

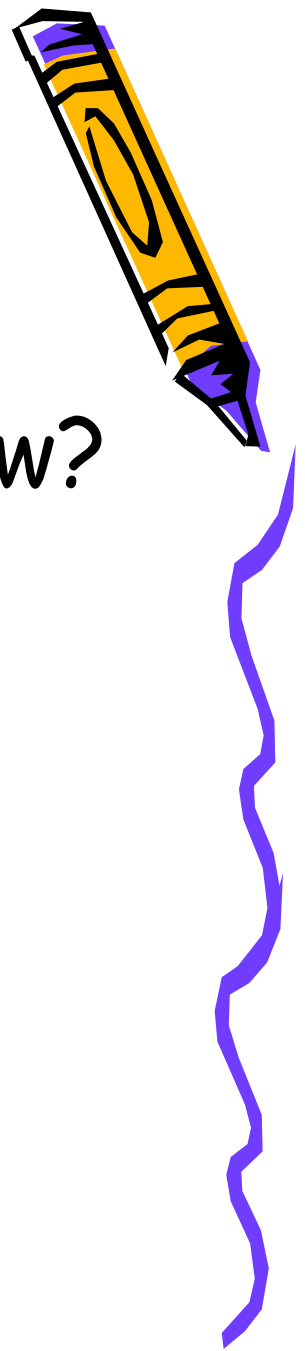


Methodology
Lecture 4

Types of Research
By Dr. Chelli



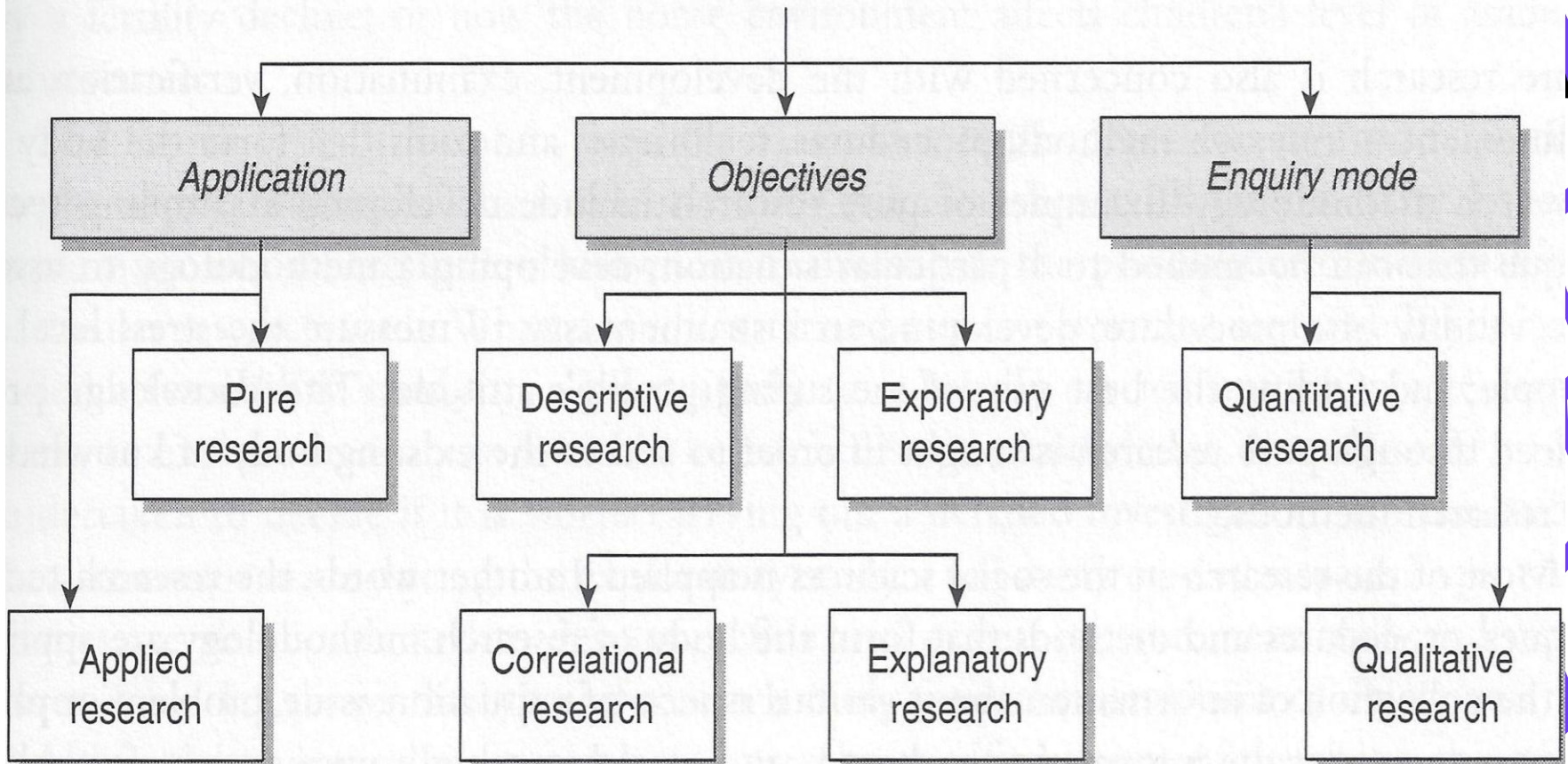
What type of research do you know?





