

Research Methodology

Re(News)

Research

Search (To seek / search again)

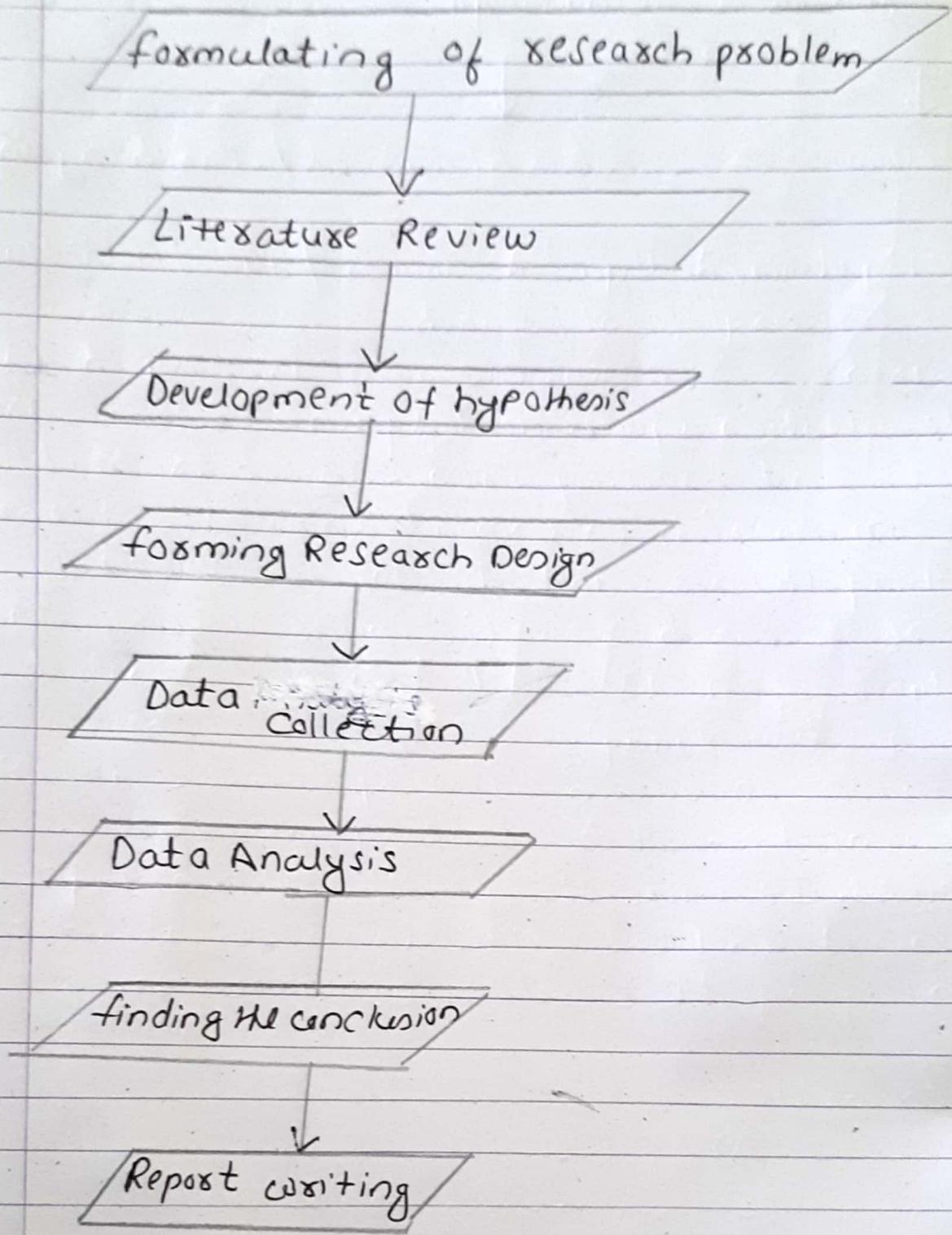
- Investigation / Analysis / Assumption / Guess / New idea / Hypothesis / Inquiry / guest / search
- Research is the process of searching the answers to the question again and again. It is a careful search and inquiry into subject or matter.
- Its main aim to expand knowledge, improve existing theories and develop new ideas.
- Social research is a discipline inquiry and analysis of interrelated process of social reality (P. V. Young).
- Scientific research is a systematic organization of knowledge. It is based on empirical facts and evidences. It consists of step by step, logical, organized and the critical investigation is identifying the solution of problem.

for example:

- a) questions
- b) Investigations and
- c) conclusion

question: Is there a gold mine in Bishnupur?

