CSCanada
Higher Education of Social Science
Vol. 10, No. 3, 2016, pp. 11-21
DOI:10.3968/8310

ISSN 1927-0232 [Print]
ISSN 1927-0240 [Online]
www.cscanada.net
www.cscanada.org

An Overview of Research, Research Paper and Thesis: Evidence From Literature Review

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Received 10 December 2015; accepted 14 February 2016
Published online 26 March 2016

Abstract

In this study an attempt has been made to answer the questions "What are Research and its types?" What is difference between research paper and article? What is difference between project report, thesis and dissertation? A systematic literature review is undertaken giving an overview of its processes and principles. Research' is a particular type of investigation. It is impossible to do research without having a problem, which is required to be resolved, or a question, which needs to be answered but it is difficult for scholars to select and write topic, statement of purpose and thesis, so the solutions of these are given in this article. The definition and evolution of the approach are described, including the various kinds of research being used today. The research procedure and its nature have been discussed from different scholars' point of view. This article also seeks to organize the scattered knowledge at one point to get research scholars equipped with the latest knowledge. Finally, this study has revealed that research is purposeful and solution-oriented investigation which needs every step properly written. Guidelines given in this study are very clear to help the student to complete their article thesis and dissertation so researchers are advised to follow the guidelines to write quality thesis.

Key words: Action research; Research approach; Research paradigm; Research cycle

Herani, G. M., & Advani, A. (2016). An Overview of Research, Research Paper and Thesis: Evidence From Literature Review. *Higher Education of Social Science*, *10*(3), 11-21. Available from: URL: http://www.cscanada.net/index.php/hess/article/view/8310
DOI: http://dx.doi.org/10.3968/8310

INTRODUCTION

The research is a systematic investigation of an area of knowledge or a problem. Everybody is doing research because they are getting knowledge and increasing the volume of the store of knowledge. So many people collect and disseminate knowledge for the required purpose for example: for the purpose of lecture, speech general talk, newspaper and magazine or for electronic media. All above is called research but all are not scholarly researches. In some researches required data are collected and it is in proper sequences to get the proper answers of question or hypothesis and in other data is collected but it is not in the required format for the testing statistically. Due to this classification according to data analysis is difficult. There is always purpose of research so to get answer data is the collection is made in that manner and according to purpose, strategy employed data testing and analysis it has different types and there is confusion in differentiation of these kinds. When we are doing academic research, then we get confused that what is the best way investigation? What method should be applied, how to write the statement. It is observed that in the field of research when researchers are doing academic research then they get confused and are worried about writing the statement of purpose, thesis (problem) and the title itself. There is also confusion in differentiation between qualitative and quantitative papers, scholarly and non-scholarly articles, article and research paper, and different terminology

for papers like green, white, yellow and black papers. In the light of the above drawbacks to get clarification of these terminologies, confusions to make the research community well aware of and well trained for the quality research this study has been conducted.

To collect information regarding the problem secondary source has been sought along with electronic media. Organization of remaining article is as under: Section 1 details what are research, how to write a purpose statement, thesis statement and the title itself. Section 2 details purpose of research; section 3 gives definitions of types of research and its classification. Section 4 differentiates between research paper and articles. Section 5 differentiates between project thesis and dissertation. Section 6 defines green paper and white paper. Finally is remarks and suggestion

1. WHAT IS RESEARCH?

Research is finding out what you don't already know. No one knows everything, but everybody knows something. However, to complicate matters, often what you know, or think you know, is incorrect. Research is a systematic investigation to establish facts, a search for knowledge and attempt to find out in a systematically and scientific manner. *Research* traditionally meant the *thorough and systematic scientific (or scholarly) investigation* (of an area of knowledge or a problem, etc.). It was also generally assumed that the work was original. "Research" is a particular type of investigation. It is impossible to do research without having a problem, which is required to be resolved, or a question, which needs to be answered (Ahmed & Huda, 2006). Easterby-Smith, Thorpe and Lowe (1999, p.9) stressed "research is always avoided about with uncertainty and risk." According to Morgan (1983), it is part of a wider process that constitutes and provides a subject agreeable to study in a distinctive way. However, research is concerned with seeking solutions to problems or answers to questions. Gillham (2000, p.2) has defined research as: "Research is about creating new knowledge, whether the disciplines—history, medicine, physics, and social work. The raw material of research is *evident*, which then has to be made sense of." Similarly Marshall and Rossman (1995) argued that research is a progression of trying to achieve a better understanding of the complexities. Definition of scientific research offered by Bassey (1999, p.38) is "systematic, critical and self-critical enquiry, which aims to contribute to the advancement of knowledge and wisdom." Similarly, Mason (1996, p.4) agreed that it should be "systematically and rigorously conducted." Research discovers answers to "who, what, when, where, how" questions rather than the "why". According to Phillips and Pugh (1994, p.45) "research aims to re-orientate our thinking, to make us question what we think we do know, and to focus on new aspects of our complex reality." According to Ahmad and Huda (2006) research is an investigation carried out to secure information for solving problems. Whether the research is simple or complex, scientific or non-scientific, sophisticated or primitive, useful or useless depends on its objectives, its design, and the skill and integrity with which it is conducted (Ahmad & Huda, 2006).

