Volume 1

RESEARCH METHODOLOGY

(MENTORING AND WRITING GUIDANCE)

Chief Editor
Dr. Manoj Kumar Mishra,
Professor, Dept. of Economics and Statistics,
British American University Florida
(Benin Campus, West Africa)

Co-Editor
Rajani Adam
Kripa Drishti Publications, Pune.

RESEARCH METHODOLOGY

(MENTORING AND WRITING GUIDANCE)

Chief Editor

Dr. Manoj Kumar Mishra,
Professor, Dept. of Economics and Statistics,
British American University Florida
(Benin Campus, West Africa)

Co-Editor

Rajani Adam
Kripa Drishti Publications, Pune.

Kripa-Drishti Publications

Book Title: **Research Methodology (Mentoring And Writing Guidance)**

Authors: Dr. Kavita Indapurkar, Dr. Sangeeta Jauhari, Dr. Vinod Mandal, Dr. R. S. Bhakuni, Rimmi Datta, Dr. Jayanta Mete, Rakesh Manna, Dr. Jayanta Mete, Dr. Kavita Patel, Dr. Swati Verma, Dr. Dipti Shukla, Pushpanjali Shadangi, Mr. Abhijeet Shukla and Debasish Biswas

1st Edition

ISBN: **978-81-947839-2-3**

Published: **October 2020**

Publisher:

Kripa-Drishti Publications

A/ 503, Poorva Height, SNO 148/1A/1/1A, Sus Road,

Near Padmalayas, Pashan- 411021, Pune, Maharashtra, India.

Mob: +91-8007068686

Email: editor@kdpublications.in

Web: https://www.kdpublications.in

INDEX

ISBN: 978-81-947839-2-3

1. Writing Synopsis In Academic Research

Dr. Kavita Indapurkar
Professor, Amity School of Economics,
Amity University, Noida.

Dr. Sangeeta Jauhari
Professor, Faculty of Management,
Rabindranath Tagore University, Bhopal.

1. Introduction:

"A well planned start leads to fruitful end"

It is important that a synopsis is made with this thought. The very first step taken to communicate the outline of one's thought is designated as synopsis. The noun meaning of the word synopsis is summary. The ancient meaning of the word synopsis means "General View". Synopsis is a snapshot of the work which is planned to achieve the desired outcome. It is an outline prepared to present the action plan of a particular task which an individual desired to perform. The synopsis mainly covers the probable answer of what, why and how. It covers mainly the points to state the brief understanding of the subject matter on which the detail study will be carried out. Synopsis gives panoramic view of research. It helps their viewers to give quick analysis. Synopsis forms an integral part of a research project or a thesis or any kind of artistic work.

A synopsis is a gadget for the writing process. The main objective of writing synopsis is to give the brief understanding of the detailed work. In addition to this the synopsis helps to verbalize the idea and at the same time makes it more concrete. It is a tool for thinking the subject and argument and it helps the writer or the researcher to focus the structure the task or project undertaken. Synopsis is prepared for all kinds of things—any type of fiction or nonfiction book, academic

papers, journal and newspaper articles, films, TV shows, research work, project proposal just to name a few!

The basic difference between summary or abstract and synopsis is that the former is the condensed presentation of a research work whereas the synopsis is an outline of the entire

research work planned to be achieved in the desired time frame. It is the condensation of the work, reflect the thought process of the individual.

2. Importance Of Synopsis:

Effective planning lead to successful execution. A well draft synopsis helps to accomplish the desired task of the researcher or writer. The synopsis drafting is an art as well as science. As a scientific approach the proper steps are to be followed while writing the synopsis and as an art the creative approach is applied so as to make it impressive for the reviewer or the reader. It is the first tool to grab the attention and give the schematic presentation of the entire story. Synopsis is drafter for varied reasons, below mentioned are some of the reasons for which synopsis is written. Depending upon the purpose for which it is written, it is important that key points are remembered while writing the synopsis.

2.1 Synopsis Of A Novel:

When we write synopsis of a novel, the key incidents of the novel reflecting the theme of the novel, the turning point in the storyline, the parallel storyline and the specific personality of the characters are covered. The purpose of the synopsis in this case is to give the motivation to the reader or to the reviewer to get the insights of the entire details of the novel. Thus, the construct of the synopsis should be in a way so as to generate the curiosity in the readers' mind.

2.2 Synopsis Of A Film:

The synopsis of a film aims to create the excitement and anticipation in the audience. The synopsis in this case covers the main highlights of the storyline with twist and turns to create the interest in the mind of audience. It may also include the theme, the turning points, the parallel storyline and the specific personality of characters involved.

2.3 Synopsis Of An Academic Writing / Doctoral Research Work / Project Proposal:

It is mandatory in the academic writings to give the snapshot of the entire research work for the quick understanding and also for the approval for the further research work to proceed. For the academic work the synopsis covers various steps highlighting systematic approach to answer what is to be researched, why and what is the need and how the proposed research shall be conducted. The 'what' of the synopsis includes the objectives for research and also the background of the research work already undertaken. The 'why' of the synopsis gives the justification of the proposed work, the need for the research and the rationale behind the work. It brings out the motivation for research as to how will the results be useful. The third part comprises of 'How' the entire work will proceed. This is answered by presenting the research design, sampling design, sample size and the hypothesis formulated. The skeleton of the entire research work or blue print of the research is reflected in this segment. All of this requires the researcher to undertake a lot of literature review and a researcher can find all the answers to what, why and how only through literature review. On the literature review, a lot of brainstorming is required to be undertaken under the able guidance so that the researcher does not get confused with what is the sole objective with which the

research is to be undertaken. In that sense, academic synopsis writing is quite different from other types of synopsis.

The next section of the chapter will highlight in detail about the contents of writing a synopsis in academic research.

3. Contents Of Synopsis:

3.1 Rationale / Background Of The Area:

Every researcher should highlight why he wants to undertake the said research and how it is of utmost importance in the given broad area of study. The rationale should come out of the present scenario and present state of affairs in that regard and at the same time should also be based on the existing review of literature. Some of the well known scientists or researchers in that area of research should also be highlighted so that the importance gets highlighted further. If the researcher is able to bring out some recent policy initiatives or some recent debate with reference to this area of study, it will further bring out that the area of study that you are undertaking has relevance in the present context. This will add to the relevance and at the same time rationale for undertaking the study/research.

The researcher should creatively use all the above to formulate arguments to bring out the rationale of the study. It is of extreme importance to bring out how the results of the study are useful in the present context.

3.2 Literature Review:

The rationale should be followed by the literature review where the researcher should give an extensive detail about the related literature undertaken so far. The primary purpose of the literature review is to bring out the gaps in the existing literature and how the proposed study would fill in these gaps. The literature

review should be exhaustive and should be having the relevance to the study area. On the basis of the review of literature certain variables and determinants can be identified. And also, the methodology used for the purpose of achieving the objectives is finalised.

3.3 Research Gaps:

These are the gaps that are found to exist in the available research done so far in the said area. This helps the researcher to put forward the proposal for his research that is relevant and meaningful. It is utmost important to bring out the research gaps so that meaningful research can be conducted, and you come out with something unique to contribute to the existing body of knowledge and literature.

There are various levels in which gaps can be identified. The gaps can be in terms of geographical locations, population, time, use of variables, methodology etc. Let us try to understand these with some examples. Suppose a study is conducted in various countries of Europe but is yet to be extensively undertaken in Asian countries, there is a research gap. Similarly, a study is not undertaken extensively among rural populations, or a study that was done in 1990s has not been done much recently, or the variables used for the purpose of research are absolutely different than those proposed by you, in all these cases there is a definite gap that can be highlighted. Similarly, if the researcher is able to show that he proposes to use an altogether different methodology, there can be a research gap in such a situation as well.

3.4 Research Design:

- **Research Questions And Objectives:**

On the basis of the review of literature and the problem identified, research questions are formulated by the researcher. Out of these research questions, the

researcher finalise a few as his objectives that he would undertake for the present research. The objectives are finalised keeping in view the constraints of the researcher. These objectives also help the researcher determine the scope of the study to be undertaken.

- **Sample Size, Sampling Methods And Data Collection Methods:**

On the basis of the objectives the researcher should also bring out the type of data that he is ought to use during the research. In case, secondary data is to be collected, the researcher should identify the sources and the availability of the data for the recent years should also be ensured. Due care should be taken in this regard so that authentic sources of data are used for the research. All the efforts of the researcher may go in vain in the absence of the same.

In case primary data is to be used by the researcher, literature review should be appropriately done so that research tool for primary data collection can be formulated.

In case of primary data, sample size has to be finalised making use of scientific methods. Accordingly, sampling methods are also to be finalised.

The software to be used should also be pinned down by the researcher and its availability should also be duly specified in the synopsis.

In the present times, academic research has allowed more flexibility and these can be altered to some extent, but they are to be included in the synopsis so that the researcher gets a direction in which he has to proceed for carrying out the research

3.5 Proposed Chapter Scheme:

Due effort should be made by the researcher in preparing the chapter scheme which gives direction to the way in which the dissertation will be undertaken by the researcher. Although there is a standard chapter scheme that is place where the first chapter is about introduction, followed by literature review. The third chapter is on research methodology and next on data analysis and interpretations. The fifth chapter is about the conclusions and suggestions. However, researcher may feel a need to develop a chapter on theoretical framework also.

3.6 Time Frame /Action Plan:

Academic research is now more specific with respect to the timeline. A separate timeline is given by the regulatory bodies for full time and part time researcher. First six months are for the course work and finalisation of the topic. Next six months is about looking for the literature review and finding gaps. This would help in finalising the objectives of the study as well. Next six months are about variables for the study followed by developing a theoretical framework. Data collection tool is finalised next and is validated. During this time, the sampling methods are also finalised. Next six months' pilot is conducted, and the tool is finalised to be used for data collection, in case of primary study. In case of secondary data, the data is collected from various sources and is cleaned using appropriate methods.

3.7 Limitations And The Future Scope:

On the basis of the objectives of research the researcher should also bring out the limitations that the proposed study might have along with the future scope.

3.8 Deciding The Title:

The researcher should start from deciding the area and then go on narrowing it down. The title of the thesis should be decided only after all the above exercise is

done by the researcher. In case of academic research, it is not recommended to give very catchy titles. The title should be precise but at the same tome should bring out the essence of the work undertaken.

On the basis of the problem identified and objectives finalised, title should be finalised and this is the last step in writing the research synopsis.

3.9 Expected Outcome:

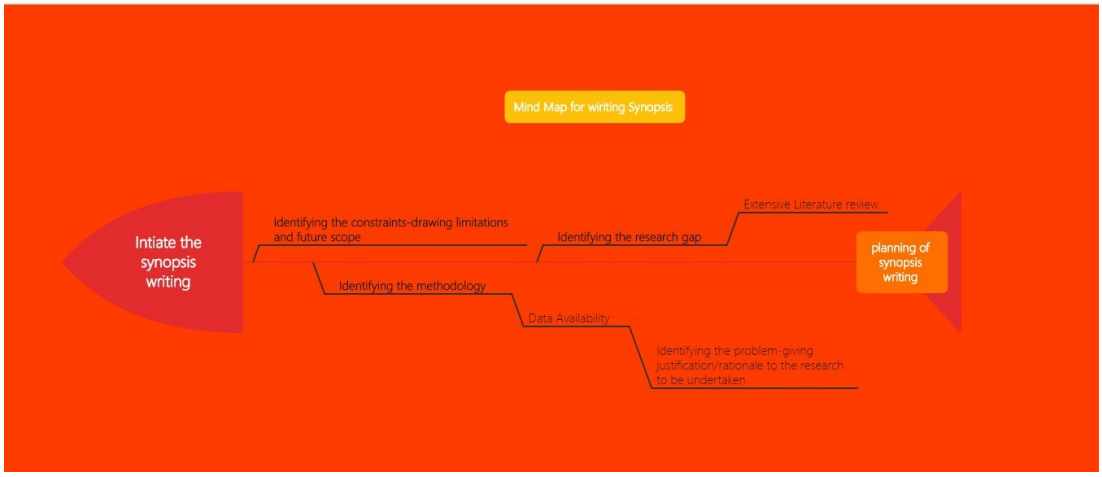
The researcher needs to pen down the outcome which are expected from the research work in the points and along with this it is also important to write the contribution to be given by the research work to the specific society or in general. It is very important to mention these points as it gives the reviewer a basic understanding about the rationale of conducting the research work.

References:

1. Extensive list of references should be given along with the synopsis.

4. Mind Mapping Before Writing Synopsis:

Before initiating the synopsis writing process below mentioned steps to be considered by the researcher. A researcher has to construct a framework in his or her mind and have to cover various facets before initiating the synopsis writing process.



Source: Author's Creation

Once all these steps are clear in the mind of the researcher and with the due discussion of the experts related to the field the drafting of the synopsis should be initiated.

A well drafted synopsis means the half work done!!!!

ISBN: 978-81-947839-2-3

2. Fundamentals Of Research Methodology: A Guide For Researcher's

Dr. Vinod Mandal
Associate Professor, Dept. of Chemistry,
A. N. College Patna, Patliputra University.

Abstract:

The technique of analysis is a way to solve the problem systematically. It can be interpreted as a science to study the scientific conduct of scientists. In this section, we discuss the different steps a researcher normally takes to analyses his research problem along with its rationale.

It is not only research techniques, but methodology that must be known to the researcher. This research method architecture uses a variety of approaches. The aim of this chapter is to evaluate the research methodology by means of mixed kinds of research technologies. The analysis methodology also assists the researcher in seeking the results.

This paper explores basic research methods and provides a summary of various forms of reviews and guidance on how a literature review paper can be created and evaluated. It addresses common pitfalls and how basic research methods can be obtained.

Discuss qualitative and quantitative methods of data collection. The last segment demonstrates the general context for analysis. The purpose of this section is to demonstrate how the analysis has been carried out during the study periods.

Keywords:

Research, Methodology, Research Methodology, Research Techniques, Qualitative research, Quantitative Research, Researcher.

Introduction:

The building block of all academic study practices regardless of discipline is the analysis and relation to established knowledge. Accurately, thus, all academics should take precedence. The development of know-how in the field of corporate research accelerates at unprecedented pace, while becoming fragmented and interdisciplinary at the same time. This makes it difficult to stay up to date with cutting-edge science and to be at the forefront and to test collective proof in a specific research field.

Common-speech research refers to a language quest. Study may once again be described as a scientific and systematic search for relevant knowledge on a particular subject. Study is simply an art in scientific science. The Advanced Learner's Current English Dictionary describes research as "a diligent inquiry or enquiry explicitly in the quest for new evidence in some area of knowledge. "[1] Redman and More defines study as" a systematic attempt to obtain new information. It involves a theoretical study of the set of methods and concepts linked to an information branch. The research methodology is generally the science to analyses how research is performed scientifically. It typically includes principles such as paradigms, theoretical model, stages, and quantitative or qualitative techniques. A method of addressing the issue of science by taking different steps logically. The approach helps not only to understand the scientific research products, but the process itself. The aim of the research methodology is to define and evaluate methods, to explain their weaknesses and resources, to explain their presuppositions and consequences and to link their potential to the crevasse zone in the "frontiers of knowledge"[4]. Their research methodological approach

Analysis approach is the path to be taken by researchers. It shows how these researchers formulate their problem and their goal and present their findings from

the study data. The research methods used in the research process were discussed in this chapter. It requires the study approach from the analysis technique to the distribution of findings. This chapter highlights research strategy, research design , research methodology, the area of study, data sources such as primary and secondary data source data, population considerations, the sample size determination of the questionnaires and the sample measurement of exposure to the workplace, data collection methods such as primary data c c Analysis methodologies used, such as the quantitative analysis and qualitative analysis of data, software for data analysis, reliability and validity analysis, reliability of information, reliability analysis, validity analysis , management of data quality, requirements for inclusion, consideration of ethics and distribution of findings and approaches to their use. A qualitative and quantitative approach for analysis is commonly understood to fulfil the objectives of the study. The study employed these mixed techniques, since all aspects of the data source were collected during the analysis. The goal of this approach is therefore to fulfil the research plan and the research objective established by the scientist.

Research Design:

A fitting structure for a study is provided by the research design. The choice to be taken in the research design process is very important because it determines how relevant information can be gathered for a study; however, there will be many interrelated decisions in the research design process.

Therefore, this study uses a descriptive research method for agreeing on the health, protection and patented harm effects in selected manufacturing industries from the workplace safety and health management framework. The descriptive research of Saunders et al. [6] or Miller [7] provides a detailed profile of individuals, incidents or circumstances. This definition gives researchers a profile of defined aspects of phenomena of interest from a viewpoint that is human,

corporate and industrial. This research design has therefore helped researchers to collect data from a broad range of interviewees regarding the effect on the manufacturing industry in Ethiopia of safety and health. And this has helped to analyses how it impacts workplace safety and health in the manufacturing industry. The research overall design and flow process are depicted in Figure 1.

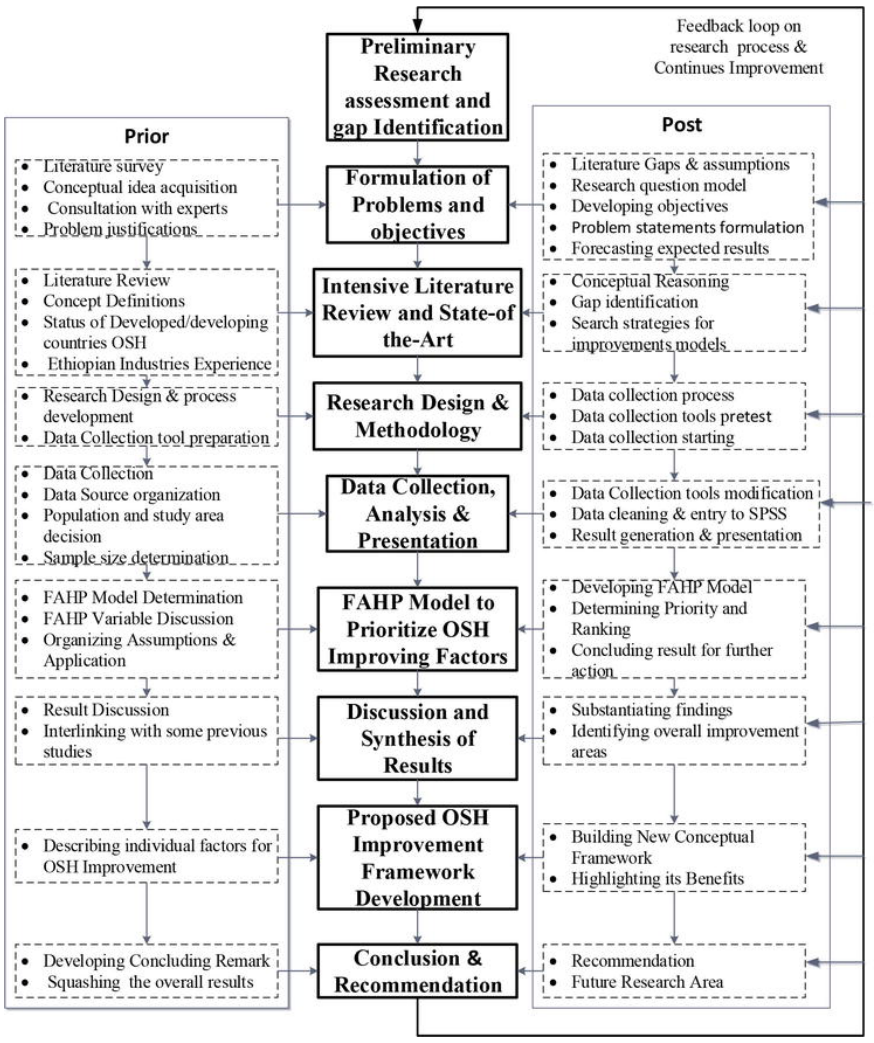


Figure 1. Research Methods And Processes (Author Design).

1. Fundamentals Of Research Methodology:

The research used qualitative and quantitative methods and a combination of primary and secondary sources to address the key research objectives. Quantitative analysis and results are supported by qualitative data. As the researcher used the qualitative and quantitative data types in data analyses, the

results obtained are triangle. This section discusses the field of study, data sources and sampling techniques.

1.1 The Study Area:

In accordance with studies carried out by Fraenkel and Warren [8], the population refers to the full range of persons (subjects or events), who are of common importance to the researcher. A random sampling system was used for the population determination of the trial. This data was collected from selected manufacturing industries in and around Addis Abeba from 07 March 2015 to 10 December 2016. The manufacturing companies were chosen on the basis of their number of workers, the year set and the prevailing possible accidents and the type of production industry, although all the criteria were difficult to meet.

1.2 Data Sources:

1.2.1 Primary Data Sources:

It has been obtained from the initial data source. The primary data were more reliable and trustworthy, with trusted analysis directly intact with the occurrence of the events. The main sources of data are industrial workplaces and industrial employees (managements and bottom workers) (interviews, questions and discussions) (by observation, photographs and pictures).

1.2.2 Secondary Data:

Data from several secondary sources have been obtained through a desk review. This includes reports and documentation of the projects in each manufacturing sector. Secondary sources of data were gathered from the OSH literature, and the majority of the data came from the business handbooks, reports and management records used in the Desktop Analysis. The industrial manufacturing sectors have been examined in terms of authoritative journals, books, numerous articles,

journals, proceedings, magazines, news lets, newspapers, websites and other media. The findings also were taken into consideration from existing documents, manuals, procedures, reports, statistics, laws, regulations and standards.

2. Data Collection Methods:

The following basic techniques were based on data collection methods. This included the collection of secondary and primary data focusing on quality and quantitative data as described in the previous section. Mechanisms for data collection are developed and designed according to suitable procedures.

2.1 Primary Data Collection Methods:

Qualitative and quantitative are the primary sources of results. Qualitative sources include field observations, interviews and informal conversations and survey questionnaires and interview questions for quantitative data sources. The following sections address how the data is derived from the key sources.

2.1.1 Workplace Site Observation Data Collection:

An, significant part of science is observation. Observations are closely related to the collection of data and are based on multiple sources: documents, archival records, interviews, direct observations and observations made by participants. Observatory study results are known to be very reliable since the researcher can obtain a thorough understanding of a certain behaviour.

The researchers used the method of observation as a tool for the collection of information and data both before and after the questionnaire was developed. More than 20 basic findings were made by the researcher in the fields of manufacturing. Through these observations, the working atmosphere and the various aspects of the production method and OSH practice became better understood.

2.1.2 Data Collection Through Interview:

Interview with people who consider themselves especially informed about the subject of concern is a loosely organized qualitative in-depth interview. The interview is usually conducted in a face-to - face atmosphere that enables the researcher to look for new ideas, to ask questions and to analyze phenomena from multiple perspectives. It helps the investigator to consider the causes and implications of the current working climate in detail. It has created opportunities to refine efforts in data collection and to analyses specialist structures or processes. It was used when the researcher was faced with written documents or paper limitations or needed to triangulate the data gathered in other primary and secondary sources.

In this study, qualitative methods and interviews are also carried out. The benefit that interviews can be used as a tool is that they can pose questions which the interviewee may not have expected. The related researchers carried out all interviews on a face-to - face basis at the workplace with staff, management and technical personnel. All interviews have been transcribed and documented.

2.1.3 Data Collection Through Questionnaires:

In practical research, questionnaires are the key method to obtain primary information, because the investigator can decide about the sample and the types of questions [6].

In this document, each respondent is asked to answer the same set of mixed questions to avoid partiality. The design of the questionnaire was initially coded and combined on the basis of standard structures from a specific subject. The questionnaire therefore produced valuable data that were important for the achievement of the dissertation targets.

The established questionnaires were based on a Likert five-point scale. A five-point Likert scale for which 1 is "strongly disagree" to 5 = "strongly agree" was used to answer every argument, and the answers were summarized to generate a score for the acts.

2.1.4 Data Obtained From Experts' Opinion:

The data was also collected from the opinion of the expert concerning the comparison of information, management, cooperation and the use of technology, including its sub-factors. For the priority making and decision-making of OSH, data collected in this way have been used to boost factor priority. In prioritizing the variables, Saaty scales (1–9) were used, then the values derived from previous research using triangular fuzzy set were converted to Fuzzy. [9].

2.1.5 Workplace Site Exposure Measurement:

The researcher has measured the workplace environment for dust, vibration, heat, pressure, light, and noise to know how much the level of each variable is. The primary data sources planned, and an actual coverage has been compared as shown in Table 1.

Instrument	Planned	Actual coverage	Success level
Interview/discussion	15	13	87%
Survey questionnaires	267	189	71%
Observation	20	18	90%
Workplace site exposure measurement	20	20	100%

Table 1. Planned Versus Actual Coverage Of The Survey.

The response rate was strong for the proposed source of data, and the pilot test showed that the questionnaires were accurate. A total of 87 per cent were respondents to interviews / discussions; the response rate for survey questionnaires achieved was 71 per cent, and for the entire data collection system,

the response rate for field observations was 90 per cent. Therefore, the quality standard of the data organization was not affected.

This rate of response is considered indicative of organizational studies. Since the survey accepts that the rate of response is 30%, it is regarded as acceptable [10]. Saunders et al. [6] submitted that the 20 percent reaction questionnaire is appropriate. The researchers should not be discouraged by low response rates, since a good deal of published research is also low in response. Therefore, in order to satisfy research objectives, the response rate in this study is reasonable and very strong.

2.1.6 Data Collection Tool Pretest:

The survey, interviews and resources were performed to verify whether or not the tool material was accurate within the context of the respondents. The validity of the content (in which the questions are answered without missing significant points), internally valid (in which the questions posed respond to investigator's findings), and externally valid (in which the findings would generalize the survey population) were therefore reflected. This pilot test was demonstrated before the basic collection of data was begun. A few minor changes to the initial data collection tools were made following a feedback process. The pilot test was conducted on 10 sample sizes randomly selected from the target sectors and experts.

2.2 Secondary Data Collection Methods:

The secondary information refers to data gathered by someone other than the user. This data source offers insight into the field of study of the modern process. It also creates a kind of research void that the researcher has to fill. These secondary sources of information may be internal and external knowledge sources covering a broad variety of fields.

Literature / Desk analysis and company documentation and studies: In order to achieve the aims of the dissertation, the researcher carried out extensive online and offline analyses of documents and reports from businesses. The literature reviews can be understood from a methodological point of view to include content analyses that incorporate quantitative and qualitative factors to determine both structural (descriptive) and continual parameters.

The search for literature was conducted using database sources such as MEDLINE, Emerald, Taylor's or Francis' journals, EMBASE, PsykINFO, Sociological Abstracts (Sociological Literature), Injury Checklists, U.S. Labor Statistics, European Safety and Health Databases, ABI Notify, Business Source First (Business/Management Literature); The search strategy focuses on papers or studies comparing one or more dimensions within the context of the study OSH model. This quest strategy was based on a strategy of the Health Measurement Instrument Selection (COSMIN) Community system and measurement philtre. Unrelated papers on the research model and priorities were omitted based on screening. In order to decide whether or not they needed to be included for further review, researcher (main investigator) reviewed a range of over 2000 journals, web pages, studies and recommendations prior to the screening. Before the analysis of the main group of over 300 papers began, gaps were thoroughly established and resolved. The remaining papers were carefully checked and the information on the instrument was extracted to determine the dimension of the research interest after removing papers based on the title, keywords and abstract. A comprehensive list of items was collected and checked to find any missing elements within each study aim or purpose.

3. Methods Of Data Analysis:

The method of data analyses follows the procedures described below. In the problem statement, the data-analysis portion addressed the fundamental issues.

Assessing, assessing, comparing and synthesizing the experience of developing and industrialized countries with OSH in manufacturing industries.

3.1 Quantitative data analysis:

The primary and secondary data mentioned above in this chapter were collected with quantitative data. This data analysis was based on Excel, SPSS 20.0, Office Word and other resources in their data form. This research focuses on the analyses of numerical / quantitative data.

Data coding and interpretation were done before interpretation. The data were encoded with SPSS 20.0 software as data obtained from questionnaires in order to analyze the data obtained easily. In this work, a numeric or character symbol was defined, categorized and assigned to data that has only been preceded in one way [11, 12]. All answers were pre-coded in this report. They have been taken from the answer list with a number that fit a certain set. This method has been extended to all prior problems that needed to be resolved. After the data were completed the following steps have been entered in a software package for statistical analysis: SPSS version 20.0 on Windows 10.

Data analysis provided descriptive statistics and graphical analysis for visualization of data. The study analyzed the relationship between variables and compared how they interact. This has been achieved by using the nonparametric statistical and cross tabulation / Chi Square, correlation and factor analysis.

3.2 Qualitative Data Analysis:

Qualitative data analysis and quantitative data analysis triangulation. In order to help conclusions, the interviews, observations and studies were used. The findings of the quantitative debate were integrated into the data analyses.

