


Subject: LAW

Production of Courseware

 - Content for Post Graduate Courses



Paper : RESEARCH METHODOLOGY

Module : RESEARCH DESIGN



ज्ञान-विज्ञान विमुक्तये

  
A Gateway to All



Role	Name	Affiliation
Principal Investigator	Prof. (Dr.) Ranbir Singh	Vice Chancellor, National Law University, Delhi
Co-Principal Investigator	Prof. (Dr.) G.S. Bajpai	Registrar, National Law University Delhi
Paper Coordinator	Prof. (Dr.) G.S. Bajpai	Registrar, National Law University Delhi
Content Writer/Author	Dr Himanshu Pandey	Devi Ahilya University, Indore, M.P
Content Reviewer	Prof. (Dr.) G.S. Bajpai	Registrar, National Law University Delhi

### **DESCRIPTION OF MODULE**

Items	Description of Module
Subject Name	Law
Paper Name	Research Methodology
Module Name/Title	Research Design
Module Id	VI

#### **1. Introduction:**

Research design is a planning of detailed outline of whole research work containing steps and process to be followed in the research which include how data is to be collected, what instruments will be employed, how the instruments will be used and the intended means for analyzing data collected.<sup>1</sup> Research design provides a direction to researcher so that he can precede the research work in a planned and systematic manner.

Research Design is understood as a planning as to the method and technology to be used in research. According to distinct nature, object and purpose of every research their design may vary from one to another.

It is a mandatory step to be designed properly in order to undergo any research work. Research design has linkages with research problem, objectives of research and purposes thereof. Researcher must have a clear picture about research problem, objective and purpose so that he can plan an appropriate and effective design to proceed with research. Whether, design is proper and efficient in achieving objectives of research would come to know after acting accordingly.

How to do any research is an independent choice of researcher. Since, unskilled and inexperienced procedure may cause heavy risk. Otherwise secure way of doing study is to follow some approved procedure which has been experienced by the previous researchers. Therefore, the procedure suggested as safe, secure and reliable are more trustworthy to be followed rather than inexperienced process and methods. Planning of researcher to go with any procedure and method for researching his topic is called a research designing.

**2. Learning Outcome:** Students can learn and understand following aspects of research as-

<sup>1</sup> <http://www.businessdictionary.com/definition/research-design.html#ixzz3BHQGD9PT>



- To the basic concept of research design.
- Nature and classification of research design.
- Substantive and procedural aspect of research design.
- Common steps to be followed under research design.
- Linkage of research problem with research design.
- Classification of research design

### 3. Meaning & Nature of Research Design:

Research design denotes the research planning. A blue print of whole research work is designed by the researcher. If man makes planning to perform any task whether picnic, party, travelling, future planning, business planning or building construction. Before initiating the task he plans or designs certain strategy to complete the task from beginning till last. It includes certain steps, methods, tools and techniques required for successful completion of such task. Similarly, research planning is required before every research work.

A research design is a general plan or strategy for conducting a research study to examine specific testable research questions of interest. The nature of the research questions and hypotheses, the variables involved, the sample of participants, the research settings, the data collection methods, and the data analysis methods are factors that contribute to the selection of the appropriate research design. Thus, a research design is the structure, or the blueprint, of research that guides the process of research from the formulation of the research questions and hypotheses to reporting the research findings. In designing any research study, the researcher should be familiar with the basic steps of the research process that guide all types of research designs. Also, the researcher should be familiar with a wide range of research designs in order to choose the most appropriate design to answer the research questions and hypotheses of interest.<sup>2</sup> Length and complexity of research designs can vary considerably, but any sound design will do the following things:<sup>3</sup>

1. Identify the research problem clearly and justify its selection, particularly in relation to any valid alternative designs that could have been used,
2. Review and synthesize previously published literature associated with the problem,
3. Clearly and explicitly specify hypotheses [i.e., research questions] central to the research problem,
4. Effectively describe the data which will be necessary for an adequate test of the hypotheses and explain how such data will be obtained, and
5. Describe the methods of analysis which will be applied to the data in determining whether or not the hypotheses are true or false.

