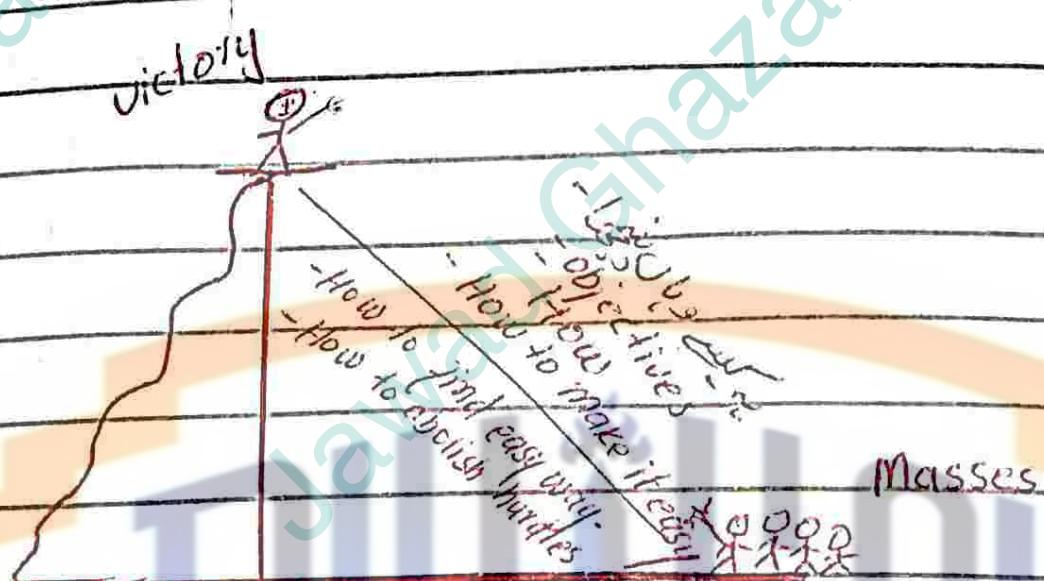


( 26-10-2021 )

# (Research Methodology) (1)



\* Knowledge :- Dualistic in nature.

=> If Someone Know we can say "yes"

⇒ If not      " "      " "      " "      " No "

=> After that no change to "Maybe"

⇒ Then research started, new know-

ledge developed, then problem solved  
(struggle started for "no" to find)

## \* Definition of Research :-

"The systematic activity directed toward inquiry, new findings, discoveries and inventions and the development of an organized knowledge."

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2nd def :- "A systematized effort to gain knowledge, and it's a process of collecting data, evaluating data and interpreting data to answer the questions".

=> To eliminate suspense.

=> To find something new.

=> To resolve problem.

=> Creation of new knowledge is research

\* Qualities / characteristics of good research:

① Research should be controlled, under command, little bit know about the topic.

② If once we choose, we will not astray from that topic, (specific, limited interest)

③ Research should be rigorous (extremely accurate), Arise questions and accurate ans.

④ Research should be systematic. (pri sec)

⑤ Research should be slowly - gradually and steadily.

⑥ Research should be valid & verified, Argument should be valid & correct.

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⑥ Research should be empirical  
and ethical (جذري).

⑦ Research should have hard evidences (برهان).

⑧ Not have pleasureism.

⑨ The foundation of Knowledge:- for  
the purpose to create new knowledge.

#### A Importance of Research - (Objectives)

① To find out the real facts/ideas

② To achieve the new thoughts.

③ To evaluate the information.

④ To test a hypothesis (نحوی) (prediction).

⑤ To design or implement the research

⑥ To improve the understanding :- To  
make something need tools and when  
person collect that tools to make it  
improve understanding.

⑦ Educative process :- (through this new ideas)

⑧ Research is Informative process, it  
keep people updated & aware. it  
provide authentic information.

⑨ Solution of national problem through  
research..

eg problem in economy, laboratories, and agriculture sectors.

⑩ It develops the ability of Comparison.

\* Types / Kinds of research :-

① Basic research :- Basically that research in which we collect primary data to enhance & create new knowledge.

=> Expansion of knowledge.

② Applied research :- A research which deal with the solution of problem.

=> In which we do research for the solution of problem / issue. (eg covid)

③ Problem oriented research :-

=> In this we will study the reason and nature of problem and then to solve the problem, mean in this we study the creation / origination of issue / problem, and then solution for that problem.

④ Historical research :-

A research which deal with

= Historical issue based

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problem of past e.g. (Terrorism), we go to the history of the problem.