3.3 Data Analysis Software:

On Windows 10, the data were entered and analyzed using SPSS 20.0. The analyses assisted by SPSS software contributed greatly to the findings. The results of the SPSS had been checked and corrected by the data. In the research questionnaires the programmed evaluated and compared the outcomes of the various variables. The photos and analytical tools are also used for Excel.

4. The Reliability And Validity Analysis Of The Quantitative Data:

4.1 Reliability Of Data:

Measurement reliability determines the quantity without distortion (error-free) and thus allows for accurate time- and over-time measurements of the device [8]. The accuracy and consistency of the data were monitored in the reliability review. The researcher examined the accuracy and precision of the calculation process in the case of reliability review. Trustworthiness has many meanings and methods, but the term is consistent in many environments [10]. The calculation meets the reliability criteria when reliable results are obtained during the data analysis process. As shown in Table 2, the reliability is determined by the alpha of Cranach.

s/n	Qualitative data major groups	Items number	Alpha standardized)
1	Knowledge related factors	K01 to K08	0.864
2	Management related factors	M01 to M17	0.877
3	Technology and suppliers related factors	T01 to T10	0.792
4	Collaboration and support related factors	C01 to C07	0.781
5	Policy , standards and guidelines related factors	P01 to P08	0.888
6	Hazards and accidents related factors	H01 to H10	0.720
7	Personal Protective Equipment related factors	PPE01 to PPE10	0.931
	Total	70	0.966

Table 2. Internal Consistency And Reliability Test Of Questionnaires Items.

K stands for knowledge; M, management; T, technology; C, collaboration; P, policy, standards, and regulation; H, hazards and accident conditions; PPE, personal protective equipment.

4.2 Reliability Analysis:

The alpha of Cronbach is a measure of internal accuracy, i.e. the closeness of a group of objects [13]. It is a measure of reliability in scale. The trustworthiness of internal consistency is often calculated by the alpha value of Cronbach. In most research cases, a 0.70 or higher reliability coefficient is considered "acceptable" [14]. The reliability analysis was similar after eliminating 13 items for the internal accuracy of measurement on the Likert scale; 76 items had 0.964 reliability coefficients and the individual groupings shown in Table 2. The Cronbach alpha test was also found to be internally consistent. Table 2 shows the internal accuracy of the seven main instruments, in which their reliability for this research falls within the appropriate range.

4.3 Validity:

Face validity as described by Babbie [15] is an indicator that makes certain variables seem a fair measure and the instrument measures, according to its subjective judgement, in terms of relevance [16]. [16]. In this analysis, the researcher thus ensured that ambiguity was removed with appropriate terms and concepts in order to improve clarification and general appropriateness [16] during the production of the instruments. In order to make the measuring instruments accurate and decide whether the instruments should be deemed to be accurate at face value, the researcher submitted to the research oversight and the joint supervisor, who are both occupational health experts.

This study directed the researcher to create the instruments by reviewing literature on compliance with the conditions of occupational health and safety and by

methods of data collection. Furthermore, the preliminary work performed before the main analysis helped the researcher avoid discrepancies about the quality of the instrument data set. A detailed review of the instruments by the statistical expert and the supervisor and common experts ensures that the instruments are enriched to ensure that all the concepts involved in the analysis are used.

Criteria of Good Research:

Whatever may be the types of research works and studies, one thing that is important is that they all meet on the common ground of scientific method employed by them. One expects scientific research to satisfy the following criteria:

1. The purpose of the research should be clearly defined, and common concepts be used.
2. The research procedure used should be described in sufficient detail to permit another researcher to repeat the research for further advancement, keeping the continuity of what has already been attained.
3. The procedural design of the research should be carefully planned to yield results that are as objective as possible.
4. The researcher should report with complete frankness, flaws in procedural design and estimate their effects upon the findings.
5. The analysis of data should be sufficiently adequate to reveal its significance and the methods of analysis used should be appropriate. The validity and reliability of the data should be checked carefully.
6. Conclusions should be confined to those justified by the data of the research and limited to those for which the data provide an adequate basis.
7. Greater confidence in research is warranted if the researcher is experienced, has a good reputation in research and is a person of integrity.[17]

Conclusion:

The methodology and nature of research have suggested the overall research flow for the study. Data sources and methods of data processing have been used. This research method, from problematic formulation to problem validation using all parameters, indicates the overall research strategies and frameworks. It has laid some foundations and planned and developed research methods for scientists. This allows researchers to take the data obtained and analyzed from the start of the problem statement to the finding of analysis as one of the samples and models. This research flow particularly supports new researchers in the field of science and methodology.

References:

1. The Advanced Learner's Dictionary of Current English, Oxford, 1952.
2. L.V. Redman and A.V.H. Mory, The Romance of Research, 1923.
3. Irny, S.I. and Rose, A.A. (2005) "Designing a Strategic Information Systems Planning Methodology for Malaysian Institutes of Higher Learning (isp-ipta), Issues in Information System, Volume VI, No. 1, 2005.
4. https://www.researchgate.net/publication/39168208_Research_Methodology_Part_1_Introduction_to_Research_Research_Methodology.
5. Patel M, Patel N. Exploring research methodology: review article. International Journal of Research and Review. 2019; 6(3):48-55.
6. Saunders M, Lewis P, Thornhill A. Research Methods for Business Student. 5th ed. Edinburgh Gate: Pearson Education Limited; 2009
7. Miller P. Motivation in the Workplace. Work and Organizational Psychology. Oxford: Blackwell Publishers; 1991
8. Fraenkel FJ, Warren NE. How to Design and Evaluate Research in Education. 4th ed. New York: McGraw-Hill; 2002

9. Saaty TL. The Analytical Hierarchy Process. Pittsburg: PWS Publications; 1990
10. Sekaran U, Bougie R. Research Methods for Business: A Skill Building Approach. 5th ed. New Delhi: John Wiley & Sons, Ltd; 2010. pp. 1-468
11. Luck DJ, Rubin RS. Marketing Research. 7th ed. New Jersey: Prentice-Hall International; 1987
12. Wong TC. Marketing Research. Oxford, UK: Butterworth-Heinemann; 1999
13. Cronbach LJ. Coefficient alpha and the internal structure of tests. Psychometrika. 1951; 16:297-334
14. Tavakol M, Dennick R. Making sense of Cronbach's alpha. International Journal of Medical Education. 2011; 2:53-55. DOI: 10.5116/ijme.4dfb.8dfd
15. Babbie E. The Practice of Social Research. 12th ed. Belmont, CA: Wadsworth; 2010
16. Polit DF, Beck CT. Generating and Assessing Evidence for Nursing Practice. 8th ed. Williams and Wilkins: Lippincott; 2008
17. C.R. Kothari, Research Methodology Methods and Techniques, ISBN (13): 978-81-224-2488-1, 2004.

ISBN: 978-81-947839-2-3

3. Basic Fundamentals Of Research Report Writing

Dr. R. S. Bhakuni
Associate Professor, Political Science,
Government Degree College, Doshapani,
District – Nainital (Uttarakhand).

Introduction:

Report writing is a basic task of researcher, since no research can be completed without its report, in fact, a research without report can be considered as a house without roof. A research study culminates in writing of report, which is a tool for communicating the various aspect of study, as the problem, or topic investigated. The ability to write effective report is one of the most useful skills a researcher can acquire, the report may be elaborately formal, or it may be a letter to many organizations and institutions according to their needs, instruction, or manuals.

As we know that work of research is formal in nature, due to this every research scholar have to present his all research works and findings in written form after completing his research. However it is last part of research work but its importance is very much valuable in research, the research report is the basis of all assessment of research work by a research scholar, research report increase our vocabulary of knowledge, provide strength to theoretical and practical aspect of knowledge. There are many differences in report writing on the basis of size of research, many universities, research institutions, organization have their own instructional manuals for report writing, but all are expected to follow traditional trend in respect of writing style and presentation. Though it seems conservative, unnecessary to follow such trend in the field of research, but it is essential to smoothly communicate research works and research results. Every research scholar should have to follow the research instruction according to standards, tradition, systematically. The report identifies areas for further research, if any, and for fresh hypothesis. Analysis and inferences, suggestions and observations,

footnotes and appendices, etc. should also find a place in report. It should include specific recommendations for a course of action. Likewise, all necessary information materials should be presented in the most appropriate manner. It should be purposeful and take account the reader and his test and preference when it is written. In the normal course, the report writer should consider such question as: who will read the question? What way is the report going to be useful? Or what are the questions the report should answer?

Type Of Reports:

For the purpose of convenience, on the basis of approach, the report can be classified under the following titles:

- Thesis;
- Dissertation;
- Project report;
- Business report and memorandum;
- Commission enquiry report.

On the basis of presentation, the report may be classified as:

- Inductive report;
- Deductive report;
- Step-by-step report;
- Time –sequence report;

A business report or memorandum may be defined as a simple business communication from one departmental head to another or one functional area to another or from top to bottom in the organizational structure on any specific aspect of day-to-day business activity.

A project report is the report of a project undertaken by an individual or a group of individuals or any functional area or any aspect or segment of any functional area of the business, industry or society.

A dissertation is a detailed discourse or report on the subject of the study that was undertaken. This usually used as a document to be submitted for the acquisition of a higher degree from a university. A thesis, too, is a detailed dissertation, which maintains a valuable proposition or hypothesis, written on the basis of a detailed research. This too, is used for academic purposes, as the dissertation is. A commission's enquiry report is detailed report prepared by a commission appointed for the specific purpose of conducting a detailed study of any matter of dispute or of anything which requires a greater insight so that it may facilitate a future course of action. It is an expert opinion.

Business report and memoranda are brief observational reports that assist one in arriving at business decisions, while project reports are detailed reports which are written with a specific purpose in mind, though they too may have implications for business decisions.

The inductive pattern of report writing is one of the oldest patterns of presenting one's thoughts. Aristotle had pointed out long ago: "A whole is that which has a beginning, middle, and an end." This type of report goes from the specifies – facts, figure, materials of research – to general conclusions, summary, recommendations, etc. such reports use the well-tested method of starting with introductory material and progressing through factual support to conclusions. The reader who likes to examine all the evidences, who wants to look at the whole situation carefully before he makes up his mind, usually welcomes reports of this kind. Generally, they arouse less antagonism that if he were confronted with what he considers disagreeable, unusual, or "unfounded" conclusions and recommendations.

The deductive pattern of report writing is the most accepted type of report writing in the business world. It is obviously known as the executive report, the management report, or the action-getting report. This is the pattern of presentation that goes from the general to the specific, i.e., from the more important to the less important. It tends to become more detailed or more specialized in its last pages because it is designed for a reader whose fundamental question is: "What do I need to know to act or to decide?" he wants the answer at the very outset. The writer has a special obligation to think his way through to the central issue or to the main point. It is almost like a newspaper report. One who goes through the title or initial introduction would be able to get a general idea; and when one goes on reading, the specific areas are unveiled. The writer has to start on common ground with the reader in the deductive pattern of report writing.

A step-by-step presentation doesn't follow any hard and fast rule, it simply presents material low-by-bow. It is a way of presenting the events or steps in an operation frequently following one another in a point of time. But the steps need not necessarily come to a conclusion or an end. A step-by-step pattern is well adapted to reports on manufacturing operations, where a step-by-step analysis is essential. PERT/CPM is well known, which systematically operates on a step-by-step basis. Sometimes, this pattern is well suited to progress reports which cover only a short period of time.

The time-sequence pattern of report writing is almost like that of the step-by-step presentation; but it lays greater emphasis on the time element. It is an easy way of writing a report by merely following the pattern the research material itself offers in a sequence of time. Some readers prefer analysis based upon a sequence of time of events. They foster a notion that such pattern is the best way of presenting all the background information to those who never like the report to be summarized or condensed.

Steps In Report Writing:

Many researchers find it difficult to make their research reports meaningful, though they toil and moil to complete the project successfully. Many a time they lose heart when they start writing their reports, because they realize that their effort is not up to the mark. They have the desire, but not the necessary skill, nor have they the will to humble themselves and to pick up; they pose too much. They are like a school boy who starts writing his home work with great enthusiasm. Though he is ignorant of what he is doing, he poses as an expert; and hence he has the delicacy to learn it from somebody. It ultimately motivates him to be a copy-master, and ruin himself. This is the background against which many so-called researchers turn themselves into copy-master and compilers. Some wish to have a bed of roses in research and report writing.

They may be task-masters, but they fail to complete their task. Some may be good researchers, who may be painstaking but easy-going. They may keep on waiting until the eleventh hour. In the process, their overconfidence may be fatal to the whole mission. At last they are forced to complete a hotchpotch report.

Taking into account all these realities, a few steps may be suggested, which would enable the researcher to complete his task of writing a report clearly and cogently. These steps are:

1. Plan the project well in advance; fix the target and the final date of completing the report.
2. The time for completing data collection and data processing should be well planned and implemented (ensure that adequate data are kept ready).
3. The time for report writing should be planned, and the task of report writing should not be put off till the last minute. At least one-third of the total project time should be earmarked for this purpose.

4. Select a structure for the report, arrange in groups the data, documents, bibliography, etc. in conformity with the structure of the research report.
5. Prepare an outline based on the structure, which should cover the main points and sub-points in detail.
6. Prepare rough point-by-point skeleton for each chapter theme and crystallize the report in a mental exercise. Do not hesitate to discuss the skeleton with somebody who is well-versed in research and writing, and who can be taken into confidence.
7. In the event of any doubt, get it cleared by reading, thinking, recollecting and discussing, before going farther. Put everything in a logical sequence.
8. It is always good to get the benefit of the guidance of a good guide at all stages.
9. Avoid easy – going and short-cut methods and don't hesitate to write an entire first draft. Even when the whole report is in black and white, be aware that it is not all perfect, and therefore, calls for much improvement.
10. Put the completed rough draft away for several days until you can bring a fresh mind to bear upon it. The researcher is then in a position to view it afresh and make substantial changes.
11. Revise the draft thoroughly before the report is typed. Do not hesitate to eliminate any irrelevant and inappropriate portion.

Formatn Of The Research Report:

A research report usually follows a fairly standardized pattern. The following outline presents the usual sequence of various sections.

1. Preliminary Section Or Front Matter:

- Title page
- Approval Sheet
- Acknowledgements
- Preface or forward

- Table of contents
- List of tables (if any)
- List of figures (if any)

2. Main Body Of The Report (Secondary Section):

1. **Introduction:**

- Significance of the problem
- Statement of the problem
- Purpose of the study
- Assumptions and delimitations
- Definition of important terms
- Statement of Hypotheses
- Assumption Underlying the Hypotheses.

2. **Review Of Related Literature Or Analysis Of Previous Research.**
3. **Design Of The Study:**

- Procedures used
- Methods of gathering data
- Description of data gathering instruments.

4. **Presentation And Analysis Of Data:**

- Text
- Tables
- Figures

5. **Summary And Conclusions:**

- Brief Restatement of Problem and Procedures
- Description of procedures used
- Principal Findings and Conclusions
- Recommendations for further research.

3. Reference Section (Complementary Part):

- Bibliography
- Appendix
- Index, if any.

The first step towards preparing a report should be the preparation of an outline of its major divisions and then sub-divisions in the form of headings and sub-headings of proposed chapters, sections or even paragraphs. This outline would guide the researcher in arranging material at his disposal in an orderly manner as it sets down the design of the report.

Preliminary Section:

The Title Page:

Several pages of preliminary material precede the body of a report in a dissertation. The first page of the report is the title page. Although title page forms differ from one institution to another, they usually include,

1. the name of the topic or the title of the study,
2. full name of the candidate and his previous academic background,
3. name of the faculty and institution to which the report is submitted,
4. degree for which the report is presented,
5. the date of presentation.

These items are centered between the margins of the page and no terminal punctuation is used. The title is presented in capital letters, but only the initial letters of principal words are capitalized in other items. If the title extends beyond one line, it is double-spaced and placed in an inverted pyramid style.

The title should be concise and should indicate clearly the purposes of the study. It should not claim more for the study than it actually delivers. Its key words would make it easy for the bibliographer to index the study in the proper category.

Approval Sheet:

If the institution requires an approval sheet, a page of the dissertation allots space for the dissertation committee.

Acknowledgment:

The acknowledgement page is largely a matter of courtesy. The investigator acknowledges the guidance and assistance he has received in carrying out the study. It conveys indebtedness for the professional, academic and administrative assistance received by him. Good taste calls for acknowledgements to be expressed in a simple and restrained language. Flattery and effusive recognition for routine participation by members of the writer's family, faculty advisors, librarians and clerical helpers are considered unnecessary and in poor taste.

Preface or Foreword:

Sometimes a preface or foreword, one or two pages long, follows the acknowledgment page, containing some initial remarks and perhaps a brief statement of the scope, aim and general character of the research.

Table of contents:

it occupies a separate page or pages, gives the readers a bird's eye-view of the report and enables them to locate quickly each section of it. It includes in it the chapter headings, the major sub-divisions of the chapters and sometimes the topics within the sub-divisions. The chapter titles are usually typed in capital letters and the sub-divisions headings in small letters with the initial letter of the

principal words capitalized. All titles and headings appear in the exact words and order as they do in the report, and each is followed by the correct page citation.

List of Tables and Figures:

If tables and figures for a part of the report, their lists are give4n on separate pages. The full titles of figures and tables, worded exactly as they appear in the text, are presented with corresponding numbers and page locations.

All pages in the preliminary section are numbered at the centre of the bottom margin with lower-case Roman numerals (i, ii, iii, iv etc.).

Main Body Of The Report (Secondary Section):

The kernel of the study, the data and their analyses, follows the preliminary materials. The body of the report contains a number of divisions.

1. Introduction:

It serves as an orientation to the investigation. In the introduction you state and analyses the nature of the problem and develop a foundation for your investigation. It usually includes a statement of the factors leading up to the choice of the problem, the purposes of the study, the value and significance attached to the probe by the investigator as a contribution to education and any information to express the sincerity of the investigator in his selection.

Statement Of The Problem:

A statement and elucidation of the problem sometimes forms a part of the introduction, but more often it is set up as a separate chapter. If the problem is stated in a clear-cut and logical manner, the reader is able to get a sufficiently clear insight into the study from the very beginning. It has been stressed in an

earlier chapter that the problem should be finalized and stated after a sufficient study, reflective thinking, consultation, discussion and guidance.

Significance Of The Problem: The background of the problem under study is thoroughly provided in the first pages of the study is developed by giving its significance and importance.

Purpose Of The Study: The importance of the investigation will be further highlighted by enlisting purposes and objectives of the study.

Assumptions And Delimitations: Any technical assumptions behind the investigation will also be clearly stated. The exact area the investigation is supposed to cover must be well demarcated. The sources of information selected, and their nature and delimitations should be mentioned and justified.

Definition Of Important Terms: Then one can define the terms that are essential to the study or are used in a restricted or unusual manner to the reader may understand the concepts employed. It gives the reader a clear concept of the scope of the study and the precise explanation offered for the problem.

Statement Of Hypotheses: Then the investigator gives the hypotheses he has formulated for the purpose of collecting further evidence for the verification of the same.

Assumptions Underlying The Hypotheses: The hypothesis/hypotheses are formulated only after some experience and evidence. Any assumptions underlying the same or restrictions placed on the same are also stated in order to build essential justification of the same.

2. Review Of Related Literature: The section revises the important literature related to the study. Previous research studies are abstracted and significant writings of authorities in the area under study are reviewed. This part of the report

provides a background for the development of the present study and brings the reader up to date. Since further research is based upon everything that is known about a problem this section gives evidence of the investigator's knowledge of the field. A brief summary, indicating areas of agreement or disagreement in findings, or gaps in existing knowledge, should be included. The author finds an opportunity to justify his own Endeavour and to emphasize new, worthwhile elements of his study. This resume is neither a summary of everything you have read nor a chronological list of the most pertinent abstracts that the reader must dissect to discover how they relate to the present problem. Rather the resume is a well-integrated discussion of the previous relevant studies and theories which points up the issues involved in the present investigation. In a logically structured discussion, you bring together the results of the existing research, show how the studies are related, point out areas of agreement and disagreement, and indicate where gaps or weaknesses problem, the need for conducting the investigation, and the logical rationale that justifies your hypothesis become evident when the problem is placed in this wider framework of knowledge.

3. Design Of The Study:

The third section explains the design of the study in detail. The size and selection of the sample, the variables and the controls employed, the sources of data, the tools, and methods or gathering data, the reliability of instruments selected or constructed, and the statistical procedures used in the analysis are carefully described.

Procedures Used:

This sub-section describes the method of attack employed in the investigation. It gives an accurate, detailed description of how the work was done. Your objective is to provide and explanation that will enable the reader to repeat the

investigation-reproducing the exact conditions of the original study-to check its findings. One may present:

1. A definition of the population and an explanation of why the population is relevant for the study.
2. The rationale of the size of the sample
3. How the sample was selected
4. Data that describe characteristics of the subjects that are relevant to the problem
5. The number of subjects who defined to participate, dropped out, or did not participate in all parts of the study and why
6. Where, when and what type of data were collected any by what instruments
7. The number of times and order in which the instruments were used, and the time allotted to each data collection session
8. The rationale for selecting the design-the assumptions made, experimental controls established, how subjects and treatments were assigned to groups, and how variables were manipulated
9. The verbal or written directions, and the briefings and briefings given the subjects.
10. The characteristics of interviewers or observers and how they were trained.
11. The type of interviewers or observers and how they were trained
12. The types of data analysis made, the reasons for choosing the particular statistical procedures employed and the level of significance selected
13. How the data will be presented
14. An account of the pilot study
15. An explanation of any methods that were employed and abandoned because they prove3d to be inadequate or valueless.
16. Suggestions for improving the procedures in further studies.

Methods Of Data Gathering:

there are various methods and techniques of data gathering. The methods and techniques preferred by the investigator for his study have to be justified and described in detail. These methods for his study have to be justified and described in detail. These methods and techniques have to be determined in the light of the nature of the problem and the sources of relevant data

Description Of Data-Gathering Instruments:

Well-known data-gathering instruments and readily available apparatus are described briefly, and references are listed to reveal where more detailed discussions may be found. But if new apparatus of instruments or variations of old ones are employed, detailed descriptions and drawings of them and clear explanations of how they were used are given. After describing the investigative instruments, you explain the procedures employed to calibrate those that require it. For any non-standardized instrument, you obtain independent validity and reliability estimates and, when applicable report whether they are lower than the estimates in the original study. For standardized instruments, you indicate why the original reliability and validity data obtained during the standardization process apply in this study, or, if you use a sample that differs from the samples used in the standardization process, you obtain independent estimates. Before presenting the results of your findings, you check to make certain that no essential information has been omitted, that the reader must possess to follow or to comprehend the rest of the report or to replicate the study.

4. Presentation And Analysis Of Data:

The data analysis and interpretation may be presented in separate chapters or may be integrated and presented in one or more chapters. This is the heart of the research report. Sometimes, separate chapters are devoted to the tabulation,

analysis and the interpretation of data. The arrangement depends on the quantity of information one has to convey to the reader regarding the different stages in the process of the development of the study. Analysis and interpretation of data have to be done through the media of text, tables and figures, which are discussed below separately.

Text:

Because of the wide variety of studies and kinds of data that exist, no specific directions can be given for organizing this section of the report, but the descriptive and inferential aspects of the data are analyzed for each problem hypothesis, null hypothesis, or sub-problem in turn. Data relevant to each hypothesis must be categorized, manipulated and summarized in ways that reveal the pertinent information required to confirm or disconfirm the hypothesis. In most studies, the raw evidence is subjected to specific statistical treatments and the values that are obtained, rather than the raw data are reported in the study. The statistical treatment to which the data were subjected is clearly specified. For each statistical method used, your present evidence indicating that the assumptions underlying its use have been met.

Extracting the meaning from the data is one of the most difficult, and delightful phases of an investigation. In the textual discussion of the data, you do not repeat all the detailed information but rather point out important facts and relationships, make certain generalizations about the data, refrain from making any generalization that is not solidly supported by the data, and interpret that data. After drafting an explanation, you examine the data for exception, try to account for them, and restate your explanation if necessary. If more than one explanation can be given for a particular aspect of your data, you discuss honestly and thoroughly all explanations-not merely the one you favour, but you are free to marshal all the evidence you can to indicate why you have rejected rival

explanations. Your decisions, of course, might be disputed by another investigator. When stating the results of the study, careful qualifications are included that stipulate the precise conditions, situations or limits for which the findings are valid, such as the nature of the population to which the conclusions apply.

In reporting and interpreting the data, you note whether the relationship exists between the independent and dependent variables that must exist to confirm your hypothesis, point out that certain other variables that might have affected the dependent variable were controlled and call attention to uncontrolled variables that may have affected the results and discuss their possible implications.

In interpreting the data, you once again scrutinize the adequacy and appropriateness of the research design, methods of observation and measurement and types of analysis for the research problem.

Your main objective in an investigation is to note whether hypothesized relationships are confirmed, but if you note any unpredicted relationships, your report these findings and suggest that they should be substantiated in specifically predicted and tested independent studies. In interpreting the data, you point out how consistent or inconsistent your findings are with those of related studies and with the demands and expectations of the theory you have reviewed in the introduction of your report. In this manner, you tie your study into the network of existing scientific information and make you contribution to the advancement of knowledge.

Tables And Figures:

Apart from textual discussion, the data are critically analyzed and reported through tabular and graphic devices Good tables and figures are constructed and titled so that they are self-explanatory. They are relatively simple, pointing up

one or two significant relationships. If complex tables are developed, they should be placed it the appendix.

5. Summary And Conclusions:

This is the fifth section of the main body of the report. The summary is probably the most difficult section of the report to write. Beginning researchers are sometimes guilty of over generalizing on the basis of their limited data. Previously held convictions, not tested by the analysis, creep into the discussion. The course instructor often has to comment. "Your study to this point has been good. Your summary is disappointing. What you have reported may possibly be true, but there is nothing in your study to justify or support your conclusions."

In the summary, you briefly review the procedures, findings, and entire development of the study. The important points in the study are brought together in the summary, but not all the evidence upon which they are based is repeated. The conclusions are stated precisely and related directly to the hypotheses that were tested. The conclusions announce whether the findings of the study confirmed or disconfirmed the hypotheses. If the conclusions modify an existing theory, this fact is discussed. If the data have any implications for educational programmes or practices, these may also be discussed.

The summary and conclusion chapter is the most widely read part of a study because it recapitulated the information that has been presented in the previous sections of the report. Most readers scan the summary first to obtain an overview of the problem and to determine the usefulness of the study to them. If the study is pertinent to their purposes, they examine the remaining chapters.

In addition to the summary, some institutions required a candidate to submit an abstract of 600 words or less to fulfill requirements for a degree. An abstract

serves no as a substitute for the summary and conclusion chapter but rather as a synopsis, enabling a scholar to judge whether he should read the complete work.

Brief Restatement Of Problem And Procedures:

After a brief statement of the problem and a description of the procedure used in the investigation, the findings and conclusions are presented.

Description Of Procedure Used:

The procedures used, the design of the study, methods of research employed, the techniques and tools used for data collection, treatment of data, the methods of analysis and interpretation of data and all other steps are described briefly in order to enlighten any reader in this respect.

Principal Findings and Conclusions: The final unit of report usually contains the findings of the study, the conclusions the investigator has arrived at and the generalization he has formulated. In stating the conclusions, the investigator must indicate what his contribution has been to his field of study. Negative as well as positive results should find a place in the conclusions.

Recommendations For Further Research:

It may be appropriate in concluding this part of the report to indicate promising side-problems that have been uncovered and to suggest areas or problems for further investigation.

Reference Section:

The bibliography, appendix and index which will be discussed in detail later in this chapter, follow the main body of the report.

Bibliography:

The bibliography is preceded by a sheet containing the word BIBLIOGRAPHY, capitalized and centered on the page. The first page of the bibliography has the centre BIBLIOGRAPHY. The method of referencing a particular type of source should be consistent down to last comma.

Appendix:

An appendix, if included, follows the bibliography. You do not merely dump left over products of the study in the appendix; rather you present relevant supporting materials that are too unwieldy to be placed in the body of the dissertation.

Index:

If a study is compiled, of major importance, or to be published in book or monography from you also prepare an alphabetized index, which follows the appendix.

Style And Typing Of The Research Report:

A typist with great proficiency should be engaged for typing the research report. It is the responsibility of the researcher to present manuscript material to the professional typist in proper form. The manuscript should adhere strictly to the institutional requirements to which the report in the form of a thesis, desertions or research article is to be presented. A well and accurately typed report makes its presentation interesting and meaningful to the reader. The following are some rules which should be followed while typing the research reports.