---

<sup>2</sup> Sema A. Kalaian, 'Research Design' (SAGE Researchmethods 2008)

<<http://srmo.sagepub.com/view/encyclopedia-of-survey-research-methods/n471.xml>> accessed 15June14

<sup>3</sup> 'Types of Research Designs' (libguides.usc.edu)

<<http://libguides.usc.edu/content.php?pid=83009&sid=818072>> accessed 15June14



**Basically, research design depends on following things as:**

1. Nature of research problem
2. Objectives of research
3. Purposes of research
4. Limitations of research

#### **4. Classification of Research Design:**

Research design can be classified into two phases as:

1. Substantive design.
2. Procedural design

**4.1. Substantive Research Design:** The initial level of designing, ipso facto comes into shape on the basis of nature of problem, objectives and purposes of research, where researcher has no interference he has to proceed in the light of objective satisfaction. He has no choice to use alternative techniques. According to nature of the problem i.e., descriptive, diagnostic, remedial, comparative or experimental research. In other words this is the foundation of every research. Researcher has to be very keen and vigilant on this stage just to make him sure whether the nature described by him accurately reflecting and appropriate to objectives of research work.

**4.2. Procedural design:** After completion of first stage, under second stage of design their procedure is opted in the light of purposes, resources and limitation of research. Limitations may be as to time, fund and human resource etc. Research procedures are not conclusively binding upon the researcher to follow a particular method and procedure in his work. He has full freedom to choose his own procedure suitable and convenient to him but should also be tested in the light of object and purpose of research study. Saul Kripke said as "There is no rule for how to apply a rule."<sup>4</sup> After selection of problem and objectives have been drawn properly, the researcher has to decide how to deal with the facts, selection of research method, method of data collection, which statistical test to be used, how to select sample size, selection of tools and technology of data collection; he has to make a methodological value judgment. His subjective interference plays a vital role because selection of particular procedure depends on the purposes of research, skill of researcher, availability of resources and limitations of research. While taking decision in this respect he has to be attentive towards the objectives of research. Recklessness in opting the procedural part may give the scope of error and impurity in study, for which researcher would be answerable for erroneous results.

#### **5. Object and purpose of Research Design:**

Research design keeps their importance in research with certain objectives as-

---

<sup>4</sup> Kristin Shrader, Frechette, *Ethics of Scientific Research* (1st, Rowman & Littlefield Publishers, Inc., London 1994) 54.



1. It provides the basic shape to every research work, which reflects the nature of problem and objectives thereof. On the basis of nature of research problem certain research design is prepared. Sometimes, merely by looking into the designing, certain anticipations can be made as to the research problem and their objectives. i.e. Qualitative Research or quantitative research design.
2. Certain directions are given to the researcher that what procedure, techniques and tools will be followed by him while data collection and their analysis. It avoids the situation of confusion or fix for taking appropriate decision under research work. In the absence of clear research planning whole research may be chaotic. It would result in loss and wastage of resources.
3. It provides procedural alternative choices to researcher to be selected according to purpose and limitations of research. How, the aimed purpose can be immediately and effectively achieved by the researcher in more economic and reliable way, it depends on intellectual decision of researcher. Where objectives are limited so a sorter and economy procedure is preferred for undergoing research rather than a comprehensive objectives. Contrarily, where objectives are comprehensive but availability of resources are limited in such cases a smart strategy is designed by the researcher to fulfill the objectives within the available resources. Appropriate techniques and tools are selected in the light of above consideration.
4. Research is designed after keeping the nature of data into consideration. What method and tools would be appropriate and reliable in the matter shall be decided according to nature of data, qualitative or quantitative.
5. It works as guiding principle and provide direction to opt certain tools and method on every stage of research.
6. It provides order of research steps. This helps to researcher to complete study in proper, systematic and orderly manner.

#### **6. Steps of Research Process:**

There are certain common steps to be followed in every research work. Therefore, every research design contain the planning of all steps such as under -



At the end of research report –



Research designing includes each and every step and procedure and methods to be followed in research. Selection of certain process and method is completely an independent decision of the researcher to be placed in any research work. His experience, knowledge, perception, observation and analysis towards the problem lead design in certain direction.

The research design refers to the overall strategy chosen to integrate the different components of the study in a coherent and logical way, thereby ensuring that the research problem should be addressed effectively because the research problem determines the type of research design.<sup>5</sup> In socio-legal research, obtaining evidence relevant to the research problem generally entails specifying the type of evidence needed to test a theory, to evaluate a program, or to accurately describe and assess meaning related to an observable phenomenon.

