

# RESEARCH PROPOSALS

A research proposal systematically and transparently outlines a proposed research project to demonstrate the study's viability and worth.

## PURPOSE

The purpose of a research proposal is to demonstrate a project's viability and the researcher's preparedness to conduct an academic study. The process holds value both externally (for accountability purposes and as a requirement for a grant) and intrinsic value (for helping the researcher to clarify the mechanics, purpose, and potential significance of the study).

## COMMON SECTIONS

- Title
- Abstract
- Introduction
- Literature Review
- Research Design and Methods
- Timeline
- Budget
- Expected Outcomes and Implications
- References and Appendix



# STRUCTURE OF A THESIS PROPOSAL



# VARIABLES

<b>Dependent Variables</b>	<b>Independent Variables</b>	<b>Extraneous Variables</b>	<b>Intervening variables</b>
<b>What is being <u>measured</u> in the study of the experiment .</b>	<b>What the researcher is changing in the study of the experiment &amp; affected by the change. (<u>manipulated</u>).</b>	<b>Variables which used in the experiment &amp; affect the results , but are kept <u>hidden</u>.</b>	<b>Variables that are used in order to explain the <u>relationships</u> between two variables .</b>



### **Directional hypothesis**

**The relationship between variable A and variable B (positive correlation).**

**The word hypothesis is a Greek word means assumptions.**

#### **\*Examples :**

**-Study time and grades: increasing the amount of time is expected to improve test scores among students .**

**-Sunlight and plant growth:**

**Exposing plants to more sunlight promoting their growth and development.**

**-Caffeine is linked to increase in activity .**

#### **-Advantages:**

**direction is specified**

**One tailed hypothesis**

**Specifies existence also relationships**

**-Disadvantages: there is no power to detect an effect in the opposite direction .**

### **Null directional hypothesis**

**No relationship between variable A and variable B (negative correlation).**

**The word hypothesis is a Greek word means assumptions .**

#### **\*Examples:**

**Drug effectiveness: the new drug does not reduce to number of days to recover from a disease compared to a standard drug , any observed difference is by chance not due to the new drug .**

#### **-Advantages:**

**Most valuable hypothesis for the scientific method because it is the easiest to test using statistical analysis .**

**-Disadvantages : always false , direction is not specified positive or negative , only predicts the existence, two tailed hypothesis and Commonly misunderstood .**

# NULL HYPOTHESIS EXAMPLES

THE NULL HYPOTHESIS ASSUMES THERE IS NO RELATIONSHIP BETWEEN TWO VARIABLES AND THAT CONTROLLING ONE VARIABLE HAS NO EFFECT ON THE OTHER.

CATS SHOW  
NO PREFERENCE  
FOR FOOD  
BASED ON SHAPE.



PLANT GROWTH IS  
NOT AFFECTED  
BY LIGHT COLOR.



AGE HAS  
NO EFFECT  
ON  
MUSICAL ABILITY.





## TOOLS OF RESEARCH



- ❖ In research, the data collection is one of the important steps to do a research study.
- ❖ Selection of a right tool at a right time for right purpose through a right person is very important.
- ❖ The major tools of research in education can be classified broadly into the following categories.

## TOOLS OF RESEARCH



- ❖ **A. Inquiry forms**
  - 1) Questionnaire
  - 2) Checklist
  - 3) Score-card
  - 4) Schedule
  - 5) Rating Scale
  - 6) Opinionnaire
  - 7) Attitude Scale

# TOOLS OF RESEARCH



❖ **B. Observation**

❖ **C. Interview**

❖ **D. Sociometry**

❖ **E. Psychological Tests**

- 1) Achievement Test
- 2) Aptitude Test
- 3) Intelligence Test
- 4) Interest inventory
- 5) Personality measures etc.

# DESCRIPTIVE RESEARCH

## DEFINITION

Descriptive research involves collecting data to provide an accurate portrayal or detailed account of a phenomenon without influencing it in any way. It aims to observe, document, and create a thorough profile of the subject under study, often exploring patterns, behaviors, or attributes.

## EXAMPLES

- **National Census:** An official survey that records information about demographics, employment, and housing.
- **Market Surveys:** Businesses gather data about their consumers' preferences to understand market trends and guide product development.

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**Descriptive research involves gathering data to provide a detailed account or depiction of a phenomenon without manipulating variables or conducting experiments.**



# Data Collection Methods of Descriptive Research

## DATA COLLECTION METHODS IN DESCRIPTIVE RESEARCH

**Survey**



Ask Questions

to the



Sample Group

**Observation**



Watching/Noticing

the



Event & Situation

**Case Study**



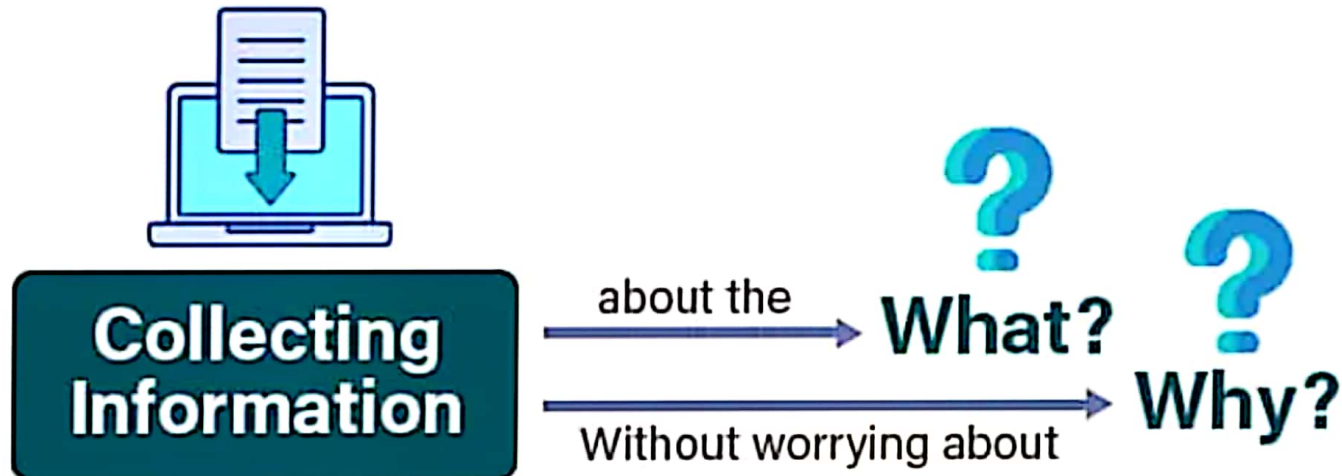
Continuous Monitoring

of the



Research Sample

# What is Descriptive Research?



## Example