General Rules For Typing Research Report:

- A while bond paper of 81/2 by 11 inches size of 13 to 16-pound weight should be used for the original and first carbon copy of the thesis or dissertation. A lighter weight paper may be used for other carbon copies. Any bond paper is acceptable for typing the research article.
- Material should be typed on one side of the paper.
- A typewriter with large (pica) type should be preferred. Same style and size of type should be used throughout the report.
- Use a non-greasy, fresh and black carbon paper, a medium-inked type writer ribbon, and clean type to get a clear and dense copy.
- The right margin should be one inch, the left margin 11/2 inches, the top margin1/4 inches, and the bottom margin 11/2 inches.
- All textural material should be double spaced.
- Throughout the manuscript an indention of seven spaces should be used at the beginning of paragraphs and quotations.
- Dividing of words at the end of the line should be avoided as far as possible.
- The body of the text is normally double spaced. Different spacing is required for quotations, footnotes, tables and figures, appendices and index (if any): These requirements are outlined with the discussion of each of these separately.

Rules For Typing Different Section Of Research Report:

The pattern and rules for typing preliminaries, main text, tables, footnotes, quotation, bibliography, appendix and index (if any) vary slightly from each other. A detailed discussion of each of these will help the researcher to provide the typist with the necessary directions for producing a satisfactory typescript.

1. Title Page:

Most universities and research organizations prescribe their own form of title page and these should be compiled within all matters of content and spacing. The title should be typed in capital letters beginning six spaces from the top of the page. If the title is too long to be centered on one line, an inverted pyramid style should be followed, without splitting words or phrases. It is not a good practice to underline titles and include them within inverted commas. Below the title, other items may be centered or balance against the left and right margins of the page. Other items are not typed in the capital letters, but usually only the initials of the principal words are capitalized. A specimen of the title page is presented in the following pages.

2. Preface Of Acknowledgements:

The heading 'preface' or 'Acknowledgments' in capital should be centered. There space below it should begin in first line of its contents. The researcher's initial are placed three spaces below the last line of the contents of acknowledgement and to the right of the right of the centre of the page.

3. The Table Of Contents:

The heading "Table of Contents" in capital should be centered at the top of the page. About three spaces below these headings 'page' appears at the right margins. Below this are preface or acknowledgements, list of table and list of figures. Then the heading 'Chapter' and 'page' are in the capital form. The 'preface' or 'acknowledgements',' list of tables' and 'list of figures' along with the4 chapter headings should be typed in capital without terminal punctuation. The chapter headings are numbered consequently in roman capitals. The initial letter of the first word of sub-headings and of all nouns, pronouns, verbs, adjectives and adverbs should be capitalized. To insert page numbers for each

division and sub-division, it is advisable to type the table of contents only after the entire final draft of the research report is typed.

4. List Of Tables And Figures:

Following the table of contents are separate pages for the list of tables and the list of figures with headings: List of tables and List of figures respectively. Two space below these headings Table and Page (in case of list of tables) and Figure and Page (in case of list of figures) appear at the left and right margins respectively. The information of each item in these lists include number of the table of figure in Arabic numerals, the exact title of the table or figure, and the page number on which it appears in the main body of the research report. The initial letters of key words in titles are capitalized and no terminal punctuation is used.

5. Chapter Division And Sub-Divisions':

For clarity and case of reading, the chapters, of theses and dissertations are usually divided into chapter divisions and sub-divisions. This practice is not followed in research articles.

The method of labeling chapter divisions and sub-divisions depends on the number of such division to be made. The kind of headings used includes centre headings, side headings and paragraph headings. In addition, each chapter has a chapter number and chapter heading. Usually, centered headings are used of chapter divisions, and side and paragraph headings for sub-divisions.

6. Pagination:

Every pages of the research report is given a number, although not every page has its page number typed on it. The title page or the initial page of the chapter, bibliography, or appendix does not have a page number typed on it; but a number is allowed for it in the serious. There are two separate series of page numbers.

The preliminaries numbered using small or lower case roman numerals (I, ii, iii, and so on). The title page is assigned the number I, but this number is not typed on it page numbers of the preliminaries should be placed in the centre at the bottom of the page, and are positioned one inch from the bottom of the page without punctuation. Roman numerals end with the last page or preliminaries preceding the main body of the report.

7. Quotations:

When a researcher cannot rephrase a law, mathematical formula, or idea as concisely, accurately, or convincingly as the original author has phrased it, he uses the exact words of the author, exactness means using the same words, the same punctuation, the same spelling, and the same capitalization.

8. Footnotes:

as the name implies, footnotes are normally found at the foot of a page. They serve a number of purpose footnotes, enable the writer to validate and substantiate a point, statement or argument; to explain, supplement, or expand material that is included in the main body of the report; to provide cross references to materials appearing in other parts of the report; to acknowledge and give credit to sources of material that he has quoted directly or indirectly and to provide the reader with sufficient information to enable him to consult sources independently and thus to verify the authenticity and accuracy of material used. Footnotes should not be included for mere purpose of scholarly appearance. They should be used sparingly; only when the material being presented clearly needs acknowledgement or amplification.

9. Construction Of Table:

Tables are used to convey information. They are used to help readers spot important details, see relationships, get a brief overview of the findings, or grasp the significance of data much more quickly and conveniently than through a long textual discussion. Although the use of the tables is not recommended simply to repeat information on adequately covered in the text of the report, the text should contain sufficient detail to support the particular argument being put forward. Some readers feel scared of the figures in the tables and refer to read the evidence presented in the main text. Other readers find tabular presentation easier to follow than written description.

10. Figures:

Figures are devices which are used by a researcher for the purpose of presenting data clearly and concisely. When skillfully used, they reveal important trends or relationships that a reader might not grasp when examining complex statistical data. Figures do not replace textual description, but they may help a researcher to explain and interpret complicated data effectively to the reader.

11. Bibliography:

the bibliography is typed at the end of the main body of the research report. It is preceded by a page bearing the word BIBLIOGRAPHY, Capitalized and centered on the page. The first page of the bibliography has the word “BIBLIOGRAPHY” as centre heading.

The purpose of a bibliography is quite different from that of a footnote. The purpose of a footnote is to give the specific location of the source of the statement made in the text, including the number of the actual page on which the statement appears in the original source. The purpose of the bibliography, on the other hand,

is to identify the whole work rather than a specific part of it. It is to identify the whole work rather than a specific part of it. It would be inconvenient to repeat the general reference on each occasion that a source is cited in a footnote, yet the full details of the source need to the included somewhere in the report for the information of the reader. The style of citation and punctuation in a bibliography is quite different from a footnote. For example, in a footnote the author's name is given in the natural order of initials or first name followed by the surname, but in a bibliography the surname precedes the initials of first name.

Most of the bibliography arrange in a simple alphabetical list the references used by the researcher in preparing the report, but more of them classify references under different headings such as books, journals, reports, newspaper, public documents and miscellaneous. The former method is preferred and generally used.

References:

1. Babbie, E.R. (2007). The Practice of Social Research, Belmont, CA: Wadsworth.
2. Creswell, J. (2007), Qualitative Inquiry and research Design: Choosing Among Five approaches, Sage Publications, New Angeles.
3. Creswell, J. (2009), Research Design: Qualitative, Quantitative and Mixed Approaches, Sage Publications, Los Angeles.
4. Kothari, C.R. (1985). Research Methodology: Methods and Techniques, New Age International, New Delhi.
5. Sharma, R.C. & Krishna Mohan, (2007). Business Correspondence and Report Writing, McGraw Hill, Delhi.
6. Bowden J. (2003). Writing a Report, Little Brown Book Group, London.
7. Reid, Michelle, (1997). Report Writing, Macmillan Education, UK.

ISBN: 978-81-947839-2-3

4. Development Of Ethnography Research Methodology

Rimmi Datta
Lecturer, Suniti Educational Trust B.Ed. and D.El.Ed. College,
Kalyani, Nadia, West Bengal, India.

Dr. Jayanta Mete
Dept. of Education, University of Kalyani, Kalyani, Nadia,
West Bengal, India-741235.

Objectives Of This Study:

- After reading this unit, one will be able to:
- To explain the concept of Educational Research.
- To know about the types of Educational Research.
- To explain the meaning, aims, characteristics of Ethnographic Research.
- To Identify the various types of Ethnographic Research.
- To explain the various steps in conducting an Ethnographic Research.
- To know about the advantages and disadvantages of Ethnographic Research.

1. Introduction To Research:

According to Clifford Woody, "research involves defining and redefining problems, making predictions or collecting possible solutions, organizing and evaluating the information obtained; Determining whether it conforms to the organized forecast by making descents and reaching the results and finally examining the results carefully". Research is the purification of human life. Its quality is improving. It is the hunt for knowledge. It shows how to scientifically solve any problem. It is a careful search in quest of all kinds of knowledge. It is a journey from the known to the unknown. It is a systematic effort to acquire new knowledge in any type of discipline. It is a strive to find a solution to any educational problem, which ultimately led to research in education. Research is

needed for any field to develop new theories or to modify, accept, or cancel existing theories. Since time is immemorial, thereafter many discoveries and inventions have come about through research and the world has had so many new theories that can help humans solve the problem. Research can be defined as the application of a scientific approach to the study of problems. Research is a systematic effort to answer meaningful questions about an event or phenomenon through scientific methods. It is a record of objective, empirical, and logical analyzes and controlled observations that lead to development. Generalizations, principles, or theories can be a consequence or cause of certain events in some cases of predicting and controlling events. The study does not settle for isolated scientific facts but seeks to integrate and streamline its research. It relates to purposeful verification, which requires the development of a logical analysis of the problem and the development of appropriate methods to obtain evidence. (Singh, 2006)

R - Rational way of thinking
E – Expert and exhaustive treatment
S – Search for a solution
E - Exactness
A – Analytical analysis of adequate data
R – Relationship of facts
C – Careful recording, Critical observation, Constructive attitude
H – Honesty, Hard work

Research can be divided into the following types, such as:

- Basic research
- Applied research
- Applicable research
- Evaluation research

- Experimental research
- Survey research
- Field investigative research

1.2 Steps Of Research:

The research is usually conducted based on the hourglass model-structure. According to this model-framework, research begins with a broad framework where data analysis, presentation of results, and relevant discussions are inserted through the collection of necessary information under a specific project or objective. The main 6 steps of the study are:

- Research problem identification,
- Relevant research and data review,
- Research problem specification,
- Specifying decision-making and research questions,
- Data collection,
- Create data analysis and description reports.

1.3 Educational Research:

Educational research is the field of scientific research that examines the process of teaching and learning and human qualities, interactions, institutions, and institutions that produce educational outcomes. Research is a daily natural activity for data collection. Academic research, much like general research, but it is more disciplined in its approach. The restriction is a rule that restricts you from what you can do or restricts you to some extent. Educational research refers to a systematic effort to gain a better understanding of the educational process, usually to improve its efficiency. It is an application of the scientific method to the study of academic problems. Educational research refers to different methods in which

people assess different aspects of learning, including student learning, teaching methods, teacher training, and mobility in the classroom. (Kerlinger, 1973)

1.4 Definitions Of Educational Research:

Travers (1969). "an activity directed towards the development of an organized body of scientific knowledge about the events with which educators are concerned".

Good. "Educational research is the study and investigation in the field of education."

Munroe. "The final purpose of educational research is to ascertain principles and develop procedures for use in the field of education."

Creswell, 2002. "Educational Research is a cyclical process of action that generally begins with the identification of a research problem or topic of study. It then involves reviewing the literature, defining a purpose for the study, collecting and analyzing data, and forming interpretations of the information. The process culminates in a report, disseminated to the audience, which is evaluated and used within the educational community".

Mulay. "Any systematic study designed to promote the development of education as a science can be considered educational research."

Crawford. "Educational research is a systematic and refined technique of thinking, using special tools to obtain a mere adequate solution to a problem."

J. W. Best. "Educational research is that activity which is directed towards the development of a science of behavior in educational situations. The ultimate aim of such a science is to provide

the knowledge that will permit the educator to achieve his goals by the most effective methods."

W. M. Traverse. "Educational research is that activity which is directed towards the development of the science of behavior in educational situations." (Naseema & Jibin, 2011)

1.5 Basic Types Of Research:

1. Fundamental Research:

It is a basic approach for the sake of knowledge. Fundamental research generally takes place in a laboratory or other sterile environment, sometimes with animals. This type of search, which has no immediate or scheduled application, can subsequently lead to new applied searches. Basic research involves the development of theory. It is not about practical application and more accurately represents laboratory conditions. Controls are often associated with scientific research. It is about establishing general learning principles. Basic research is primarily concerned with formulating a theory or contributing to an existing body of knowledge.

2. Applied Research:

This research aims to solve immediate practical problems. Research is conducted based on real problems and the circumstances in which they find themselves. Applied research can also be employed at a university or research institute, or it can be done in the private sector or for a government agency. Most of the features of basic research include the use of sampling techniques in applied research and subsequent information on the target population. The aim, however, is to improve the product or process - to test theoretical concepts in real problem situations.

Most pedagogical research is applied to research, which seeks to develop generalizations.

3. Action Research:

Research designed to discover effective ways to solve problems in the real world can be called action research. Such research is not limited to any specific method or instance. The goal of action research is to solve problems in the classroom using scientific methods. It is related to the local problem and is managed in the local environment. The main purpose of action research is to solve a given problem, not to make a contribution to science. (Sankhala, 2007)

1.6 Methods Of Educational Research:

Research methods are almost as important as research methods. They describe the various attack planning steps that will be taken to resolve investigation problems, such as how problems are formulated, the definition of terms, the validity of data collection tools, data collection, analysis, and interpretation, and initiation processes, and generalization. The research methodology has three main sections.

1. Historical Method:

It explains what is historical. It is a tool for researching recording past events and interpreting the present from a perspective. Historical research is a process associated with observation in which researchers try to test the authenticity of reports or observations made by others. It is a systematic collection and objective evaluation of data related to past events to determine the causes, effects, or trends of historical research.

2. Descriptive Method:

The detailed method helps us to know what is present by studying the nature of the present conditions. Detailed research studies are designed to obtain relevant and accurate information about current conditions. It is not limited to finding facts, but it aims to formulate principles that apply to a wider area. They are not limited to the local application but are also useful in finding solutions to problems at the state, national or international levels. The main purpose of the detailed study is to explain the current situation. But most of the time it refers to solutions or alternatives to improve on existing conditions.

3. Experimental Method:

The experimental method provides a research method to identify the underlying conditions under which a given phenomenon occurs, or more simply, under controlled conditions. The practitioner manipulates certain stimuli, therapies, or environmental conditions and observes how the condition or behavior of the subject is affected or altered in their manipulative and systematic way. The experiment provides a method of hypothesis testing. Once the experiments have defined a problem, they propose a tentative answer or hypothesis. Accept or reject it by testing the hypothesis and in light of the observed controlled variable relationship. The laboratory is the classic method of science laboratory where elements can be manipulated, and the observed effects can be controlled. It is the most advanced, accurate, and powerful method for finding and developing organized knowledge. (Kulbir Singh Sidhu, 2006)

2. Introduction To Ethnography:

Ethnography is both a social science research method and its ultimate written product. As a method, ethnographic observation involves deep and long-term emotions in the field of a person's field of study, behavior, and interaction with

people in everyday life. As a written product, an ethnography is a perfectly descriptive account of the social life and culture of the study community. Any field site can serve as a setting for ethnographic research.

2.1 History Of Ethnography

In the early twentieth century, anthropologists were developed by Bronisalla Malinovsky, most famously, by anthropologists. But at the same time, sociologists in the early days of the United States adopted many of the methods approved by the Chicago school, as well as playing a leading role in urban sociology. Since then ethnography has been a staple of socialist research methods, and many sociological methods have contributed to its formalization in books that offer developing and methodological guidelines. An ethnographer's goal is to study how a particular community or organization (field of study), and most importantly, people understand these things from the perspective as they develop a rich sense of thought, behavior, and interaction ("emic perspective" or "internal Perspectives"). Thus, the goal of anthropology is not only to understand customs and interactions but also to understand what the population means. Importantly, anthropologists work to identify what they find in historical and local contexts and their consequences and the connections between larger social forces and the structure of society. To conduct ethnographic research and produce an ethnography, researchers usually embed themselves within the site of their chosen field over a long period. They do this so that they can create a powerful dataset consisting of regular observations, interviews, and historical and investigative research, which requires repetition, careful observation of the same person and settings. Anthropologist Clifford Jitz referred to the process as producing "thick descriptions," meaning a submerged description of the following questions: who, where, where, when, and how. From a systematic point of view, an ethnographer has little impact on the field of important goals and people are studied as much as possible, to collect as much unbiased information as possible. An important

part of this process depends on believing, as they usually feel the presence of an ethnographer to behave and behave normally. (Pelto, 2017)

2.2 Introduction To Ethnographic Research:

Anthropological studies are generally holistic, based on the idea that humans are improved in the area they live in, how they make a living, and how they provide food, shelter, energy, and resources, as well as the best they can. Marked is the water for them, what their wedding customs are, what language(s) they speak, and much more. Ethnography is a type of research that focuses on the sociology of money by closely examining socio-economic issues. Typically, ethnographers focus on a community, work, leisure, class or school group, and other communities. Ethnography can be approached by the conservation of art and culture as a descriptive rather than analytical effort, approve that it is a branch of social and cultural anthropology. The focus in ethnography is on the study of the entire culture. The process begins with the selection of culture, a review of the literature on culture, and the identification of variables considered important by members of the culture, generally variables. Ethnography is a huge area with a huge variety of professionals and methods. The most common ethnographic approach, however, is participatory observation and randomized interviews as part of field research. The ethnographer immersed himself in the culture as an active participant by recording a wide range of field notes. In an anthropological study, there is no predetermined limit to what will be observed and interviewed, and there is no real endpoint as is the case with well-founded theories. Reflexivity occupies a central element in this type of research due to the ethnographer's exchange relationship with the study participants. This strategy is important because what people say about your behavior may conflict with your actual activity. (Mangal & Mangal, 2013)

2.3 Meaning Of Ethnographic Research:

Ethnography is the study of social interactions and cultural groups classified into societies, associations, institutions, or teams. The word ethnography is derived from the Greek word's ethnos and graphei (to be written). The main purpose of ethnography is to provide a rich, comprehensive insight into people's worldviews and activities and where they live Ethnographic research is a qualitative method in which researchers observe and communicate with respondents in their real-life environment. Ethnography is popularized by anthropology, but it is also widely used in the social sciences. Ethnography is a qualitative research that collects observations, interviews, and documentary data to create comprehensive and complete accounts of various social phenomena. (Lokesh, 2009). Ethnography is used to support a researcher's broader understanding of the research problem - along with the relevant domain, the audience(s), processes, goals, and context(s). In the early twentieth century, ethnography entered a wide range of disciplines in a wide range of disciplines, including anthropology, sociology, and education. The diversity of ethnographic approaches across multiple disciplines has contributed to the challenge of defining ethnography without reducing its complexity or limiting its conceptual frameworks.

2.4 Definitions Of Ethnographic Research:

"Ethnography means 'a portrait of a people'. Ethnography is a written description of a particular culture – the customs, beliefs, and behavior – based on information collected through fieldwork." –Marvin Harris and Orna Johnson, 2000.

"Ethnography is the art and science of describing a group or culture. The description may be of a small tribal group in an exotic land or a classroom in middle-class suburbia." –David M. Fetterman, 1998.

“When used as a method, ethnography typically refers to fieldwork (alternatively, participant-observation) conducted by a single investigator who ‘lives with and lives like’ those who are studied, usually for a year or more.” –John Van Maanen, 1996.

Ethnography is defined by Spradley and McCurdy as “the task of describing a particular culture.” Ethnography is the predominant method used by cultural anthropologists interested in relatively primitive cultures.

According to Spradley (1979), Ethnography is “the work of describing a culture”. The goal of ethnographic research is “to understand another way of life from the native point of view”.

"Ethnography is a process of creation and representation of knowledge (about society, culture, and the individual) that anthropologists base on their own experience. An experience that is as faithful as possible to the context, discussion, and interpersonal knowledge". Pink (2007)

2.5 The Aim Of Ethnographic Research:

Ethnography is qualitative research that analyzes the social interactions of environmental users. This study provides users with a complete view of images and words throughout the day, including their opinions and activities. This allows researchers to understand how users see the world and how they interact with everything around them. Ethnographic methods include devices such as direct observation, journaling, video recording, photography, and artistic analysis that a person uses during the day. The user can be monitored at home or anywhere with family or friends, even when not at work. The duration of the study may vary depending on the study. This can range from two hours of observation to several months of study. (Best & Kahn, 2003)

2.6 Assumptions In An Ethnographic Research:

According to Hammersley and Sanders, ethnography is characterized by the following characteristics:

1. Human behavior is studied in everyday contexts.
2. It is completed in a natural setting.
3. The goal is exploratory rather than evaluative.
4. It aims at finding out the point of view of the local person or the native, where the native can be a consumer or an end-user.
5. Data is collected from a wide variety of sources, but observation and/or relatively informal conversations are usually the most important.
6. The data collection approach is not structured, nor does it imply following a pre-determined detailed plan established at the beginning of the study, nor does it define the categories used to analyze and interpret the data. Got smooth data. This does not mean that research is unscientific. This means that the data is initially collected in raw form and as large as possible.
7. The focus is usually a single setting or group of relatively small size. In life history research, the focus can even be on one person.
8. The analysis of the data involves interpretation of the meanings and functions of human action and mainly takes the form of verbal descriptions and explanations, quantification, and statistical analysis being at most subordinate.
9. It is cyclical in terms of data collection and analysis. It is open to change and refinement throughout the process, while new learning forms shape future observations. Since one type of data yields new information, this information can stimulate the researcher to look at another type of data or elicit confirmation of an interpretation from another person who is part of the culture being studied. (Christopher & Marlene, 2003)

2.7 Characteristics Of Ethnographic Research:

The main features of ethnographic research are:

1. The subjects are examined in a natural environment and not in a laboratory.
2. The research requires close, personal interaction between the researcher and the participants.
3. Generates an accurate reflection of perspectives and behaviors.
4. Ethnography consists of an inductive, interactive, and repetitive collection of unstructured data and analysis to build local cultural theories.
5. Data is mainly collected from the field research experience.
6. Various data collection methods are used, such as Interviews, observation, review of artifacts, and visual material.
7. The research summarizes all human behaviors and beliefs in a socio-political and historical context.
8. Culture is used as a lens to interpret the results.
9. Emphasizes the study of the nature of certain social phenomena.
10. It examines a small number of cases, usually one case, but in detail.
11. The data analysis process includes an explicit interpretation of the meaning and functions of human activity. Interpretations take place within the context or group and are presented in the description of the topics.
12. Researchers should reflect on their implications for the site and cultural group.
13. Provides interpretations of people's actions and behaviors that should be studied carefully, what people do and why they do it.
14. It also provides a representation of the life and behavior of a person who is neither the researcher nor the person. Rather, the presentation is based on points of understanding and misunderstanding that arise between the researcher and the participant.

15. Ethnographic research cannot provide an exclusive, absolute description of anything. Instead, partial descriptions are provided that are required due to the time-bound and specific circumstances. (Singh, 2017)

2.8 Major Features Of Ethnographic Research:

1. Concentrate on one aspect of culture or culture:

- Holistic Ethnography: A comprehensive description and analysis of the whole culture.
- Microthnography: A special aspect of culture.

2. A natural research study of humans in the soil:

- Ethnographers may be part of cultural groups to study cultural patterns
- Its source.
- A pattern of sharing beliefs, behaviors, or language among members of a group are studied.
- Observe participants: Observe their daily lives and interview them.
- An "immersion" in a group: observation and informal conversation.

3. Overview:

- Greatly describe the field configuration.
- Low estimates, mainly descriptive data representations.
- Participants Use long quotes from participants.
- The purpose is to bring the culture to "living" readers.
- Use the present tense for communication of permanence and universality. (Grills, 1998)

3. Types Of Ethnographic Research:

Over the past 20 years, multiple disciplines and ethnographic genres have appeared in the social science literature. There are several types of ethnographic research, all based on different fields of human endeavor and each type is defined by specific characteristics. These are:

1. Classical/Traditional/ Theological /Realist Ethnic Groups:

In the early 20th century (Denzin 1997) and the 1930s, the classical form of anthropology was raised in the field of sociology, which is called by method (case study) (Hogan et al. 2009).

The depth and overall empirical description of his approach were based on the positive notion that "isolated researchers" try to describe their anthropological experience "descriptively".

This was often the result of a text written by a third party, where the phenomenon exists in a natural form without acknowledging the role of anthropology in social structures. This view of ethnography is widely rejected today as a failure to recognize the relationships he establishes with ethnographers and those engaged in them

2. Genre Ethnography:

Genre is a literary term that denotes the speech or rhetoric of several texts. In literary studies, ethnography is a genre in its own right, which became increasingly studied from the 1960s to the 1980s.

In the field of social sciences, different types of ethnography have emerged through reflection and discussion on the methodological, ethical, and theoretical components of this literary genre. Although genres are closely related to the

methodological, ethical, and theoretical aspects of fieldwork, writing ethnography is something to be studied in its own right. Unique in ethnographic writing is the importance of building the author's identity and providing reliable and valid information to the reader.

The language and form of the text play an important role in shaping and reflecting an author's intentions and statements, and examples of the ethnographic style that invokes particular authoritative rhetoric include presenting evidence and many examples, providing and elaborating analogies, and offering interpretations. (Mills & Morton, 2013)

3. Macro Ethnography:

Macro ethnographic studies of school structure attempt to analyze the relationships between social structure, social institutions, and school education. Here common perspectives are explored at a broader level, which appears to be general at a larger level. (Holloway & Wheeler, 2013)

4. Micro Ethnography:

Micro ethnography relates to local and existing ecology among participants in face-to-face interactional engagements with social and historical experience. This is the study of more specific cultural groupings. (Hornberger & Corson, 2012)

5. Rapid Ethnography:

Rapid ethnographic research is a method by which fieldwork is carried out on a concise and well-defined timeline. Normally, work in the anthropological field lasts many months or years. Likewise, the socio-economic area is also managed for several months. In the case of fast-paced ethnic groups, however, fieldwork time is often limited to a few weeks or 1-2 months. Rapid ethnography is often carried out in an environment where time and resources are not always available

to conduct research. Rapid ethnography approaches require anthropologists to enter the field with more well-defined and narrow research questions and case studies.

Rapid ethnographies often enter the next field of an engagement or attempt to solve a specific problem, especially in a case study or context. Therefore, the production of rapid anthropologists rarely takes the form of monographs; Instead, more direct and concise reports are created that do not always provide a detailed description in the theoretical sense, but provide information on the narrow search range or focus questions that led to the beginning of the search. (Pelto, 2016)

6. Feminist Ethnography:

Feminist ethnography is a textual form, which came to prominence in the 1970s. The decree of this ethnography is to correct the sexist imbalance in ethnographic research. Often in this ethnography, there is a more central focus on ethical and methodological issues than the substantive argument.

It centrally rejects positivism, naturalism, and the use of dualism. Feminist ethnographies seek to realize an egalitarian research process, represented by the reciprocity of authenticity and intersubjectivity, rather than embracing the hierarchical and exploitative relationships associated with conventional research. (Naples, 2013)

7. Critical Ethnography:

Critical anthropology itself emerged as an ethnographic text in the 1960s and 1970s. Like feminist ethnography, it criticized traditional and naturalistic research approaches and identified the political nature and central theme of ethnographic research.

Critical ethnography has three conditions under which ethnographers should engage in the political aspects of conducting research, work should be a starting point for criticism and social change, and research engages insensitivity to identify the limitations of research. Unlike classical ethnography, the ethnographer does not pursue the goal of remaining aloof and scientific purpose. (Kimmer & Mills, 2019)

8. Online Ethnography:

This form of ethnography, sometimes called virtual ethnography or netnography, uses the Internet to collect and analyze data from online chats, forums, and virtual communities, such as texts, interviews, and online discussions.

In many cases, this form of ethnography maintains the traditional view of ethnography by generating "thick details" from an immersion in the life of an online culture or community. (Kozinets, 2010)

9. Experimental Ethnography:

Experimental anthropology is an approach to the study and interpretation of cultures in everyday life that uses the techniques of experimental cinema to create new ways of looking at the world around us, editing, filming, and surrealism. Experimental ethnography seeks new ways of representing the complexities of the multicultural world in which we live.

10.Virtual Ethnography:

Virtual ethnography refers to ethnographic research that takes place in an online environment (Internet). Virtual ethnography is a highly interactive process that enables observation and participation in computer/device mediation cultures through a variety of confrontational methods. It is used to better understand the behaviors and knowledge of participants and collaborators in those cultures. It

also deals with the artifacts produced by these cultures and how these cultures share, use, and replicate them. The key to virtual ethnography is not to treat digital lives differently from real life, because they both belong to the same life and can only be comprehensively understood when approached as one. Ethnographers interested in the study of culture often engage in field research to immerse themselves in the culture they are studying. Similarly, virtual ethnographer's study online communities and culture. They do their research on the World Wide Web. Virtual ethnography is known differently by different researchers and different disciplines. (Atkinson, Delamont & Coffey, 2007)

11.Autoethnography:

This type of ethnography focuses more on the subjective experience and perspective of the writer as an object of study. Autoethnography understands the self as the narrator and part of the story, unlike the naturalistic and positivist approaches to traditional ethnographic work. Autoethnographic stories move towards an autobiographical narrative writing style. Autoethnography is the process of research and writing that seeks to describe and systematically analyze personal experience to understand cultural experience. (Chang, 2016)

12.Theoretical Discovery Ethnography:

Here, an ethnography generates new concepts or theoretical structures rather than connecting the theory of previous works.