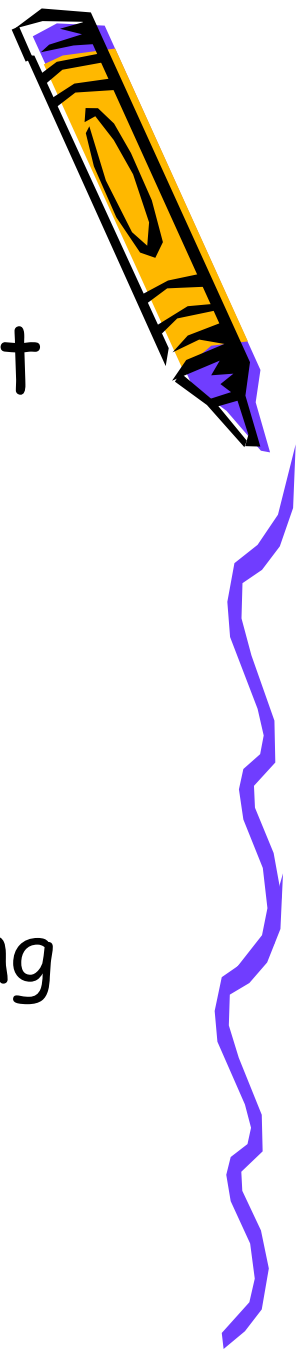
Types of research

From the viewpoint of



Types of research can be classified from three different perspectives (Kumar, 2011):

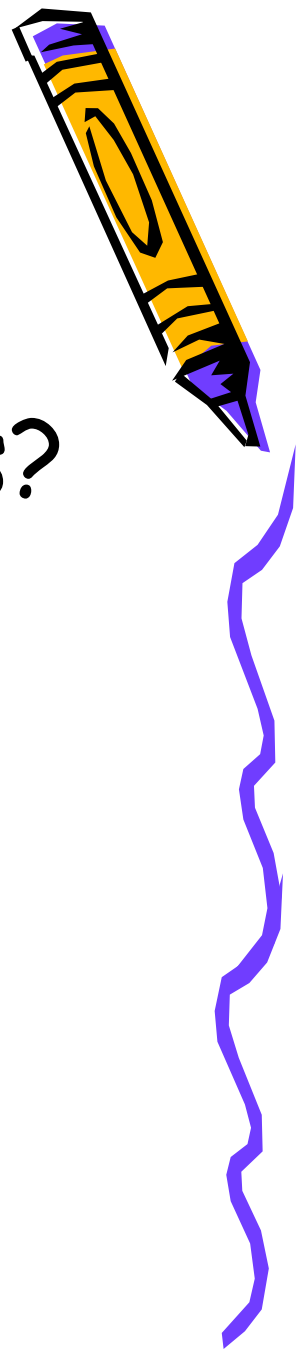
- Application of the findings of the research study
- Objectives of the study
- Mode of enquiry used in conducting the study



The classification of a study on the basis of these three perspectives is not mutually exclusive; that is, a research study classified from the viewpoint of application can be classified from the perspectives of objectives and enquiry mode.

