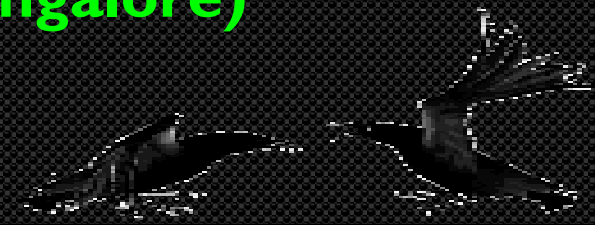


RESEARCH (Type & Process)

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D. Litt. (FD), FDP (IIM Bangalore)**



Types of Research

- Fundamental or Basic Research
- Applied Research
- Descriptive Research
- Historical Research
- Formulative or Exploratory Research
- Experimental Research
- Ex-Post-Facto Research
- Case Study Approach



TYPES OF RESEARCH

**Basic
Research**

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TYPES OF RESEARCH

Basic Research

Basic research, fundamental research (sometimes pure research), is research carried out to increase understanding of fundamental principles. Many times the end results have no direct or immediate commercial benefits, which is to say that basic research can be thought of as arising out of pure curiosity. However, in the long term it is the basis for many commercial products and applied research.

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TYPES OF RESEARCH

Basic Research

Applied
Research



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TYPES OF RESEARCH

Applied research: is research accessing and using some part of the research communities' (the academy's) accumulated theories, knowledge, methods, and techniques, for a specific, often state, commercial, or client driven purpose. Applied research is often opposed to pure research in debates about research ideals, programs, and projects.

**Applied
Research**

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TYPES OF RESEARCH

Basic Research

Applied Research

**Descriptive
Research**



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TYPES OF RESEARCH

Descriptive Research

Descriptive research, also known as statistical research, describes data and characteristics about the population or phenomenon being studied. Descriptive research answers the questions *who, what, where, when* and *how*.



TYPES OF RESEARCH

Basic Research

Applied Research

Descriptive Research

**Historical
Research**



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TYPES OF RESEARCH

Historical research is a procedure supplementary to observation in which the researchers seeks to test the authenticity of the reports or observation made by others.

Historical research is descriptive research that involves describing and interpreting events, conditions, or situations of the past. As with all history, the purpose is to study the past in order to understand the present, and maybe to plan for the future.

Historical Research

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TYPES OF RESEARCH

Basic Research

Applied Research

Descriptive Research

Historical Research

**Exploratory
Research**



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TYPES OF RESEARCH

Exploratory Research

Exploratory research is a type of research conducted because a problem has not been clearly defined. Exploratory research helps determine the best research design, data collection method and selection of subjects. Given its fundamental nature, exploratory research often concludes that a perceived problem does not actually exist.



TYPES OF RESEARCH

Basic Research

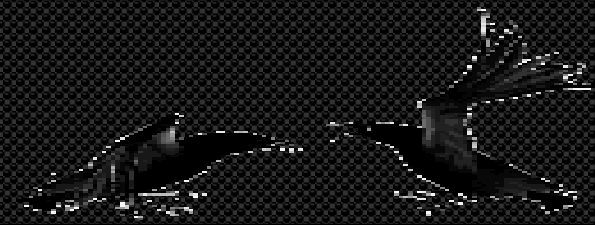
Applied Research

Descriptive Research

Historical Research

Exploratory Research

**Experimental
Research**



TYPES OF RESEARCH

Experimental Research

Experimental research is a systematic and scientific approach to research in which the researcher manipulates one or more variables, and controls and measures any change in other variables.

Experimental research is often used where:

- There is time priority in a causal relationship
- There is consistency in a causal relationship (a cause will always lead to the same effect)
- The magnitude of the correlation is great.

TYPES OF RESEARCH

Basic Research

Applied Research

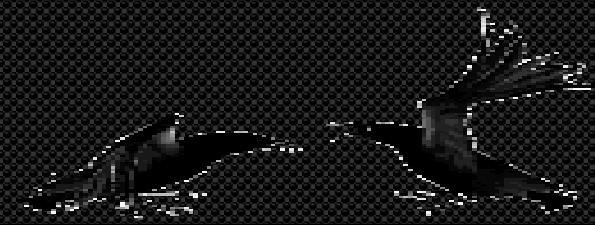
Descriptive Research

Historical Research

Exploratory Research

Experimental Research

**Ex-Post-Facto
Research**



TYPES OF RESEARCH

Ex-Post-Facto Research is concerned with non-manipulated variables of a phenomenon. Much of what is generally emphasized is descriptive research in which hypotheses are formulated and tested while studying the phenomena in their own setting.