13.Theoretical Extension Ethnography:

This type of ethnography extends the relevance of a particular concept or framework to other empirical contexts. This type of theoretical development often examines patterns that appear in contexts, such as social processes or stages of development.

14.Theoretical Refinement Ethnography:

Theoretical refinement is the modification of existing theoretical perspectives by examining new material. Theoretical refinement can be done alone or in combination with the theoretical extension. (Privitera & Ahlgrim-Delzell, 2018)

4. Different Approaches To Ethnographic Research:

There are a few key distinctions in ethnography that help to inform the researcher's approach: open vs. closed settings, overt vs. covert ethnography, and active vs. passive observation. Each approach has its advantages and disadvantages.

Open vs. Closed Settings:

The setting of ethnography, the environment in which one observes the inactivity of the chosen society can be open or closed. There are no official barriers to entry into the open or public setting. The closed or private setting is difficult to access. The boundaries of the closed group are clearly defined, and the ethnographer is fully immersed in the setting.

Overt vs. Covert Ethnography:

Most ethnography is public. In public policy, the ethnographer openly states their intentions and acknowledges their role as a researcher to the members of the group being studied. Over ethnography is usually preferred for ethical reasons because participants can provide informed consent. Sometimes ethnography is a mystery. This means that the researcher does not tell the participants about their research and comes forward with a few more Nepalese for being there. The occult ethnography group allows access to environments that do not welcome the researcher.

Active vs. Passive Observation:

Immersion at different levels in society may be appropriate in different contexts. The ethnographer may be a more active or passive participant, depending on the demands of their research and the nature of the setting. Trying to fully integrate into an active role, doing things, and participating in activities like other members of the community. Active participation encourages the group to be more comfortable with the presence of the ethnographer. A passive role means that the ethnographer stands back from the activities of others, behaves as a more distant observer, and does not participate in community activities. Passive observation allows more space for careful examination and note-taking. Ethnographers generally have a preference; they should also be simple about the level of participation.

5. When To Use Ethnography:

1. Ethnography can be very useful in the early stages of a user-centric design project. Ethnography focuses on raising awareness of the design issue. Therefore, it makes more sense to conduct ethnographic studies at the beginning of the project to support future design decisions (this will happen later in the user-centric design process).
2. Ethnographic techniques (such as Participant Observation) can override an existing design, but their true value comes from raising awareness of the relevant domain, the audience(s), processes, goals, and context(s).
3. Ethnographic techniques are used for very complex and/or complex design problems. More complex design issues (in terms of their domain, audience(s), processes, goals, and/or context(s) usage) require an in-depth understanding of what ethnographic studies contribute to. Similarly, the most complex systems (failure or error can lead to disaster) also require meaningful ethnographic research. (Cohen, Manion, & Morrison, 2002)

6. The Procedure Of Ethnographic Research:

Ethnography is a research method and has a solid foundation in empiricism and naturalism. Anthropological ethnographers often live in a group or society for a year or more to get to know them. A completely immersive, long-term "live and work" approach to ethnography has not been popular in the consumer realm. Ethnography did not make hypotheses about their research, nor did they set up an ethnographic methodology to test the hypothesis. On the other hand, ethnographic research is exploratory. This approach means that the ethnologist enters the field to explore a cultural group and/or to explore some social interactions. Therefore, research questions are not specified at the beginning of this effort, instead, this approach facilitates a persuasive and iterative approach whereby the dense description leads to the development of research questions while studying social questions. Part of the reason may have to do with cost, but it is also true that anthropologists and usability professionals are interested in various things. Anthropologists use ethnography to understand as much as possible of the entire society. Usability professionals are generally only interested in learning information that supports their argument about a specific design problem. However, miniature ethnographic studies can be very useful for user-focused projects. In ethnographic research, activities and processes are more integrated and less sequential than other forms of research (in particular, hypothesis formulation). Common activities for conducting ethnographic research are discussed in detail below: (Mills & Morton, 2013)

Identification Of The Phenomenon To Be Studied:

1. Identify Research Question:

Determine the problem you are trying to better understand. Develop a problem statement that raises questions that you want to know more about.

The problem or question can be about almost anything that is intended for people in a designated environment.

2. Selection:

The ethnographic method begins with the choice of culture. The researcher chooses the culture/community or population according to his interest. Ethnographic research often begins with selecting a field site.

After that, you will formulate a guiding research question appropriate to the specific site. However, it is also possible to start with a theoretically derived research question about a particular cultural process and find a site appropriate to that question.

3. Identification Of Subjects:

The second step that the researcher needs to do is to identify the basics for the study and consider whose interaction. For this purpose, the researcher usually uses a deliberate sampling method to identify the subjects. Identify things that need to be studied; It is often possible to study by specifying conditions.

4. Review Of Literature:

The researcher reviews the literature on the culture to get a brief idea and historical sketch of the culture selected for the study.

5. Hypotheses Generation:

As data collection continues in an ethnographic study, hypotheses can be formulated and modified. A study may begin with any specific hypotheses, but the data represent hypotheses as the study progresses. The ethnographic researcher is best suited to introduce new hypotheses and ignore unsupported hypotheses. In ethnographic research, hypotheses are created in a continuous

process throughout the study. Ethnographic research begins with no hypotheses and can formulate and modify hypotheses.

6. Identification Of Variables:

The researcher then needs to identify and explore variables that are of interest to him or her and members of the culture.

7. Sampling:

Sampling is an important aspect of preparing data collection and analysis activities. In ethnography, research context sampling is an important component of data collection, framing the overall functioning. The importance of the setting can be inferred by reading the titles of ethnographic passages which often refer to a group of people or a place of research more directly than to a topic or research problem. The central issue of sampling is the "trade-off" between the number of cases (e.g. settings, individuals, tasks, activities) - as the depth of study or as a time of ethnography. Generate a detailed and fully described account of the incident under consideration. Often a single study site is selected in ethnographic works, but many individuals, tasks, and activities incorporated into this context are chosen to develop a practical account of daily life. Participants, activities, and interactions are sampled on an opportunistic or targeted basis: the latter is more preferable to create a more complete picture of the events studied as more consideration has been given in the selection process. It is normally up to ethnographers to assign periods for observing a sample of common activities occurring in a research setting. However, a sample of less frequent activities is also sought, such as presenting behaviors, which also contribute to daily life. In this way, it is possible to generate a more sophisticated description of the social context.

8. Fieldwork:

Fieldwork includes all activities necessary to collect data (e.g. monitoring, interviews, and site documents). Overall, fieldwork is a personal experience because all researchers are different and their interests and skills are different. Multisite ethnography allows ethnographers to compare multiple local subcultures for multiple local studies. (Grills, 1998)

9. Data Collection:

Some data sources can be collected during fieldwork. Data collection is often associated with intensive use of resources and is therefore an important aspect of research for planning and execution. After gaining the trust of the respondents, the researcher collected data in the form of observation and recording transcripts, and interview tapping. There is a range of different but complementary approaches that can be used in ethnography. The following are the main methods used to collect data:

1. Participant Observation:

Participant observation is one of the main methodological approaches involved in ethnography. Observation of association is a more active engagement with research participants, requiring the ethnographer to balance internal with external continuity. Through participation, the anthropological writer behaves as an intern and always has a sense of unreality towards participant observation by which he can differentiate himself from the group being studied. In contrast, partial observation is characterized as a method by which the researcher "follows the flow of events." The level of participation depends on the research site and includes formal and informal interactions with study participants. Other components of participatory observation include the use of additional qualitative and quantitative methods. Various methods are commonly used as components

of participatory observation and include in-depth interviews, biographies, and document analysis.

2. In-Depth Interviews:

In addition to observations, an ethnographic study can be based on life history interviews or open narratives, also called "ethnographic interviews." In-depth interviews are also known as focused, distracted, or ethnographic interviews. These interviews are characterized by voluntary participation in which the participant engages in conversation about a particular topic of discussion related to relevant research questions or topics. In-depth interviews often appreciate participant observation that observation provides information about everyday life and interviews provide information about how to speak and interpret daily social life. In general, interviews can be especially useful when selecting a site, after participants have completed their observations, or when participants are going through changes that are of interest to the researcher. Participants provide information on observational actions and behaviors, but the interviews provide an opportunity to learn how people directly reflect their behavior, situations, identities, and events. This can be valuable in gaining an underlying perspective. An important part of the interviews is building relationships with the participants. The best way to do this is to be a good listener, which means listening and listening much more than talking and conversing. Interviews can be recorded with the consent of the participants. If the participant does not want you to record the interview, take enough time after the interview to write a more complete note of what was said.

3. Life Histories:

The life story is a type of interview that focuses on individual life and its narrated story in an attempt to understand the social processes determined by

classification, culture, and gender. This method considers one as an active participant in the research process. Life stories allow ethnographers to broaden their understanding beyond the time they spend in the field. Also, it helps the anthropologist to collect more examples from everyday life that can be observed or repeated in participatory observations and in-depth interviews.

4. Documentary Data:

Document analysis is the analysis of text documents such as media reports, laws, and/or graphic documents such as photographs and maps. Document analysis provides information on how participants study messages, languages, and lectures. Document analysis can provide useful background information for the study and provide information on how participants view them. This analysis can provide information on how the participants triangulate them with previous methods.

5. Triangulation:

Triangulation is an analytical technique that involves and compares multiple approaches to provide a deeper and more general understanding of an event. The use of multiple methods during ethnography raises unique concerns around data analysis and synthesis. Not only is triangulation an important way for anthropologists to establish systematic strengths/qualities, but the use of triangulation is also an important aspect of data synthesis to provide a rich and representative statement in the context in which it is being studied.

6. Reflexivity In Ethnography:

Reflexivity refers to self-representation, recognition, and location in ethnographic investigations. In classical anthropological research, anthropologists viewed data collection as natural, while anthropologists viewed social phenomenon in its

natural order. As a result, little or no consideration was given to how the presence of anthropologists affected the people they studied or the recording and reporting of data. Reflexivity is a strategy that involves (the researcher's) own consideration when planning and conducting an anthropological investigation. It refers to the self-reflection of a person's background, values, and history, as it affects the way the social phenomenon is viewed and reported. In the research report, the reflection is presented in the form of descriptions of the ethnographer's ideas and experiences, which readers can use to judge the impact of these effects on any study.

7. Site Documents:

Various documents on the site may be relevant to ethnographic research. This includes announcements, job descriptions, annual reports, memos, letters, brochures, newsletters, websites, meeting minutes, menus, and many other types of written articles. The site documentation places your study participants in a much broader context.

8. Fieldnotes:

The general advice is to write field notes while you are in the field or as soon as possible after leaving the field site. It is possible to distinguish between the four main parts of the field note, which must be kept separate from each other. First, the annotation is a word or short phrase written on the field site. Annotations are usually recorded in a small notebook and are designed to help you remember those things if you want to include them when writing more complete notes. Secondly, the description means writing everything you can remember about a particular event that can later help you write about the site, but also help link related events to each other. Third, the analysis is about what you learned in the environment about your research questions and other related topics. Fourth,

reflection is a reflection of what you have thought, felt, and learned while observing. Reflection is very relevant in ethnographic research but be careful to separate it from description and analysis. Finally, the methods for writing field notes are quite personal. Therefore, you can develop different types of methods for writing notes. Whatever you do, be sure to separate the description from explanation and judgment.

9. Reviewing Other Sources:

There may be other data sources that reflect the research problems under study. These other sources usually contain periodic records of the organizations in which the study is conducted. These records can support observational data and the researcher's perception. These can be in the form of other sources:

- Achievement tests
- Attitude inventories
- Psychological tests
- Interest inventories
- Incidence of specific behaviors (discipline records) (Keeves, 1997).

10.Analyzing Data:

Data analysis in ethnographic methods is repetitive and not used. There are three aspects of data analysis: description, analysis, and explanation. The description refers to the recalculation and description of the data, inevitably treating the information as true. Analysis refers to examining relationships, causes, and links between data points. Finally, data interpretation is done through data points and data understanding or interpretation outside of analysis.

Although these three items are not always easily divided separately, it may be important for the ethnographer and reader to understand them as they may reflect

more data collection and decorative devices used when writing in some parts. Field notes are a unique feature of compositional ethnography that combines data collection and analysis through iterative reporting and interpretation of research from all methods used.

In the case of data collection, field notes provide a space for observers to observe stories, descriptions, and interpretations during the observation. Field notes can include notes on ethnographic, ethical, and theoretical considerations and other methods used during the field when documenting struggles. Observations, descriptions, and explanations should be displayed when writing field notes because field notes become a record and data point during the data writing and analysis process. As clear as the difference is; Ethnographers are in a better position to report both the events they record during the research process and the explanations they add.

11.Using Technology In Data Analysis:

Although the breadth of ethnographic themes and genres has increased in the last 20 years and the "rules" of ethnography have become strange; There is a trend in the ethnographic literature to become more dependent on software programs for data analysis. The range of capabilities available in software packages differs and provides new ways for anthropologists to organize and manage their data. (Daniel & Harland, 2017)

7. Evaluating The Quality Of Ethnographic Research:

The term ethnography means "portrait of a human being", which reminds us that ethnography will represent the field which suggests that there is a concern both in conducting the ethnographic research and in the research report itself, often written in a format rather than more conventional academic research reports. A challenge with evaluating anthropological work is that the process and the

product use scientific and artistic approaches to the collection and interpretation of data. Therefore, it is difficult to apply both scientific and thematic concepts in the evaluation of a single complex piece. For the convenience of engaging with ethnography, it is important not only to discuss the value of this work but also to discuss the ways to evaluate it. Ethnography is an applied social science research method, the evaluation involves various research methods, one of which may be ethnography. The purpose of ethnography is a bold description and cultural interpretation; The goal of the evaluation is to systematically determine the suitability of the program and to develop an evaluation resolution. The qualitative evaluation approach demonstrated benefits to the evaluators and this three Responsive Evaluation, Goal-Free Evaluation, and Constructivist Evaluation approaches are summarized in the anthropological models of evaluation. Responsive Evaluation, Goal-Free Evaluation, and Constructivist Evaluation have conceptual and methodological similarities. In evaluating a program evaluation should be able to identify when one of these ethnographic or anthropological models is possible and appropriate. Evaluators should consider the model and its strengths and limitations when selecting the most appropriate evaluation method for program stakeholders. A sound evaluation usually requires the employment of quantitative and qualitative research methods. The anthropological models of ethnography and evaluation are best suited to supplement the quantitative components of evaluation and serve as a way of triangulating data collection methods and data resources. The competent evaluator should be informed about these evaluation methods and the anthropological models of evaluation. (Davidson, 2005)

8. Advantages & Disadvantages Of Ethnographic Research:

8.1 Advantages Of Ethnographic Research:

- An important benefit associated with ethnographic research is that ethnographic imagery can help identify and identify unexpected problems. When conducting other forms of studies that are not grounded on observation or interactions, it is very easy to miss unexpected problems. This can happen because the question is not asked, or the respondents do not mention anything. The presence of an anthropologist helps reduce this risk because the problems are known directly to the researcher.
- The other great advantage of ethnography is considered to be the ability to present detailed and reliable representations of user behavior and attitudes. Due to its subjective nature, an anthropological study (including a trained researcher) can be very effective in discovering and analyzing the relevant perspectives and sensations of the user.
- The ability to see how natural users interact with technology in their natural environment.
- Identify unexpected issues that may not test your usability.
- The opportunity to test new product ideas to see what your needs are before they go to market.

8.3 Disadvantages Of Ethnographic Research:

- One of the main criticisms of ethnographic studies is that they take time to complete. As discussed above, ethnographic studies are not always time consuming, but this observation is valid. Due to the rich production, the ethnographic study requires more time to generate and analyze its data than many other methods.

- During previous ethnographic studies, we found that subjects were unable to function normally during a small study. Long studies are generally opposed to this because researchers are tired of believing researchers and/or any hypocrisy.
- It takes a long time to create and analyze all the results as the user becomes more knowledgeable.
- Small studies may not work normally with any user because they know the existing researchers.
- The cost of conducting ethnographic studies is often much higher than utility tests. (Arthur, Waring, Coe, & Hedges, 2012)

Challenges & Risks Associated With Ethnographic Research:

9.1 Challenges In Conducting An Ethnographic Research:

- Field Fieldwork requires time.
- Knowledge of social socio-cultural systems is required.
- Report Research requires a literal, storytelling approach.
- Avoiding an inaccurate portrayal of the cultural system.

9.2 Risks Associated With Ethnographic Research:

As mentioned above, ethnographic studies examine and/or interact with environmental issues intended to support the researcher's (future) design. There are two major potential weaknesses with ethnographic studies:

Researcher: Ethnographic researchers need to be very skilled to avoid the potential pitfalls of ethnographic study. Some of these include observational details and completeness and potential bias (and errors) in data collection or analysis.

Subjects: Any study subjects need to be as large as possible to represent a large audience (assuming the study is designed in this way). It is also very important to be open about things and honest with the researcher. Both issues are related to the quality of the researcher and their role in the design of the study.

Therefore, the maximum of the risks accompanying ethnographic studies is directly or indirectly associated with the researcher. This means that the choice of an ethnographic researcher is crucial to the success of the study. We recommend choosing a researcher with a proven background who has been involved in successful projects in different domains in the past. (Delamont, 2012)

10. Ethnography In Education:

Delamont (2000) generally analyzes the pattern of five-second ethnography by Denzin and Lincoln (1994: 7-11) and attempts to apply it to education. In the process, she gives an overview of ethnography in education. Denzin and Lincoln (1994: 7-11) divided the history of qualitative research into five periods:

- Traditional (1900-50),
- Modernist or Golden Age (1950-70),
- Blurred Genres (1970-86),
- Crisis of Representation (1986-90),
- The Present or The Postmodern (1990-97).

They associate each period with a dominant paradigmatic theme. A brief description of these periods, the dominant themes and models identified by Denzin and Lincoln, and its counterpart in education as discussed in Delamont (2000).

Traditional, 1900-50; Positivism:

This era was influenced by Malinowski and Evans Pritchard in anthropology and classical urban studies at the Chicago School of Sociology. Emphasis was placed on creating an account of social events with purpose and approval. Anthropological research on education was not yet established during this period, but socialization was a problem. In America, two empirical issues were studied; Teachers and male students in school or those who drop out. In Great Britain, no qualitative study of education has yet been started.

Modernist; 1950-70: Challenges to Positivism (e.g. Symbolic Interactionism):

The second period was by Denzin and Lincoln (1994) as the golden age of ethnography. Here an exact form of the qualitative or ethnographic approach formally given. It was the best day of the second school in Chicago. The discovery of grounded theory, considered one milestone of the qualitative method, is related to this period. Other writers who transformed this period through their writing include Mayer Forts, Edmund Leach, and Max Gluckman from Anthropology and Everett Hughes, Blanche Zier, Howard Baker, Ansell Strauss, and Joseph Gusfield from Sociology. It was also a golden age in education. Baker, Zir (1966), and Peterson (1964), professors, and Baker and colleagues conducted prominent quality studies in the United States during this period in higher education. The topics in the ethnography of education were Woolcott (1967), Dumont and Wax, and the Native American settings of Spindler and Spindler which are classical ethnographies in education. In the UK, the first qualitative study of education was based on a joint department of anthropology and sociology, although it was not published. It has not yet started in Australia. Another important feature of this period was the apparent difference between the ethnographic perspective of qualitative pedagogical research (strong in the United States and Canada, absent

in the United Kingdom and Australia) and the clear sociology of emerging education (strong in the United Kingdom and Australia). This difference became more acute in later times.

Blurred Genres, 1970-86:

The growing challenges for positivism when looking at symbolic interactionism, phenomenology, ethnography, feminism, and fictional criticism. This can be considered a moment of ambiguity as large amounts of data collection and analysis emerge. For example, various methods of collecting and analyzing empirical materials are also available, including qualitative interviews were entering situations with narrative, content, and semiotic methods of reading interviews and cultural lessons. Two textbooks on the qualitative approach were published: the Lofland textbook on the qualitative approach and the qualitative approach by Hammersley and Atkinson (1983) and Burgess (1984). This can be considered the golden age of qualitative educational research because there have been many studies. While British and Australian qualitative researchers focused on class, American and Canadian educational anthropologists focused on the position of schools within a cultural similarity. Some important writers of this period were Baker, Olcott, and Young.

Crisis of Representation:

1986-90; Production of Reflexive Texts: According to Lincoln and Denzin (1994) this is a period of representative crisis. So far there have been very few questions about the presentation of the ethnography text. After the publication of the books by Clifford and Marcus (1986), qualitative research called the different languages linguistic turn or explanatory team or rhetorical turn. The cans of truth and method were challenged, not through critical tests of textual practice. Anthropologists review their field notes and look for new meanings in them.

The Present or the Postmodern 1990-97. The Postmodern Zone:

Doubts were cast on all previous examples: Lincoln and Denzin highlight the current characteristic: "a messy moment, multiple voices, experimental lessons, ruptures, cracks, the crisis of legitimacy and presentation, self-criticism, new moral discourse, and technology." The basic premise of postmodernism is that since we are part of society, we can only create partial local truths and not universal truths. John Van Maanen (1995) theorized that further concern with deconstruction would make acquaintances stranger than strangers. Qualitative. The study in the study has taken none linguistic or postmodern tumor. Attempts by some anthropologists to establish a gender perspective or to explicitly adopt a more modern position in education have led to a sub gender rather than an alternative gender. (Vine, Clark, Richards, & Weir, 2017)

10.1 Some Examples Of Ethnographic Research In Education:

- Ethnographic analysis: a study of classroom environments in tribal districts in North East India.
- An Ethnographic Case Study on the Phenomena of Blended Learning Teachers.
- Ethnographic Case Study of a High School Science Classroom: Strategies in Stem Education.
- An Ethnographic Case Study of a School's Engagement in a School-Wide Reform.
- An ethnographic investigation of teacher behavior as a function of cognitive style.
- An Ethnographic Study of the Qualities and Characteristics of Democratic Elementary Classrooms Which Motivate Students to Civically Participate.
- A Linguistic Ethnography of Learning to Teach English at Indian Junior High Schools.

- An Ethnographic Study of Participant Roles in School Bullying.
- Education for sustainability: An ethnographic study of 15 years rural South Indian children's attitudes on sustainability.
- The Learning Home: An Ethnographic Case-Study of Curriculum, Place, and Design.

11. Conclusion:

Ethnographic research is the scientific explanation of an explicit human culture alien to the anthropologist. Each researcher has their way of conducting research and all these ideas are transmitted and understood in different ways. Because the researcher does not understand how to conduct his research, controversy arises. Ethnographic research is research that describes what is happening in a particular setting with the perspective of the participants in these events. This research focuses broadly on all events that take place in a particular setting. It usually provides a general picture of how a particular social group operates and does so through direct observation and interviews with key participants. Ethnographic research is known as the most qualitative research. Ethnographic research that seeks to explain human behavior to people is commonly known as its explanatory research and is the most common type of ethnographic research in the classroom. Ethnographic research is essentially a descriptive study. Uses a combination of quantitative and qualitative research methods to answer research questions about individuals in their social context. It includes records of observation and behavior more quantitative but uses qualitative research methods to understand beliefs, attitudes, values, social roles, social structures, and rules of behavior in an environment. Ethnographic research has been widely used in social science and educational research and its importance has been recognized by the academic community. Ethnographic research, if done correctly, enlightens the researcher and the ethnographic writer learns a lot through engagement. Learn from the "not

only" of what the investigator has to learn to fail. Ethnographic studies are a great way to understand your users and the challenges they may face in their daily life. However, ethnographic studies can be expensive and time-consuming, so it is important to ensure that you have found the correct research method. It is important to make sure that the research question is answered. Allow groups to change the data and use the information to make sure it is not omitted. Perhaps the most important decision in an ethnographic study is the choice of the ethnographic researcher. This person will design, manage, and analyze the results of the study, so they must have the skills and experience to ensure that the study is representative, accurate, and fair. This is an important and effective possibility that is constantly being evaluated and corrected. One of the most important concepts behind participant observation is that there is no appropriate method: the method matches the study. The strategies described here can be integrated with other research methods in a larger research design that cannot reveal accessible information using more quantitative strategies for researchers. This article specifically examines “educational” anthropology because it applies to focus on in this educational course. Bloom firmly confirms that the educational ethnographic picture "helps to recreate what the classroom is and what happens there." The ultimate product of ethnography, history, or narrative is creating theoretically informed explanations about the culture of the community, group, or setting. It influences ethnography and will continue research in academic or classroom settings. (Pathak, 2008)

References:

1. Arthur, J., Waring, M., Coe, R., & Hedges, L. V. (2012). Research Methods and Methodologies in Education. SAGE.
2. Atkinson, P., and Hammersley, M. (2007). Ethnography Principles in Practice (Third ed.). London: Routledge.

3. Bernard H.R. (1995). Research Methods in Anthropology, Second Edition. London: Sage Publications.
4. Best, J. W., & Kahn, J. V. (2003). Research in education. Boston: Allyn And Bacon.
5. Creshwell. (2009). Research Design Qualitative, Quantitative, and Mixed Methods Approaches (Third ed.). Los Angeles: SAGE.
6. Christopher, & Marlene. (2003). Ethnography for Education. McGraw-Hill Education (UK).
7. Cohen, L., Manion, L., & Morrison, K. (2002). Research Methods in Education. Routledge.
8. Delamont, S. (2012). Ethnographic Methods in Education. Los Angeles, Calif.; London: Sage
9. Daniel, B. K., & Harland, T. (2017). Higher Education Research Methodology. Routledge.
10. Fetterman, D.M. (2010). Ethnography Step-by-step (Third ed.). Los Angeles: SAGE.
11. Grills, S. (1998). Doing Ethnographic Research. SAGE Publications, Incorporated.
12. Katz, J. and Csordas, T. (2003). Phenomenological Ethnography in Sociology and Anthropology. Ethnography, 4. 275-288.
13. Keeves, J. P. (1997). Educational Research, Methodology and Measurement: An International Handbook. New York, N.Y.: Pergamon.
14. Kulbir Singh Sidhu. (2006). Methodology of Research in Education. New Delhi: Sterling Publishers Private.
15. Lokesh, K. (2009). Methodology of Educational Research, 4th Edition. Vikas Publishing House.
16. Mangal, S., K., & Mangal, S. (2013). Research Methodology in Behavioral Sciences. PHI Learning Pvt. Ltd.
17. Mills, D., & Morton, M. (2013). Ethnography in Education. SAGE.

18. Naseema, C., & Jibin, V., K. (2011). Research Methodology in Education and Application of Statistics.
19. Pathak, R. (2008). Methodology of Educational Research. Atlantic Publishers & Dist.
20. Privitera, G. J., & Ahlgrim-Delzell, L. (2018). Research Methods for Education. SAGE Publications.
21. Sankhala, D. P. (2007). Research Methodology in Education. New Delhi, India: Adhyayan Publishers & Distributors.
22. Singh, M. (2017). Post-Monolingual Research Methodology: Multilingual Researchers Democratizing Theorizing and Doctoral Education. Education Sciences, 7(1), 28.
23. Singh, Y., Kumar. (2006). Fundamental of Research Methodology and Statistics. New Age International
24. Vine, T., Clark, J., Richards, S., & Weir, D. (2017). Ethnographic Research and Analysis: Anxiety, Identity and Self. Springer.

ISBN: 978-81-947839-2-3

5. An Overview Of Systematic Literature Review In The Field Of Research Work

Rakesh Manna
Research Scholar, Department of Education,
University of Kalyani, West Bengal, India -741235.

Dr. Jayanta Mete
Professor, Department of Education, University of Kalyani,
Kalyani, Nadia, West Bengal, India -741235.

Introduction:

Review of related Literature is a very important part in design of a research work. A review of the literature and related research report's is a most important component in designing a research project. The review should describe, summarize, evaluate and clarify this literature. A literature review is a survey of scholarly sources that provides an overview of a particular topic. It generally follows a discussion of the paper's thesis statement or the study's goals or purpose. Best (2003) stated that "Man builds upon the accumulated and recorded knowledge of the past and a familiarity with the literature. Any problem area helps the students to discover what is already known, what others have attempted to find out, what methods of action have been promising and what problems remain to be unsolved". It should give a theoretical basis for the research and help us determine the nature of our own research. Select a limited number of works that are central to our area rather than trying to collect a large number of works that are not as closely connected to our topic area.