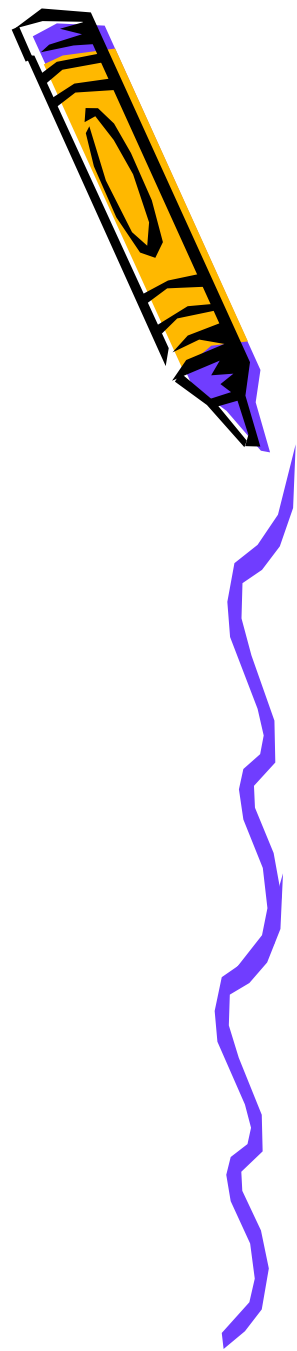


How? Can you give examples?



1. Types of research: Application perspective

Can you guess what is meant by
this?





a. **Pure research:** This kind of research is academic in nature and is undertaken in order to gain knowledge about phenomena that may or may not have applications in the near future, and to develop new techniques and procedures that form the body of research methodology.



b. Applied research: Most of the research in social sciences is applied. In other words, the research techniques, procedures and methods that form the body of research methodology are applied.





APPLIED RESEARCH

APPLIED RESEARCH

BASIC RESEARCH

CORRELATIONAL RESEARCH

DESCRIPTIVE RESEARCH

ETHNOGRAPHIC RESEARCH

EXPERIMENTAL RESEARCH

EXPLORATORY RESEARCH .

GROUNDNED THEORY RESEARCH.

HISTORICAL RESEARCH

PHENOMENOLOGICAL

RESEARCH

QUALITATIVE RESEARCH

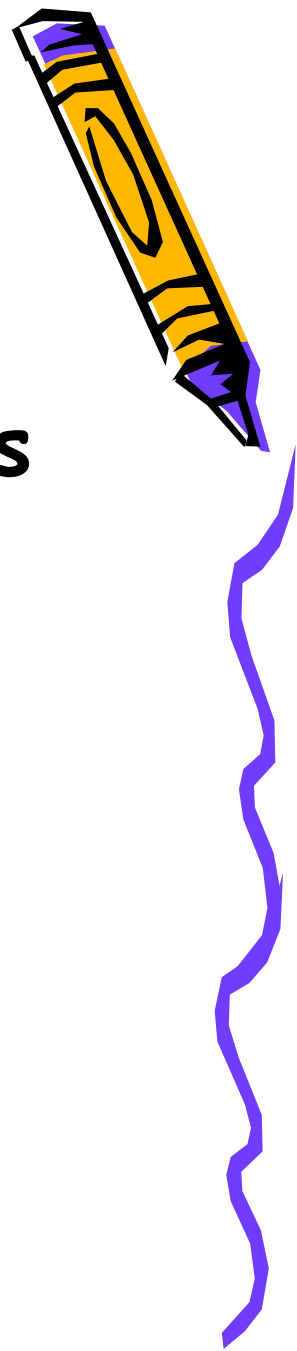
QUANTITATIVE RESEARCH

***Applied research** refers to scientific study and research that seeks to solve practical problems. Applied research is used to find solutions to everyday problems, cure illness, and develop innovative technologies, rather than to acquire knowledge for knowledge's sake.*

For example, applied researchers may investigate ways to:

- Improve agricultural crop production
- Treat or cure a specific disease
- Improve the energy efficiency of homes, offices, or modes of transportation





- 2. Types of research: Objectives perspective





- **a. Descriptive:** A research study classified as a descriptive study attempts to describe systematically a situation, problem, phenomenon, service or programme, or provide information about the living conditions of a community, or describe attitudes towards an issue.



DESCRIPTIVE RESEARCH

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QUANTITATIVE RESEARCH

***Descriptive research** refers to research that provides an accurate portrayal of characteristics of a particular individual, situation, or group. Descriptive research, also known as **statistical research**.*

These studies are a means of discovering new meaning, describing what exists, determining the frequency with which something occurs, and categorizing information.