Process



Rigex & Relevance

- ① Direct
- ② Indirect

1. Previous Research
2. Current Events
3. Literature Review
4. Personal Experiences
5. Theory Development
6. Collection / Data Analysis

Alternative Research process

- Process which is differ from quali & quanti
- No fact-based data
- used to explain the result of something in different ways
- Gives outcome when variables result is an alternative outcome instead of the expected outcomes

Theory

1. Evolutionary Theory: By August Comte
 - (a) Theological: planets were god
 - (b) Meta Physical: Prediction
 - (c) Positive:
- 2) Symbolic Interactionism: - People interact with one another & their surroundings through the use of symbols
- 3) Feminism: - Emerged in 1960s. Its main aim is to active political, economic, personal & social equality of sexes. They fight against exploitation.
- 4) Marxist feminism: fight for economic equality of women.

Research Hypothesis

Kerlinger, "Research hypothesis is a conjectural statement of the relationship between two or more variables."

Characteristics

1. A research hypothesis must be conceptually clear.
2. It should be empirically verifiable
3. Must be Specific
4. If Then Statement (should have)
5. Should be logically consistent
6. Offers a valid explanation for some outcome
7. Make research Limited Examined: By Interview or experiment.

Types

1. Simple hypothesis: With cause & effect. for ex: _____
2. Complex hypothesis: It is one in which some relationship among variables exists: for ex: _____
3. Empirical hypothesis: Mainly based on field work for ex: _____
4. Null hypothesis: Contrary to the positive statement of a working hypothesis. for ex: _____
(Denoted by H_0)
5. Alternative hypothesis: Opposite of null hypothesis. It shows the significant relationship between the variables
6. Logical Hypothesis: Hypothesis is verified logically: for ex

7. Statistical Hypothesis: Which can be verified statistically. ~~for E&C~~:

* Sampling

The Sampling technique is a procedure for the selection of a sample from the given population. Sampling is an essential part of any research investigation. The researchers normally cannot survey every one in the population, but through sampling techniques, they can be confident that only a small part of the total population can fairly represent the total population.

Characteristics:

1. A sample should be representative
2. Should be scientific in nature
3. Saves time
4. Very suitable for carrying out different surveys
5. Based on practical experiences
6. Cheap & reliable