⇒ There are two methods in

this research (primary + secondary)

1. A materials from past, and collection of data directly question from person is primary data, and when that data submitted to another person is secondary data.

### ⑤ Scientific research :-

that research in which we do research through scientific methods/tools/laboratories. Scientific research give single result, while social research giving different result

① On the basis of data, two types

#### ① Qualitative research :-

A research in which we used secondary data - eg. Magazines, research paper etc. more descriptive.

#### ② Quantitative research :-

3  $\frac{11}{20}$  to 6

A research in which we <sup>use</sup> primary data, no in descriptive form, and we use statistical methods.

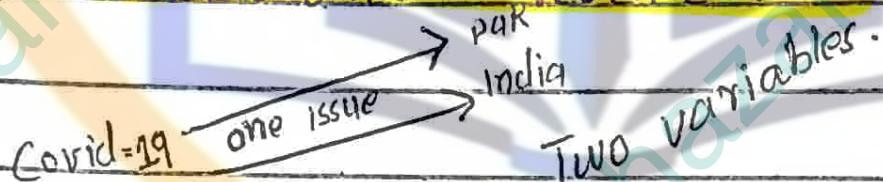
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Time

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5 | 8 | 2

### ⑥ Explanatory research:-

in which we study cause & effect relationship, mean the causes, reason of issue/problem, and what was it effects, and their both relationship.

### ⑦ Correlational research:-



=> when we research between both.

### ⑧ Descriptive research:-

In which we only describe the problem/issue/topic, we not discuss the causes and consequences. Just describe the concern topic.

\* philosophy of research:-

\*⇒ philosophy of research :-

"why the things exist and all those fundamental question which we want to know is phi-

two terms "of research philosophy"

① ontology :- we study the existence, which we can touch and see.

"onto" mean being logy study.

⇒ study of that things which we can see touch, and arise question on physical things is called ontology.

⇒ In this we study the nature of existence.



Realist view → which exist in reality

like chair, and that is fine no more want to change it. (is it is)

Revivalist view → reality can be changed if someone see wood chair, and person thought it can be made from plastic, etc. So the nature of reality changed through research

→ 8  $\frac{11}{0.21}$  8

Research should be based on primary data, Questionnaire, Interviews, it will not be based on qualitative, numericals.

② Epistemology: <sup>when</sup> we know about the thing, how we have that knowledge and we know.

→ What we know?

→ How we know?

→ Study for that Questions, that how we know about something, how we get it, study for this is called epistemology

→ In this we will explore the knowledge

→ Study about own & other mind.

Relationship b/w epis & ontology:

mean two couple, how they married, how they understand each other e.g.

\* Methodology / Methods of

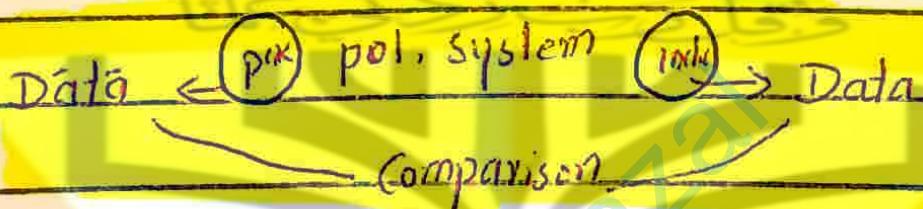
Research :-

① Comparative Method:- In this method we compare two things, we collect data for the both sides.

e.g. developed countries and developing countries, in this we will compare and search for both topics / things.

→ it can be two or more than two

⇒ in this we will use primary data



② Analytical method:-

→ In this we will use the existing information, and the raw data will change to secondary data, then we will reach to result.

→ In this we analyze the existing data/information (some can be wrong, some can be right) (raw data) and when we make it useful data, and achieve

date. 9/02/10

Result, so it is analytical method.

⇒ Make own suggestion/research from other people ideas.

جس میں اپنے دیرے میں رجسٹر ہے، اور ایں سٹوڈنٹ

کا حاضری نہ ہو رہے۔ جس میں اس کے لئے میں حاضر

ہے تو سناروں کے کیوں یہ غیر حاضر ہوتا ہے تو (اسی)

Dem

Democracy in Pakistan

Inductive method

Deductive method

→ Specific → General

General → Specific

→ Qualitative nature

→ Qualitative in nature

→ Emerge new theory.

→ Existing theory → will

→ Study about the specific thing.

→ Should hypothesis

→ Should not hypothesis

⇒ In beginning we have

→ beginning we have not

the existing knowledge.

knowledge.

→ (statistical, numerical forms)

## Quantitative

→ Numerical data,  
numbering, amounts.