'Review of related studies' works as a main guide for the entire research process. Any scientific investigation starts with a review of the literature. It is an essential part of the research process which allows a researcher to acquire current knowledge in a scientific way in the field of research work. The knowledge of the related study helps the researcher carry out the research work smoothly,

systematically and concisely. It helps a researcher avoid keep away from any duplication of work done earlier. A careful review always focuses at interpreting previous studies and indicating their usefulness for the study to be undertaken.

The review of literature is a written summary of articles, books, and other documents that describes the past and current state of knowledge about a topic. It involves the systematic identification, location, and analysis of documents containing information related to the research problem.

The review of the literature in educational research provides one with means of

getting to the frontier in a particular field of knowledge. According to Miller (1965) research worker must be aware of what is known with some degree of certainty, what is accepted as truth by some but not by others, and must have some linking of the nature of unexplored areas where additional research should be conducted. (Chandra, 2014)

Once the researcher identifies a topic that can have an should be studied; the search can begin for related literature on the topic. It provides a framework for establishing the importance of the study as well as a benchmark for comparing the results with other findings. Quantitative research, for example, includes a substantial amount of literature at the beginning of a study to provide direction for the research questions or hypotheses. Not only these, it is useful in other section of a research study.

A literature review goes beyond the search for information and includes the information and articulation of relationships between the literature and our field of research. While the form of the literature review may vary with different types of studies, the basic purposes remain constant:

- Provide a context for the research.

- Justify the research.
- Ensure the research hasn't been before.
- Shown where the research fits into the existing body of knowledge.
- Enable the researcher to learn from previous theory on the subject.
- Illustrate how the subject has been studied previously.
- Highlight flaws in previous research.
- Outline gaps in previous research.

What is Literature Review?

A Literature Review is a systematic and comprehensive analysis of books, scholarly articles and other sources relevant to a specific topic providing a base of knowledge on a topic. Literature reviews are designed to identify and critique the existing literature on a topic to justify your research by exposing gaps in current research.

This investigation should provide a description, summary, and critical evaluation of works related to the research problem and should also add to the overall knowledge of the topic as well as demonstrating how your research will fit within a larger field of study.

A literature review should offer critical analysis of the current research on a topic and that analysis should direct your research objective. This should not be confused with a book review or an annotated bibliography both research tools but very different in purpose and scope. A Literature Review can be a standalone element or part of a larger end product, know your assignment. Key to a good Literature Review is to document your process.

A literature review is a survey of scholarly sources that provides an overview of a particular topic. It generally follows a discussion of the paper's thesis statement or the study's goals or purpose.

Definitions of Review of Related Literature:

- According to Creswell, "A literature review is a written summary of journal, articles, books and other documents that describes the post and current state of information on the topic of research study."
- According to Cooper (1988), "....a literature review uses as its database reports of primary or original scholarship, and does not report new primary scholarship itself. The primary reports used in the literature may be verbal, but in the vast majority of cases reports are written documents."
- According to Bruce (1994), "The review of relevant literature is nearly always a standard chapter of a thesis or dissertation. The review forms an important chapter in a thesis where its purpose is to provide the background to and justification for the research undertaken."
- According to Lichtman (2006) "A literature review is an accounting of what is out there on a particular topic ..... It represents a synthesis and critical assessment related to a particular topic."

Importance Of The Review Of The Related Literature:

The literature review is important because;

- It describes how the proposed research is related to prior research in statistics.
- It shows the originality and relevance of your research problem specifically, your research is different from other statisticians.
- It justifies our proposed methodology.
- It demonstrates our preparedness to complete the research.

According To Goll The Literature Review Is Important Because:

- Seeking new lines of enquiry.
- Avoiding fruitless approaches.

- Delimiting the research.
- Gaining methodological inside.
- Identifying recommendation for further research.

Many researchers struggle when it comes to writing literature review for their research paper. A literature review is a comprehensive overview of all the knowledge available on a specific topic till date. When you decide on a research topic, usually the first step you take in the direction of conducting research is learn more about the previous research published on the topic, and this eventually translates into literature review when you write your research paper. Literature review is one of the pillars on which your research idea stands since it provides context, relevance, and background to the research problem you are exploring.

The Purpose Of A Literature Review Is To:

- Provide foundation of knowledge on topic
- Identify areas of prior scholarship to prevent duplication and give credit to other researchers
- Identify inconstancies: gaps in research, conflicts in previous studies, open questions left from another research
- Identify need for additional research (justifying your research)
- Identify the relationship of works in context of its contribution to the topic and to other works.
- Place your own research within the context of existing literature making a case for why further study is needed.

Types Of Literature Review:

Literature reviews can be categorized as Experimental literature review and Theoretical literature review. Experimental literature review basically refers to

surveying all the information available on a particular topic and critically analyzing the gaps that need to be worked upon. In this sense, it essentially forms the first experiment of any research project. The more extensive the review, the more precise and systematic the research project will be. Therefore, it is one of the most critical parts of one's research work. On the other hand Theoretical literature review essentially involves two steps: First, Surveying and critically reading the existing literature: this step is commonly referred to as experimental literature review; and Second, Summarizing and actually penning down the gist of your review in an organized manner: this is known as theoretical review.

It is important to think of knowledge in a given field as consisting of three layers.

1. There are the primary studies that researchers conduct and publish.
2. The reviews of those studies that summarize and offer new interpretations built from and often extending beyond the original studies.
3. There are the perceptions, conclusions, opinions, and interpretations that are shared informally that become part of the lore of the field.

In composing a literature review, it is important to note that it is often this third layer of knowledge that is cited as "true" even though it often has only a loose relationship to the primary studies and secondary literature reviews. Given this, while literature reviews are designed to provide an overview and synthesis of pertinent sources you have explored, there are several approaches to how they can be done, depending upon the type of analysis underpinning the study.

Various types and definition of literature reviews are listed below:

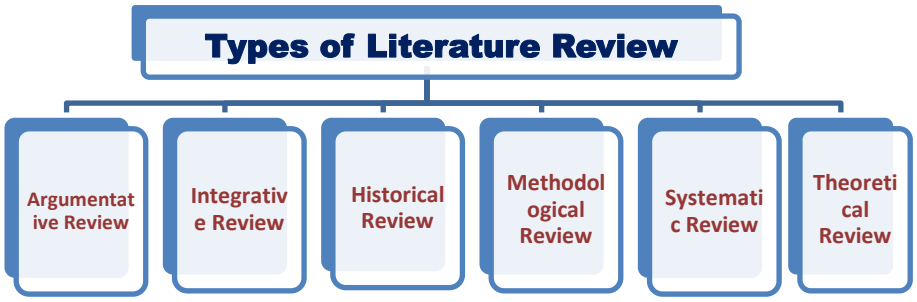


Fig.: 1 -Types of Literature Review

Argumentative Review: Argumentative Review is a review, this form examines literature selectively in order to support or refute an argument, deeply imbedded assumption, or philosophical problem already established in the literature. The purpose is to develop a body of literature that establishes a contrarian viewpoint. Given the value-laden nature of some social science research [e.g., educational reform; immigration control], argumentative approaches to analyzing the literature can be a legitimate and important form of discourse. However, note that they can also introduce problems of bias when they are used to make summary claims of the sort found in systematic reviews.

Integrative Review: Integrative Review is another type of review, Considered a form of research that reviews, critiques, and synthesizes representative literature on a topic in an integrated way such that new frameworks and perspectives on the topic are generated. The body of literature includes all studies that address related or identical hypotheses. A well-done integrative review meets the same standards as primary research in regard to clarity, rigor, and replication.

Historical Review: Historical review is a review; few things rest in isolation from historical precedent. Historical reviews are focused on examining research throughout a period of time; often starting with the first time an issue, concept, theory, phenomena emerged in the literature, then tracing its evolution within the scholarship of a discipline. The purpose is to place research in a historical context

to show familiarity with state-of-the-art developments and to identify the likely directions for future research.

Methodological Review: Methodological Review is a review does not always focus on 'what' someone said (content), but 'how' they said it (method of analysis). This approach provides a framework of understanding at different levels (i.e. those of theory, substantive fields, research approaches, and data collection and analysis techniques), enables researchers to draw on a wide variety of knowledge ranging from the conceptual level to practical documents for use in fieldwork in the areas of ontological and epistemological consideration, quantitative and qualitative integration, sampling, interviewing, data collection and data analysis, and helps highlight many ethical issues which we should be aware of and consider as we go through our study.

Systematic Review: Systematic Review is a review, this form consists of an overview of existing evidence pertinent to a clearly formulated research question, which uses pre-specified and standardized methods to identify and critically appraise relevant research, and to collect, report, and analyze data from the studies that are included in the review.

Theoretical Review: In Theoretical Review, the purpose of this form is to concretely examine the corpus of theory that has accumulated in regard to an issue, concept, theory, phenomena. The theoretical literature review help establish what theories already exist, the relationships between them, to what degree the existing theories have been investigated, and to develop new hypotheses to be tested. Often this form is used to help establish a lack of appropriate theories or reveal that current theories are inadequate for explaining new or emerging research problems. The unit of analysis can focus on a theoretical concept or a whole theory or framework.

Three Essential Categories of literature review are found. Those are follows-

1. **Simple:** A simple literature review is a brief overview of the topic not necessarily purely academic in scope and often uses popular sources (although popular sources are noted so their weight and value can be judged), this review is often just the start of the research process.
2. **Applied:** Used mostly in business, government and other professional environments applied literature reviews are more fact finding exorcizes. Used to look at marketability and profitability they look at change and value objectivity and accuracy in similar projects and programs.
3. **Academic:** Whether stand alone or part of a paper, study, or project the Academic Literature Review requires accuracy, quality resources, objectivity thoroughness and quality analysis but unlike the other two styles the Academic Review requires a depth the others do not. Academic sources not popular should be used and a summery and synthesis of sources usually within a conceptual framework.

Elements Of Literature Review:

There are many different ways to organize the references in a literature review, but most reviews contain certain basic elements. These are follows:

Objective of the literature review: Clearly describe the purpose of the paper and state your objectives in completing the literature review.

Overview of the subject, issue or theory under consideration: Give an overview of your research topic and what prompted it.

Categorization of sources: Grouping your research either historic, chronologically or thematically.

Organization of Subtopics: Subtopics should be grouped and presented in a logical order starting with the most prominent or significant and moving to the least significant.

Discussion: Provide analysis of both the uniqueness of each source and its similarities with other sources.

Conclusion: Summary of your analysis and evaluation of the reviewed works and how it is related to its parent discipline, scientific endeavor or profession.

Main features of Elements in a Literature Review:

- Locate major formative works in the field
- Ascertain key researchers working on this topic
- Find main ideas conclusions and theories Establish Similarities & differences
- Notice main methodologies and Research techniques
- Identify gaps in existing research
- Show relationships between previous studies / theories
- Provide context for your own research
- Explore existing information in the fields of research

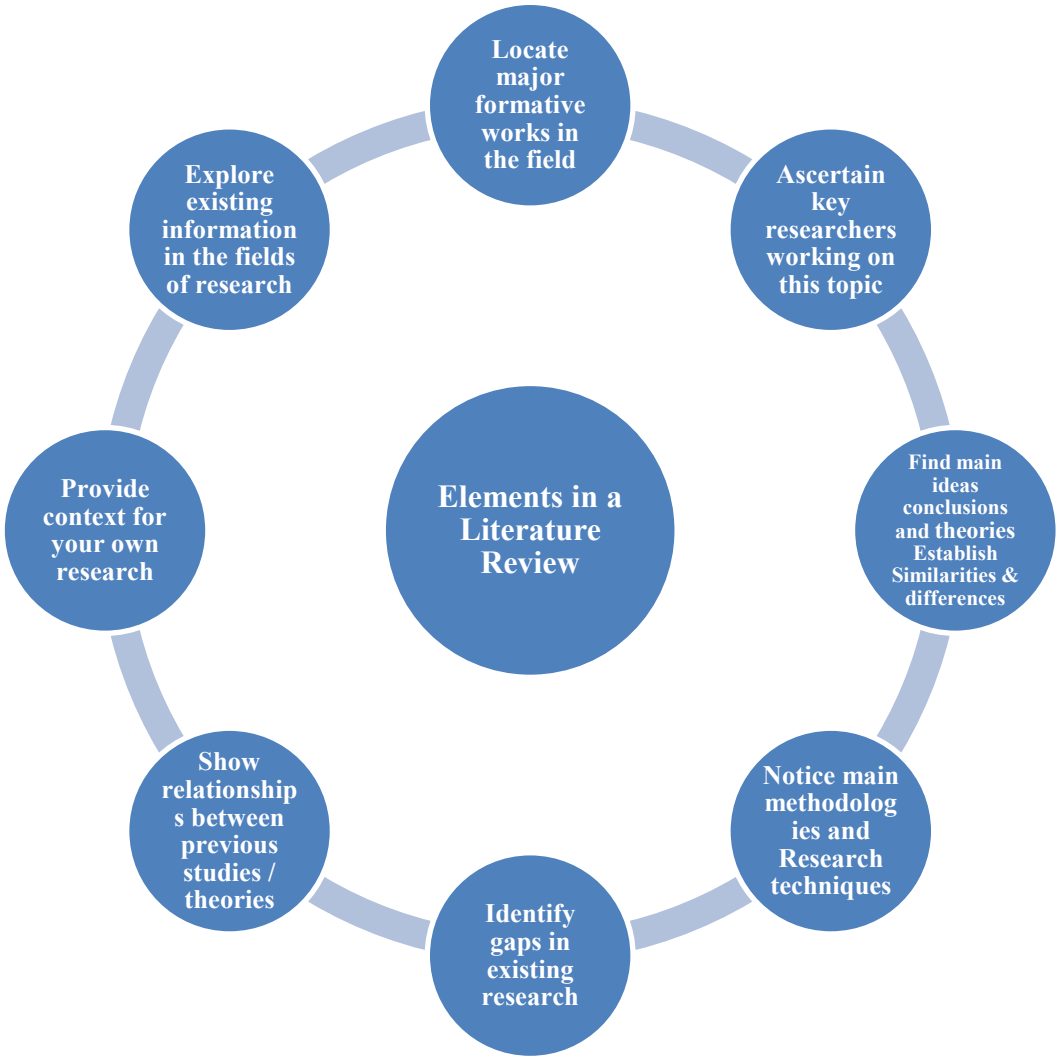


Fig:2- Elements of Literature Review

Systematic Review Seeks To:

- Identify all relevant published and unpublished evidence
- Assess critically the quality of each study/ literature
- Synthesizes the findings/ conclusion from each study/ literature in an unbiased way
- Interpret the findings/ conclusion
- Present a balanced and impartial summary of the findings/ conclusion (with due consideration of any flaws in the evidence.)

Systematic Review And Literature Review:

It is common to confuse systematic and literature reviews as both are used to provide a summary of the existent literature or research on a specific topic. Even with this common ground, both types vary significantly. Please review the following chart (and its corresponding poster linked below) for the detailed explanation of each as well as the differences between each type of review.

	Systematic Review	Literature Review
Definition	High-level overview of primary research on a focused question that identifies, selects, synthesizes, and appraises all high quality research evidence relevant to that question.	Qualitatively summarizes evidence on a topic using informal or subjective methods to collect and interpret studies.
Goals	Answer a focused clinical question Eliminate bias	Provide summary or overview of topic
Question	Clearly defined and answerable clinical question Recommend using PICO as a guide	Can be a general topic or a specific question
Components	Pre-specified eligibility criteria Systematic search strategy Assessment of the validity of findings Interpretation and presentation of results Reference list	Introduction Methods Discussion Conclusion Reference list
Number of Authors	Three or More	One or more
Timeline	Moths to years Average eighteen months	Weeks to Months
Requirements	Thorough knowledge of the topic Preform searches of all relevant databases Statistical analysis resources (for meta-analysis)	Understanding of topic Perform searches of one or more database
Value	Connects practicing clinicians to high quality evidence Supports evidence-based practice	Provides summary of literature on a topic

Fig- 3: Systematic Review And Literature Review

Sources of Research Literature:

The review of literature is a written summary of articles, books, and other documents that describes the past and current state of knowledge about a topic.

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

- Theses,
- Journals
- Books
- Magazines,
- Seminar Papers,
- Handbooks
- Government documents
- Encyclopedias
- Dictionaries and Glossaries of Terms
- Indexed Publications
- Electronic Sources
- Abstracts,
- Different/ various authors
- Occasional papers,
- Various types of report, etc.

Review Helps You To:

- Review helps to define and limit your study area to form a research question.
- Review helps to increase your knowledge of the subject area and methodology.
- Review helps to give background, context and perspective to your work and thesis.
- Review helps to avoid reinventing the wheel (saves time, avoids the mistakes of others).
- Review helps to evaluate possible research methods.

- Review helps to build on existing knowledge, to suggest further research.
- Review helps to identify people working in your field.

It Shows The Reader That You Can:

- Organize information and relate it to the research question.
- Compare and contrast authors' views noting areas of disagreement.
- Criticize aspects of methodology.
- Identify: seminal and exemplary work; gaps and areas of controversy.
- Synthesize results into a summary of what is and is not known and you can,
- Formulate question that needs further research.

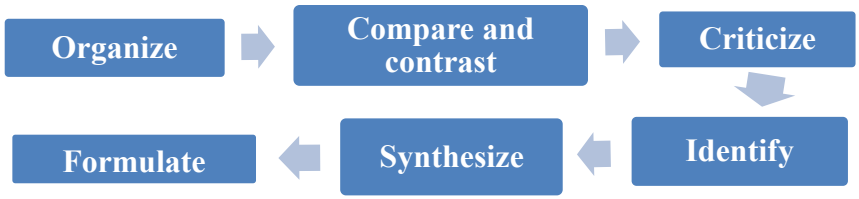


Fig. 4: Flow Chart

Preparing A Literature Review Thus Involves:

- Searching for reliable, accurate and up-to-date material on the topic or subject
- Reading and summarizing the key points from this literature
- Synthesizing these key ideas, theories and concepts into a summary of what is known
- Discussing and evaluating these ideas, theories and concepts
- Identifying particular areas of debate or controversy
- Preparing the ground for the application of these ideas to new research

Steps Of Literature Review: The process of writing a literature review is not necessarily a linear process. It also reminds to continually keep track of the

research by citing sources and creating a bibliography. Basically, there are four steps of literature review. These are-

1. **Topic -** Decide on a research topic or question. The formulation of a thesis will help get the process started. This may have to be revisited as work on research.
    - Know what the review is for; each assignment will offer the purpose for the review. For example, is it for “background”, or a “pro and con discussion”, "integration", “summarizing”, etc.
    - Create a “search plan”, decide where will search for information, what type of information as will need.
2. **Research -** Perform Searches; choose sources and collect information to use in paper. Make sure cite the sources used.
3. **Think -** Analyze information in a systematic manner and begin the literature review (e.g., summarize, synthesize, etc.). Make sure cite the sources used.
4. **Complete -** Write the paper, proof & revise and create the finished bibliography.

Literature Reviews For Dissertation / Research Article:

Every research report/ thesis/research article begins with an introduction to the topic of research. This forms the literature review for the article. The main purpose of the review is to introduce the readers to the need for conducting the said research. A literature review should begin with a thorough literature search using the main keywords in relevant online databases such as Google Scholar, PubMed, etc. Once all the relevant literature has been gathered, it should be organized as follows:

1. Background literature about the broad research topic to introduce the readers to the field of study.

2. Recent progress on the study topic which can be organized thematically or chronologically. Ideally, separate themes should be discussed in a chronological manner to describe how research in the field has evolved over time and to highlight the progress in the field.
3. The review should include a comparison and contrast of different studies. Discussing the controversial aspects helps to identify the main gaps that need to be worked upon. This is essential for defining the problem statement of the study and highlighting the significance of the research under question.
4. Once a problem statement has been defined, the strengths and pitfalls of other studies that have tackled the problem statement should be discussed. This is important for outlining the need and novelty of the research.

A literature review should not be a mere recounting of all the available information. It should be a critical and analytical summary of the selected literature that guides the readers through the central theme of the research.

Stand-Alone Literature Reviews:

Literature reviews can also be written as stand-alone articles. These are not different from the literature review sections described above; however, they are not followed by experimental data.

They basically fall into 2 broad categories: narrative reviews and systematic reviews.

1. Narrative Reviews: These are theoretical discussions of relevant information on a particular topic and its critical analysis. These are mostly qualitative in nature similar to the review sections of larger articles.

Narrative Reviews Are Usually Organized As Follows:

Introduction that establishes the context of the field of research and the topic of the review

Body is normally used for describing the different themes under the main topic by dividing them into different subheadings. This section compares and contrasts published studies and identify gaps that have not been addressed or have been unsuccessfully addressed.

Conclusions This section differs slightly between reviews which are part of research articles and narrative reviews. The section describes the main conclusions from analysis of all the current studies and puts forth further avenues for research. This section requires critical interpretation by the author such that the review adds value to existing literature. It should bring out ideas/hypotheses that can explain any discrepancies and provide solutions to existing problems.

Fig. 5: Flow Chart.

2. Systematic Reviews:

On the other hand, systematic reviews follow a well-planned methodology to qualitatively or quantitatively analyze a defined number of studies. They usually focus on a single question and have clear study objectives that are worked upon in a systematic manner. These studies are based on a well-defined strategy unlike narrative reviews. Systematic reviews and narrative reviews are organized slightly differently. The details are described below:

Introduction: Systematic reviews begin with specific research questions that are defined in terms of the samples and research outcomes to be studied.

Methods (only for systematic reviews): These studies have a comprehensive methodology that starts by narrowing down the literature for the review. Usually, specific inclusion/exclusion criteria are set based on the research questions and databases are searched based on these criteria. Once the sample studies have been shortlisted, they are analyzed in detail.

Results: The results section for these studies involves comprehensive data analysis to determine the significance of the study outcomes. Systematic reviews can be accompanied with Meta-analysis which involves statistical analysis of the included studies to increase the power of the results.

Discussion: This section usually interprets the study data based on their weighted significance and the power of the results. The study therefore provides strengthened results that are validated by the scientific rigor of the analytical method.

Before starting to write a review, it is important to determine what kind of review you want to write and follow the appropriate style and guidelines. An effective literature review is important for the complete life cycle of a research from defining the right research goals to correctly interpreting and presenting the research results.

Fig. 6: Flow Chart

References:

1. Aggarwal, J.C (2007): 'Essentials of Educational Psychology', Vikas Publishing House Pvt. Ltd., New Delhi, 2007.
2. Best, W. J. and Kahn, J. V.: Research in Education, New Delhi: Prentice Hall, 2003.
3. Best, W John, Kahn, James V (2011), Research in Education, New Delhi: PHI Learning Private Limited
4. Booth, A., Papaioannou, D., & Sutton, A. (2012). Systematic approaches to a successful literature review.
5. C. R. Kothari, Research Methodology: Methods and Techniques, New Delhi: New Age International, 2004.
6. Chandra, R. (2014). Influence of Socio-Economic Status And Intelligence on Academic Achievement of Secondary School Students of Lucknow City. thesis, Integral University, Lucknow.
7. Fink, A. (2010). Conducting research literature reviews: From the Internet to paper
8. Galvin, J. (2006). Writing literature reviews: A guide for students of the social and behavioral sciences
9. Garret, H E (2007), Statistics in Psychology of Education, New Delhi: Paragon International Publishers
10. J. W. Creswell, Educational Research: Planning conducting and evaluating quantitative and qualitative research, Upper Saddle River: Pearson, 2008.
11. Kennedy, Mary M. "Defining a Literature." Educational Researcher 36 (April 2007): 139-147.
12. Key, K.L., Rich, C., DeCristofaro, C., Collins, S. (2010). Use of Propofol and emergence agitation in children: A literature review. AANA Journal, 78(6).
13. Khandpekar, Neeta M. (2017). Book Review - Qualitative Research for Social Sciences, Journal of Indian Research. 5(3), 112-114.

14. Koul, Lokesh (2006), Methodology of Educational Research, New Delhi: Vikas Publishing House
15. Literature Review: Literature Review, Learning to Write a Systematic Review of Literature, https://uscupstate.libguides.com/Literature_Review
16. Ledesma, M. C., & Calderón, D. (2015). Critical race theory in education: A review of past literature and a look to the future. Qualitative Inquiry, 21(3), 206-222.
17. Lichtman, M. (2014), Qualitative Research for Social Sciences, Sage, USA, pp.418
18. M. Derntl, "Basics of research paper writing and publishing", Int. J. Tech. Enhanced Learning, vol. 6, no. 2, pp. 105-123, 2014.
19. Machi, L. A., & McEvoy, B. T. (2012). The literature review: Six steps to success
20. Mohan, Radha (2011), Research Methods in Education, Hyderabad: Neelkamal Publications Pvt Ltd

Webliography:

1. www.wikipedia.org
2. www.shodhganga.inflibnet.ac.in
3. www.ncw.nic.in
4. www.en.wikipedia.org
5. www.slideshare.net
6. www.academicjournals.org/articles
7. http://www.education.nic.in/ssa/ssa_1.asp
8. https://guides.library.ucsc.edu/write-a-literature-review
9. https://uscupstate.libguides.com/Literature_Review
10. https://research.library.gsu.edu/c.php?g=115595&p=754162

ISBN: 978-81-947839-2-3

6. Review Of Research Format

Dr. Kavita Patel
School of Science, Chemistry Department,
O.P Jindal University, Raigarh.

In this Chapter, we discuss the suggestion for review of research / Literature writing in different formats. In this chapter present why we should review of any topic, subject related research or article because a review of a journal article examines a scholarly article's strengths and weaknesses in terms of what the article is attempting to accomplish. We should know why writing review article? What is their importance in our research work? Here we will know about review of any research, their element, their content, quality etc. Review article preparation is more important part of our research work. So here I present How to write a review literature.

Introduction:

Review should include description, paraphrases, and your own analysis. Any analysis included should help readers to assess the article's value without having to necessarily read the articles themselves. To write a Review than you need to first properly, read the article twice thrice times. So, you find a good sources and content for review of research of any title topic or subject.

Meaning of Review: Review means "a critical article or report" a systematic periodically literature of previous work. At first, we must know about the definition of review of research.

A Review Article:

- A basic, helpful investigation of the writing in a particular field through rundown,
- Arrangement, investigation, examination.

- A logical book depending on recently distributed writing or information. New information from the creator's investigations are not introduced (with special cases: a few audits contain new information).
- An independent distribution. Writing audits as essential pieces of ace propositions, doctoral theories or award recommendations won't be considered here. In any case, numerous tips in this rule are adaptable to these content sorts.

Function Of A Review Article:

- properly organize literature
- to evaluate literature
- to identify research gaps and recommend new research areas
- identify patterns and trends in the literature
- to synthesize literature

The Audience Of Review Articles:

- experts in specific research areas
- students or novice researchers
- decision-makers Review articles targeted at the last two groups: Extended explanations of subjects or of subject-specific language are mandatory (e.g. through the uses of information boxes or glossaries).

The Types Of Review Articles:

1. Types By Methodological Approach:

Narrative Review: Selected research is in contrast and summarized on the foundation of the author’s experience, existing theories and models. Results are based totally on a qualitative as a substitute than a quantitative level.

- Best proof review A focal point on chosen research is blended with systematic strategies of study-selection and end result exploration.
- Systematic overview Findings from a number of person research are analyzed statistically through strict procedures.

Meta-Analyses are used to pool the outcomes of man or woman studies.

2. Types By Objective

- Status quo review Presentation of the most modern-day lookup for a given subject matter or discipline of research.
- History review Development of a discipline of lookup over time.
- Issue review evaluate Investigation of a trouble (i.e. a factor of disagreement or a question) in a precise discipline of research.
- Theory/model review assessment Introduction of a new principle or mannequin in a unique subject of research.

3. Types by mandate

- Invited reviews: skilled researchers are invited
- Commissioned reviews: formal contracts of authors with clients
- Unsolicited submissions: researchers increase a thought for an overview and put up it to journal editors.