1.1 Writing a Statement of Purpose, Thesis and Problem

A Statement of Purpose is a sentence that you write, which states, in some detail, what you want to learn about in your research project. The statement guides you as you work so that you will read and take notes only on what's needed for your project. Writing a statement of purpose will do 4 things to help you:

You will get more interested in your project. It will keep you from getting overwhelmed and panicky at all the information you may find. It will help you develop a Thesis Statement, which comes later on in the research process.

It saves your valuable and effort able time. After you focus your topic, after some overview reading, write a sentence that says what you want to learn about. Don't worry if you're not totally sure, your Statement of Purpose may change 3 or 4 times before you're done. To write the sentence, first answer these questions for yourself as best as you can.

1.2 What Is My Real Personal Interest in the Topic?

(There will always be something that can interest you).

What do I specifically want to learn about my topic? (Don't overwhelm yourself with too many things. Two or three are plenty.)

Start your Statement of Purpose with words like "I want to learn about..." For example: One person was very concerned about air pollution and wanted to know if the government is doing anything to stop it.

Her Statement of Purpose was this: I want to learn about what is being done by our government to stop air pollution.

This Statement of Purpose will lead her to eventually write a Thesis Statement in which she will be able to make an assertion (a statement she can defend) and support it with the evidence she has gathered in her research. *Thesis Statement*: Her Thesis Statement may sound something like this: "In the United States, government regulation plays an important role in the fight against air pollution." Or, conversely, "United States government regulation has little effect in the fight against air pollution." Whichever the case, she will use the evidence she has gathered in her research to prove her Thesis Statement.

Table 1
Examples of Preparation of Purpose Statements

Bit too general	Much better, more specific
I want to learn about the Dalai Lama.	I want to know what role the Dalai Lama plays as the spiritual leader of the Tibetan people.
I want to learn about 50 cent.	I want to learn about what has influenced the music of 50 cent.
I want to find out about teen gangs.	I want to find out some ways to stop teen gang activity.
I want to learn about AIDS.	I want to know how close we are to a cure for AIDS.
I want to know about pro basketball.	I want to know what it takes to be a professional basketball player.
"I want to find out about the Marshall Plan"	I want to know if the Marshall Plan still has any effect on the world's economy.
I want to find out about Porsches and Trans Ams.	I want to compare the performance of a Porsche 911 and a Pontiac Trans Am and see which I will buy when I have the money.
I want to learn about teen pregnancy.	I want to know how teenage pregnancy affects young fathers and young mothers differently.
I want to find out about the juvenile criminal justice system.	I want to know what juveniles experience when they get put in legal detention for committing a serious crime.
I want to learn about the Crusades.	I want to know why Christians and Muslims fought so hard with each other during the middle ages.

Sources: http://wiki.answers.com/Q/What_is_the_purpose_of_research#ixzz1udx9lyhw

I think you probably get the idea by now. It may take a while to write your statement. If you are having trouble, ask a teacher or librarian for it.

Problem (title/topic): An evaluation of work regulations by government to stop air pollution: A case study of United Nations.

2. WHAT IS THE PURPOSE OF RESEARCH?

There are two basic purposes for research: to learn something, or to gather evidence. The first, to learn something, is for your own benefit. It is almost impossible for a human to stop learning. It may be the theory of relativity or the RBIs of your favorite ball player, but you continue to learn. Research is organized learning, looking for specific things to add to your store of knowledge. You may read SCIENTIFIC AMERICAN for the latest research in quantum mechanics, or the sports section for last night's game results. Either is research.

What you've learned is the source of the background information you use to communicate with others. In any conversation you talk about the things you know, the things you've learned. If you know nothing about the subject under discussion, you can neither contribute nor understand it. (This fact does not, however, stop many people from joining in on conversations, anyway.) When you write or speak formally, you share what you've learned with others, backed with evidence to show that what you've learned is correct. If, however, you haven't learned more than your audience already knows, there is nothing for you to share. Thus you do research.

Research has many purposes. It can be used to further your understanding of how things work or even figure out something you had always needed to know. Scientists, lawyers, doctors, and many other jobs use research and information to gather conclusions and other valuable things. If you're finding out the questions about an essay, or figuring out how to reverse Climate Change, research and hard work is the way to go (wiki.answers.com).

