Ed.), Encyclopedia of educational research (Vol. 4, pp. 1894-1903). New York: The Free Press.

JOURNAL ARTICLES:

One Author:

Herrington, A. J. (1985). Classrooms as forums for reasoning and writing. College Composition and Communication, 36(4), 404-413.

Two Authors:

Horowitz, L. M., & Post, D. L. (1981). The prototype as a construct in abnormal psychology. Journal of Abnormal Psychology, 90(6), 575-585.

Society, Association, or Institution as Author: Institute on Rehabilitation Issues. (1975). Critical issues in rehabilitating the severely handicapped. Rehabilitation Counseling Bulletin, 18(4), 205-213.

NEWSPAPER ARTICLES:

No Author:

More jobs waiting for college grads. (1986, June 17). Detroit Free Press, pp. 1A, 3A.

MAGAZINES:

One Author:

Powledge, T. M. (1983, July). The importance of being twins. Psychology Today, 19, 20- 27.

No Author:

CBS invades Cuba, returns with Irakere: Havana jam. (1979, May 3). Down Beat,

MICROFORMS:

ERIC report:

Plantes, Mary Kay. (1979). The effect of work experience on young men's earnings. (Report No. IRP-DP-567-79). Madison: Wisconsin University. Madison Institute for Research on Poverty. (ERIC Document Reproduction Service No. ED183687)

ERIC Paper Presented at a Meeting:

Whipple, W. S. (1977, January). Changing attitude through behaviour modification. Paper presented at the annual meeting of the National Association of Secondary School Principals, New Orleans, LA. (ERIC Document Reproduction Service No. ED146500)

AUDIOVISUAL MEDIA AND SPECIAL INSTRUCTIONAL MATERIALS:

This category includes the following types of non-book materials:

Audio record, Flashcard, Motion picture, Video recording, Slide, Kit, Chart, Game Picture, Transparency, Realia, Filmstrip. A bibliographic/reference format for these non-print materials is as follows:

Author's name (inverted.----Author's function, i.e., Producer, Director, Speaker, etc. in parentheses.----Date of publication in parentheses----Title.----Medium in brackets after title, [Filmstrip]. HOWEVER, if it is necessary to use a number after a medium for identification or retrieval purposes, use parentheses instead of brackets, e.g., (Audio record No. 4321). Place of publication: Publisher.

Maas, J. B. (Producer), & Gluck, D. H. (Director). (1979). Deeper in hypnosis [Motion Picture]. Englewood Cliffs, NJ: Prentice-Hall.

ELECTRONIC MEDIA:

Materials available via the Internet include journals, newspapers, research papers, government reports, web pages, etc. When citing an Internet source, one should:

Provide as much information as possible that will help readers relocate the information. Also try to reference specific documents rather than web pages when possible. Give accurate, working addresses (URLs) or Digital Object Identifiers. References to Internet sources should include at least the following four items:

A title or description

A date (either date of publication or date of retrieval)

An address (URL) or Digital Object Identifier An author's name, if available

In an effort to solve the problem of changed addresses and broken links, publishers have begun to assign Digital Object Identifiers (DOI) to documents, particularly to scholarly journal articles. DOIs should be used in reference lists when they are available. A DOI may be pasted into the DOI Resolver at http://www.crossref.org/ to confirm a citation. For journal articles, if no DOI is available, a database name or URL may be added to make it particularly easy to find publications. Since journal articles, unlike many web pages, are unlikely to change, a retrieval date is not necessary. Electronic book citations only need source information when the book is difficult to find or only available electronically.