### 7. Kinds of Research design:

<sup>5</sup> "Types of Research Designs" (libguides.usc.edu) <<http://libguides.usc.edu/content.php?pid=83009&sid=818072>> accessed 15June14



The function of a research design is to ensure that the evidence obtained enables us to answer the initial question as unambiguously as possible. Obtaining relevant evidence entails specifying the type of evidence needed to answer the research question, to test a theory, to evaluate a programme or to accurately describe some phenomenon. In other words, when designing research we need to ask: given this research question (or theory), what type of evidence is needed to answer the question (or test the theory) in a convincing way?<sup>6</sup> On the basis of nature of data required in legal research its design can be classified on the basis of nature of inquiry and nature of data as:

- i. Qualitative & Quantitative Research.
- ii. Doctrinal & Empirical Research.

### 7.1. **Qualitative & Quantitative Research Design** -

Research designs are classified as qualitative and quantitative research. Social surveys and experiments are frequently viewed as prime examples of quantitative research, case studies, on the other hand, are often seen as prime examples of qualitative research which adopts an interpretive approach to collected data, studies and 'things' in their context and considers the subjective meanings that people bring to their situation.

**7.1.1. Qualitative Research** : Qualitative research is a method of inquiry employed in many different academic disciplines. Qualitative researches aim to gather an in-depth understanding of [human behavior](#) and the reasons that 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 used than large samples. 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.<sup>7</sup>

The word qualitative implies an emphasis on the qualities of entities and on processes and meanings that are not experimentally examined or measures (if measured at all) in terms of quantity, amount, intensity or frequency. Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry such researchers emphasize the value-laden nature of inquiry. They seek answers to questions that stress how social experience is created and given meaning. Whereas, in quantitative studies emphasize the measurement and analysis of causal relationships between variables, not processes. Proponents claim that their work is done from within a value free framework.<sup>8</sup>

Qualitative method may be defined as the techniques associated with the gathering, analysis, interpretation and presentation of narrative information. Answers to qualitative

---

<sup>6</sup><http://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CB4QFjAA&url=http%3A%2F%2Fwww.nyu.edu%2Fclasses%2Fbk%2Fmethods%2F005847ch1.pdf&ei=den5U8DsB469ugSC34GgBw&usg=AFQjCNH5oz37wx1bkD5S6mC4ERYUr-8Q8Q&sig2=2pMPQvN0hQl-V5H1K1SdWw&bvm=by.73612305.d.c2E>

<sup>7</sup> Norman K. Denzin and Yvonna S. Lincoln, 'Introduction: The Discipline and Practice of Qualitative Research' in Norman K. Denzin and Yvonna S. Lincoln (eds), *The SAGE Handbook of Qualitative Research* (4th, SAGE Publications India Pvt. Ltd., New Delhi 2011).

<sup>8</sup> Ibid.



research questions are narrative in form.<sup>9</sup> Many common law practitioners are unaware that they undertake qualitative empirical legal research on a regular basis the case-based method of establishing the law through analysis of precedent is in fact a form of qualitative research using documents as source material. But qualitative empirical legal research goes far beyond this kind of research.<sup>10</sup>

**7.1.2. Quantitative Research:** The quantitative method is one of the social sciences' frameworks or approaches for research, and has been widely used in different academic disciplines such as psychology, sociology, political science and legal studies. It deals with numbers, statistics or hard data whereas qualitative data are mostly in the forms of words.<sup>11</sup> Quantitative methods may be defined as the techniques associated with the gathering, analysis, interpretation and presentation of numerical information. Quantitative method is opted where the research questions guide investigations and are concerned with unknown aspects of a phenomenon of interest. Answer to quantitative research questions are presented in numerical form. Quantitative (statistical) data analysis is the analysis of numerical data using techniques that include simply describing the phenomenon of interest or looking for significant difference between groups or among variables.<sup>12</sup>

Quantitative research is primarily concerned with techniques that analyze numbers. Quantitative research involves calculation of descriptive statistics (calculating averages, averages, probabilities or exploring numerical relationships). In quantitative research data is ordinarily in numerical form or the results of the numeric processes.

*Martyn Hammersley* defines quantitative approach as –The term “ ‘quantitative method’ refers in large part to the adoption of the natural science experiments as the model of scientific research, its key features being quantitative measurement of the phenomena studied and systematic control of the theoretical variables influencing those phenomena.”<sup>13</sup>

An advantage of quantitative research is that it allows the study of a large number of cases for certain aspects in a relatively short time and its results have a high degree of generalizability.