3. WHAT IS THE PRIMARY PURPOSE OF BASIC RESEARCH?

The "Primary Purpose" of basic research is to gain a general understanding of the topic being explored. For instance, the difference between focused researches, as opposed to basic research, would be the amount of specific, rather than general, information gathered. In terms of a research paper done on the African Society, for example, basic research would be researching a general overview of the country's history, while a focused research would be analyzing the events that happened within the history of the country and how they ultimately effected the country as it stands now, including the various movements and lifestyles that arose. Essentially, basic research allows you to take hold of the basic facts or points of a topic, and allows you to formulate a hypothesis, or possible course of action, before you dive into more focused, specific research. Information, ideas and opinions surround us, most of which we never question. In fact, we have to ignore most of them or suffer from brain burnout. However, when we do pay attention we usually accept it as it comes in from whatever source. For example, do you ever wonder if you're getting the whole story from TV news shows or newspapers? Do you wonder what's been left out, if anything? Or why? However, if we wish to understand something, not just accept someone else's

word for it but actually understand it, and in turn pass on our understanding to someone else, we must question opinion and assumption and theory and speculation. The purpose of the questions is to gather evidence. Evidence is either not heard or disregarded. Evidence is also the key to understanding your subject. A way to understand something is to break it down into its component parts, examine each one, and put it back together. For example, your subject is state income tax. First you break the subject down into the component parts. Second, you find evidence, actual information about each component part. Third, you put the subject back together again, only now with a full understanding of each component and how it relates to each other component. Thus you have a more complete understanding of your topic. Finally, evidence is the key to having others to accept your ideas. To communicate your understanding of a topic you give your audience the same evidence that you found to understand it yourself. Remember that if you don't give your audience any reasons why what you have to say should be believed, and then there is no reason why they should believe you.

4. TYPES OF RESEARCH

4.1 According to Data Analysis

According to data available and way of analysis there are two types of researches. One is called qualitative theoretical and other is quantitative.

Qualitative (theoretical) deals with data or information which is not in order to test statistically and needs testable analysis or conclusions from systematically gathered material. It reconciles conflicting points or conclusions finds new relations with non-related research and comes on conclusion from these evidences, where involvement of logics is more involved that is why it is very difficult and it is mostly exploration and prominent researchers do this because to defend it is very difficult. Mostly noble prize winners are doing this type of research which is new and explores new things. It answers questions and it has multiple focal points. It helps people to manage, shape and make sense of unstructured information. Qualitative research seeks out the "why", not the "how" of its topic through the analysis of unstructured information—things like interview transcripts, open ended survey responses, emails, notes, feedback forms, photos and videos. It doesn't just rely on statistics or numbers, which are the domain of quantitative researchers.

Qualitative research is a method of inquiry employed in many different academic disciplines, traditionally in the social sciences but also in market research and further contexts (Denzin & Lincoln 2005). Qualitative researchers aim to gather an in-depth understanding of human behavior and reasons govern such behavior. The qualitative method investigates the *why* and *how* of decision making, not just *what*, *where*, *when*. Hence, smaller but focused samples are more often needed than large samples (Qualitative. www.quora). In the conventional view, qualitative methods produce information only on the particular cases studied, and any more general conclusions are only propositions (informed assertions). Quantitative methods can then be used to seek empirical support for such research hypotheses. This view has been disputed by Oxford University professor Flyvbjerg (2006; 2011, pp.301-316), who argues that qualitative methods and case study research may be used both for hypotheses-testing and for generalizing beyond the particular cases studied. A central issue in qualitative research is validity (also known as credibility and/or dependability). There are many different ways of establishing the validity, including: member check, interviewer corroboration, peer debriefing, prolonged engagement, negative case analysis, auditability, confirmability, bracketing, and balance. Most of these methods were coined, or at least extensively described by Lincoln and Guba (1985).

Quantitative (empirical) research on the other hand deals with proper data and can be statically tested. It needs defending from evidence of testing and hypothesis is accepted or rejected according to evidences. It uses mathematical model and testing instrument.

Quantitative research is the numbers side of market research. It's about measurement and attaching numbers to a market—for instance market size, market share, penetration, installed base and market growth rates. Quantitative research can also be used to measure attitudes, satisfaction, commitment and a range of other useful market data and market metrics that can track over time and used as part of a wider business planning and business strategy process. Most quantitative market research is now conducted online via web-based surveys, but we also do research by phone, post and face-to-face. The mainstay of business planning is the use of numbers such as market size, share and use. This form of numerical data, or market metrics is gathered through the use of questionnaire-based statistical surveys which will provide information about the installed base, market size, market share, market penetration and market growth rates. This research can be conducted by phone, post and face-to-face. The basis of all quantitative research comes from the design of the sample and survey type, the design of the questionnaire and the quality of the analysis and reporting. A good design comes from understanding not just how to do research, but also the business context for that research and knowledge of the decisions that may be taken once the results are in (Quantitative www.dobney).