Internet article based on a print source (exact duplicate) with DOI assigned:

Stultz, J. (2006). Integrating exposure therapy and analytic therapy in trauma treatment. American Journal of Orthopsychiatry, 76(4), 482-488. doi:10.1037/0002-9432.76.4.482

Article in an Internet only Journal with no DOI Assigned:

Sillick, T. J., & Schutte, N. S. (2006). Emotional intelligence and self-esteem mediate between perceived early parental love and adult happiness. E-Journal of Applied Psychology, 2(2), 38-48. Retrieved from http://ojs.lib.swin.edu.au/index.php/ejap/article/view/71/100

Daily newspaper article, electronic version available by search: Botha, T. (1999, February 21). The Statue of Liberty, Central Park and me. The New York Times. Retrieved from http://www.nytimes.com

Webpage: Raymon H. Mulford Library, The University of Toledo Health Science Campus. (2008). Instructions to authors in the health sciences. Retrieved June 17, 2008, from http://mulford.mco.edu/instr/

Annual report: Pearson PLC. (2005). Reading allowed: Annual review and summary financial statements 2004. Retrieved from

Unit IV

Methods of Acquiring Knowledge: Dialectical Method, Empirical – Scientific Method, Hermeneutical – Interpretative Method

1. What is the meaning of dialectic?

Ans: The term 'dialectic' is said to have originated with the Greek philosopher Plato who wrote dialogues featuring his famous teacher Socrates. These dialogues introduce a conception of dialectic as a method of question-and-answer argumentation. Plato may have invented the term dialectic as we said earlier, but it is important to note that it was his student, Aristotle, who first presented a theory and methodology of dialectic in an organised form. According to Amber, in Aristotle's time, argumentative competitions or what Kullmann refers to as 'academic gymnastical disputes' were commonplace among the intellectual elites of ancient Greece. For Aristotle, dialectic is simply the skilful argumentation of contrary opinions represented by a thesis and antithesis (Samson, 2019). The German philosopher Immanuel Kant was one of those who later resurrected the term with his Transcendental Dialectic, which later became a great inspiration to Fichte and Hegel who developed the three-stage dialectical movement from thesis to antithesis to synthesis. Hence, Karl Popper's definition of dialectic as a theory maintains that something – for instance, human thought – develops in a way characterised by the so-called (dialectic) triad of thesis, anti-thesis, and synthesis (Popper, 2002: 421). When related to the history of ideas, dialectics is a method that refers to the process where history moves forward to a particular end goal. This movement happens in two ways: negating the negativity and uniting the oppositions. Throughout history, ideas and ideas interact with each other to form differences and conflicts, which constitute a development of history from on stage to another. In order to resolve a conflict, a synthesis emerges to combine the best parts of these contradictory ideas and also abandon the worst parts. As a result, history elevates to meet new levels through the process of negating the negativity between two or more conflicting concepts and uniting them into a more complete one. From this understanding of dialectics, the definition or meaning we give to concepts and ideas are merely useful as an initial starting point. The processes of re-conceptualisation of such concepts and ideas are the kernel or more important aspects of a dialectical process. In what follows, we shall examine the dialectics of Socrates, Hegel and Marx, after first looking at dialectics as a philosophical method.

2. Explain Dialectics as a Philosophical Method .

Ans: Dialectics as a philosophical method is a term that is used to describe a system philosophical argument that involves some kind of contradictory process between opposing sides. Dialectics as a philosophical method is used to study things in their own being and movement via the connection of opposites. In other words, dialectics involves an interplay of opposites and a study of complex types of connections. It is closely connected to the ideas of Socrates and Plato where Plato's famous dialogues often presented Socrates playing a leading role in conversations. Conversation or dialogue was at the heart of the Socratic dialectical method. Through this method, Socrates would ask probing questions that cumulatively revealed his students' unsupported assumptions and misconceptions. The goal was to elicit a clear and consistent expression of something supposed to be implicitly known by all rational beings. The dialectical method, in the modern sense, derives from the work of Hegel (1770-1831), who aimed at critically synthesising rationalism and empiricism. Both rationalism and empiricism conceive the world in terms of a subject–object or thought–reality dualism, and both reduced the foundation of knowledge to one of these poles.

Hegel's project was to transcend the one-sidedness of these philosophies; that is, to overcome the dichotomy between rationalism and empiricism without losing sight of them. It is pertinent to state the Hegel shares this aim of reconciling rationalism and empiricism with another German philosopher, Immanuel Kant (1724-1804). However, Kant's philosophy in this regard, is considered insufficient in dealing with the dichotomy of rationalism and empiricism, because it does not overcome dualism. Rather, it separates the form of knowledge from the content of knowledge, as it postulates a 'thing in itself' which we cannot know and a 'thing as it appears to us' which is knowable.