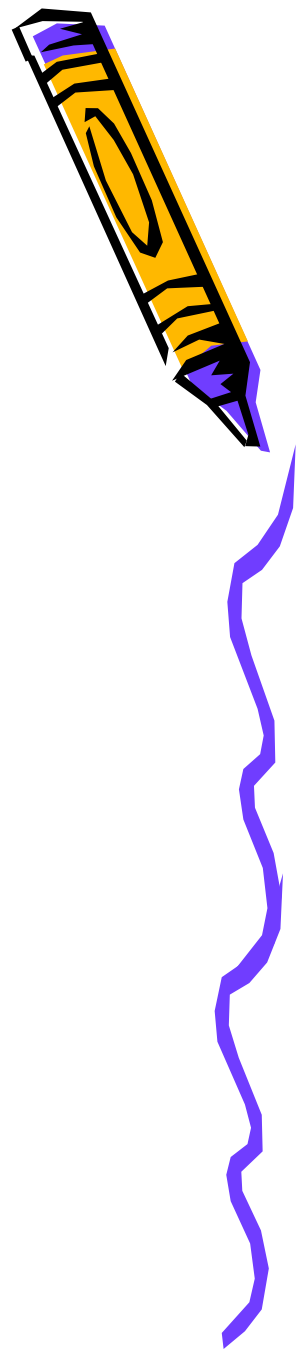
In short descriptive research deals with everything that can be counted and studied, which has an impact of the lives of the people it deals with.

For example,

- finding the most frequent disease that affects the children of a town. The reader of the research will know what to do to prevent that disease thus, more people will live a healthy life.



What are the methods that can be used in the descriptive method?

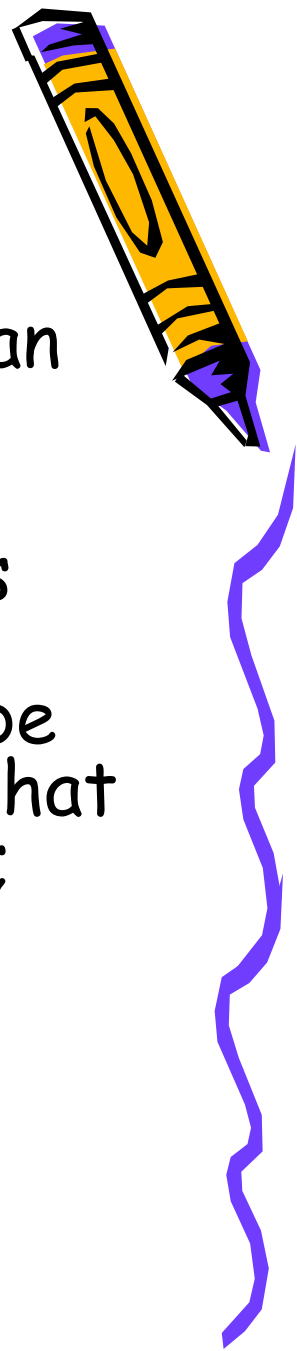




Research Methods—Descriptive

Three types of descriptive research:

- **Naturalistic Observation**
(observation & recording of behavior in natural state or habitat)
- **Survey** (assessment of a sample or population)
- **Case Study** (in-depth study of a single participant)



- The methods that can be used in the descriptive research are:
- The **case-study method**: case study research involves an in-depth study of an individual or group of individuals;
- The **survey method**: in survey method research, participants answer questions administered through questionnaire or interviews. In order for the survey to be both valid and reliable, it is important that the questions are constructed properly;
- The **observational method**: it can be naturalistic observation or laboratory observation.





- **b. Correlational research:** The main emphasis in a correlational study is to discover or establish the existence of a relationship/ association/ interdependence between two or more variables or more aspects of a situation.



Correlational Research

- **DEFINITION**

- ❑ *Associational Research* – a study to determine the relationship among two or more variables without any attempt to influence them.
- ❑ Investigate the possibility of relationship between variables.
- ❑ *Descriptive Research* - describe an existing relationship between variables.