The sample and survey type are the statistical bedrock on which quantitative research is based. Survey design relies on properly defining the target universe

or population, finding means to make contact with this population and stratifying or dividing the population into a known classification scheme so that the sample can be drawn properly. The type of survey to be carried out will depend almost entirely on the target population and the subject under investigation. Options range from postal, to telephone, to face-to-face intercept surveys (street interviewing), to house-to-house and on-line research. Understanding the likely response rates, biases and properly defining the interviewing task will determine the true statistical quality of the final data. We carry out quantitative research in all forms whether postal, telephone, on-line or using face-to-face interviewers which make us well placed to determine which technique will work best for your project.

Quantitative research, unlike qualitative research, relies on a fixed questionnaire that should be administered the same way, word-for-word, for each respondent to obtain a reliable measure of the market. Although not hard to design, questionnaires require a few basic rules to be followed so that ambiguous results are avoided. Such as avoiding double meanings or leaving the respondent unable to answer. A well designed questionnaire will be short, to the point, yet have a flow that the interviewer and respondent can use to get through it quickly and accurately. Ideally a questionnaire should be designed with analysis and presentation in mind. Will I be able to use and explain the results? Have I covered off the key market, metrics needed for analysis? Can I adequately segment and classify the different parts of the market? Increasingly questionnaires are not just about measuring "*x*% of the population", but also involve modelling and forecasting behaviors from the answers given. Proper thought to the statistical output and modelling possibilities should be strongly considered when designing the questions, particularly if the questionnaire is to be used in any form of long-term tracking where changes are difficult and often costly to make.

Table 2
Qualitative versus Quantitative Research: Key Points in a Classic Debate

Qualitative	Quantitative
"All research ultimately has a qualitative grounding" - Donald Campbell	"There's no such thing as qualitative data. Everything is either 1 or 0"- Fred Kerlinger
The aim is a complete, detailed description.	The aim is to classify features, count them, and construct statistical models in an attempt to explain what is observed.
Researcher may only know roughly in advance what he/she is looking for.	Researcher knows clearly in advance what he/she is looking for.
Recommended during earlier phases of research projects.	Recommended during latter phases of research projects.
The design emerges as the study unfolds.	All aspects of the study are carefully designed before data is collected.
Researcher is the data gathering instrument.	Researcher uses tools, such as questionnaires or equipment to collect numerical data.
Data is in the form of words, pictures or objects.	Data is in the form of numbers and statistics.
Subjective - individual's interpretation of events is important, e.g., uses participant observation, in-depth interviews etc..	Objective- seeks precise measurement & analysis of target concepts, e.g., uses surveys, questionnaires etc..
Qualitative data is more 'rich', time consuming, and less able to be generalized.	Quantitative data is more efficient, able to test hypotheses, but may miss contextual detail.
Researcher tends to become subjectively immersed in the subject matter.	Researcher tends to remain objectively separated from the subject matter.

Source: Miles, M. B., & Huberman, M. (1994, p.40).

4.2 Types According to Nature of Problem

Research has different kinds according to nature of problem. *Operational research* is designed to determine most efficient way to do something. *Field work research* is an investigation carried out in the field rather than in a laboratory or headquarters. *Marketing research* gathers and analyzes information about the moving of goods or services from producer to consumer. *Microcopy research* is with the use of microscopes. Probe research is an investigation conducted using a flexible surgical instrument to explore an injury or a body cavity or qualitative knowledge. Scientific research is to search into questions posed by scientific theories and hypotheses.

4.3 Types According to Purpose and Investigation

Exploratory: *"*This type of research investigates an area or issue on which little previous work has been carried out. In an organizational setting it may be used to discover whether or not a problem exists."

*Speculative: "*Sometimes research is implemented strategically, where researchers take account of current situations and speculation as to their future implications. For example, the introduction of a specific government policy might raise implications for practitioners involved in its implementation. Research of this nature might speculate as to what these implications might be and develop a programme of inquiry that can inform future responses to these issues."

Descriptive: "Descriptive work aims to gather information that illuminates relationships, patterns and links between variables. An example would be an investigation of the link between students' study skills and course drop-out rates."

Explanatory: "Explanatory research aims to show why relationships, patterns and links occur. Using the example from 3, how could study skills support improve student retention? And does this depend on other factors such as different types of support available?"

Predictive: "The purpose of this type of research is to develop a model that predicts the likely course of events given particular intervening variables or circumstances."

Evaluative: "To evaluate the impact of something, for example a new policy, event, law, treatment regime or the introduction of a new system."

Source: http://wiki.answers.com/Q/What_is_the_purpose_of_research

4.4 Types According to Specific Purpose

There are two types of it one is directed and other is no-directed. Research can be directed or non-directed.