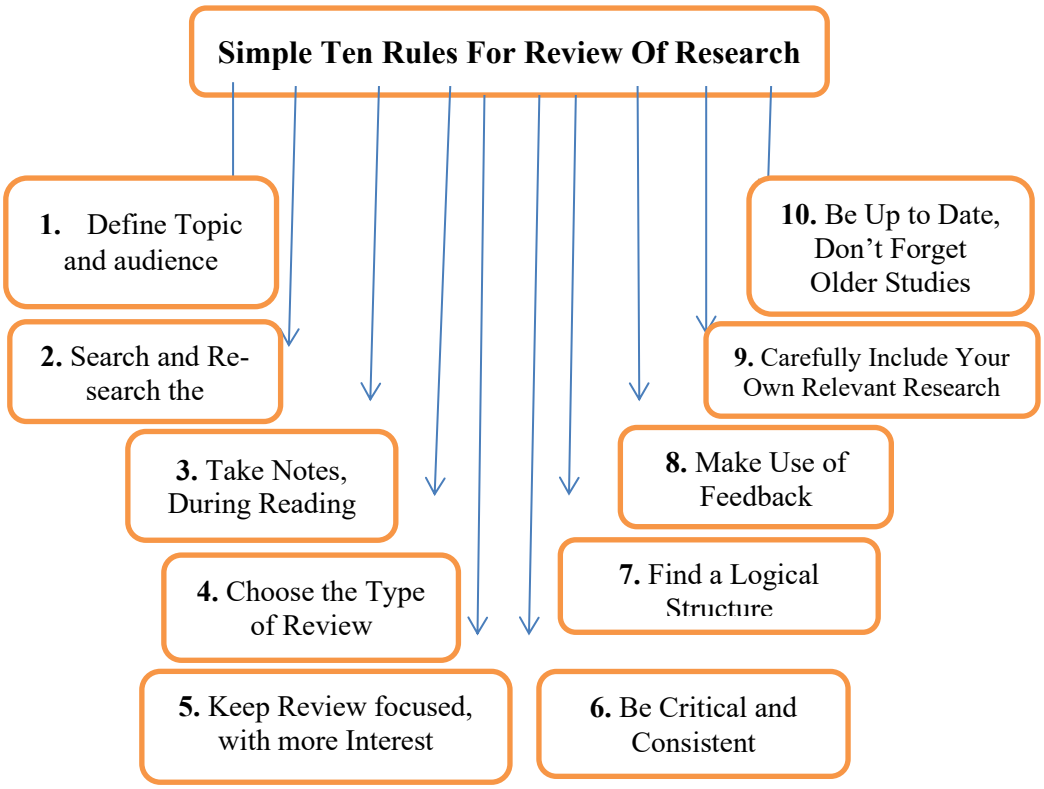


Figure No. 1

Some Important Exercises Before Writing Review Of Research:

Pre Reading-Exercise. Things To Consider:

- Initial assumptions based on the title
- Assumptions based on the sub-titles
- Read the abstract. Initial thoughts? Look over the References. Have you read any of the sources? Should you? What do they indicate?
- Search the Web for the author of the article. Is the author established in his/her field? Does the author speak with authority?

First Reading Exercise. Things To Consider:

- The article's audience
- The author's purpose in writing
- The author's thesis or main argument

Second Reading Exercise. Things To Consider:

- What information is fact? What information is opinion?
- What opinions are supported? How well are they supported?
- Is there a gap in information? In logic?
- Can you find instances of bias?
- Is the author successfully persuasive?

How Long Is A Review Article?

Review articles fluctuate notably in length. Narrative critiques may also vary between 8,000 and 40,000 phrases (references and the entirety else included). Systematic evaluations are normally shorter with much less than 10,000 words.

Format Of A Review Article:

Title

The title must be informative:

- The title has to include important terms.
- It has to indicate that the text is a review article.
- It may include the message of the article.
- The title must be short:
- Keep the title concise.

- A longer subtitle may be an option in case a specification is necessary. Tense In a title with results indicated: the present tense stresses the general validity of the results and illustrates.

List Of Authors:

(IMPORTANT: Discuss authorship as early as possible)

1. Decision On Authorship:

- Every person that contributed significantly to the literature search, literature exploration and/or writing process.

2. Order Of Authors:

- The first author has done most of the research and written major parts of the article.
- Authors between first and last author have contributed in one way or the other to the success of the project. They may be ordered alphabetically (indicating equality) or in a sequence of decreasing involvement.
- The last author usually coordinated the project and had the original idea.

Abstract:

Informs about the main objectives and result of the review article (informative abstract) or indicates the text structure (descriptive abstract).

Descriptive abstract - for narrative reviews Elements Description of subjects covered without specific details. A descriptive abstract is like a table of contents in paragraph form. Tense present

Informative abstract - for systematic and best evidence reviews Elements

1. Objectives: One or two sentences describe the context and intention of the review.
2. Material and methods: One or a few sentences provide a general picture of the methodological approach.
3. Results: A few sentences describe main outcomes.
4. Conclusions: One or two sentences present the conclusion (which is linked to the objectives).

Tense Objectives: Present:

material and methods, results: past conclusions: present Citations usually none Length usually 200 to 250 words

Table Of Contents:

Some review journals print an outline/table of contents at the beginning of the article, others do not. In general, these are recommended for extensive narrative reviews.

Introduction:

Provides information about the context, indicates the motivation for the review, defines the focus, the research question and explains the text structure. Elements of a three-paragraph introduction.

1. Subject background. The general topic, issue, or area of concern is given to illustrate the context.
2. "Problem". Trends, new perspectives, gaps, conflicts, or a single problem is indicated.
3. Motivation/justification. The author's reason for reviewing the literature, the approach and the organisation of the text are described. Tense present (use past tense for the description of your methods and your results) Citations many

Length Between 10% and 20% of the core text (introduction, body, conclusions). Note Make sure to have a narrow focus and an explicit research question. Indicate these two points clearly in the introduction. Give theoretical or practical justifications for the need for a review.

Material and Methods:

Systematic and best evidence reviews have a methods section. This section enables motivated researches to repeat the review. Narrative reviews do not have a methods section but should include some information about applied methods at the end of the introduction. Elements The material and methods section contains for example information about data sources (e.g. bibliographic databases), search terms and search strategies, selection criteria (inclusion/exclusion of studies), the number of studies screened, and the number of studies included, statistical methods of meta-analysis.

Main Part of the Review Article:

Section structure A coherent structuring of the topic is necessary to develop the section structure. Subheadings reflect the organization of the topic and indicate the content of the various sections.

Possible criteria for structuring the topic are:

- methodological approaches
- models or theories
- extent of support for a given thesis
- studies that agree with another versus studies that disagree
- chronological order
- geographical location

Conclusions:

Answer the research question set in the introduction. Elements • implications of the findings• interpretations by the authors (kept separate from factual information)

- Identification of unresolved questions Tense present: summarizing and drawing conclusions present perfect: referring to an area of research or a body of literature Citations few or none Length 5 to 10% of the core text (introduction, body, conclusions).

Note: Make sure to have a clear take home message that integrates the points discussed in the review. Make sure your conclusions are not simply a repeat of the abstract!

Acknowledgements:

- Expresses gratitude to people who helped with the literature search, the structuring of the material or in the writing process (but whose contribution is too small to justify co-authorship).
- Expresses gratitude to funding organisation and specifies the funding program (often required by funding agencies).

Elements:

- Full names of people and their specific contributions to the project are given.
- The name of the funding agency and program as well as the grant number and the person to whom it was awarded are mentioned. Tense present (past tense when referring to funding agencies in terminated projects) Citations none.

References:

- Shows interested readers how to find the literature mentioned in the text.
- Acknowledges the work of other scientists.
- Compulsory to avoid charges of plagiarism Elements Include every reference cited in the text. Do not include additional references. Avoid internet sources. If internet sources must be used, find the original source for the internet reference, check it has been correctly cited and cite it directly. Length A range between 50-100 references is in most cases appropriate.

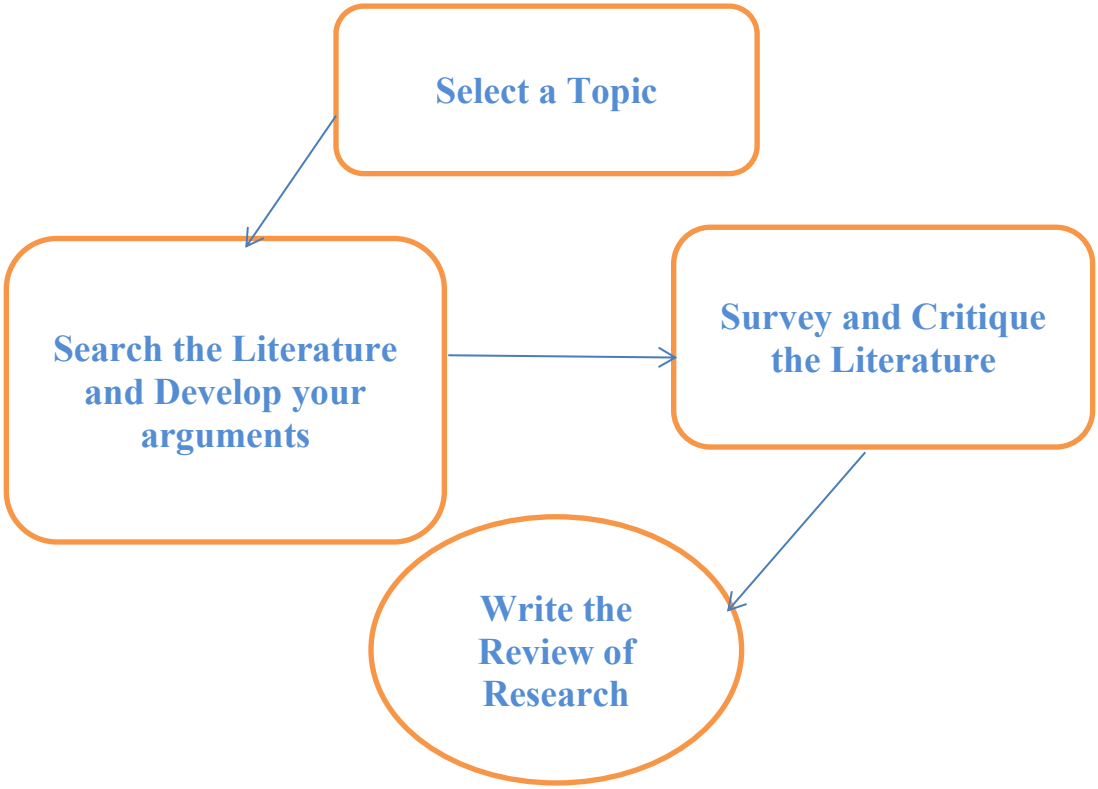
Note:

- For narrative reviews the inclusion of all relevant, high-quality studies is the target.
- Systematic and best evidence reviews need explicit criteria for the inclusion/exclusion of studies from which they got the data.

References:

1. Anonymous (2003): Tips for conducting a literature review. Centre Alpha Plus. Available on http://alphaplus.ca/pdfs/litrev.pdf; accessed 12 November 2008.
2. Bem, D.J. (1995): Writing a review article for Psychological Bulletin. Psychological Bulletin 118 (2): 172-177.
3. Day, R.A., Gastel, B. (2006): How to write and publish a scientific paper. Sixth edition. Greenwood Press, Westport. 10
4. Noguchi, J. (2006): The science review article – An opportune genre in the construction of science. Linguistic Insights Volume 17. Peter Lang, Bern. Ridley,
5. D. (2008): The literature review – a step-by-step guide for students. Sage Publications, London.

Outline Of Review Of Research



ISBN: 978-81-947839-2-3

7. Dissertation Format Guide (Instructions For Preparation And Submission)

Dr. Swati Verma

Assistant Professor, Department of Mathematics,
O.P. Jindal University, Raigarh, Chattisgarh, India.

Table of Contents:

5. Discussion
6. Conclusion And Recommendations
7. Appendices
8. References

7. Style and Format

8. Citation and References

9. Plagiarism

10. Submission

11. Assessment

Abstract:

A dissertation or thesis is a long piece of academic writing based on original research, submitted as part of an undergraduate or postgraduate degree. Because of the changing nature of research writing, it is imperative to develop a practical guideline for students and research scholars. This is due to the fact that most of the students or potential researchers do not have mastery in proper academic writing. This chapter helps them to prepare a comprehensive and thorough dissertation or thesis.

In this chapter, the key aspects of writing a dissertation or a thesis. The author provides a step by step direction in creating a comprehensive dissertation or thesis. The following are the some of the topics included in the CHAPTER: Section One which provides the background and introduction of the study, In Section Two, author provides a comprehensive discussion of related literature in the study, Section Three which describes the research methodology used in the study, In Section Four, author provides a summarized result of the study, Section

Five which presents the research findings and a detailed discussion about the findings in relation to the literature. Section Six, summarizes the key findings while proposing possible recommendations for implementation and conclusion.

Every institution has a format or guideline of preparing a dissertation or thesis. Therefore, every student or researcher should take into consideration the guidelines provided by their institutions. This chapter provides broad practical guidelines to prepare a research proposal and dissertation or thesis report. It is a step by step guide for writing a dissertation or thesis.

Objectives:

Your dissertation will be one of the most important and substantial pieces of writing you will produce during your academic career. As the culmination of your degree, your dissertation will focus on a specific topic you find interesting, encompass much of the knowledge you have built throughout your course, and showcase your understanding of academic conventions.

These guidelines are provided to formally expose you to the various ethical and technical issues involved in writing up your work and the format you are required to adhere to while submitting your work as Ph. D thesis /M Phil dissertation/ Master Degree dissertation.

Overview Of The Process:

As a graduate degree such as a doctorate, master's degree, bachelors (honors) degree, or a postgraduate diploma are required to follow the guidelines and specifications established by your department and University for the completion of your dissertation and also comply with the requirements of the Graduate Council concerning the physical format of your manuscript as established in these instructions.

Never use as a precedent dissertations or theses on file in the University Libraries or in your academic department because the manuscript requirements have changed over the years.

If you require assistance with the presentation and submission of your thesis or dissertation, your supervisors and department/faculty are your principal sources of support. However, several other service divisions at the University are also able to assist you.

Before beginning work on a dissertation, you must receive approval of the proposed subject matter from the research guide of concern faculty of your program. Your University/College/Institutes has responsibility for both the content and written style of the manuscript. Style, including footnote and bibliographic form is at the discretion of your guide, so long as consistency is maintained throughout the manuscript.

Introduction

The dissertation is the final stage of the master's degree and provides you with the opportunity to show that you have gained the necessary skills and knowledge in order to organize and conduct a research project. It should demonstrate that you are skilled in identifying an area, or areas, suitable for research: setting research objectives; locating, organizing and critically analyzing the relevant secondary data and authoritative literature; devising an appropriate research methodology; analyzing the primary data selected and drawing on the literature in the field; drawing conclusions and if appropriate making relevant recommendations and indications of areas for further research.

A dissertation is the written report of a research study undertaken in fulfillment or partial fulfillment of a graduate degree such as a doctorate, master's degree, bachelor's (honors) degree, or a postgraduate diploma. It is an undertaking that

allows you to explore areas or problems in detail and develop and utilize your thinking and analytical skills.

This CHAPTER intended to guide you through the dissertation process. It can only offer suggestions; there is nothing that can be said which will guarantee the production of a fine piece of work, but these are suggestions which, through time, have been found to be both practical and effective. You should read this guide before starting your dissertation and consult it as necessary throughout the process. This will help you to make a start to your dissertation and make more effective use of your meeting sessions with your supervisor.

Aims Of The Dissertation:

The aims of the dissertation are to:

- put into practice theories and concepts learned on the programme,
- provide an opportunity to study a particular topic in depth,
- show evidence of independent investigation,
- combine relevant theories and suggest alternatives,
- show evidence of ability to plan and manage a project within deadlines

After completion of the dissertation students should be able to:

- define, design and deliver an academically rigorous piece of research,
- understand the relationships between the theoretical concepts taught in class and their application in specific situations,
- show evidence of a critical and holistic knowledge and have a deeper understanding of their chosen subject area,
- appreciate practical implications and constraints of the specialist subject,
- understand the process and decisions to be made in managing a project within deadlines.

The Dissertation:

You will be advised of the deadline for submitting a dissertation proposal by your programme Supervisor. For some programmes in the School where research methods are a taught course, then the research proposal may be separately assessed. Regardless if this is the case or not, you must receive confirmation from your academic supervisor that your research proposal is approved before you continue with your dissertation.

The Research Proposal:

The research proposal is an important working document and which over the next few months becomes transformed into the dissertation. You will see that the main sections replicate the structure of the dissertation. A copy of the Research proposal used by your program.

Used correctly, the proposal will become your road map through the dissertation process. Because of a wide variety of circumstances, the focus of your research may change. If this happens then you should change your proposal document.

Writing And Structuring Your Dissertation:

The structure of a dissertation depends on your field, but it is usually divided into at least four or five chapters (including an introduction and conclusion chapter).

Preliminary Pages:

The following preliminary pages precede the main text of the dissertation.

1. **Title Page:** The title gives a clear and concise description of the topic/problem and the scope of the study. The title page will show the title; the author's full name; the degree to be conferred; the university, department, and college in which the degree is earned; and the month and year of approval. Margins for

the title page and the entire document are left—1.5 inches; right, top, and bottom— 1 inch. Also, the title should be in all capitals.

2. **Abstract:** The dissertation should contain an abstract of up to 350 words. A good abstract is difficult to write and can only be completed after the full dissertation has been written. It represents a brief summary of the results of the dissertation research. By summarizing the results of the research, it allows other people to get an idea of what was accomplished without having to read through the whole dissertation. The abstract, is a concise summary description of the study, including statement of the problem, purpose, scope, research tradition, data sources, methodology, key findings, and implications. The abstract is written after the dissertation is completed.

   The page numbers before the text are in Roman numerals. The abstract page is the first page to be numbered, but as iii. All Roman numerals should be centered between the left and right margins, and 1 inch from the bottom of the page. The title of the page, "ABSTRACT," should be in all capitals and centered between the left and right margins, and 2 inches from the top.

3. **Acknowledgements:** These pages are optional, although most dissertations include a brief acknowledgement of the contributions of committee members, colleagues, friends, and family members who have supported the students' research.

   "ACKNOWLEDGMENTS" should be capitalized and should appear centered between the left and right margins, 2 inches from the top. Text should begin two-line spaces after "ACKNOWL¬EDGMENTS."

Table Of Contents Page:

An outline of the entire dissertation, listing headings and subheadings with their respective page numbers, the table of contents lists all chapters and major sections within chapters and all back matter with page numbers.

The heading “TABLE OF CONTENTS” is centered between the left and right margins, 2 inches from the top of the page. The listing begins one double space below and even with the left margin. Leader dots are placed from the end of each listing to the corresponding page number. All major titles are typed exactly as they appear in the text. When a title or subtitle exceeds one line, the second and succeeding lines are single-spaced and indented two spaces. Double spacing is used between major titles and between each major title and its subtitle.

The table of contents may be followed by any of the following,

- *List of tables
- *List of figures
- *List of illustrations
- *List of symbols

Dissertation Chapters/ Main Text:

The main text is divided into five major chapters. Each chapter can be further subdivided into sections and subsections based on the formatting requirements for each college. Order and format of dissertation chapters may vary by institution and department.

- Chapter 1: An Introduction to your topic
- Chapter 2: A Literature review / Theoretical framework that surveys relevant sources
- Chapter 3: An explanation of your Methodology
- Chapter 4: An overview of the Results / Data Analysis of your research
- Chapter 5: A Discussion of the results and their implications
- Chapter 6: A Conclusion/ and Recommendations that shows what your research has contributed

Supplementary Pages: Supplementary pages follow the body text, including reference materials and other required.

- *References (required)
- *Appendices (required)

Chapter 1: Introduction

The Introduction describes the content, scope, and organization of the review as well as the strategy used in the literature search. The introduction to the dissertation should set out the background to the research study and address the following areas:

The context in which the research took place

- What is the background, the context, in which the research took place?
- Why is this subject or issue important?
- Who are the key participants and/or 'actors' in the area under investigation?
- Are there important trends or pivotal variables of which the reader needs to be made aware?
- A clear and succinct statement of the aims and objectives that the dissertation is going to address.

Have you presented a clear and unambiguous exposition of your research aim, the objectives you will address to meet this aim and your research questions?

Why This Study Was Carried Out:

- Was this study undertaken for example in order to test some aspect of professional or business practice or theory or framework of analysis?
- Was the research carried out to fulfill the demands of a business organization?

The Dissertation Is To Be Organized:

You should write your dissertation with the idea in mind that the intended reader and reviewer has some shared understanding of the area being investigated, however, underpinning concepts and arguments still need to be included as otherwise the depth of research will be compromised. In this way, you will not be tempted to make too many implicit assumptions, i.e. by making the erroneous assumptions that the reader has your degree of knowledge about the matters in question or can follow, exactly, your thought processes without your spelling them out. It should be a document which is 'self-contained' and does not need any additional explanation, or interpretation.

This chapter may be between 500 to 750 words although in some subjects or topics the justification of the subject and scope may change the length of this chapter.

Chapter 2: Literature Review / Theoretical Framework

Before you start on your research, you should have conducted a literature review to gain a thorough understanding of the academic work that already exists on your topic. This means:

- Collecting sources (e.g. books and journal articles) and selecting the most relevant ones
- Critically evaluating and analyzing each source
- Drawing connections between them (e.g. themes, patterns, conflicts, gaps) to make an overall point

In the dissertation literature review chapter or section, you shouldn't just summarize existing studies, but develop a coherent structure and argument that leads to a clear basis or justification for your own research. For example, it might aim to show how your research:

- Addresses a gap in the literature
- Takes a new theoretical or methodological approach to the topic
- Proposes a solution to an unresolved problem
- Advances a theoretical debate
- Builds on and strengthens existing knowledge with new data

This section is clearly related to the problem statement, purpose, and research questions; states up front the bodies of literature that will be covered and why; reviews primary sources that are mostly recent empirical studies from scholarly journals and publications, as well as secondary sources; it is logically organized by theme or subtopic, from broad to narrow; synthesizes findings across studies and compares and contrasts different research outcomes, perspectives, or methods; notes gaps, debates, or shortcomings in the literature and provides a rationale for the study; and it also provides section summaries.

Remember that your literature review should lead and justify the research objectives and questions of your dissertation. Your literature review should not just be a catalogue of authors, frameworks and ideas but should attempt to introduce a critical evaluation of those authors work. The literature review will be around 3,000 to 4,000 words

Chapter 3: Methodology

In this chapter, we describe how you conducted your research, allowing your reader to assess its validity. You should generally include:

- The overall approach and type of research (e.g. qualitative, quantitative, experimental, ethnographic)
- Your methods of collecting data (e.g. interviews, surveys, archives)
- Details of where, when, and with whom the research took place
- Your methods of analyzing data (e.g. statistical analysis, discourse analysis)

- Tools and materials, you used (e.g. computer programs, lab equipment)
- A discussion of any obstacles you faced in conducting the research and how you overcame them
- An evaluation or justification of your methods

Your aim in the methodology is to accurately report what you did, as well as convincing the reader that this was the best approach to answering your research questions or objectives.

This chapter situates the study within a particular methodological tradition, provides a rationale for that approach, describes the research setting and sample, and describes data collection and analysis methods. This provides detailed description of all aspects of the design and procedures of the study.

Research Sample And Data Sources:

This section explains and justifies the sample used and how participants were selected (including population and sampling procedures) and describes the characteristics and size of the sample, and provides other pertinent demographic information; and outlines ethical considerations pertaining to participants, shedding light on how rights of participants were protected, with reference to conventions of research ethics.

Data Collection Methods:

This section describes all data collection methods, tools, instruments, and procedures, including how, when, where, and by whom data were collected.

Data Analysis Methods:

This section describes all methods and tools used for analysis of data (Manual and/or Computational).

The term 'Methodology', particularly when employed in the social sciences, does not just mean method, but also the governing philosophy behind the methods employed. The conclusion of this chapter should provide a summary of the main points that have been covered. The conclusion should also direct the reader as to how the contents of this chapter link in with the contents of the next chapter or your findings. This chapter will be usually being between 1,000 and 2,000 words.

Chapter 4: Results / Data Analysis:

This chapter presents the results of the analyses, usually in order by research question and any results of further analyses (that is, analyses that were not proposed but which were carried out). Results should be presented without interpretation; interpretation is reserved for the discussion in next chapter.

This chapter presents the evidence and results of primary research which you have undertaken. Depending upon your subject area this can be in the form of detailed quantitative models, hypothesis testing to some basic analysis using basic descriptive statistics or qualitative techniques dealing with structured content analysis, textual analysis, to case study descriptions.

The main part of this chapter is the presentation of the data that you obtained. Even projects of relatively moderate dimensions will generate a large amount of data which has to be considered. This data must be organized in a logical and coherently ordered whole so that your thought processes and interpretation are clear to the reader.

The dissertations included detailed modeling or quantitative analysis will clearly need to show

all relevant assumptions, relationships and methods. Your academic supervisor will be able to advise on the level of detail required in the main body of dissertation. The Graphs, diagrams, pie-charts etc. are all useful ways of

presenting research results. Keep your review to those items which are relevant to your research question and not just everything I found out.

Not all dissertations contain quantitative data. In many situations, students will have made extensive use of qualitative research techniques such as focus groups and/or in-depth unstructured interviews. While quantitative data lends itself to graphs, tables and so on, qualitative data, and the way it is presented create particular challenges for students.

The analysis of qualitative data should be based on the research questions and issues that you explored during your fieldwork. For instance, you may have addressed six or seven critical questions in a series of interviews. Each of these questions should be examined separately, rather than describing each focus group in turn. This provides a degree of logical flow and development to the analysis.

Many students make the mistake of providing a very superficial, descriptive analysis of qualitative data. This does not allow you to demonstrate that the research you undertook was of a substantive nature. Tables can also be included that reflect the respondent's overall attitudes, perceptions and views about the themes.

Structure for results section is given:

Order Of Presentation For Nomothetic Studies:

1. Descriptive Statistics (includes means, standard deviations, frequencies, etc. for all variables in the study).
2. Preliminary Statistical Analyses (correlation matrices, etc.)
3. Statistical analyses to answer research questions/hypotheses.
4. Note: for single-subject, small n, and qualitative studies develop the order of presentation with the dissertation chair.

Statistical Analyses to Answer Research Questions/Hypotheses:

1. Use questions/hypotheses as an outline to organize results.
2. Each question/hypothesis should be restated followed by the results of the tests of assumptions and then by the data analyses which provide answers to that question/hypothesis.
3. Report statistical power of the test and effect sizes.

Organize Data Into Tables And Figures:

1. Each Table or Figure must be referenced in the text.
2. Tables and Figures should include complete information so that they can be understood without reference to the text.
3. Place tables and figures as soon after their first mention in the text as is possible.

Chapter 5: Discussion

Results are interpreted in light of the research questions and discussed in conjunction with other literature. Limitations of interpretation and implications for further research may be presented.

This section provides an in-depth interpretation, analysis and synthesis of the results/findings. Analysis is a multilayered approach; seeking emergent patterns among findings can be considered a first round of analysis. Examining whether the literature corresponds with, contradicts and/or deepens interpretations constitutes a second layer of interpretation. Issues of trustworthiness are incorporated as these relate to and are applied throughout the analysis process. Discussion may include interpretation of any findings that were not anticipated when the study was first described.

Establishing credibility means that you have engaged in the systematic search for rival or competing explanations and interpretations. This section restates the study's limitations and discusses transferability of the findings to broader populations or other settings and conditions.

In the introduction to the dissertation you described the context of the research. In the literature survey you analyzed the work of previously published authors and derived a set of questions that needed to be answered to fulfill the objectives of this study. In the research methodology section, you showed the reader what techniques were available, what their advantages and disadvantages were, and what guided you to make the choice you did. In the results section, you present to the reader the outcome of the research exercise.

This is the heart of the dissertation and must be more than descriptive.

This chapter develops analytic and critical thinking on primary results and analysis with reference to theoretical arguments grounded in the literature review. You should try to highlight where there are major differences and similarities from the literature or between different groups. Where a model or framework of analysis has been used or is being developed you should highlight the main relationships as well as explaining the reason and significance behind features or decisions being discussed.

Chapter 6: Conclusion And Recommendations:

Conclusions are based on an integration of the study findings, analysis, interpretation, and synthesis. Concluding statements end the dissertation with strong, clear, concise "takeaway messages" for the reader. Clearly stated and focused concluding statements reflect an integration of the study findings, analysis, interpretation, and synthesis.

This chapter presents a set of concluding statements and recommendations. Conclusions are assertions based on findings and must therefore be warranted by the findings. With respect to each finding, you are asking yourself, "Knowing what I now know, what conclusion can I draw?"

Conclusions are not the same as findings; neither are conclusions the same as interpretations. Rather, conclusions are essentially conclusive statements of what you now know, having done this research, which you did not know before. Conclusions must be logically tied to one another. There should be consistency among your conclusions; none of them should be at odds with any of the others.

In this chapter, you will bring together the work of the dissertation by showing how the initial research plan has been addressed in such a way that conclusions may be formed from the evidence of the dissertation. No new material or references should be placed here. The conclusions should make a statement on the extent to which each of the aims and objectives has been met. You should bring back your research questions and state clearly your understanding of those questions. Be careful not to make claims that are not substantiated from the evidence you have presented in earlier chapters

Recommendations are the application of those conclusions. Recommendations are actionable; that is, they suggest implications for policy and practice based on the findings, providing specific action planning and next steps. Recommendations support the belief that scholarly work initiates as many questions as it answers, thus opening the way for further practice and research. Recommendations for research describe topics that require closer examination and that may generate new questions for further study. Recommendations must have implications for policy and practice, as well as for further research.

In other words, we organize this section with headings:

- Explicitly discuss the implications of the results. Integrate your results with the theoretical background and very relevant literature findings.
- Relate to literature review-point out (a) consistencies and (b) inconsistencies with results of those studies reported in the literature cited.
- Did findings provide support or differ from extant theoretical positions.
- It is appropriate to speculate on the meaning of the results as long as it is made explicit that that is what the writer is doing.