Types of Correlational Research:

Naturalistic Observation

- Observe and record the natural environment without interference

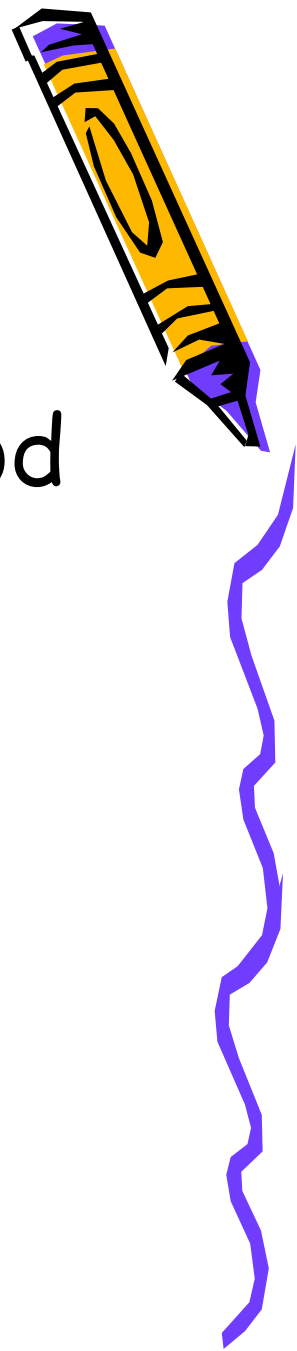
Survey Method

- Inexpensive and quick, can cover large population
- Dependent on survey respondents and questionnaire

Archival Research

- Analyze historical records
- Inexpensive
- Questions the reliability of the method used for recording

Do you think that such a method
is manipulated?

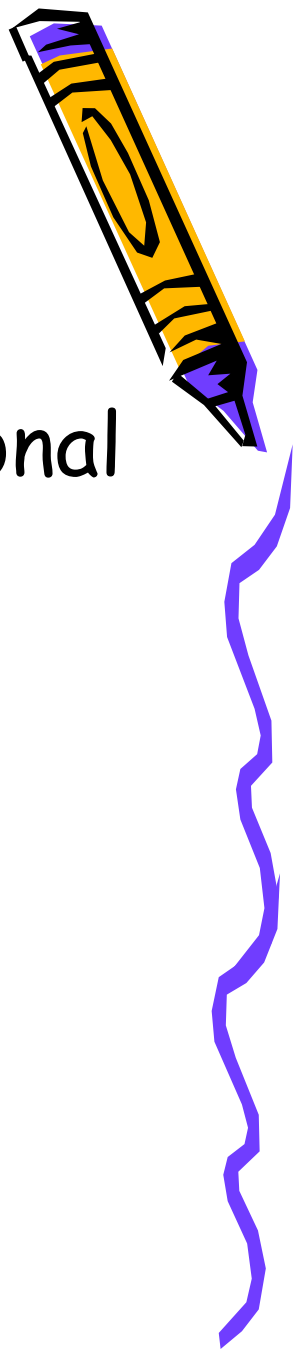




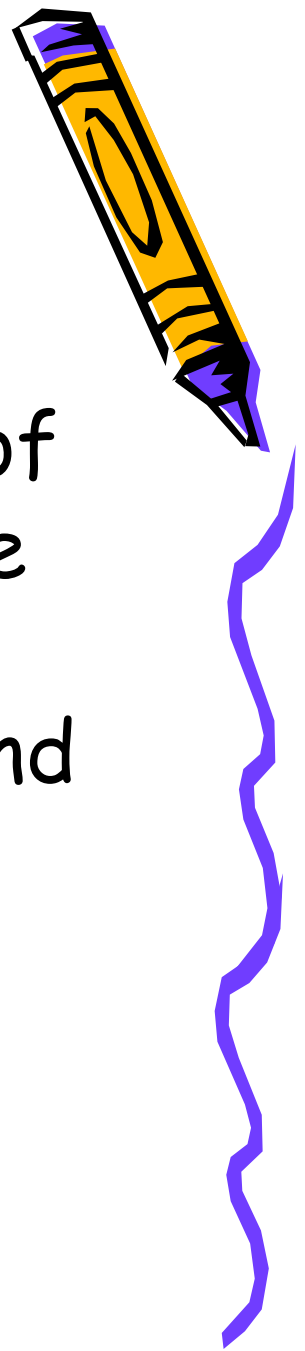
- In other words, it determines whether and to what degree a relationship exists between two or more variables (quantifiable but nothing is manipulated). The degree of the relationship is expressed as a coefficient of correlation.



Can you give examples of correlational research?