Non-directed research is finding out things for the sheer fun of finding them out. Reading a newspaper or the entire Encyclopedia Britannica, or asking several people how they feel about something is non-directed research. It has no specific purpose beyond increasing your store of knowledge about the world (or everything in general). Watching television is non-directed research, as is reading a magazine, science fiction, mysteries, historical fiction, or anything else. Everything you don't think of yourself contains information you don't have, and is thus research.

Directed research, on the other hand, is done with a specific purpose in mind. The purpose could be to make a point, write a paper or speech, or simply know more about a specific thing. It is directed since it deals with something specific, and someone decides what to try next. It simply doesn't have a specific outcome in mind. For example, directed research in microelectronics is not trying to achieve a specific goal. It does, however, deal specifically with microelectronics, be it the conducting properties of alloys and compounds, electron etching, or dual bonding. It does not concern itself with anthropology. There is also a researcher or project director who decides what is worth pursuing and what is not. Directed research is what you want to do when you are preparing a report. You have a specific goal in mind, to communicate what you want your audience to know about your topic. Thus, you direct your research toward finding what you can about your topic, not to find out what there is to know about whatever you come across.

4.5 Types According to Strategy Employed in Achieving Objectives (Purpose)

There are three types of research, pure, original, and secondary. Each type has the goal of finding information and/or understanding something. The difference comes in the strategy employed in achieving the objective.

4.5.1 Pure Research

Pure research is research done simply to find out something by examining anything. For instance, in some pure scientific research scientists discover what properties of various materials possess. It is not for the sake of applying those properties to anything in particular, but simply to find out what properties there are. Pure mathematics is for the sake of seeing what happens, not to solve a problem. The fun of pure research is that you are not looking for anything in particular. Instead, anything and everything you find may be joined with anything else just to see where that combination would lead, if anywhere. Let's take an example. I was reading a variety of books and magazines once. There were a some science fiction novels, Jean Auel's *The Clan of the Cave Bear*, Carl Sagan's *Broca's Brain*, several Isaac Asimov collections of science essays and two of his history books, Advertising Age and AD WEEK magazines, some programs on PBS, a couple of advertising textbooks I was examining for adoption in my class, and several other things I can't even remember now. This was pure research; I was reading and watching television for the sake of reading and watching about things I didn't know. Relating all of the disparate facts and opinions in all of these sources led me to my opinions on stereotyping and pigeonholing as vital components of human thought, now a major element in my media criticism and advertising psychology classes. When I started I had no idea this pure research would lead where it did. I was just having fun.

4.5.2 Original Research

Original or primary research is looking for information that nobody else has found. Observing people's response to advertising, how prison sentences influence crime rates, doing tests, observations, experiments, etc., are to discover something new. Original research requires two things:

a) knowing what has already been discovered, having a background in the subject; and b) formulating a method to find out what you want to know. To accomplish the first you indulge in secondary research (see below). For the second, you decide how best to find the information you need to arrive at a conclusion. This method may be using focus groups, interviews, observations, expeditions, experiments, surveys, etc.. For example, you can decide to find out what the governmental system of the Hittite Empire was like on the basis of their communication system to determine how closely the empire could be governed by a central bureaucracy. The method to do this original research would probably require that you travel to the Middle East and examine such things as roads, systems of writing, courier systems without horses, archeological evidence, actual extent of Hittite influence (commercial, military, laws, language, religion, etc.) and anything else you can think of and find any evidence for.

4.5.3 Secondary Research

Secondary research is finding out what others have discovered through original research and trying to reconcile conflicting viewpoints or conclusions, find new relationships between normally non-related researches, and arrived at your own conclusion based on others' work. This is, of course, the usual course for college students. An example from recent years was the relating of tectonic, geologic, biologic, paleontological, and astronomic research to each other. Relating facts from these researches led to the conclusion that the mass extinctions of 65 million years ago, including the dinosaurs, were the result of an asteroid or comet striking the earth in the North Atlantic at the site of Iceland. (For a full explanation sees THE GREAT EXTINCTION by Michael Allaby and James Lovelock.) Later research based on the above has found a potential crater by the impact on the Yucatan Peninsula. Secondary research should not be belittled simply because it is not original research. Fresh insights and viewpoints, based on a wide variety of facts gleaned from original research in many areas, have often been a source of new ideas. Even more, it has provided a clearer understanding of what the evidence means without the influence of the original researcher's prejudices and preconceptions.

5. DIFFERENCE BETWEEN RESEARCH PAPER AND RESEARCH ARTICLE

Research paper and research article are same in construction at broader level and both are scholarly research

Research paper: A research paper is a presentation of facts which are based upon reading or consulting several specified sources, presented according to a standard method of procedure, limited to a relatively narrow phase of a subject and original in selection, evaluation, expression and conclusion (*Dangle and Haussman)*. It should be a question that should be answered correctly by every student. The research paper is normally an academic pursuit which is usually undertaken by the student to signify the coming to an end of a particular course. Therefore, the research paper can be written as a high school research paper, a postgraduate or Ph.D. thesis (RP. www.masterpapers.com). A research paper is primarily a discussion or argument based on a thesis, which includes evidence from several collected sources.