→ Measurement. ( $\frac{100}{200}$ )

→ Statistical data analysis → Focus on why? / reasons.

→ Data collection:- through questionnaires, interviews.

→ should not touch the interviews, opinions, videos  
reason. (Avoid why)

→ Questionnaire should be based on yes and why.

→ close interview

→ Zero interference of Researcher (objectivity)

→ Randomization to reduce subjective bias.

→ observation :- should be based on numberwise.

Numberwise collection.

→ We will collect secondary data with numbering - objective in nature.

## Qualitative

→ Descriptive/subjective

→ Involving quality :- broad

Questions will be developed

→ focus on why? / reasons.

→ No use of numerical data, we will use ideas and views.

and recordings / Images.

field notes & own words.

→ Explain How & why.

→ Researcher Interference

allowed to add own opinion.

→ Secondary data (Articles,

Research papers, news paper,

Journals, magazines, should be

used.

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## \* Steps involved in research:-

### ① Selection of topic/problem:-

1st <sup>step</sup> of research is selection of interest area, which we want to investigate. first we select the specific Topic. eg. women participation in voting in maidan, covid-19, democracy in pakistan etc.

=> choosing of specific Topic is the first step of research. in this we will identify the problem, & then create questions about the problem like, How, why, (causes) etc, then writing problem statement. then significance of the study (which related to the benefits of the people)

~~Method~~<sup>we</sup>: once topic Selected will

study the literature (magazines, Articles) etc (literature review) regarding the Topic and to find out the gap which lefted by previous researcher

Methods → Data collection and then Data analysis, some will related & some will unrelated, we will take related data, the interpretation of that data, and then we will write Research report, & then suggestions & the then Conclusion  $\Rightarrow$  conclusion will based on result.

$\Rightarrow$  Conclusion, report, result is of Research design.

Data Collection :- observation, interviews

$\Rightarrow$  Data is information

$\Rightarrow$  Data collection is the process of gathering and measuring information on variable of interest.

) is an establish systematic question that enable one to answer stated research questions, test hypothesis and evaluate outcomes.

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⇒ Every discipline having different techniques for data collection.

⇒ The source of collection of data should be authentic and accurate.

⇒ Irrelevant information impact the research badly.

⇒ If second researcher read the study research of first person, it badly impact the research of 2nd researcher.

⇒ Issues in data collection:- 2 issues

① Quality assurance :- it comes before the research, it's main focus on "prevention": the data which is lead to confusion, it should be not include in research, Questions will be have authentic answers, which u can make to understand for other, and will avoid those which lead to confusion.

→ Uncertainty about timing.

→ methods & identifying of person's are responsible for data collection.

⇒ No identified mechanism, if researcher did not have proper mechanism it lead to confusion so it should be prevented.

⇒ No well training plan make issues

### ① Quality Control:-

⇒ Documents/data should be related.

⇒ Data should be to the point topic

⇒ Data Collection should be from concern expert people.

⇒ \* observation in data collection..

The most important method for data collection. (observe people behaviour)

⇒ observe the things.

⇒ In political science we observe the political systems. (eg democratic structure etc)

⇒ We observe the behaviour, structure, merits, & shortcomings to develop our research.

⇒ Different techniques take place. e.g

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through eyes, groups, organizations, end observation, & close observations etc.

=> In this we use five Senses, smell, eye, skin etc.

=> observation:- observation is the power of perceptions (ability to see) <sup>through senses</sup> (Oxford Dictionary)

=> observation need 5 senses

\* Kinds of research observation:-

\* ① Structured:- on the basis of pre-plan.

For this we make plan for observation.

=> make structure → pre-specify

=> we make structure before observation

\* ② unstructured :- not - pre-planned,

when we do flexibility and change

has advance planning => when we

change the plan or do any changes

during observation is called unstructured.

③ Participant observation:- observer take part in activity directly.

④ Non-participant:- not practically take part in activity. (7+9)

$\Rightarrow$  get A loof and observe the thing.

[We use different tools for observation e.g. camera, mobile etc]

\* Advantages & disadvantages of observation in research :-

$\Rightarrow$  Advantages :-

① To see human behaviour easily we can easily see attitude, behaviour, expressions & variations with environment & when we know the attitude expressions according to that we develop laws & rules regulations.

② Data through observation is more reliable(trusted) - we achieve reliable and trusted informations

$\Rightarrow$  it depends on researcher qualities, who have ability to observe things.

i.e. ③ <sup>easiy</sup> understand human psyche.