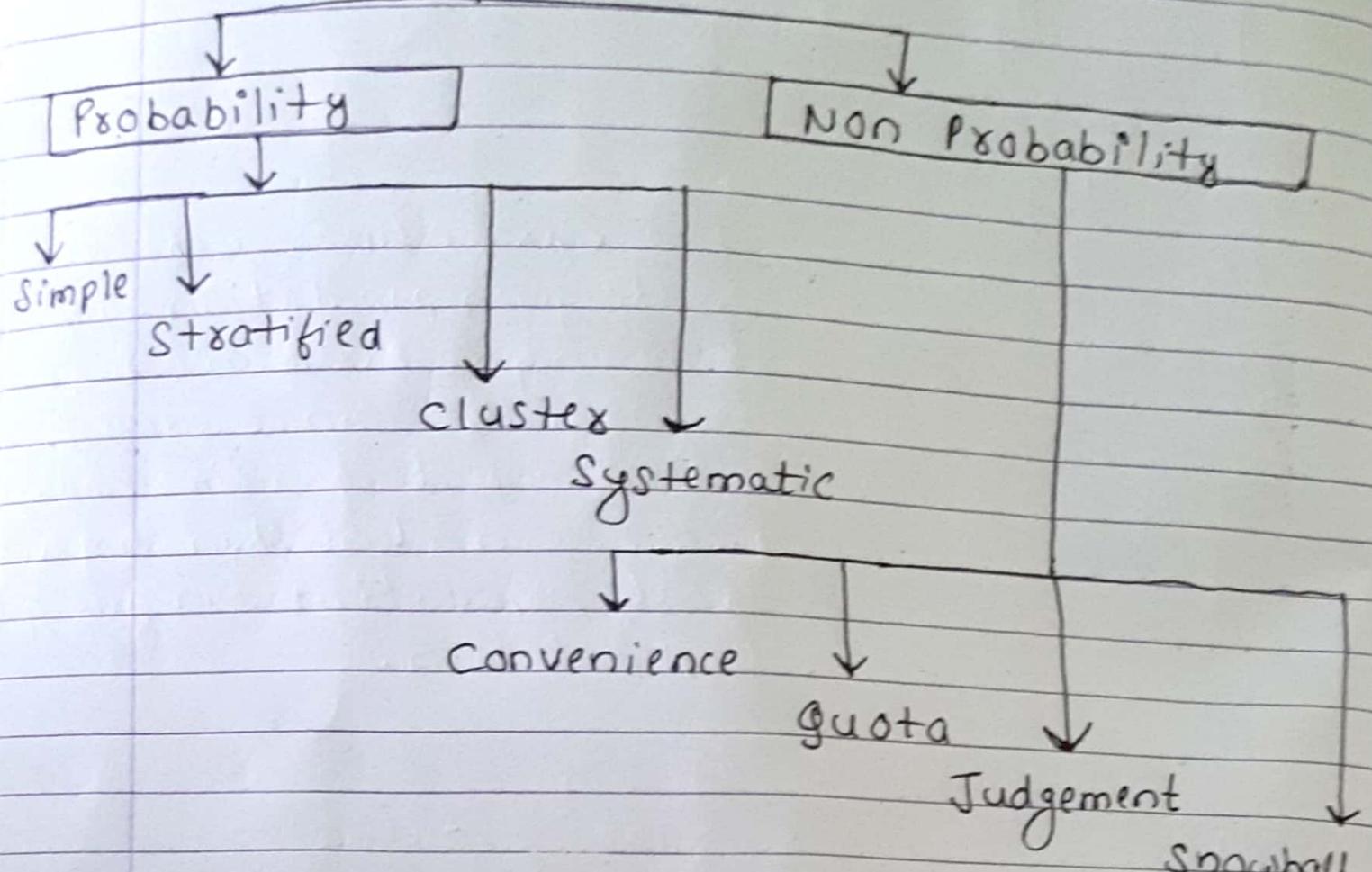
DisAdvantage

- 1) It may not be accurate
- 2) There are possibilities of bias
- 3) Untrained manpower can create problem.

Advantages

- 1) Saves time
- 2) Provide accuracy of result
- 3) ~~Untrained manpower~~ It makes administrative activity comfortable.

Types



Probability

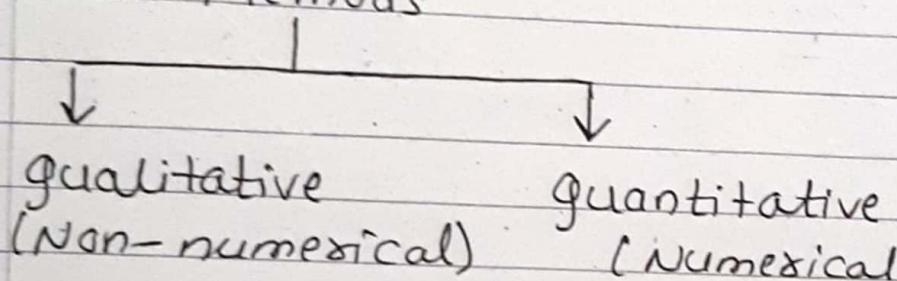
1. Simple Random:- It selects the required number of Sampling methods by using a lottery method. for ex:-
2. Stratified : The population is stratified under different heads such as caste/taxi, age, sex, edun, profession etc and thereafter the representational samples are selected for study
3. Cluster Sampling:- It refers to the method of dividing the population into groups called clusters for eg:-

4. Systematic Sampling:- Called N^{th} name selection technique because we can choose n^{th} participant from a complex list. Ex--

Non-probability:-

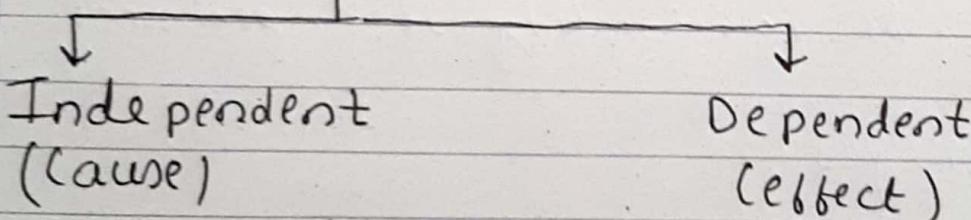
- 1) Convenience: known as accidental, opportunity or grab sampling eg:-
- 2) Quota sampling: The popn is divided into number of segments Eg:-
- 3) Judgemental sampling:- Known as purposive sampling also.
- 4) Snowball sampling: used to study drug culture, teenage gang etc. eg