Research article*:* Articles are of further two types scholarly and non-scholarly. Non scholarly do not need evidence and academic approach. They are published in newspapers, magazines, and no scholarly journal. Scholarly articles report the results of original research, assesses its contribution to the body of knowledge in a given area, and is published in a peer-reviewed scholarly journal. A given academic field will likely have dozens of peer-reviewed journals. For university professors, publishing their research plays a key role in determining whether they are granted tenure. Once, research articles had only a limited audience consisting mainly of other scholars and graduate students. Today, websites such as Google Scholar and the proliferation of electronic academic journals have broadened the potential audience for research articles (Hall, www.ehow.com). Research articles generally consist of the following components: a title and abstract, an introduction, a methodology, results, discussion, and references. Before they are published, the editor of the journal to which the manuscript was submitted sends it to experts in the same field for review. These scholars will review the article for, among other things, the appropriateness of its methodology and its relevance to the field. They may suggest revisions. The peer review process is lengthy. It may be a year or longer between the time an article is submitted and its publication. Details of them are as under:

Title and Abstract**:** The title and abstract are key factors in determining whether the entire article will be read. A title should be descriptive, giving the reader an idea of the focus of the study. Because the Internet has made it possible to access so many research articles online, a title should contain enough keywords for an interested reader to find the article. The abstract, meanwhile, serves as a mini-summary of the study. Many readers will review the abstract and, based on the findings, will decide whether to read the entire article Hall (ww. ehow.com).

Introduction: The introduction of a research article should state the problem being studied and the reason for the study. To place the research in proper context, the introduction should contain a brief summary of the previous research in the area covered by the study. This literature review should include references, which should be listed in the references section at the end of the article. By presenting an overview of the previous research, the

article's author(s) can explain how the study presented in the article will contribute to an advance the body of knowledge".

Methods: This section of the research article should outline the methodology the author(s) used in conducting the study. Including information on methods used allows readers to determine whether the study used appropriate research methods for the question being investigated. It also makes it possible for other researchers to replicate the study and see if they obtain the same results.

Results: The results section will present the data, the meat of the study. It is easy to confuse the results section with the discussion section that follows, in which the article's author interprets the results of the study. The results section should only report the results from the data analysis, regardless of whether the study is qualitative or quantitative.

Discussion: The discussion section presents an interpretation of the results of the study. The authors will summarize the findings and assess them in the larger context of the existing knowledge, pointing out the ways in which their findings relate to those from prior studies. Any unusual or unexpected results will be discussed in this section as well. Finally, the authors will consider the larger theoretical implications of the study's results.

Citations: The citations (references) come at the end of the article and should list all books, articles, and other resources used and cited in the article. The references and the entire article should be written in the appropriate style [Modern Languages Association, American Psychological Association, Chicago, etc.] (DR www.ehow.com).

6. DIFFERENCE BETWEEN PROJECT, THESIS AND DISSERTATION

In Pakistan, at undergraduate level the thesis is usually called final year project, as it is completed in the senior year of the degree, the name project usually implies that the work carried out is less extensive than a thesis and bears lesser credit hours too. The undergraduate level project is presented through an elaborate written report and a presentation to the advisor, a board of faculty members and students. At graduate level however, i.e. in MS, some universities allow students to accomplish a project of 6 credits or a thesis of 9 credits, at least one publication is normally considered enough for the awarding of the degree with project and is considered mandatory for the awarding of a degree with thesis. A written report and a public thesis defense are mandatory, in the presence of a board of senior researchers, consisting of members from an outside organization or a university. A Ph.D. candidate is supposed to accomplish extensive research work to fulfill the dissertation requirements with international publications being a mandatory requirement. The defense of the research work is done publicly.

A dissertation or thesis is a research document submitted in support of candidature for an academic degree or professional qualification presenting the researcher's report and findings. In some countries/ universities, the word "thesis" or a cognate is used as part of a bachelor's or master's course, while "dissertation" is normally applied to a doctorate, while in others, the reverse is true. The term dissertation can at times be used to describe a treatise without relation to obtaining an academic degree. The term thesis is also used to refer to the central claim of an essay or similar work. A typical thesis (or dissertation) has a title page, an Abstract, a table of contents, a body, comprising the various chapters (introduction, literature review, findings, etc.), and a bibliography or (more usually) a references section. They vary in their structure in line with the many different areas of study (arts, humanities, social sciences, technology, sciences, etc.) and the great differences between them (Thesis Structure http://en.wikipedia.org/). Dissertations normally report on a research project or an extended analysis of a topic. The structure of the thesis or dissertation explains the purpose, the methods used and the findings of the project. Most world universities use a 5 chapter format: a) an introduction, which introduces the research topic, the methodology, as well as its scope and significance; b) a literature review, reviewing relevant literature and showing how this has informed the research issue; c) a methodology chapter, explaining how the research has been designed and why the research methods/population/data collection and analysis being used have been chosen; d) a findings chapter, outlining the findings of the research itself; e) an analysis and discussion chapter, analyzing the findings and discussing them in the context of the literature review (this chapter is often divided into two—analysis and discussion); f) a conclusion (http://en.wikipedia.org/wiki/Thesis).