Date 30/11/18

### Disadvantages / demerits :-

- ⇒ ① The event maybe artificial. behaviour can be changed according to situation, so we cant easily find natural behaviour.
- ⇒ ② pre-engineered plan:- plan maybe not reliable to observation.
- ⇒ ③ mis-understanding of the observer, observer can be mis-understood the scenario, but they collect information, that will be mis & not accurate.
- ⇒ ④ Acts maybe under Emotions:- people can emotionally acts during sometimes, so if we observe that it would be not accurate.
- ⇒ ⑤ Something can not be observed like thief.
- ⇒ ⑥ Laberius :- mean observation take & need much times to observe something.
- ⇒ ⑦ Costly ⇒ need Journey, traveling time, so it costly.

\* Guiding principles for observations:-

⇒ ① Bias-free :- personal desires and personal orientation should be avoided, observation should be neutral.

⇒ ② Basic Knowledge :- if we observe about something before observation, we should to study & know about the basic knowledge of concern. without knowledge we can't observe things.

⇒ ③ Determining method to record results for the observation there should be proper & specific methods.

⇒ ④ Classification :- for everyone there should be own category for each id.

⇒ ⑤ Silent Spectators :- observation should be like dumbly ( <sup>ज़मीन</sup> )

⇒ ⑥ Various tools :- we can use different tools for observation like Spy camera, etc.

## \* Interview in research :-

↓ "Meeting  someone, for discussion is called interview."

⇒ Persue indepth information.

⇒ oral examination of applicant.

⇒ Meeting face to face, especially for consultation.

## \* Preparation for Interview :-

(i) choose a sitting with a little interruption.

(ii) Avoid loud lights or noises.

(iii) ensures the interviewee is comfortable.

(iv) Explain purpose of the interview, to be mentally ready.

(v) Address terms of confidentiality, the terms of interviewee should be noted by interviewer.

(vi) Explain format of the Interview, mean (open ended, oral, discussion etc)

(vii) Ask from the interviewee if they have any question before getting

Started with the Interviewer

VIII Ask for permission  $\rightarrow$  to record, note.

\* Types / kinds of Research :- Interview:-

① Informal or Conversational interview:-

- $\rightarrow$  Not pre-determined questions asked.
- $\rightarrow$  Based on general discussion.
- $\rightarrow$  Based on conversation.

② General interview or Guide interview:-

- $\Rightarrow$  Also no pre-determined question.
- $\Rightarrow$  Discussion over specific thing / issue etc
- $\Rightarrow$  There will be suggestion and guidance for the problem.

$\Rightarrow$  Based on guidance Approach.

$\Rightarrow$  <sup>ended to</sup> ensure that the some general information and guidance

③ Open ended interview or standardized

$\Rightarrow$  In this we ask questions & the Interviewee give own ideas / thoughts.

$\Rightarrow$  Openly express thoughts.

$\Rightarrow$  Don't select yes or no, it based on open ended.

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#### (iv) Close Ended Interview:-

⇒ In this interview just give

an answer of "yes" and "No"

⇒ interviewee can not give own idea, thoughts & opinion.

⇒ Data Collection techniques n10.3

#### \* (3) Questionnaires:-

⇒ Series of questions or list of questions is called questionnaire.

⇒ A list of questions regarding a specific topic, to collect

information from people, is questionnaire

⇒ Kinds of Questionnaires:-

#### ① open ended or free answers:-

⇒ Question designed like that, which can be answered by responded in descriptive form, & openly express him/herself.

⇒ Completeness of the answer, based on open ended, no restrictions on responded.

## ② Multiple type choice Questionnaires:-

⇒ There will options for the concern questions to choose one of them just like exam MCQs.

⇒ option should be choose by the responded.

⇒ Through this we collect information.

## ③ Dichotomous/ Categorical Questionnaire

⇒ It will based on close ended the answer should be given in "yes" or "no".

⇒ In this question designed based on "yes" or "No"

⇒ steps involve in Questionnaire designing :-

### (i) Defining the objective of the survey:-

Means if we choose research topic,

{ we choose questionnaire for collection

We will define the objective, then we

will design questions, to collect

information for research.

- clear & good purpose.

who is to be question  
- بگویی کنیم کیم کس

8/11  
8/21

24

(ii) Determining the Sampling who are to be questions, (that will be the expert people to the concern topic).

⇒ mean Determine the person, that you will ask question from them.

⇒ who are important to be question.

(iii) Writing the questions;

→ There should clarity (clear) in questions, easily understandable to be answered.

⇒ leading question; there should be some guidance in question.

(iv) phrasing :- positive words, respectable words should be using. (امنیت - ترجیح)

⇒ words should be ambiguousless.