1. Methods



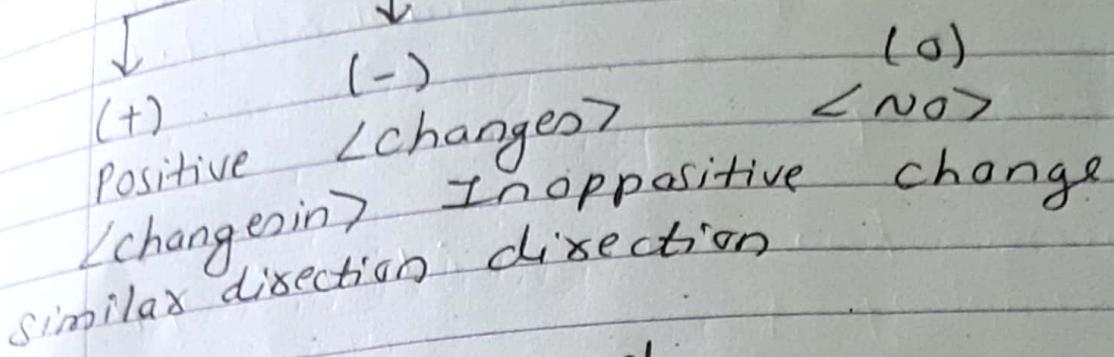
2.

Variables

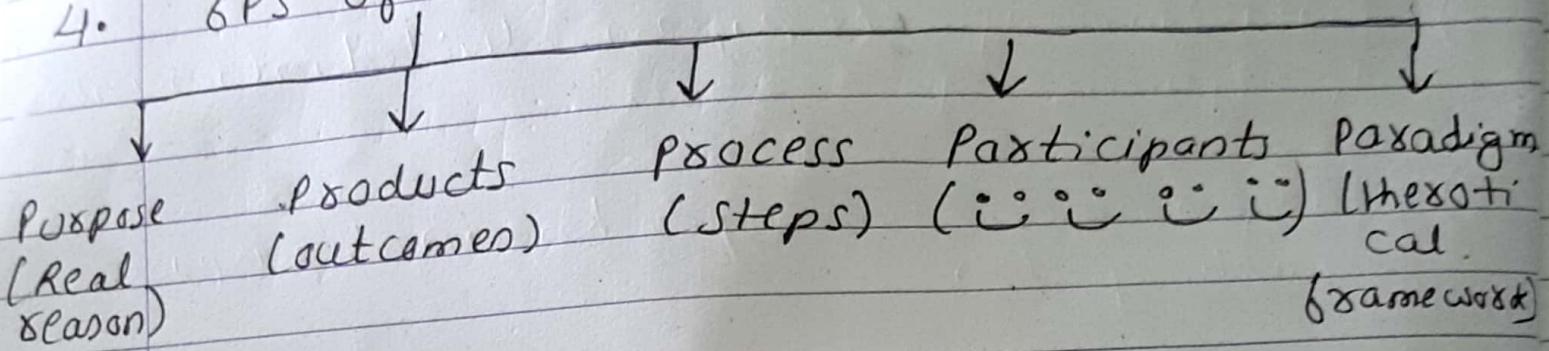


Correlation

3.



4. 6PS of Research



fieldwork

It was developed in the 19th and 20th century.
Mostly field work is done by the students under the supervision of a teacher to impart knowledge of the theory, model, design of research, application of research, selection of topics, creation of specific aims, objectives and hypothesis etc.

Advantages

- (1) It provides opportunities for direct observation
- (2) It avoids the artificiality of experiment.

Disadvantages

- (i) Lack of practical materials
- (ii) Very complex methods.

Validity \rightarrow Data are considered to be valid.
It removes the errors. There are some types

- (i) Content Validity:- It collects systematic errors.
- (ii) Construct Validity:- It shows the differences between measurement scales and variables.
- (iii) Criterion Validity:- The obtain score may be future use.
- (iv) Face Validity:- It depends upon the judgement of researchers.
- (v) Reliability:- Valid data are considered as reliable. To be reliable the sampling should match with the total research.

Types: \Rightarrow

- (i) Test and Re-test \Rightarrow
It means repeating the measurement by using same method in other condition.
- (ii) Alternative reliability \Rightarrow
It means getting result by applying two methods for same subjects.
- (iii) Split half:-
It means dividing the total no of items like odd & even and getting same results.
- (iv) Internal reliability:- It is consistent with itself cause and effect both should be over there.

concept of Research Design

" A research design is the logical and systematic planning and directing of a piece of research (P.v.young)

Decision regarding what, where, when, how much, by what mean concerning an enquiry or all research study constitute of research design.