7. DIFFERENCE BETWEEN GREEN AND WHITE PAPER

Green paper: It is government document detailing the specifics of an issue and possible course of action. It is a consultation document which contains policy proposal for debate and discussion before a final decision is taken on the best policy option. First-draft documents on a specific policy area circulated among interested parties who are invited to join in a process of consultation and debate. The objectives of a green paper are to arrive at a general consensus before drafting the official policy document, the white paper (Green Paper. www. businessdictionary).

White paper: Following the consultation of green paper government normally publishes firmer recommendations in a white paper, which contains detailed proposals for legislation. Lead up to the final

policy document, it contains proposals for the specific policy area suggested during the consultation process initiated with the publication of publication of a green paper. Several drafts of a white paper may be distributed for the final comments after which it goes for approval to the apex body such as a Parliament before it becomes the official policy (White paper. www.businessdictionary).

CONCLUSION

This research is basic, exploratory, secondary, probe and qualitative in nature. This research is *basic because it* gains general understanding of research its types and terminologies. It is exploratory because little is known about the problem at one spot. It is secondary due to strategy applied for data collection. It is to probe because nature of problem depends on questions and it uses flexible surgical instrument to explore an enquiry or qualitative knowledge. For this study information from secondary published sources and electronic sources has been collected and answers and conclusion are made on the basis of this information. Some important questions are selected to get the answers for the purpose of study. Question wise answers are as under.

Research: Research traditionally meant the *thorough and systematic scientific (or scholarly) investigation* (of an area of knowledge or a problem, etc.). It was also generally assumed that the work was original. It is impossible to do research without having a problem, which is required to be resolved, or a question, which needs to be answered.

Statement of Purpose: A Statement of Purpose is a sentence that you write, which states, in some detail, what you want to learn about in your research project. The statement guides you as you work so that you will read and take notes only on what's needed for your project. It will help you develop a thesis statement, which comes later on in the research process. This Statement of Purpose will lead her to eventually write a Thesis Statement in which she will be able to make an assertion (a statement she can defend) and support it with the evidence she has gathered in her research. Start your Statement of Purpose with words like "I want to learn about..." For example: One person was very concerned about air pollution and wanted to know if the government is doing anything to stop it. Her Statement of Purpose was this: ***I want to learn about what is being done by our government to stop air pollution.***

Statement of thesis (problem): Her Thesis Statement may sound something like this: *"In the United States, government regulation plays an important role in the fight against air pollution." Or, conversely, "United States government regulation has little effect in the fight against air pollution."* Whichever the case, she will use the evidence she has gathered in her research to prove her Thesis Statement. Statement of thesis will help you to develop a Thesis Statement, which is written on the title page as a research problem (title/ Topic).

Problem (title/topic): An evaluation of work regulations by government to stop air pollution: A case study of United Nations

(a) Purpose of Research and Its Types

Purpose of research: There are two basic purposes for research: to learn something, or to gather evidence. If you're finding out the questions about an essay, or figuring out how to reverse Climate Change, research and hard work is the way to go. If, however, you haven't learned more than your audience already knows, there is nothing for you to share. Thus you do research. It can be used to further your understanding of how things work or even figure out something you had always needed to know. Or you to share. Thus you do research. Research has many purposes. It can be used to further your understanding of how things work or even figure out something you had always needed to know. The "Primary Purpose" of basic research is to gain a general understanding of the topic being explored. For instance, the difference between focused researches, as opposed to basic research, would be the amount of specific, rather than general, information gathered.

(b) Kinds of Research According To

Data collection and analysis: According to data available and way of analysis there are two types of researches qualitative (theoretical) and quantitative (empirical).

Qualitative (theoretical) *research* deals with data or information, which are not in order to test and justify statistically. It helps people to manage, shape and make sense of unstructured information. Qualitative research involves analysis of data such as words (e.g., from interviews), pictures (e.g., video), or objects (e.g., an artifact).Qualitative research seeks out the 'why', not the 'how' of its topic through the analysis of unstructured information—things like interview transcripts, open ended survey responses, emails, notes, feedback forms, photos and videos. It doesn't just rely on statistics or numbers, which are the domain of quantitative researchers.