(v) Embarrassing questions :- personal question should not be asked, private matters should be avoided.

(vi) Hypothetical questions should be avoided during Questionnaire designing.

Testing

- Administering the questions:-
- > Testing the designed question, which we have designed, that it is relevant or not, if not it will invalid.
- > if relevant it send to the determine persons.
- Interpretation of responses:-
- Gathered & responded should be interpreted.
- > conclusion: Then we will get a conclusion, that will be the report of questionnaire.

PUACP

\* Hypothesis :- "it's a prediction"

=> " Basically experimental statement that proposes of a possible explanation to some phenomenon or event "

=> The <sup>possible</sup> result which comes in mind before research is called hypothesis

-> Hypothesis may be Correct or Wrong Prediction

~~With the help of Result & less Data - coll~~  
On the basis of limited evidences.

13.02

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P. Hypoth

Resu

Hypothesis is a testable statement.

=> Hypo

will test our statement.

=> we

clude prediction :- whatever comes

=> In

in our mind, we will find the reason.

in

Hypothesis makes ways for research.

=> Hy

Hypothesis are beliefs that a

=> Hy

researcher possesses before conducting

research

such experiment.

research

Formulating Hypothesis :-

\* P

Explanatory :- In this we will go from

=> Indu

particular to General (future of demo-in pak)

specif

Formulation of hypothesis we

=> In

use maybe " eg Federation

will

be solved multi-ethnic conflict.

may

Use of Conditional words " may "

=> 1

Features of hypothesis :-

\*

not contradictory with the spirit

=> No

search and law of nature

of re

(sun rise from east / west)

(eg

concerned with the actual case.

=> Co

specific - Subject oriented → the

→ Sp

Hypo = Tentative or subject to verification  
thesis = statement about the solution of problem.

14 12, 27

Hypothesis must be related to the concern problem.

⇒ value free. → Free of personal likes and dislikes, neutral way.  
⇒ verifiable; - Hypothesis <sup>must</sup> can be verifiable. (imp)

\* Importance of Hypothesis :-

① To Assess the direction of research.

② Provide direction.

③ It remove and avoid confusion.

④ Determine relevency & irrelevency, that which material is relevant & which is irrelevant.

⑤ Shortens our research process:-

Targeted goals shorten research process, it make systematic way for research.

⑥ Hypothesis keep researcher to the point, researcher only focus on concern hypothesis.

⑦ Select the most relevant information.

⑧ Explanation; - Hypothesis provide explanation to research, through which

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We can explain & interpret our research.

- ① Through hypothesis we can understand the problem, & then we will do research for problem.
- ② Enable the researcher to determine the means & methods to solve problems.

### \* Facts :

"Facts is something that is supported: unmistakable evidence".

=> which is based on solid arguments is called facts.

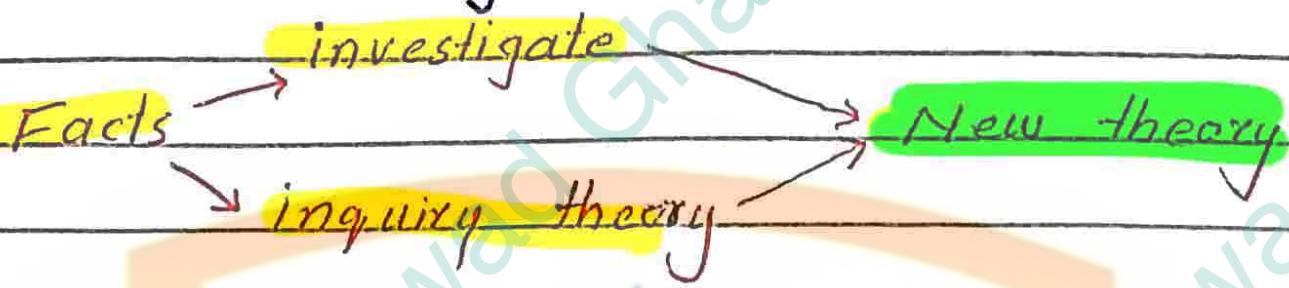
"Item of verified information is facts"

=> Truth and actuality.

=> Things assumed as the basis for arguments.

=> Goode & Hatte define "empirically verifiable observation is facts"

~~Facts → Investigate → Inquiry theory →~~  
~~→ New theory.~~



وہ جو خواب تھے میرے دین میں

نہ میں کہ سکا نہ میں لکھ سکا

کہ زبان ملی تو کہی یونئی کہ قلم ملا تو بکا بوا۔