When a particular area has been identified, research problem defined, and the related literature in the area have been reviewed, the next step is to construct the research design. for ex:

- # Elements : (a) What the study is about?
- (b) why the study is being made?
- (c) where will the study be carried out?
- (d) what type of data is required?
- (e) where can the required data be found?
- (f) what periods of time will the study include?
- (g) what will be the sample design?
- (h) what techniques of data collection will be used?
- (i) How will the data be analysed?
- (j) In what style will the report be prepared?

steps:-

- Title
- Background
- Statement of the problem
- Theoretical framework
- Statement of hypothesis
- Define terms (if needed)
- Research methods
- References

Types

1. Qualitative Research Design
2. Quantitative Research Design
3. Exploratory Research Design
4. Survey
5. Confirmatory Research Design
6. Experimental Research Design

Research Topic

Finding and choosing Research topic -
Research topic should be meaningful,
catching, useful appropriate.

Research problem means crucial state
in the research process. If the problem
is stated ~~as~~ or if the
wrong problem is defined then the
rest of research is completely useless.
A problem simply indicates issue for
finding the right answers might fail the
existing situation.

To make the research problem clear we should make data clear, clear expressions conditions should be improved, a difficulty to be eliminate and troubling question should be solved clearly. So a problem well stated is problem half solved.

Research proposal

It is detail plan which includes how any work should be started and what process or method should be followed to complete the work. Research proposal can be classified into two types.

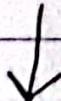
- (1) Research project proposal
- (2) Development project proposal

format of Research proposal

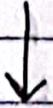
Title



Background



Statement of the problem



Theoretical framework



Statement of hypothesis

The plan

↓
Define terms (used)

↓
Research Methods

↓
References.

Meaning & importance of Data collection

Data collection is a process of gathering and measuring information on targeted variables in an established systematic fashion which then enables one to answer relevant questions and evaluate outcomes.

Purpose of data collection:-

- i) collect data to make processes more efficient and effective
- ii) collect data to get deep into facts
- iii) collect data to reduce risk
- (iv) The goal for all data collection is to capture quality evidence
- (v) Data collection helps to learn more about customers.

Importance of data collection:-

The data collection activity consists of taking ordered information from reality and transferring it into some recording system so that it can later be examined and analysed for patterns.

Categories of Data collections:

These are two Categories:-

1. fact:- It describes tangible things. It measures anything that exists or has existed.
2. opinion:- It is a view or judgement about a particular matter. a belief stronger than impression and less stronger than positive knowledge.

Unit - 5

Survey

1) Survey

Techniques of data collections. It is derived from two words 'sur' and 've' which means to see a particular things from a high place. The function of Survey depends on its purpose that how much of information is already known about the problem.

- * Survey belongs to following groups:-
- 1) Demographic characteristics such as house-hold, family and its related aspects.
- 2) Social environment aspects such as income, social amenities etc
- 3) Social activity such as peoples behaviours and actions

Advantages

- ① It provides capable person to represent a large population
- ② Now a days online survey methods became more popular.
- ③ Accurate methods based on statistics

Disadvantages

- ① It doesn't explain depth problem so, it is narrow study
- ② It is time consuming method.

③ It is accurate but there may be Sampling error

* Case Study

It is used for studying the social problems. Social problems may be related with family, persons, institutions, culture and group of entized community. Case study means doing research of particular area to get the answer of research questions.

Sources

- ① Personal documents
- ② Documentation
- ③ Interview
- ④ Direct observation
- ⑤ Archival records
- ⑥ Life history

Characteristics

- ① In-depth investigation
- ② Variables should be clear
- ③ More reliable
- ④ From this method hypothesis can be built and concept or theory can be tested
- ⑤ Historical facts are given more priority

Disadvantages

- ① More time consuming
- ② Narrow study
- ③ It is based on historical facts but if the history is not true, the real facts can't be obtained.

* Observations

It is measured technique of Social Science which is used to study about event or subject under research observation means eyes to eyes contact

Components

These are some components of observation

- ① Sensation
- ② Attention
- ③ Perception

Characteristics

- ① It is both physical and mental.
- ② It is selective.
- ③ It is made of specific purpose.

Types

These are 3 types of observation method

- ① Controlled and Uncontrolled observation
- ② Structured and Unstructured observation
- ③ Participant and non participant observation

Disadvantages

- ① People doesn't want to share personal matter
- ② Lack of reliability
- ③ Personal biased
- ④ Slow investigation