In present times, dialectics is in fact a family name for a variety of strands. The two main strands are historical dialectic and systematic dialectic. The first, which applies to the study of society and its philosophy, arts and science – or, more specifically, society and its historical emergence, is most popularly stressed by scholars, partly because of Marx's historical materialist view of society, and Hegel's work on the philosophy of history (Hegel, 1837).

3. What is the meaning of hermeneutics?

Ans: From its semantic history, the word, 'hermeneutics,' derives from the name of the Greek god, 'Hermes', who is considered in Greek mythology to be the messenger of the gods. In this vein, it was the practice that to correctly discern a divine message, one needed is to clearly understand Hermes' words. Hermeneutics, in this sense, would therefore refer to proper interpretation and understanding. By this, reference is made to the interpretation of phenomena as signs (Noorderhaven 2008: 8). "Signs can be understood if we can reconstruct, make our own, and appropriate the meaning that the signs have to its author" (Noorderhaven 2008: 8).

This, essentially speaking, means that effort is made to integrate the sign that we want to understand within our own semiotic horizon; that is, the general, more or less coherent system of signs that form our worldview (Grondin 1994: 5). Interpretation in hermeneutics, therefore, has to do with entering into a 'dialogue' between the worldview of the self and that of the other. This process usually starts somewhere, somehow, from a position that is more often than not, based on insufficient knowledge of the phenomenon studied (Noorderhaven 2008: 9). Gadamer uses the word 'prejudice', but not in the conventional pejorative sense. A prejudice, for Gadamer, is nothing more or less than a prejudgment made at the beginning of the dialogue. As our prejudices are confronted in more and more depth with the phenomenon we try to understand, we see which of them are misguided and have to be altered (How 1995: 47-48). Interpreting the product of the human mind involves a fusion of horizons – the horizon of the interpreter and that of the individual whose product we try to understand. This fusion is made possible only if, from the start, there is some overlap, some common ground (Noorderhaven 2008: 9). The possibility that different horizons can be fused lies in the fact that they are implicitly joined "in the depth of tradition" (Shusterman 1989: 217). What we are led to from the foregoing is that we always start from prejudices. And the fact that we always start from prejudices implies that we are always subjective. It is this subjectivism that creates in the complexity of the human mind the challenge that the science of hermeneutics is meant to resolve.

Hermeneutics, therefore, as the study of interpretation, plays a crucial role in a number of disciplines whose subject-matter demands interpretative approaches. That is, disciplines whose subject-matter concerns issues like the meaning of human intentions, beliefs, and actions, or the meaning of human experience, as it is preserved in the arts and literature, historical testimony, and other artefacts. Among such disciplines are Theology, Jurisprudence, Medicine, as well as some of the human sciences, social sciences, and humanities. Little wonder Grondin (1994: 1) described hermeneutics as an "auxiliary" study of the arts, methods, and foundations of research appropriate to a respective disciplinary subject-matter. For example, in theology, Biblical hermeneutics concerns the general principles for the proper interpretation of the Bible. Within philosophy, however, hermeneutics typically signifies, first, a disciplinary area and, second, the historical movement in which this area has been developed.

As a disciplinary area, and on analogy with the designations of other disciplinary areas (such as 'the philosophy of mind' or 'the philosophy of art'), hermeneutics might have been named 'the philosophy of interpretation.' Hermeneutics thus treats interpretation itself as its subject-matter and not as an auxiliary to the study of something else. Philosophically, hermeneutics, therefore, concerns the meaning of interpretation – its basic nature, scope and validity, as well as its place within and implications for human existence; and it treats interpretation in the context of fundamental philosophical questions about being and knowing language and history, art and aesthetic experience, and practical life.