Quantitative (imperial) *research* on other hand deals with proper data and can be statically tested. Quantitative research involves analysis of numerical data. It needs for defending from evidence of testing and hypothesis are accepting or rejected according to evidences. It uses mathematical model and testing instrument. Quantitative research is the numbers side of market research. It's about measurement and attaching numbers to a market—for instance market size, market share, penetration, installed base and market growth rates.

The strengths and weaknesses of qualitative and quantitative research are a permanent, hot debate, especially in the social sciences. The issues invoke classic "paradigm war". The personality / thinking style of the researcher and/or the culture of the organization is

under-recognized as a key factor in preferred choice of methods. Overly focusing on the debate of "qualitative *versus* quantitative" frames the methods in opposition. It is important to focus also on how the techniques can be integrated, such as in mixed methods research. More good can come of social science researchers developing skills in both realms than debating which method is superior.

(c) Nature of Problem

Operational research is designed to determine most efficient way to do something. *Field work research* is an investigation carried out in the field rather than in a laboratory or headquarters. *Marketing research* gathers and analyzes information about the moving of goods or services from producer to consumer. *Microcopy research* is with the use of microscopes. Probe research is an investigation conducted using a flexible surgical instrument to explore an injury or a body cavity or qualitative knowledge. Scientific research is to search into questions posed by scientific theories and hypotheses.

(d) Purpose and Investigation

Exploratory: This type of research investigates an area or issue on which little previous work has been carried out. In an organizational setting, it may be used to discover whether or not a problem exists.

Speculative*: S*ometimes research is implemented strategically, where researchers take account of current situations and speculation as to their future implications.

Descriptive: Descriptive work aims to gather information that illuminates relationships, patterns and links between variables.

Explanatory: Explanatory research aims to show why relationships, patterns and links occur.

Predictive: The purpose of this type of research is to develop a model that predicts the likely course of events given particular intervening variables or circumstances.

Evaluative: To evaluate the impact of something, for example a new policy, event, law, treatment regime or the introduction of a new system.

(e) Strategy Employed in Achieving Objectives

Pure Research*:* Pure research is research done simply to find out something by examining anything. For instance, in some pure scientific research scientists discover what properties various materials possess. It is not for the sake of applying those properties to anything in particular, but simply to find out what properties there are. Pure mathematics is for the sake of seeing what happens, not to solve a problem. The fun of pure research is that you are not looking for anything in particular.

(f) Data Collection

Original or Primary Research: Original or primary research is looking for information that nobody else has found. Observing people's response to advertising, how prison sentences influence crime rates, doing tests, observations, experiments, etc., are to discover something new. Original research requires two things: a) knowing what has already been discovered, having a background in the subject; and b) formulating a method to find out what you want to know. To accomplish the first you indulge in secondary research.

Secondary Research: Secondary research is finding out what others have discovered through original research and trying to reconcile conflicting viewpoints or conclusions, find new relationships between normally non-related researches, and arrive at your own conclusion based on others' work.

Directed or Non-Directed: Research can be directed or non-directed. Non-directed research is finding out things for the sheer fun of finding them out. Reading a newspaper or the entire Encyclopedia Britannica, or asking several people how they feel about something is non-directed research. Directed research, on the other hand, is done with a specific purpose in mind. The purpose could be to make a point, write a paper or speech, or simply know more about a specific thing. It is directed since it deals with something specific, and someone decides what to try next.

(g) Project, Thesis and Dissertation

In Pakistan, at undergraduate level the thesis is usually called final year project. At graduate level however, i.e. in MS, some universities allow students to accomplish a project of 6 credits or a thesis of 9 credits. A Ph.D. candidate is supposed to accomplish extensive research work to fulfill the dissertation requirements with international publications being a mandatory requirement.

(h) Green Paper and White Paper

Green, white yellow blue and black papers paper: *Green paper is* government document detailing the specifics of an issue and possible course of action. It is a consultation document which contains policy proposal for debate and discussion before a final decision is taken on the best policy option. Following the consultation of green paper government normally publishes firmer recommendations in a white paper, which contains detailed proposals for legislation. The term Yellow Pages refers to a telephone directory of businesses, categorized according to the product or service provided.

RECOMMENDATIONS

It is important for every researcher that they should study this paper and conceptualize the facts which are explained in this article. Every researcher of tertiary education should read it which will help them to prepare their assignments, interim reports, articles and project reports (thesis and dissertation).

ACKNOWLEDGEMENT

Author(s) would like to thank the editors and anonymous referees for their comments and insight in improving

the draft copy of this article. Author(s) further would like to declare that this manuscript is original, has not previously been published, not currently on offer to another publisher; and willingly transfers its copyrights to the publisher. In case of plagiarize author(s) is legally responsible for it.

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