This final section offers the researcher an opportunity to reflect on the overall process, review the findings that have emerged, and share any new learning and insights that she or he has developed over the course of the research and writing process. How do you personally value the research experience? What are the lessons you have learned from conducting the study? What insights, knowledge, and inspiration have you derived from conducting this study?

Appendices:

Appendices contain all research instruments used, as well as any relevant additional materials such as sample interview transcripts, sample coding schemes, summary charts, and so forth. Each item that is included as an appendix is given a letter or number and listed in the table of contents.

References / Bibliography:

The list of references includes all works cited in the dissertation in alphabetical order by author and in proper format. All sources that are quoted, summarized, or paraphrased, as well as all other sources of information (text, visual, electronic, personal, etc.), must be correctly cited using par-esthetical citation format within the dissertation.

All sources must also be correctly listed on the references page. Proper citation serves several purposes: It attributes work fairly to the author, places the

dissertation within the context of the literature in the field, and provides readers with a quick resource for locating and accessing sources that were used.

Style And Format:

1. **Word length:** 12,000 to 15,000 words maximum. Excludes abstract, references i.e. main text only. If you are writing a dissertation by translation/commentary the source text for your translation should be 6,000 words (+/- 10%) and your commentary should be6,000 to 7,000 words (excludes abstract, references and appendices).
2. **Page Size:** The recommended page size is A4.
3. **Margins Setting** (File, Page setup, margins): Top 2.54cm Bottom 2.54cm, Left 3.17cm Right 3.17cm.
4. **Line Spacing** (Format, Paragraph, Indents & spacing)- One and a half spacing, not single or double.
5. **Page Numbering:** View, Header & Footer, Insert page Numbers: For sections from Acknowledgements to start of Main Text page number format is i) ii) iii). and so on continuously. For Main Text page format is 1,2, 3 and so on continuously With position on page centered aligned.
6. **Text:** Times New Roman
7. **Font:** 12-point font
8. **Alignment:** Justified
9. **Cover Page & Title Page:** As per the format given below the page.
10. **Declaration:** As per the format given below the page.
11. **Certificate:** As per the format given below the page. The certificate shall be followed by the Guide's signature and academic designation.
12. **Abstract:** Abstract should be one-page synopsis of the dissertation typed one and a half line spacing.
13. **Font Style:** Times New Roman and Font Size: 12. The abstract is a very brief summary of the thesis contents. It should be about one page long not more

than 300 words. The 300-word statement should describe the problem addressed by your thesis, a description of the work completed and a summary of any findings or lessons learned.

14. **Acknowledgement:** In the "Acknowledgement" page, the student acknowledges the guidance and assistance of the Research advisor and other members. Courtesy demands that he / she also recognizes specific contributions by other persons or institutions such as libraries and research foundations. Sometimes the nature of the contribution is described (For example, permission for the use of equipment, facilities and documents).

Citation And References:

The University has a policy which covers all Honors students and all master's students in relation to a reference system. It is important that you get your citations and references correct. You must always cite the source of your material; in adequate citation could leave you open to the suspicion of plagiarism.

End Of Text Referencing:

The list of references is placed at the end of the dissertation as follows:

For a journal: Smith, S. (1997) "The Effects of Shoe Size on Consumer Behavior", Journal of International Shoe Manufacturers, Vol. 34, No. 45, pp 23-45.

For a textbook: Smith, S. (1997) Strategy, Marketing and Consumers, Paisley, Academic Free Press, 7th edition.

All references should be typed in alphabetical order at the end of thesis.

Plagiarism:

Plagiarism means using the work of others in preparing an assignment and presenting it as your own without explicitly acknowledging or referencing, where it came from. Plagiarism can also mean not acknowledging the full extent of indebtedness to a source. In publishing, plagiarism is illegal; in other circumstances, it is, at the least, unethical. You may quote or paraphrase the words or ideas of another if you document your source. Although you need not enclose the paraphrased material in quotation marks, you must document the source. Paraphrased ideas are taken from someone else whether or not the words are identical. Plagiarism can also occur unconsciously or inadvertently. Direct copying is definitely plagiarism. Paraphrasing of another work without attribution is also plagiarism. Submitting someone else's work or ideas without acknowledgement or attribution is not evidence of your own grasp of the material and cannot earn you marks.

Paraphrasing a passage without citing the source is permissible only when the information paraphrased is common knowledge in a field. (Common knowledge refers to historical, scientific, geographical, technical, and other type of information on a topic readily available in handbooks, manuals, atlases and other references).

Examples Of Plagiarism:

Taking sentences/paragraphs from sources such as journal articles, books, reports, proceedings, theses, and Internet, mixing them to camouflage the source, changing some of the words, or rearranging the sentences is plagiarism. Picking sentences from various sources to form paragraphs is also plagiarism. Similarly, if there is a thesis/report already submitted and is closely aligned with your work, copying sections such as literature survey, methodology, theory, etc., with or without changes is also plagiarism. You must carry out your own literature

survey, write your own interpretation of theory or methodology after reading the relevant material or quote from earlier reports or the relevant material using quotation marks.

Submission:

Four hard copies of the dissertation, written and bound in the approved manner, a copy on a CD-ROM (using MS Word format), together with the TURNITIN report should be submitted to the School Office in room MB 1.62 by the published deadline. In the case of a company-based dissertation, a third copy will need to be provided to the organization studied.

Where students are submitting from overseas, then they will be required to send an electronic version by email to arrive by the due date and time with hard copies being sent to arrive at the School Office a maximum of 5 days later. It is the responsibility of the student to use a reputable carrier and a guaranteed service. The dissertation deadline will be strictly observed. Dissertations can be submitted earlier.

Requirements for Submitting Ph D/M S [By Research]/M Phil dissertation as per norms of University/Organization/Institutes:

1. Covering letter (through proper channel)
2. Dissertation Submission form (with Fee Receipt)
3. Hard copy (4 copies).

Assessment:

All dissertations will be read by two internal examiners including the academic supervisor. For company-based dissertations the company will not be involved in the assessment process. In addition, some dissertations may be read by an

External Examiner to ensure a uniform standard is maintained. An agreed mark will be awarded for the dissertation. The following common standards apply:

- The dissertation must be presented using a coherent and thoughtful level of English.
- An informed description of events or data is not enough. There must exist an analysis of the information collected, and this must be directed towards answering the research questions raised by the dissertation.
- The dissertation must show an awareness of the relevant literature.
- The document should be capable of showing that the author has learnt something new, either from reviewing the literature or from undertaking an empirical investigation, or both.

Sample Title Page

[DISSERTATION TITLE: SUBTITLE]

by

[Your Name]

A Dissertation

Submitted to [Name of Department]

[University Name]

In Partial Fulfillment of the Requirements

for the Degree [Degree Classification]

[Month Year]

Sample Declaration Page

DECLARATION

<Times New Roman, Font 14, Underlined, Bold, CAPS>

I hereby declare that the thesis entitled "TITLE OF THE DISSERTATION" submitted by me, for the award of the degree of Master of Philosophy to University Name is a record of bonafide work carried out by me under the supervision of Dr. ……..

I further declare that the work reported in this dissertation has not been submitted and will not be submitted, either in part or in full, for the award of any other degree or diploma in this institute or any other institute or university.

<Times New Roman, Font 12 >

Place:

Date: **Signature of the Candidate**

<Times New Roman, Font 12, Bold >

Sample Certificate Page

CERTIFICATE

<Times New Roman, Font 14, Underlined, Bold, CAPS>

This is to certify that the thesis entitled "TITLE OF THE DISSERTATION" submitted by NAME OF THE CANDIDATE (School/Centre) University Name, for the award of the degree of Master of Philosophy, is a record of bonafide work carried out by him/her under my supervision, as per the VIT code of academic and research ethics.

The contents of this report have not been submitted and will not be submitted either in part or in full, for the award of any other degree or diploma in this institute or any other institute or university. The thesis fulfills the requirements and regulations of the University and in my opinion meets the necessary standards for submission.

<Times New Roman, Font 12>

Place:

Date: **Signature of the Guide**

<Times New Roman, Font 12, Bold >

Sample Acknowledgements Page

Acknowledgements

The acknowledgements section is where you thank those who have helped and supported you during the research and writing process. This section is optional and should be no longer than one page.

Move from thanking the people most formally involved (supervisors, academics) to those who have supported you in other ways (friends and family).

If you include acknowledgements, make sure to thank your supervisor!

-----//////----

ISBN: 978-81-947839-2-3

8. Ph.D. Theses Format

Dr. Dipti Shukla
School of Science, Physics Department,
O.P Jindal University, Raigarh.

In this Chapter, we discuss the suggestion for Ph. D thesis writing in different formats. This short guideline the idea of a PhD thesis consisting of an alternative format for writing-up the results of three years' PhD research. It also studies compare and contrasts the conventional PhD thesis with the 'three papers' model, highlighting the main differences between them.

Introduction:

Thesis is not a book. Many emerging Ph. D researchers misguidedly believe that their PhD theses are essentially ready-to-go books. Basically Ph. D theses high quality presentation that imitates your depth study of broad subject related to the proposed title of thesis.

Types Of Theses:

Ph. D Researcher has the choice of writing their theses in the following two types of formats:

1. Traditional (Typical) Theses
2. Manuscript- Based Theses

A traditional (Typical) thesis which is a coherent document that provides a complete and systematic account of your research.

Specifications: Traditional theses contain the following components (as outlined in the graduate handbook:

http://graduatestudies.concordia.ca/documents/publications/graduatehandbooks/thesispreparationguide.pdf

Traditional Theses Contents:

- Title page
- Declarations (originality, copyright, thesis declaration form)
- Table of content
- List of figures and tables
- Acronyms
- Abstract
- Introduction
- Literature review
- Aims and Objectives
- Methodology (Method)
- 2 to 4 substan6al results chapters (include discussion)
- General discussion
- Conclusion - implications and future out come

A manuscript-based thesis which is constructed around one or more related manuscripts. If your research has produced one or more manuscripts suitable for journal publication, your thesis may best be presented in manuscript-based format.

A manuscript-based thesis is constructed around one or more related manuscripts and can include additional results chapters.

You can be either the sole author or a senior co-author of the manuscripts. Important: Manuscripts must be included as published or as submitted. Partial papers or combinations of papers are not acceptable.

If you wish to change or re-write the material in the manuscript chapters, you must incorporate them into a traditional thesis format.

Manuscript – Based Theses Contents:

Introduction (WHY?):

The introductory chapter of a manuscript-based thesis is an over-arching, unifying introduction to the thesis as a whole. The introductory chapter should contain

- Literature review
- Context
- Theory
- Gaps

Objectives:

Methods (WHAT and HOW? In sufficient details):

Additional research results that have not been written up for publication in a refereed academic journal can be included as a separate chapter or chapters following the format of a more traditional thesis.

Please note that the inclusion of any additional result chapters may require adjustments to the contents of Chapter 1, such as the inclusion of a methods section.

Results (WHAT did you find?)

- Careful selection of figures & tables
- Add texture
- Style according to your discipline

Discussion (WHAT does it means?)

- Strengths & limitations

Final Chapter:

Conclusions And Suggestions For Further Work:

The concluding chapter forms a significant part of the thesis. It must not be merely a summary of the manuscript chapters.

References:

- Appendices (additional details, published papers & permission for copyright): Appendices should include materials that normally do not appear in refereed journal manuscripts, but which are sufficiently important to record in the thesis.

Examples: - Detailed methodologies that would enable a reader to repeat the studies - Details of experimental data not presented within the manuscript chapters - Diagrams of specialized equipment developed - Samples of questionnaires or survey

Specifications For The Thesis Format:

2.1 Preparation of Manuscript and Copies:

2.1.1 The thesis needs to be prepared using standard text processing software.

2.1.2 Uniformity in font sizes, fonts, spacing, and margins has to be ensured.

2.1.3 Thesis should be free from typographical errors.

Abstract:

The abstract is a separate document from the manuscript; it is not bound with the thesis or dissertation. Abstracts must be printed on white, 8 ½ x 11-inch paper. No page numbers are printed on the abstract. One copy is required. Abstracts

must have the original signature(s) of the faculty advisor(s). The maximum length of the thesis abstract is 250 words. The maximum length of the dissertation abstract is 350 words, including the dissertation title. A sample is provided on page 13. Majors are listed on page 29-30.

Title Pages:

Title pages must be printed on white, 8 ½ x 11-inch paper. Committee member signatures on the title page must be originals. Spacing between text on the title page will vary according to the length of the title. Sample title pages, including one revised for electronic submission, are on pages 15-16. Format instructions are on page 14.

2.2 Size And Margins:

Font Size:

Use a standard font consistently throughout the manuscript. Font size should be 10 to 12 point for all text, including titles and headings. It is permissible to change point size in tables, figures, captions, footnotes, and appendix material. Retain the same font, where possible. When charts, graphs, or spreadsheets are "imported," it is permissible to use alternate fonts. Italics are appropriate for book and journal titles, foreign terms, and scientific terminology. Boldface may be used within the text for emphasis and/or for headings and subheadings. Use both in moderation.

2.2.1 A4 Is The Recommended Thesis Page Size.

2.2.2 The top, bottom and right-side margins should be 25 mm, whereas the left side margin should be 35 mm for both textual and non-textual (e.g., figures, tables) pages. 2.2.3 Content should not extend beyond the bottom margin except for completing a footnote, last line of chapter/subdivision, or figure/table caption.

2.2.4 A sub-heading at the bottom of the page should have at least two full lines of content below it. If the sub-heading is too short to allow this, it should begin on the next page.

2.2.5 All tables and figures should conform to the same requirements as text. Color may be used for figures. If tables and figures are large, they may be reduced to the standard 4 size (provided the reduced area is not less than 50% of the original) and /or folded just once to flush with the thesis margin (if the page size does not exceed 250x360 mm). 2.2.6 Students may choose to submit the thesis either in the standard size (as in 2.2.1) or in a book format that is roughly half of A4. If the book format is adopted for submission, it should be ensured that all textual and illustrative material is distinct and legible.

2.3 Page Numbering:

Chapters may be identified with uppercase Roman numerals or Arabic numbers. Tables, figures, and equations should be numbered consecutively throughout the manuscript with Arabic numerals. Equation numbers should be placed to the right of the equation and contained within parentheses or brackets. Use uppercase letters to designate appendices

2.3.1 Beginning with the first page of the text in the thesis (chapter 1), all pages should be numbered consecutively and consistently in Arabic numerals through the appendices. 2.3.2 Page numbers prior to Chapter 1 should be in lower case Roman numerals. The title page is considered to be page i but the number is not printed.

2.3.3 All page numbers should be placed without punctuation in the upper right-hand corner, 12mm from the top edge and with the last digit even with the right-hand margin. 2.4 Multi-Volume

A thesis may be in two or more volumes, if required. The volume separations come at the end(s) of major division(s). The preliminary pages prior to Chapter 1 are contained only in Volume I, except the title page.

2.5 Line Spacing:

The entire text should be single-spaced, one and one-half spaced, or double-spaced. Block quotations, footnotes, endnotes, table and figure captions, titles longer than one line, and individual reference entries may be single-spaced. Double spacing should follow chapter numbers, chapter titles and major section titles (Dedication, Acknowledgements, Table of Contents, List of Tables, List of Figures, List of Abbreviations, Appendices, and References). Double spacing should also occur before each first level and second-level heading, and before and after tables and figures embedded in the text. There should only be one blank space after headings. The general text of the manuscript should be in double spacing (3 lines per inch). Long tables, quotations, footnotes, multi-line captions and bibliographic entries (references) should be in single spacing (6 lines per inch), with text size in 11 points.

2.6 Tables, Figures And Equations:

Figures commonly refer to photographs, images, maps, charts, graphs, and drawings. Tables generally list tabulated numerical data. These items should appear as close as possible to their first mention in the text. Tables and figures may be placed in appendices, if this is a departmental requirement or standard in the field. Tables and figures should be numbered with Arabic numerals, either consecutively or by chapter. Be consistent in the style used in the placement of tables and figure captions. Tables and figures may be embedded within the text or placed on a page alone. When placed on its own page, a figure or table may be centered on the page. When included with text, a table or figure should be set apart from the text. Tables and figures, including captions, may be oriented in

landscape. Table data and figure data must be kept together, if the information fits on one page.

2.6.1 All tables (tabulated data) and figures (charts, graphs, maps, images, diagrams, etc.) should be prepared, wherever possible, on the same page used to type the text and conform to the specifications outlined earlier. They should be inserted as close to the textual reference as possible.

2.6.2 Tables, figures and equations should be numbered sequentially either throughout the thesis or chapter-wise using Arabic numerals. They are referred to in the body of the text capitalizing the first letter of the word and number, as for instance, Table 17, Figure 24, Equation (33), or Table 5.3, Figure 3.11, Equation (4.16), etc. 5

2.6.3 If tables and figures are of only half a page or less, they may appear on the same page as text but separated above and below by triple line spacing. Font size for text should be the same as for the general text.

2.6.4 Good quality figures must be drawn using standard software that provides vector rather than bit-map graphics. Figures must be scalable.

2.6.5 Images, Photographs etc. must be scanned in resolution exceeding 200dpi with 256 grayscales for the monochrome images and 24 bit per pixel for the color images.

3. Guidelines For Structuring The Contents:

3.1. Sequence of Contents The following sequence for the thesis organization should be followed: (i) Preliminaries Title Page) As per the format given Certificate) at the end of the Thesis Declaration) Guide Abstract/Synopsis) Acknowledgement and/ or Dedication (where included) Table of Contents List of Figures, Tables, Illustrations, Symbols, etc (wherever applicable) (ii) Text of

Thesis Introduction The body of the thesis, summary and conclusions (iii) Reference Material List of References, Bibliography (where included) (iv) Appendices Where included (v) Index Where included All the headings are centered (without punctuation) 25mm down the top edge of the page. The subsequent type-setting begins four spaces below the heading.

3.2 Preliminaries:

3.2.1 Synopsis / Abstract:

3.2.1.1 An M Tech. thesis should contain an abstract not exceeding 300 words (about one page), and a Ph.D. thesis should contain an abstract/synopsis not exceeding 1000 words (about four pages) in double spacing.

3.2.1.2 Ph.D. students shall submit a copy of the synopsis/abstract for transmission to examiners.

3.2.1.3 A synopsis/abstract shall be prepared in double space with the heading "SYNOPSIS/ABSTRACT" in uppercase followed by certain preliminary information and the text. For textual matter, refer to the suggested format which is placed at the end of the Thesis Guide.

3.2.1.4 Synopsis/Abstract should be complete by itself and contain no citations.

3.2.2 Table Of Contents:

3.2.2.1 The table of contents lists all material that follows it. No preceding material is listed. Chapter titles, sections, first and second order sub-divisions, etc must be listed in it. 3.2.2.2 Tables, figures, nomenclature, if used in the thesis, are listed under separate headings.

3.3 The Text Of The Thesis:

3.3.1 Introduction Introduction may be the first chapter or its first major division. In either case, it should contain a brief statement of the problem investigated. It should outline the scope, aim, general character of the research and the reasons for the student's interest in the problem.

3.3.2 The body of Thesis This is the substance of the dissertation inclusive of all divisions, subdivisions, tables, figures, etc.

3.3.3 Summary and conclusions If required, these are given as the last major division (chapter) of the text. A further and final sub-division titled "Scope for Further Work" may follow.

3.3.4 Reference material The list of references should appear as a consolidated list with references listed either alphabetically or sequentially as they appear in the text of the thesis. If pertinent works have been consulted but not specifically cited, they should be listed as Bibliography or General References. Spacing and font size should be consistent inside a single reference, and there should be double spacing between two different references (see Section 2.5).

Division:

Body of Manuscript: Departments will determine acceptable standards for organizing master's theses into chapters, sections, or parts. Usually, if a thesis has headings, a Table of Contents should be included. The dissertation must be divided into chapters. The use of parts, in addition to chapters, is acceptable.

Words and Sentences: Take care to divide words correctly. Do not divide words from one page to the next. Word processing software provides for "widow and orphan" protection. Utilize this feature to help in the proper division of sentences from one page to another. In general, a single line of text should not be left at the

bottom or top of a page. Blank space may be left at the bottom of a page, where necessary.

Headings and Subheadings: Use headings and subheadings to describe briefly the material in the section that follows. Be consistent with your choice of "levels" and refer to the instructions on spacing, above, for proper spacing between headings, subheadings, and text. First-level headings must be listed in the Table of Contents. Second level and subsequent subheadings may be included.

Acronyms / Abbreviations / Capitalization Abbreviations on the title page should appear as they do in the body of the thesis or dissertation. Examples: Xenopus laevis, Ca, Mg, Pb, Zn; TGF-β, p53. Capitalize only the first letter of words of importance, distinction, or emphasis in titles and headings. Do not alter the all-cap style used for acronyms (Example: AIDS) and organizational names (Example: IBM). Use the conventional style for Latin words (Examples: in vitro, in vivo, in situ). Genus and species should be italicized. Capitalize the first letter of the Genus, but not that of the Species name (Example: Streptococcus aureus).

Reference Format:

For referencing an article in a scientific journal, the suggested reference format should contain the following information: title, authors, name of journal, volume no's, page no's and year. For referencing an article published in a book, the suggested format should reference should contain, the title of the book, authors, editors, publisher, year, page number of the article in the book being referred to. For referencing a thesis, it is required to specify the title of thesis, author, where thesis was submitted or awarded, and the year. A few examples of formats of references are given below and student should be consistent in following the style.

1. Journals H.E. Exner, "Physical and Chemical Nature of Cemented Carbides," International Metals Review, 1979, v. 24, pp. 149-173.

2. G.E. Spriggs, "The Importance of Atmosphere Control in Hard Metal Production", Powder Metallurgy, 1970, v. 13, n. 26, pp. 369-393.
3. Paul, A.; Connolly, D.; Schulz, M.; Pryce, M. T.; Vos, J. G. Effect of Water during the Quantitation of Format in Photocatalytic Studies on CO2 Reduction in Dimethylformamide. Inorg. Chem. 2012, 51, 1977– 1979, DOI: 10.1021/ic202121.
4. Kaczmarek, M. Shiga, and D. Marx, J. Phys. Chem. A 113, 1985 (2009). Conference Proceedings H.F. Fischmeister, "Development and Present Status of the Science and Technology of Hard Materials," Science of Hard Materials, R.K. Viswanadham, D.J. Rowcliffe, and J. Gurland (eds.), Plenum Press, New York, NY, USA, 1982, pp. 1-45. W.H. Baek, M.H. Hong, S. Lee, and D.T. Chung, "A Study on the Shear Localization Behavior of Tungsten Heavy Alloy," Tungsten and Refractory Metals 2, A. Bose and R.J. Dowding (eds.), Metal Powder Industries Federation, Princeton, NJ, USA, 1995, pp. 463- 471.

Outline Of Theses:

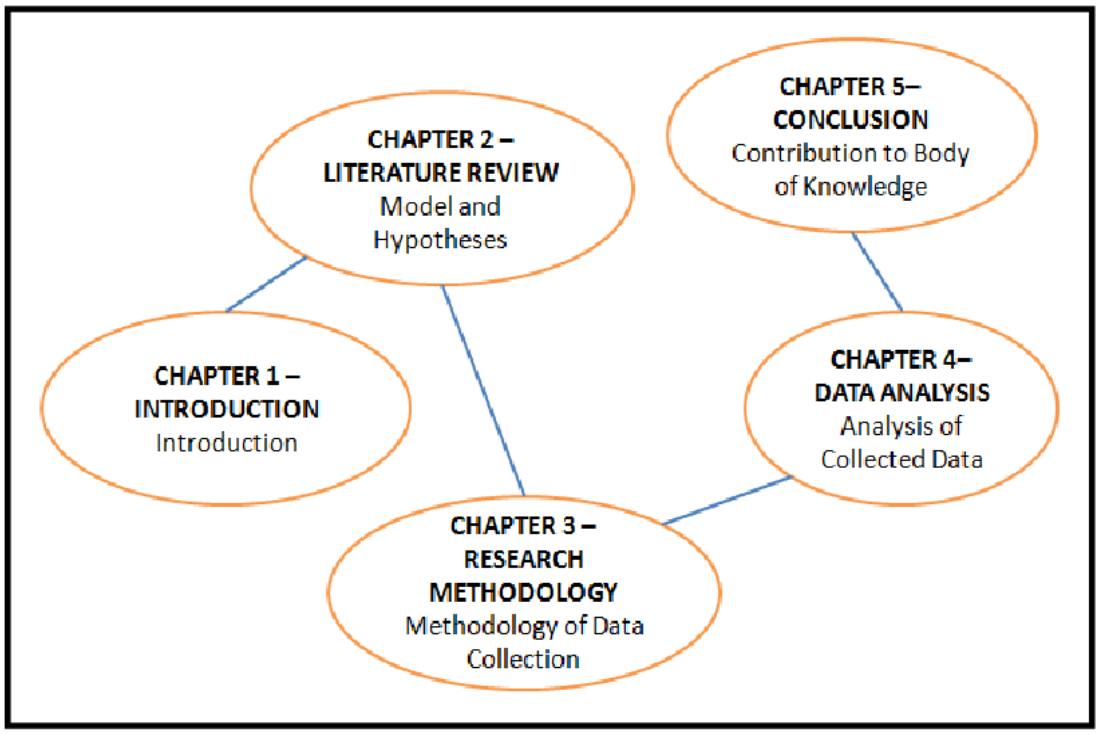


Figure 1.2: **Model of the chapters of a thesis**
Source: Adapted from Perry (2012, p. 5) for this research.

ISBN: 978-81-947839-2-3

9. Research Methodology: Mentoring And Writing Guidance

Pushpanjali Shadangi
O.P. Jindal University, Punjipathra, Raigarh,
Chhattisgarh, India.

Mentoring:

Mentoring is a process of guiding a person in the proper direction to achieve something or to perform some specific task by utilizing self-experience and skill in an appropriate way. ```

Mentoring consists of long-term relationship focused on supporting the growth and the development of a mentee. The mentor becomes source of knowledge and wisdom.

Mentor:

Mentor is a trusted counselor. Mentor is a person who helps someone to achieve career goals, specific work project, or in general life advice.

Mentoring Structure:

These are the steps one good mentor should opt:

1. Building a healthy relationship between two people
2. Inspire
3. Cultivation
4. Tutor
5. Mutual understanding
6. Respond to the learners need.

Key Aspects Of Mentoring:

1. Enhancing the overall performance
2. Career with personality development
3. Counseling
4. Sharing the ideas and knowledge
5. Defines the key measures to achieve the goal within defined time

A mentor can perform various roles while mentoring a student some of those are as follows:

1. **Guiding:** A guide is a person who provide proper way to go somewhere or to do something in a proper manner. A person who leads another person to more abstract goals such as wisdom.
2. **Counseling:** A counselor can help a listener likes, dislikes, hurdles he or she is facing talking about his weaknesses and strengths.
3. **Tutor:** Helps learners to complete his tasks, assignments, develops skill in them to do something in a better way.
4. **Advisor:** Assists learners in formulating long time goals and planning a motivating for small and long terms projects. An advisor is a person that evaluates assignments, projects and performance of the learners in different aspects of their progress.
5. **Providing Learning Consultation:** Gives advice to perform the task with more intellectual manner. Provokes learner to spend more and more time deep learning.
6. **Building Strong Bond With Learner:** A good mentor tries to make a healthy bond with the learners so that the working environment is also healthy.
7. **Role Model:** A role model is a person who sets an example by influencing others.

Advantage Of Mentoring:

1. Being encouraged
2. Empowered in personal development
3. Being helped to achieve career goals
4. Being helped to correct gaps in generic skills and knowledge

What a mentor does for you?