4. Explain Hermeneutics as a philosophical method.

Ans: In its historical perspective, the reference to hermeneutics as a method for interpreting the text, especially biblical texts, dates back, at least, to some 300 years (Grondin 1994: 2). Hermeneutics understood as a methodology which is usually referred to as "philosophical hermeneutics", is of much recent origin, and is identified with the work of 20th century philosophers Martin Heidegger, Hans-Georg Gadamer, and Paul Ricoeur (Noorderhaven 2008: 8). In its original understanding, hermeneutics is meant to offer the sciences of the human mind (the humanities, such as philosophy, art, history) an alternative to the logical empiricism of the natural sciences. In the natural sciences, hypotheses are known to be arrived at by means of the rules of logical inferences and tested against relevant data. This is with the aim of identifying general regularities or what is referred to as 'covering laws'. This model was understood as unfit for the science of the human mind (Noorderhaven 2008: 9). In the study of history, for example, the aim is not to discover general laws, which is seen as impossible given the overt unpredictability of historical events and circumstances, but rather to interpret history in such a way that it can be understood.

The primary function of hermeneutics as a method is to stress the interpreter's relation to the interpreted and the understanding that arises out of that relation. In this vein, hermeneutics emphasises the act of mediation between an interpreter and the interpreted. Interpretation is an act, that if successful, produces understanding. In other words, the task of interpretation is to understand that, which is to be interpreted. To produce an interpretation is to come up with an understanding of the interpreted (Silverman 1994: 11). Interpretation itself is a new and unique production of work; it is not merely a specular reproduction of what is being interpreted. According to Gallagher (1992), interpretations never simply repeat, copy, reproduce or restore the interpreted in its originality. Interpretation produces something new and this original insight gives meaning and understanding to the interpreter. A unique characteristic of hermeneutical inquiry is that it accords priority to questioning, which results in a persistent search for questioning about meaning. These questions resist easy answers or solutions. There is a search for finding the genuine question, but in finding the genuine question it must be recognised that there may be genuine questions but never final or closed ones.

A distinctive feature of hermeneutics is that this form of inquiry remains open-ended and ambiguous. "A genuine question is more important than settling finally on solutions or answers" (Smits 2001). Hermeneutics as a research method, if it is to remain true to its philosophical origins, involves reappraisal and reinterpretation in relation to its cultural contexts.

What is distinctive about philosophical hermeneutics, however, is the ontological grounding of interpretation that calls into play, in Gadamer's (1960/2004) terms, our prejudices and historically-effected consciousness. By the fact of our being-in-the-world, we are already seeing the world as something – we have a perspective.

The task in the use of hermeneutics as a method is to align this perspective with the appropriate cultural resources to enable us to "see what is going on" in the world (Caputo 2006: 57). This requires an understanding of the role of interpretation as a method in research. It is instructive to note, in this vein, that interpretation in the hermeneutic tradition also draws on a profound sense of the place of language as mediating our being-in-the-world. Gadamer wrote that, "the light that causes everything to emerge in such a way that it is evident and comprehensible in itself is the light of the word [language]" (Gadamer 1960/2004: 478). This view of language as inherently interpretive and self expressive presses back against the objectification of words as entities to be counted, and means that forms of thematic analysis have to be approached with care. For philosophical hermeneutics, language is interpretive.

The challenge of research inspired by the hermeneutical method is to articulate a meaningful and useful alignment of the infinite possibilities of individual experiences and cultural and historical interconnections on which a particular research focuses. A way to address this is that hermeneutics proposes “a return to the essential generativity of human life, a sense of life in which there is always something left to say, with all the difficulty, risk, and ambiguity that such generativity entails” (Jardine 2000: 120). In this sense, hermeneutics as a research approach grants a hearing to those living in important, complicated relationships and offers possibilities of reinvention. Likewise, it is open to the voices of other strands of thought, other cultures and ways of viewing the world, and seeks to do them justice in understanding and, ending where it begins, in practice. It is important to note in this regard that hermeneutics developed from a philosophical practice into a research practice and has proven to be of value in disciplines whose research involves practical questioning and applicability. Indeed, the attendant complexities surrounding its status as a method and its functioning as a methodology, far from being arguments against its application in research, are testament to its vitality. From its tradition, hermeneutics in its various iterations has brought much to the table regarding understanding and meaning which is constructed in the quest for truth. From ancient times, hermeneutics has allowed scholars to more fully understand the world which we inhabit. It provides a fuller, richer meaning to the questions that emerge from honest inquiries into what is true.