## 7.2. Doctrinal & Empirical Research Design –

Legal researches can be classified on the basis of nature of data intended to be used in research. This classification can be made doctrinal and empirical research methods. Every method has their own advantages and disadvantages. What method ought to be used? It depends on the aims of the study and the nature of the phenomenon:

---

<sup>9</sup> Charles Teddlie, Abbas Tashakkori, *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioural Sciences* (1st, SAGE Publications India Pvt. Ltd., New Delhi 2009) 5-6

<sup>10</sup>

<sup>11</sup> Wing Hong Chui, 'Quantitative Legal Research' in Mike McConville and Wing Hong Chui (eds), *Research Methods for Law* (1st, Edinburg University Press Limited, Edinburg 2007).

<sup>12</sup> Charles Teddlie, Abbas Tashakkori, *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioural Sciences* (1st, SAGE Publications India Pvt. Ltd., New Delhi 2009) 5-6

<sup>13</sup> Wing Hong Chui, 'Quantitative Legal Research' in Mike McConville and Wing Hong Chui (eds), *Research Methods for Law* (1st, Edinburg University Press Limited, Edinburg 2007) 48





**7.2.1. Doctrinal Research:** Doctrinal research aims to systematize, rectify and clarify the question or problem on any particular topic relating to law by a distinctive mode of analysis to authoritative texts that consists of primary and secondary sources. Doctrinal research is known as library based research focusing on a reading and analysis of the primary data (such as the legislation and case law) and secondary data (such as legal glossaries, text books, journals, articles, case digests and legal encyclopedias) are regarded as the most accepted research paradigm. When reviewing a number of textbooks on legal research the bulk of their contents are concerned with identifying and analyzing factual material and legal issues.<sup>14</sup> The main assumption of using data from 'authoritative text' is that the character of legal scholarship is derived from law itself.<sup>15</sup> Nature of data admitted for doctrinal research is always in text form.

**7.2.2. Empirical Research:** Empirical research is also known as Non-doctrinal research and Socio-legal research. In socio-legal studies, the researcher has to study law with interdisciplinary approach. Understanding of social facts cannot be developing without investigation of real social condition.

Traditional concept of studying legal principles within the authoritative text and informative sources has no significance in studying social variables. Researcher is required to observe and analyze the social phenomenon by using significant tools of data collection. In empirical research sources of data can come from a wide range of sources including surveys, observation method, questionnaire and interview schedules etc.

## **8. Summary:**

Research design situates the researcher in the empirical world, and connects the research questions to data. The research design is the basic plan for a piece of research; it includes four main ideas as-

1. Strategy
2. Conceptual framework
3. Question of what and how will be studied
4. Tools and techniques used for collecting and analyzing empirical materials.

In formal manner it is considered as planning of procedure to be followed and research procedure comes into process after determination of problem. Research design contains a bundle of process, methods, tools and techniques of data collection, data analysis and interpretation thereof.

Research designing is a sketch of series of chain where every link is connected to other in a systematic and scientific manner. Any mismatched link used in the series of research procedure may vitiate the whole research. Therefore, before going into the real research function it is necessary and safe to observe this series of procedure. If design is not satisfactory it can be changed and modified accordingly. Once entering into the voyage of research, researcher cannot opt any unplanned method or procedure not forming part of research designing.

---

<sup>14</sup> Wing Hong Chui, 'Quantitative Legal Research' in Mike McConville and Wing Hong Chui (eds), *Research Methods for Law* (1st, Edinburg University Press Limited, Edinburg 2007)

<sup>15</sup> Ibid.



## 9. Glossary-

Starting Character	Term	Definition	Related Term
D	Design	Creation of a plan or convention for the construction of an object or a system.	
	Doctrinal	Pertaining to doctrine or principle	
E	Empirical	Derived from or relating to experiment and observation rather than theory	
K	Keen	Having a fine, sharp or marked by intellectual quickness and acuity.	
Q	Qualitative	Descriptions or distinctions are based on some quality or characteristic rather than on some quantity or measured value.	
	Quantitative	Type of information based in quantities or else quantifiable data.	
V	Vigilant	Carefully observant or attentive; on the lookout for possible trouble.	