1. Provides long range view of mentees growth
2. Provides complete map of project
3. Encourages the mentee in all the work
4. Advices how to do? What to do? When to do? The respective work in proper manner.
5. Addresses the problems and obstacles in the targeted work

Key Mentoring Skills:

1. Effective listener
2. Encouraging
3. motivating
4. Inspiring
5. Build up trust
6. Determine strength and weakness of mentee
7. Focus more on mentees weakness so that he/she can perform well in all the worst situations
8. Discuss pitfalls in the academic growth
9. Take into account gender, ethic and cultural issues.
10. Do the assessments periodically

Role Of A Mentee:

1. Explain clearly about the vision and project to be executed
2. Put all the queries in front of the mentor
3. Always be able to hear the feedbacks from the mentors
4. Discuss with mentor how you can best measure the success and effectiveness of working relationship
5. Don't afraid to ask frequent questions to mentor
6. Make a schedule to meet and discuss the key points with the mentor in periodic manner.
7. Exchange the information and set the goal
8. Provide sound advice to the mentee
9. Provide thoughtful advice
10. Give fruitful advice

Writing Guidance:

Key Points To Write A Research Paper:

1. Find the broad area of research
2. Do discuss with the expertise of that particular area
3. Find the right topic
4. Download the journals recently published in that area to get the current status of the research
5. Go through the articles published in the same domain
6. Find information
7. Make your thesis statement
8. Make outline
9. Literature survey
10. Research Methodology
11. Do the research

12. Write the result, analysis, discussion, conclusion and future scope.
13. Process of research writing research paper
14. Write the initial draft
15. Check the content carefully
16. Review the paper
17. Tools for research paper

How To Write A Research Article:

Certain steps to follow while writing a research paper or a research article

Research Paper Outline:

1. Abstract
2. Keywords
3. Introduction
4. Overview of the issue you are dealing with
5. Detailing about the topic you are going to cover
6. Literature review
7. Methods
8. Mathematical modeling if required
9. Different cases you are dealing with
10. Result
11. Discussion
12. Conclusion and future scopes
13. Remarks and recommendation

Process Of Writing Research Paper:

1. Do the literature survey of more papers and articles on the same area or topic
2. Organize your flow of work
3. Make a timeline to complete the work

4. Use the appropriate tool to write the paper in systematic way
5. Write your initial draft
6. Deep review of the work you are going to deal with
7. Make the checklist
8. Use software to write the paper in organized manner
9. Install the appropriate software's to draw the diagrams
10. Install the best software to write the mathematical expressions
11. Put the correct citation of referred papers and referred equations and figures also.
12. Install software or tool for grammar check
13. Install software or tool for plagiarism check
14. Install software or tool for citation generations
15. Use title page generator.

ISBN: 978-81-947839-2-3

10. Essay Writing

Mr. Abhijeet Shukla
MBA (Dr. H.S Gaur University, FMS, Sagar, M.P)

Essay Writing:

Basically, an Essay is a "precise academic compositions". Most of us find it difficult to begin writing. We can make this easier by thinking about the topic either through brainstorming, that is- with several people in the group providing their ideas as they strike them or by putting them down on a sheet of a paper as they occur to us.

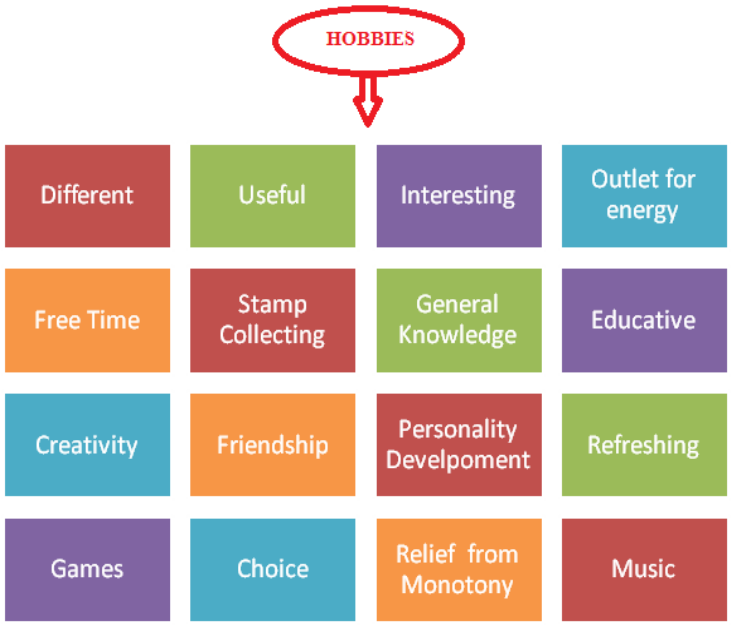
Keywords: Definition of essay, Kinds of essay, Parts of an essay, how to write an effective essay, kinds of essay writing, most important elements of an effective essay.

Introduction:

The word "Essay" is derived from French words "ESSAI" or "ESSAYER", which mean "trail ". In composition an essay is a piece of non –fiction writing that tells or describes a specific given topic. Currently essay is part of every degree program.

A formal essay is a piece of writing that informs or persuades its audience.

For example, if the topic is "Hobbies", we can draw a circle and write "Hobbies" in it: n we can put down our ideas and thoughts as they come to us naturally in a random manner as shown below:



Definition Of Essay:

"An essay is a sort of writing. which usually demonstrates author's position, personal view, or a research of a certain topic."

Having Done That, We Select The Points And Expand Each Into A Sentence.

- Hobbies are free-time activities. Examples are stamp- collecting, painting etc.
- They are matters of personal choice, not forced.
- They are interesting and provide pleasure.
- They refreshed the mind by giving an opportunity to do different kinds of activities.
- They provide relief from monotony.

We usually begin a topic with a definition or short description. So, specifically in this topic (Hobbies), we could begin thus:

Traditional Example Of Essay Writing: (Hobbies)

Hobbies are activities that we engage in, in our free time, we may be interested in needlework, drawing and painting or music. Other common hobbies are stamp-collecting, clay-modelling, solving crossword puzzles.

Although hobbies also entail work, they are taken upon through one's own personal choice. They are activities that we are really interested in and hence give us a great deal of pleasure. They are not forced upon us. Hobbies make life interesting. They refresh our minds after a hard day's work. We need to do something different in order to do our routine work effectively. Hobbies provide this variety. Hobbies relieve us from the monotony of daily life. They fill us with enthusiasm for work and keep our energy levels high. Hobbies are also useful activities. Quite a few hobbies, like stamp-collecting, widen our general knowledge about various countries of the world. When we share common interests, we even get into correspond once with people of other countries.

Here we can divide the Essay in some important different parts:

Parts Of An Essay:

Introduction:

An introductory paragraph is the first paragraph in an essay. It consists two parts.

- General Statement – a few sentences about your subject that catch the attention of your reader.
- A Thesis Statement – one sentence that tells your reader the main points of your topic and states the overall "plan" of your essay.

“Body Paragraph 1”:

After introduction part an Essay consists “Body Paragraph 1”, which contains some initial features related with given topic of Essay writing.

“Body Paragraph 2”:

Body paragraph 2 contains some information’s about the main topic of Essay writing, like consequences, reasons for particular topic.

“Body Paragraph 3”:

Thus, Body paragraph 3 contains another valuable content like,” Benefits”,” Disadvantages”,” Features” about that particular given topic.

Conclusion:

The Conclusion paragraph sumps up the writer’s opinion, taking into account all he has said in paragraphs 2,3 and 4(if written), i.e. it forms the conclusion. Just as every essay has a clear beginning; it should have a clear ending in the form of “Conclusion”.

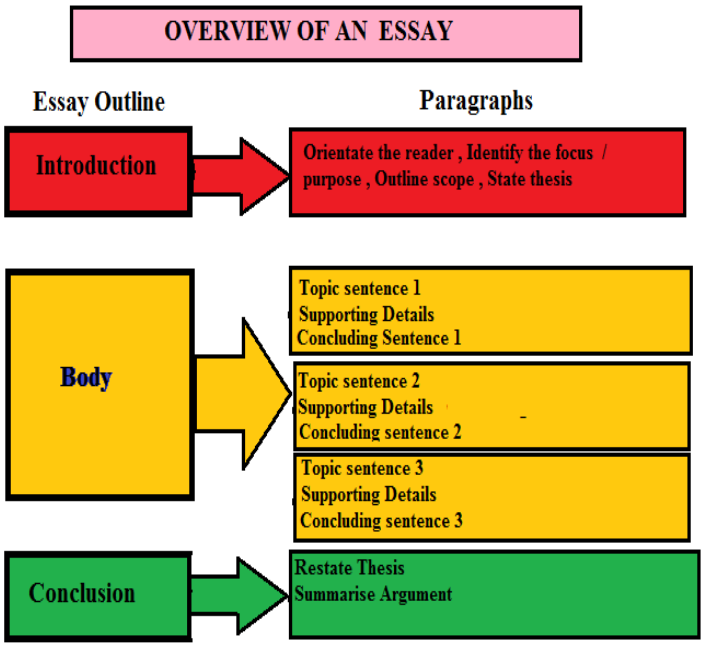
The concluding paragraph typically has two parts:

- ‘’The summary statement” is one or two sentences which restate the thesis in a fresh way to reinforce the essay writing’s main idea.
- ‘’The clincher” is a final thought which should create a lasting impression on the reader.

How Can We Write An Effective Essay?

A composition on a particular subject consisting of more than one paragraph is an “Essay”. An effective essay is the crux and abstract of the writer’s ideas,

thoughts and concepts which should be able to touch the audience's mind and soul naturally.



The Characteristics Of A Good Essay:

- **Unity:** The essay should deal with the main subject, and all parts of it should be clearly linked with that particular specific subject.
- **Coherence:** There should be logical sequence of thoughts. This requires a logical relationship between ideas, sentences and paragraphs.
- **Relevance:** Unimportant information should not be included.
- **Proportion:** Giving more space to the important ideas.

Effectively writing different types of essays has become critical to academic success. Essay writing is a common school assignment, a part of standardized test, and a requirement on college applications. Often on test, choosing the correct type of essay to write in response to a writing prompt is key to getting the question write. Clearly, students can't afford to remain confused about types of essays.

There are over dozen types of essays, so it's easy to get confused. However, rest assured, the number is actually more manageable.

Types Of Essays:

Essentially there are four major types of essays, with the variation making of the remainder.

- Narrative Essays
- Descriptive Essays
- Expository Essays
- Persuasive Essays
- Narrative Essays: (Telling a story)

In a Narrative essay, the writer tells a story about a real-life experience. While telling a story may sound easy to do, the narrative essay challenges students to think and write about themselves. When writing a narrative essay, writers should try to involve the reader by making the story as vivid as possible. The fact that narrative essays are usually written in the first person helps engage the reader. ''I" sentences give readers a feeling of being part of the story. A well – crafted narrative essay will also build towards drawing a conclusion or making a personal statement.

Descriptive Essays: (Painting A Picture)

A cousin of the narrative essay, a descriptive essay paints a picture with wards. A writer might describe a person, place, object, or even memory of special signification. However, these types of essay are not description for description's sake. The descriptive essay strives to communicate a deeper meaning through the description. In a descriptive essay, the writer should show, not tell, through the use of colorful wards and sensory details. The best descriptive essays appeal to the reader's emotions, with a result that is highly evocative.

Expository Essays: (Just The Facts)

The Expository essay is an informative piece of writing that presents a balanced analysis of a specific topic. In an expository essay, the writer explains or defines a topic, using facts, statistics, and examples. Expository writing encompasses a wide range of essay variations, such as the comparison and contrast essay, the cause an effect essay, and the "how to "or processes essay. Because expository essays based on facts and not personal feelings, writers don't reveal their emotions or write in the first person.

Persuasive Essays: (Convince Me)

While like an expository essay in its presentation of facts, the goal of the persuasive essay is to convince the reader to accept the writer's point of view or recommendation. The writer must build a case using facts and logic, as well as examples, expert opinion, and sound reasoning. The writer should present all sides of the argument but must be able to communicate clearly and without equivocation why a certain position is correct.

Important Elements / Components Of Essay Writing:

Traditionally, there are three necessary components to any essay. The main parts (or sections) to an essay are the Intro, Body, and Conclusion. In a standard short essay, five paragraphs can provide the reader with enough information in a short amount of space.

The introduction is a paragraph that gives an overview of the essay topic, often with background information.

Elements of an Essay persuade the audience and convey the Essay's meaning. An Essay is not just a haphazard piece of writing. It's important to keep improving your approach to research, writing and structure.

Essay Basics:

- An essay is a piece of writing our genuine thoughts, ideas where you present your opinion, backed up by evidence, in response to a specific topic.
- This opinion is referred to as 'your contention, position or thesis
- Statement'.
- There are many different types of essays, but they have several common features that make them straight forward to plan and execute if you follow the rules!
- SALIENT FEATURES OF GOOD ESSAY WRITING:
- A strong contention, supported by ideas, arguments and evidence
- The summary and analysis of other writer's research and opinions
- A clear structure, including an Introduction, Body paragraphs and a Conclusion
- A reference lists.

Prerequisites For A Good Essay Writing:

- A good Essay writer should always leave enough time to prepare
- himself/ herself for writing an effective Essay.
- Essay writer will need to complete the required reading (both from classes and wider sources).
- Decide on your point of view, brainstorm keywords and concepts.
- Draft an outline of the contents of your paragraphs.

At Last But Not The Least, Most Important Elements Of Effective Essay Writing Are:

1. Engaging Beginning:

- The title suggests the problem, it's strong and fitting, it brings the reader in.

- The lead grabs the reader's interest. It's deliberate and inviting.
- The lead introduces the problems the problem and establishes a context, a time, a place, or situation.
- The essay goes right to the topic and sticks to it.

2. Effective Support:

- The writer explains his or her r the topic and shares his or her thoughts and feelings about it.
- By the second paragraph, the reader gets the point and the writer's position.
- There is strong "I" or "we" voice.
- Arguments are supported with evidence: statistics, dates, facts, quotes, history, stories, experts, analogies and personal experiences.
- The writer brings in opposing arguments, quotes them, and shoots them down.

3. Coherent Structure:

- The essay moves at a good pace.
- Transitional words and phrases make the essay flow and connect paragraphs.
- The data has been organized for its best presentation; it flows with the movement of the essay and appears in a logical place.
- The diction, or word choice, is precise and strong- not passive. The language is crafted and literary.
- The essay is cut to the bone: just long enough to say what needs to be said.
- The length is about eight to eleven paragraphs –about 750 to 1000 words approximately.

4. Joins The Conversation:

- The writer presents a straightforward history of the problem.

- The tone is conversational, and the writer speaks directly to the reader.
- The essay makes the reader think and/or feel.
- The writer encourages the reader to ask questions.
- The essay is full of opinions and provocative statements.
- The effective essay conforms to the standard conventions of its genre.

5. Thoughtful Conclusion:

- There is a strong conclusion: direct opinion, statement, question, anecdote, solution, echo of the lead, etc.
- The writer proposes a solution or multiple solutions to the problem.
- When you read the last sentence, you know it's the end.

ISBN: 978-81-947839-2-3

11. How To Write A Research Paper

Debasish Biswas
Assistant Prof. in Commerce, Ramnagar College.

Introduction:

It is the first step of any proposal. Under this point, we have to write something about the topic. One can understand about your research proposal after reading this unit. Here, we are giving some concept about the topic.

Background Of The Study:

Under this segment, we are discussing in detail about the topic regarding origination of the topic. Why have to take or choosing this topic. Necessity of the study is focusing under this unit.

Review Of The Literature:

This unit is important for any study. Under this a researcher has to collect past research of his/her selected topic and analysis in detail for find out the actual conclusion on this topic. What types of worked had been done on the selected topic that must be understand in detail.

Research Gap:

After reviewing past research on selected topic. A research has to find on which area of this topic is not worked by the research. This point should be highlighted. Your research is totally based on this gap.

Objectives And Aim Of The Study:

This is another important unit for research. After, point out the research gap, you have to select some objects of your study on the basis of your selection.

Methodology:

Which methods, you have to use for this study mention about in details. That means to analysis which tools and techniques are using for fulfilling the objectives of the study. Without making any tools and technique, the research cannot be justified the aim and objects of the study.

Sources Of Data:

Collections of data are important aspect of any research. Data means for information. That information is required for the fulfillment of the study. If we cannot get proper data source. At the end, our objectives are not justified.

Analysis The Data:

After collecting data, a research has to take various statistical tools for analysis the data or information. Which result comes out from the analysis? The research should write down for interpretation view point. If any requirements to draw any chart, graph, or other thing.

Interpretation Of The Result:

Next to analysis the data, interpretation is required through interpretation. A researcher has to draw what actual result has to come throughout the study. On the basis of aim and objectives, this unit is important because we are analysis and calculating the result on the basis of your objectives.

Conclusion:

At the end, we are going to conclude in detail about the topic on which we have to work. Through this segment a researcher has to write down the actual result and what are the conclusions are there.

Limitation Of The Study:

Under this segment, the area of which we are not mention due to any unavoidable causes. If we are not getting any information properly that thing must be mention under this unit.

Scope For Further Study:

Under this segment, which area a researcher is not mentioned or not covered by the researcher at the time of research. This area must be mention under this unit.

References:

Consider of where you will find information to support your arguments should go hand in hand with thinking about methodology. Where sources are used, they should be listed at the end of the synopsis and you should be prepared to discuss then when asked.

References from journal, authors/s of the articles, titles of the articles, name of the journal, year of publication, volume, issue, number, page number e.g.

ISBN: 978-81-947839-2-3

12. Case Study

Dr. Syed Md. Bakhteyar Fatmi
Associate Professor and Head, Dept. of Psychology,
Oriental College, Patna (Bihar).

Introduction:

The case study method is a very popular form of qualitative analysis and involves a careful and complete observation of a social unit, a cultural group or even the entire community. The case study places more emphasis on the full analysis of a limited number of merits or conditions and their interrelations. It deals with the processes that take place and their interrelationship. Thus, case study is essentially an intensive investigation of the particular unit under consideration.

The case study method is a widely used systematic field research technique in Social Sciences these days. The credit for introducing this method to the field of social investigation goes to Frederic Le. Play (1806 – 1982) who used it as a hand-maidan to statistics in his studies of family budgets. Herbert Speneer was the first to use case material in his comparative study of different cultures. William Healy resorted to this method in his study of Juvenile delinquency and considered it as a better method over and above the mere use of statistical data. Similarly, Anthropologists, Historians, Novelists, Dramatists etc. have used this method concerning problems pertaining to their areas of interests. Even management experts use case study methods for getting clues to several management problems.

Definitions:

Many definitions of case study are given yet basically the method of exploring and analyzing the life of a social unit be that a person, a family or an institution, or a community, be called ‘case study’. Various aspects of this unit are deeply and thoroughly studied, taking in account its past, present and future. Behaviour

patterns of a unit and its relationship with the environments is studied from al dimensions. It is related to natural history and its relationship with social factors and forces on the one hand and complex factors that are operative in a social unit as an integrated totality on the other.

According to P.V. Young – "Case study is a method of exploring and analyzing of life of a social unit, be that a person, a family, an institution, cultural group or even entire community."

In the words of Goode and Hatt – "Case study is a way of organizing social data so as to preserve the unitary character of the social object being studied. Expressed somewhat differently, it is an approach which views any social unit as a whole."

H. Odum has defined case study method by saying that – "The case study method of a data collection is a technique by which individual factor whether it be an institution or just an episode in the life of an individual or a group is analysed in its relationship to any other in the group."

In this way several definitions of case study have been given but all make it clear that it is a method which aims at studying deeply and thoroughly different aspects of social unit. Some thinkers, however, try to establish that it is not an independent method but only a technique, while still others believe that it is only an approach to a social reality and a mode of organising data in terms of some units. But by and large case study is considered an independent unit and helps in examining the complex situation and combination of various factors involved in a given situation with the object of identifying the casual factors operating on it.

Characteristics of Case Study:

Following characteristics of case study are cleared from above definitions:

1. The researcher can take one single social unit or more of such units for his study purpose; he may even take a situation to study the same comprehensively.
2. In this method selected unit is studied intensively.
3. Case study method results in fruitful hypotheses along with the data which may be helpful in testing them, and thus it enables the generalized knowledge to get richer and richer. In its absence, generalized social science may get handicapped.
4. In case study method the behaviour pattern of the concerning unit is studied directly and not by an indirect and abstract approach.
5. An effort is made to know the mutual inter-relationship of casual factors in respect of the case study method.
6. In case study method the approach happens to be qualitative and not quantitative. Every possible effort is made to collect information's concerning all aspects of life.
7. In case study method we make complete study of the social unit covering all facts. By this method we try to understand the complex of factors that are operative within a social unit as an integrated totality.

Assumptions Of Case Study:

Followings are the assumptions of case study method:

1. The assumption of comprehensive study of the unit concerned.
2. The assumption of studying the natural history of the unit concerned.
3. The assumptions of uniformity in the basic human nature in spite of the fact that human behaviour may vary according to situations.

Stages For The Completion Of Case Study:

In case study method there are normally four stages, which need crossing before the whole study is completed. These may briefly be discussed as under:

If the unit is to be studied as a whole it is essential that there should be collection of broad arrays of data, no matter whether such a unit is social relationship, a group or a person. In the words of Goode and Hatt (1952), "Although mere quantity of data is not sufficient since the collection must be guided by research problem, there is greater opportunity to grasp the pattern of individual's life if a substantial body of data concerning many facets of that is available."

The case study method is further distinguished by the use of data from other abstract levels than the purely sociological. Recourse to other levels does give added dimensions to the individual being studied. It is rightly pointed out that when an individual is seen in his total network of relationship, it is more difficult to lose sight of him as a unit.

Goode and Hatt (1952) are of the view that in case study method indices and types are most important and as such proper care should be taken in their formation. According to them, "However, the most important technique in preserving the wholeness of social unit is the development of typologies and indexes, so that the various traits are actually used in characterising the units. It is equally essential that the data collected should be timely processed.

1. Statement Of The Problem:

In this respect it is essential that the problem should be clearly started and specified. In this statement it should be clearly stated as to what type of cases have been selected for the study and that how many cases have actually been picked up for the study. The statement should also show as to what are the types of units which have been picked up and what is the scope of analysis once the data has been collected.

2. Description Of Events:

Next step then is description of events. It is very essential step and implies that every unit must be carefully and clearly studied. We have already said that case study means in depth extensive and quantitative study. Accordingly, in case study method no event can either be completely missed or its study can be slightly over-looked, neglected or under-estimated in any manner.

3. Factors Of Influence:

There are different factors which influence a social unit. Nobody can under-estimate the importance of these factors, which can be both general as well as particular. Such factors can be those which might have influenced social unit directly or indirectly. If case study is desired to be complete it is essential that in the first instance these factors should be identified and after that has been done, then each such factor should be very carefully and thoroughly studied. Unusually indirect factors are given less importance as compared with direct factors. It is essential that this tendency should be avoided in case it is desired that study should be complete and perfect.

4. Analysis Of Data:

In this method of study social unit can be an individual/ group or a particular community. The investigator collects data from his social unit and records that after taking into consideration various influences and factors. But once the data has been collected it is essential that it should be carefully and properly recorded and analysed.

Sources Of Case Study Data:

Following are the main sources of case study data:

1. Personal Documents:

These include diaries autobiographies, memories, letters etc. In every society, generally the people keep diaries, write their autobiographies or memories. These documents are personal and contain the description of significant events of the life of the narrator and his reactions towards them. It is likelihood that these documents may also contain the description of even those events in which an important role has been played by the narrator. To quote Allport, "they are self-revealing records which intentionally or unintentionally yield direct information regarding the structure, dynamics and functioning of author's mental life. Such personal documents, although sufficiently subjective in nature are highly important for social research. Diaries are mostly written for self-satisfaction and the writer is not likely to distort facts deliberately." The documents of this type may be written for general purpose, or specially kept for the purpose of research. The former type of the document is generally more reliable, but it may not give full facts regarding an event.

Pauline V. Young opines that, "Personal documents represent continuity experience which helps to illuminate the writer's personality, social relations and philosophy of life often expressed in objective reality or subjective appreciation." This is how these are of immense help in studying the personality of the writer as well as his reactions to different circumstances of life.

2. Life History:

Life history involves the study of various events of the life of the person concerned. There is also an attempt to find their social significance. 'It is in this way that life history differs from the pure historical narrative of facts. While the pure narrative aims at narrating the facts only, life history aims at revealing the meaning and significance of these events in the context of motivating factors of social life.' Analysis of life history is thus a combination of facts and the inferences. The data relating to life history is collected through prolonged

interviews with the respondents and also with the aid of any written material available about his life and thereupon analysis of the facts so compiled to draw valid generalizations from the available information.

These two sources reveal that a case study often adopts two forms i.e.:

1. the use of written material about the respondent; and
2. collection of data through respondent's interviews.

In addition to these, various other methods may be approached to collect the correct information. To quote, P.V. Young, "they may include from simple verification method viz. periodical conferences, impromptu conversations, dramatic productions, observation and post experimental interviews, to more complicated processes like experimental studies, a wide range of tests including hyphotic tests, tests of ability, tests of aesthetic appreciation, emotional conditioning, social reaction to frustration, imaginal productivity psychological insight etc." The whole life history of the informant (from childhood to old age) is put to through probe and tests by treating every aspect of his life.

Advantages (Merits):

There are several advantages of the case study method:

1. Being an exhaustive study of a social unit, the case study method enables us to understand fully the behaviour pattern of the concerned unit. In the words of Charles Horton Cooley, "Case study deepens our perception and gives us a clearer insight into life …. It gets at behaviour directly and not by an indirect and abstract approach."
2. Through case study a researcher can obtain a real and enlightened record of personal experiences which would reveal man's inner strivings, tensions and motivations that drive him to action along with the forces that direct him to adopt a certain pattern of behaviour.

3. This method enables the researcher to trace out the natural history of the social unit and its relationship with the social factors and the forces involved in its surrounding environment.
4. It helps in formulating relevant hypotheses along with the data which may be helpful in testing them. Case studies, thus, enable the generalized knowledge to get richer and richer.
5. The method facilitates intensive study of social units which is generally not possible if we use either the observation method or the method of collecting information through schedules. This is the reason why case study method is being frequently used, particularly in social researches.
6. Information collected under the case study method helps a lot to the researcher in the task of constructing the appropriate questionnaire or schedule for the said task requires thorough knowledge of the concerning universe.
7. The researcher can use one or more of the several research methods under the case study method depending upon the prevalent circumstances. In other words, the use of different methods such as depth interviews, questionnaires, documents, study reports of individuals, letters, and the like is possible under case study method.
8. Case study method has proved beneficial in determining the nature of units to be studied along with the nature of the universe. This is the reason why at times the case study method is alternatively known as “mode of organising data”.
9. This method is a means to well understand the past of a social unit because of its emphasis of historical analysis. Besides, it is also a technique to suggest measures for improvement in the context of the present environment of the concerned social units.
10. Case studies constitute the perfect type of sociological material as they represent a real record of personal experience which very often escape the attention of most of the skilled researchers using other techniques.

11. Case study method enhances the experience of the researcher and this in turn increases his analyzing ability and skill.
12. This method makes possible the study of social changes. On account of the minute study of the different facets of a social unit, the researcher can well understand the social change then and now. This also facilitates the drawing of inferences and helps in maintaining the continuity of the research process. In fact, it may be considered the gateway to and at the same time the final destination.
13. Case study techniques are indispensable for therapeutic and administrative purposes. They are also of immense value in taking decisions regarding several management problems. Case data are quite useful for diagnosis, therapy and other practical case problems.

Limitations (Demerits):

Important limitations of the case study method may as well be highlighted.

1. Case situations are seldom comparable and as such the information gathered in case studies is often not comparable. Since the subject under case study tells history in his own words, logical concepts and units of scientific classification have to be read into it or out of it by the investigator.
2. Read Bain does not consider the case data as significant scientific data since they do not provide knowledge of the "impersonal, universal, non-ethical, non-practical, repetitive aspects of phenomena." Real information is often not collected because the subjectivity of the researcher does enter in the collection of information in a case study.
3. The danger of false generalisation is always there in view of the fact that no set rules are followed in collection of the information and only few units are studied.

4. It consumes more time and requires lot of expenditure. More time is needed under case study method since one studies the natural history cycles of social units and that too minutely.
5. The case data are often vitiated because the subject, according to Read Bain, may write what he thinks the investigator wants, and the greater the rapport, the more subjective the whole process is.
6. Case study method is based on several assumptions which may not be very realistic at times, and as such the usefulness of case data is always subject to doubt.
    a. Case study method can be used only in a limited sphere. It is not possible to use it in case of a big society. Sampling is also not possible under a case study method.
7. Response of the investigator is an important limitation of the case study method. He often thinks that he has full knowledge of the unit and can himself answer about it. In case the same is not true, then consequences follow. In fact, this is more the fault of the researcher rather than that of the case method.

Despite the above limitations, case studies are being undertaken in several disciplines, particularly in Social Sciences, as a tool of scientific research in view of the several advantages indicated earlier. Most of the limitations can be removed if researchers are always conscious of these and are well trained in the modern methods of collecting case data and in the scientific techniques of assembling, classifying and processing the same. In modern times case studies can be conducted in such a manner that the data are amenable to qualification and statistical treatment. This is also the reason why case studies are becoming popular day to day. Case studies allow a research to investigate a topic in far more detail than might be possible if they were trying to deal with a large number of research participants (nomothetic approach) with the aim of ‘averaging’. Hence, the method, though useful, is arduous in nature and requires good deal of

experience and training. However, the limitations are only difficulties and therefore it can be usefully used if the method is used expertisely.

List of Chapters

KRIPA DRISHTI PUBLICATIONS

Kripa-Drishti Publications
A-503 Poorva Heights, Pashan-Sus Road, Near Sai Chowk,
Pune – 411021, Maharashtra, India.
Mob: +91 8007068686
Email: editor@kdpublications.in
Web: https://www.kdpublications.in

ISBN: 978-81-947839-2-3