Unit V

Research Ethics : Ethical Guidelines in Research
Publication Ethics: Falsification, Fabrication and Plagarism

1. How to avoid plagiarism?

Ans: When drafting the manuscript, authors refer to published/unpublished work to draw upon ideas or to support their statements. However, researchers often end up in plagiarism trap intentionally or accidentally.

Plagiarism is defined as an unethical practice of using someone else's work, ideas, data, concept, words, methods, images, etc. without proper acknowledgment and presenting them as their own. It is a serious misconduct and professional infarction. Therefore, it is important to give appropriate credit to the author or the source.

The severity and extent of plagiarism can vary and can fall under the following categories.

Complete plagiarism/ intellectual theft: Submit work under one's name when somebody else has created it.

Source-based plagiarism: Reference a source that is incorrect or does not exist i.e. a misleading citation. May also occur when the author cites only the primary source without citing the secondary source from where information was obtained.

Verbatim plagiarism: Copy word-to-word from original work without quoting & citing it.

Self plagiarism: Reuse significant portions of own previously published work without attribution.

Paraphrasing plagiarism: Use someone else's writing with some minor changes in the sentences (using synonyms) and using it as one's own.

Mosaic/patchwork plagiarism: Interlay someone else's phrases or text within own work.

Plagiarism is a serious offense. It can not only have legal implications but also damage the credibility and reputation of the author. In academic publishing, plagiarism can lead to retraction of the published work and loss of academic positions or jobs. Read through the figure below for effective tips to avoid plagiarism when drafting your manuscript.Authors can also use plagiarism checkers such as PlagScan, iThenticate, etc. to avoid text plagiarism. However, all plagiarism checkers are not created equal. While few have access to premium databases (e.g., Crossref) for similarity check, others do not.

2. How to research ethically?

Ans: Researchers primarily use journal articles or books to communicate the results of their research to the scientific community and general public. Therefore, following publishing ethics is equally important for researchers and journals. Journals require authors to disclose whether the same research has been published before or is being considered for publication elsewhere.

Duplicate publications and simultaneous submissions account for serious misconduct!Often, in biomedical research, authors present same data with different analyses (of a subgroup). In that case, authors should disclose the original source of the data and previous publications when making a submission. ICMJE define simultaneous submissions and duplicate publications as follows:

Submission.

- Simultaneous Submissions: Submitting same manuscript in same or different language(s) to one or more than one journal at the same time.

- Duplicate publications: Publishing a paper that is significantly similar to the paper published previously.

The Committee on Publication Ethics (COPE) has outlined guidelines for journal editors to identify and avoid such misconducts in submitted manuscripts and published papers .

Researchers should consider the following points to avoid unethical publishing practices .

- Do not submit the same paper to different journals.

- Maintain transparency during submission and peer review process on previously published work (disclose publication in conference proceedings, submission to a pre-print repository etc.).

- Check with the publisher about translating and publishing the work again.

- Disclose already published and/or translated versions of the submitted manuscript.

 Avoid dividing your study into multiple publications.

Journals may allow secondary publications in certain cases.

 Author(s) have got approval from the editors of both the journals (ensure they have access to the original/primary published work).

 The editors have agreed on the publication interval between the primary and secondary publication.

 The secondary publication refers (cite) to the data and interpretation of the primary publication.

 The secondary publication informs readers that primary publication has been published previously (whole or in parts) by citing it appropriately.

 The title should indicate that it is a secondary publication.

3. What is research misconduct?

Ans: The ORI defines research misconduct as fabrication, falsification, or plagiarism in designing, conducting, or reviewing research or in reporting the findings of the research .