Classification of Ex-post-facto Research

**Exploratory Research
Historic Research
Descriptive Research**

**Ex-Post-Facto
Research**



TYPES OF RESEARCH

Basic Research

Applied Research

Descriptive Research

Historical Research

Exploratory Research

Experimental Research

Ex-Post-Facto Research

**Case Study
Approach**

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TYPES OF RESEARCH

Case study Approach is a research strategy, an empirical inquiry that investigates a phenomenon within its real-life context.

Case study research means single and multiple case studies, can include quantitative evidence, relies on multiple sources of evidence and benefits from the prior development of theoretical propositions.

Case studies should not be confused with qualitative research and they can be based on any mix of quantitative and qualitative evidence.

**Case Study
Approach**

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TYPES OF RESEARCH

Basic Research

Applied Research

Descriptive Research

Historical Research

Exploratory Research

Experimental Research

Ex-Post-Facto Research

Case Study Approach

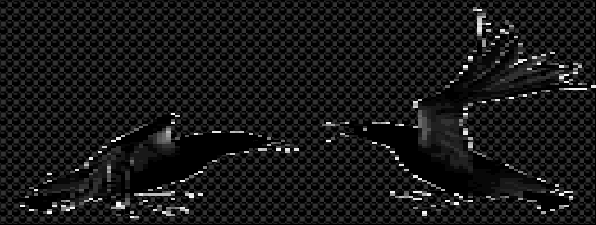
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Research Process

- Formulating Research Problem

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Research Process

- Formulating Research Problem
- Extensive Literature Survey

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Research Process

- Formulating Research Problem
- Extensive Literature Survey
- Development of working Hypothesis

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Research Process

- Formulating Research Problem
- Extensive Literature Survey
- Development of working Hypothesis
- Preparing Research Design

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Research Process

- Formulating Research Problem
- Extensive Literature Survey
- Development of working Hypothesis
- Preparing Research Design
- Determining Sample Design



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Research Process

- Formulating Research Problem
- Extensive Literature Survey
- Development of working Hypothesis
- Preparing Research Design
- Determining Sample Design
- Collecting the Data



Research Process

- Formulating Research Problem
- Extensive Literature Survey
- Development of working Hypothesis
- Preparing Research Design
- Determining Sample Design
- Collecting the Data
- Execution of the Project



Research Process

- Formulating Research Problem
- Extensive Literature Survey
- Development of working Hypothesis
- Preparing Research Design
- Determining Sample Design
- Collecting the Data
- Execution of the Project
- Analysis of the Data



Research Process

- Formulating Research Problem
- Extensive Literature Survey
- Development of working Hypothesis
- Preparing Research Design
- Determining Sample Design
- Collecting the Data
- Execution of the Project
- Analysis of the Data
- Hypothesis Testing



Research Process

- Formulating Research Problem
- Extensive Literature Survey
- Development of working Hypothesis
- Preparing Research Design
- Determining Sample Design
- Collecting the Data
- Execution of the Project
- Analysis of the Data
- Hypothesis Testing
- Generalization and Interpretation



Research Process

- Formulating Research Problem
- Extensive Literature Survey
- Development of working Hypothesis
- Preparing Research Design
- Determining Sample Design
- Collecting the Data
- Execution of the Project
- Analysis of the Data
- Hypothesis Testing
- Generalization and Interpretation
- Preparation of the Report



RESEARCH PROCESS

Formulating Research Problem.

- Nature and relationship
- Conceptual and empirical literature



**Formulating
Research Problem.**

RESEARCH PROCESS

Extensive Literature Survey

- A brief summary [writing Ph.D thesis]
- Abstract, journal, bibliography published
- Academic journal, conference proceeding govt., report, books.



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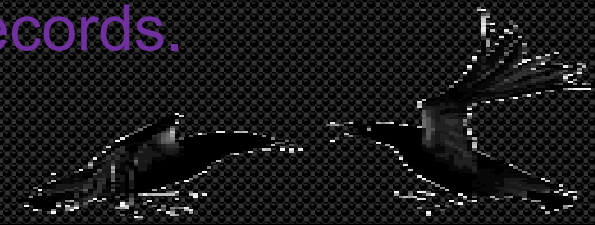
**Formulating
Research Problem.**

**Extensive Literature
Survey**

RESEARCH PROCESS

**Development of
working hypothesis.**

- Logical or empirical consequences.
- Tested or examination of data and records.
- Review of studies.