Falsification involves misrepresentation of the research by changing data or results or by tampering with equipment, research methods, or materials.

Fabrication involves reporting false or made-up data, results, or research outputs.

Plagiarism involves presenting others' ideas, works, or words without acknowledging or providing appropriate credit to the original authorship.

What about errors that are unintentional or situations that arise because of different opinions? These do not fall under scientific misconduct or fraud.

Universities and research institutions define policies and guidelines for researchers to maintain scientific integrity while conducting research. These guidelines also provide information on how to report any such cases.Make sure you are aware of your university's policies.

Most cases of scientific misconduct involve image or data manipulation. Researchers are often not aware of the nuances between image modification and manipulation. They use image processing tools without having appropriate training in concepts such as vector graphics, RGB vs. CMYK, continuous-tone images, etc..

4. What is research productivity?

Ans: Reproducibility in research is important to validate findings. What is reproducibility?Reproducibility is defined as when a researcher is able to duplicate the same phenomenon even when experimental conditions are varied. Whereas, replicability is defined as when a researcher is able to obtain same results when the experiment is conducted under same experimental conditions.

Although reproducibility is promoted in science, researchers are not keen to replicate or read published results. Moreover, published work is expected to be reproducible but its rarely tested on those grounds later.

It is the responsibility of the researchers to promote reproducibility. So, how can you ensure that your work is reproducible?

- Write detailed experimental protocols that are easy to understand/implement.
- Share your research outputs in an open access repository to make them accessible.
- Perform experiments (with variations) in duplicates/triplicates to increase the robustness of your findings.
- Refrain from data fabrication or manipulation.

It is important to note that reproducible research is not always correct. There are many instances as follows.

- False positives in published research.
- Bad quality of data and data analysis.
- Poor study design.
- Missed confounding variables.
- Omitted data points.

5. What is research ethics and its importance?

Ans: What is ethical conduct of research? You may have often heard the term "ethics." It is generally defined as a set of principles that distinguish between acceptable and unacceptable behavior or way of conducting a task. These guidelines or principles may vary across countries, disciplines, institutions, and even laboratories. For instance, these ethics may not only dictate the conduct and functioning of an organization or a government but also a business entity!

One of the most commonly known ethical code in medical practice, the "Hippocratic Oath," dates back to 500 B.C. Over the years, guidelines such as Nuremberg Code and Declaration of Helsinki have been introduced and implemented into practice.

Moreover, ethical policies addressing issues related to plagiarism, fabrication, conflicts of interest etc. are being outlined at different governmental and academic levels. Refer to the ethics timeline below for a detailed overview.

Why is it important for you as a researcher to follow these ethical codes? How does adherence to these can impact your credibility and repute in the scientific community?

Firstly, these ethical codes not only help maintain scientific integrity but also safeguard the primary aim of conducting the research i.e. to promote knowledge and truth . Secondly, these values promote trust, respect, and objectivity in a collaborative work environment by avoiding conflicts related to authorship, copyrights, and others . Moreover, these codes help maintain the safety and interest of human subjects and ensure appropriate care of animal subjects in a clinical or laboratory setting. Lastly, these ethical norms make researchers accountable for the quality and outcome of the research that may directly or indirectly affect public health and interests.

6. How to assign authorship in research?

Ans: Allocating authorship allows researchers to assign appropriate credit and acknowledge their contribution to the research. However, assigning authorship is not always that simple as it also implies accountability and responsibility for the published work. Authorship issues can sometimes lead to conflicts and give rise to misconducts.

Many journals now, therefore, request researchers to submit contributorship statement mentioning the role of each researcher.

According to ICMJE, an author must satisfy these four criteria.

- Made substantial contributions to the design and conception of the study; data collection, analysis, and interpretation.

- Drafted or revised the intellectual content/output.

- Approved the final version of the manuscript for publication.

- Agreed to be accountable for the research work, ensuring that queries related to accuracy or integrity of the research are resolved.

Moreover, the author should be able to identify which co-authors are responsible for which part of the work.

According to ICMJE, in a large multi-author study, the decision on authorship should be taken before submitting a manuscript to the journal. Each author of such studies should qualify those four criteria and individually submit conflicts of disclosure forms to the journal editor. Additionally, some large multi-author groups can choose a group name to assign authorship. In that case, a group name should be used when making a submission to the journal along with a description of who all qualify as authors in that group.

What about individuals who do not qualify all four of the criteria, but have contributed to the study? You should make sure to acknowledge them as contributors.

Contributors usually help in the acquisition of funding, supervising research group, providing administrative support, assisting in technical writing, editing, proofreading, etc.

Apart from that, the corresponding author communicates with the journal during manuscript submission, peer review, and publishing. He/she ensures that all the documentation requirements related to ethics committees approvals, authorship, conflict of interest, clinical trial registration etc. are met .

Reading through the figure below to identify disputes and misconducts in authorship.

Researchers, especially those at the early stage of their careers should ensure to follow appropriate author guidelines by the target journal or international organizations such as ICMJE, World Association of Medical Editors (WAME), and the American Medical Writers Association (AMWA). You can also consult your advisors or mentors to solve these issues.

7. How to manage research data?

Ans: Data are important outputs of a research process. These can be used to accept or reject a hypothesis or frame a new hypothesis. Data management, therefore, is crucial during and even after the research. It can include the following aspects.

- Data ownership: It implies ownership of the legal rights to the research data during and after the research project. The important stakeholders include funders, research institutions, principal investigators, and even data sources.

- Data collection: It implies consistent and quality-controlled collection of data. Few important aspects include obtaining required authorization, using appropriate methods, and applying attention to details.

- Data storage: It implies protection of data from damage, loss, or theft. Data storage is important to recheck the findings, to prioritize research activities/tasks and to be reanalyzed by others.

- Data sharing: It implies deciding what to share and with whom (general public or other researchers) to share the preliminary data or final results. Data withholding is also an important aspect.

Researchers have the responsibility to maintain the integrity of the research data. The group members involved in the handling of the data should maintain privacy and confidentiality of the data while recording on hard-copy or electronic evidence. Lapses in the management of research data can give rise to many ethical issues. These issues are more prominent in studies involving human subjects.Researchers should, therefore, provide data management plan (DMP) to ethics committees for clinical studies/trials for approval.

Moreover, informed consent to obtain data and protecting or anonymising a certain part of data during analysis or sharing should also be proactively implemented. An effective data management plan can help you avoid ethical issues. Refer to this checklist for fewimportant points.

8. How to handle conflicts of interest in research?

Ans: The changing dynamics of research environment and collaborations can often give rise to conflicts of interests and commitments/obligations. Therefore, it is important to maintain transparency in research and publication by both authors and publishers.

What constitutes conflicts of interest? For instance, conflicts of interest can arise when a researcher who is heading the research of a product is also a visiting consultant at the parent company. Conflicts of interest can also arise when an author, researcher, editor, or a peer reviewer has a relationship (personal or financial) that can directly or indirectly affect his/her objectivity in making decisions or influence his/her actions.

Conflicts of interests can arise because of the following:

- Financial relationships: These can include direct employment, consultancies to a related organization/company, stock options, grants, patents, and paid expert testimony.

- Personal relationships: These can include rivalries and bias.

- Intellectual beliefs: These can include moral convictions or personal beliefs that can influence scientific opinions.

- Academic competition: It can include biased judgements because of the direct or indirect competition with peers or colleagues.

Such situations are sometimes unavoidable and finding yourself in such a situation itself is not unethical. Therefore, all the stakeholders, including authors, editors, and reviewers must maintain transparency and disclose all potential or actual conflicts of interest. So, what is your responsibility as an author in reporting and managing conflicts of interest?The Office of Research Integrity (ORI) suggests that to manage or remove conflicts of interest, take the following steps.

- Disclose all interests so that the stakeholders are aware and can take the required steps.

- Monitor research and research results for transparency and integrity.

- Remove the person in question from important processes such as data interpretation or review process.