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**Formulating
Research Problem.**

**Extensive Literature
Survey**

**Development of
working hypothesis.**

RESEARCH PROCESS

**Preparing the Research
Design.**

- Conceptual structure.
- Minimal expenditure, time, money.
- Availability and skill researchers and his staff.
- Obtaining the information.
- Cost factor relating to the research[i.e., finance]



**Formulating
Research Problem.**

**Extensive Literature
Survey**

**Development of
working hypothesis.**

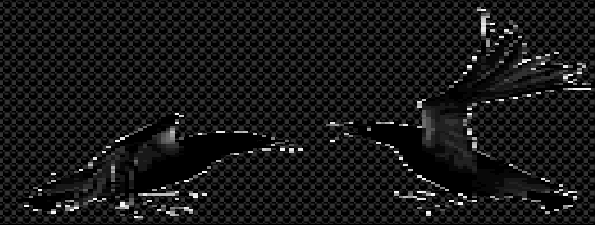
**Preparing the
Research Design.**

RESEARCH PROCESS

**Determining Sample
Design.**

- Simple random sampling.
- Systematic sampling.
- Stratified sampling.
- Quota sampling.
- Cluster sampling and area sampling.
- Multistage sampling.
- judgment sampling

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**Formulating
Research Problem.**

**Extensive Literature
Survey**

**Development of
working hypothesis.**

**Preparing the
Research Design.**

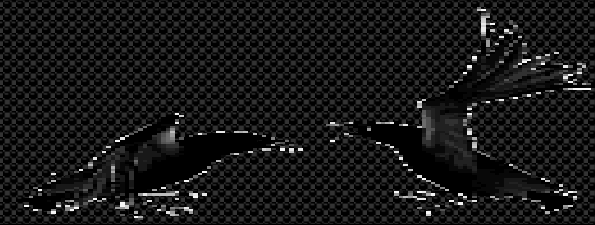
**Determining Sample
Design.**

*RESEARCH
PROCESS*

**Collecting the
data.**

- By observation
- Through telephone interview
- By mailing interview
- Through schedules
- Through questionnaire

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**Formulating
Research Problem.**

**Extensive Literature
Survey**

**Development of
working hypothesis.**

**Preparing the
Research Design.**

**Determining Sample
Design.**

Collecting the data.

***RESEARCH
PROCESS***

**Execution of the
Project.**

- Project proceeds on correct lines.
- Collected data would be adequate and dependable.
- Accuracy collected information.

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RESEARCH PROCESS

**Formulating
Research Problem.**

**Extensive Literature
Survey**

**Development of
working hypothesis.**

**Preparing the
Research Design.**

**Determining Sample
Design.**

Collecting the data.

**Execution of the
Project.**

**Analysis of
Data**

- Coding.
- Editing.
- Tabulation.

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RESEARCH PROCESS

**Formulating
Research Problem.**

**Extensive Literature
Survey**

**Development of
working hypothesis.**

**Preparing the
Research Design.**

**Determining Sample
Design.**

Collecting the data.

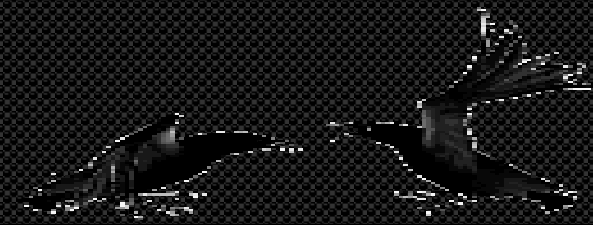
**Execution of the
Project.**

Analysis of Data

- T-test.
- Z-test.
- X^2 _test.
- F-test.

Hypothesis Testing

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RESEARCH PROCESS

**Formulating
Research Problem.**

**Extensive Literature
Survey**

**Development of
working hypothesis.**

**Preparing the
Research Design.**

**Determining Sample
Design.**

Collecting the data.

**Execution of the
Project.**

Analysis of Data

Hypothesis Testing

**Generalization and
interpretation**

- Build a theory.

- Prepare a new question for future research.

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RESEARCH PROCESS

**Formulating
Research Problem.**

**Extensive Literature
Survey**

**Development of
working hypothesis.**

**Preparing the
Research Design.**

**Determining Sample
Design.**

Collecting the data.

**Execution of the
Project.**

Analysis of Data

Hypothesis Testing

**Generalization and
interpretation**

**Preparation of the
report or thesis**

- Introduction.
- Summary of finding.
- Main report.
- Conclusion.
- Bibliography.
- [List of book, journals, reports etc]
- Index.

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RESEARCH PROCESS

**Formulating
Research Problem.**

**Extensive Literature
Survey**

**Development of
working hypothesis.**

**Preparing the
Research Design.**

**Determining Sample
Design.**

Collecting the data.

**Execution of the
Project.**

Analysis of Data

Hypothesis Testing

**Generalization and
interpretation**

**Preparation of the
report or thesis**

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