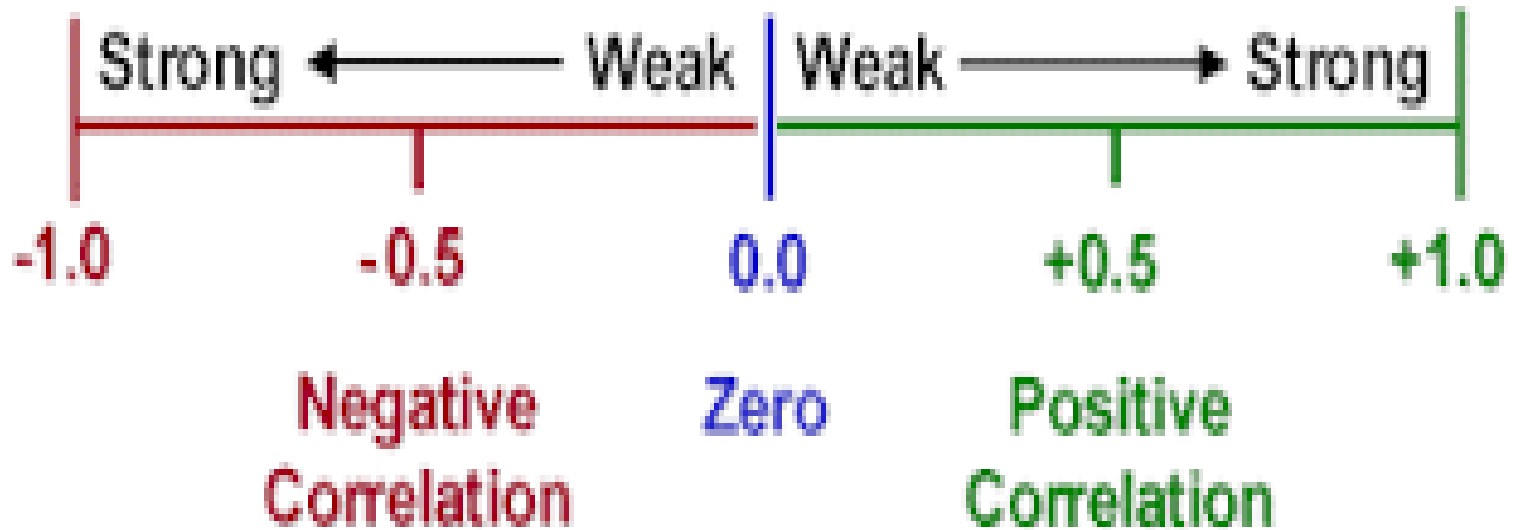


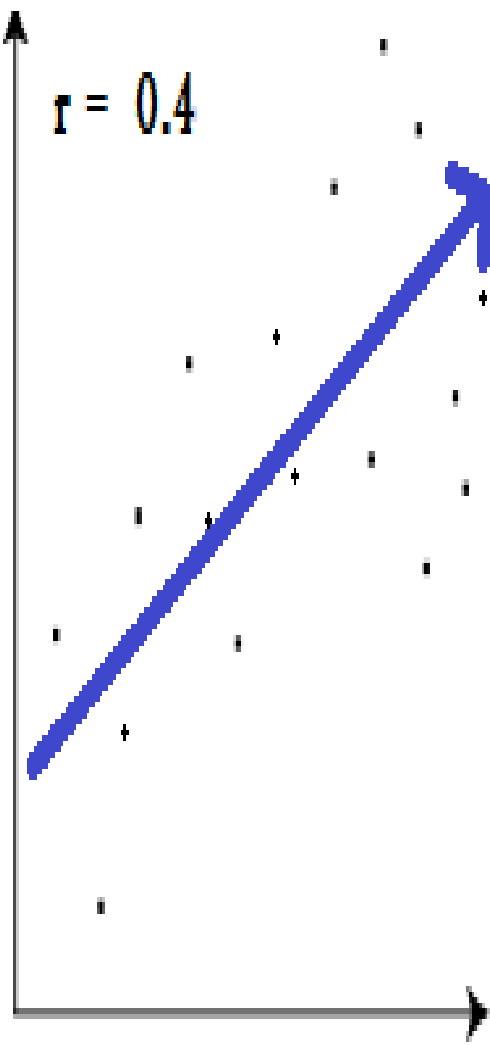
For examples, what is the impact of an advertising campaign on the sale of a product? What is the relationship between technology and unemployment?



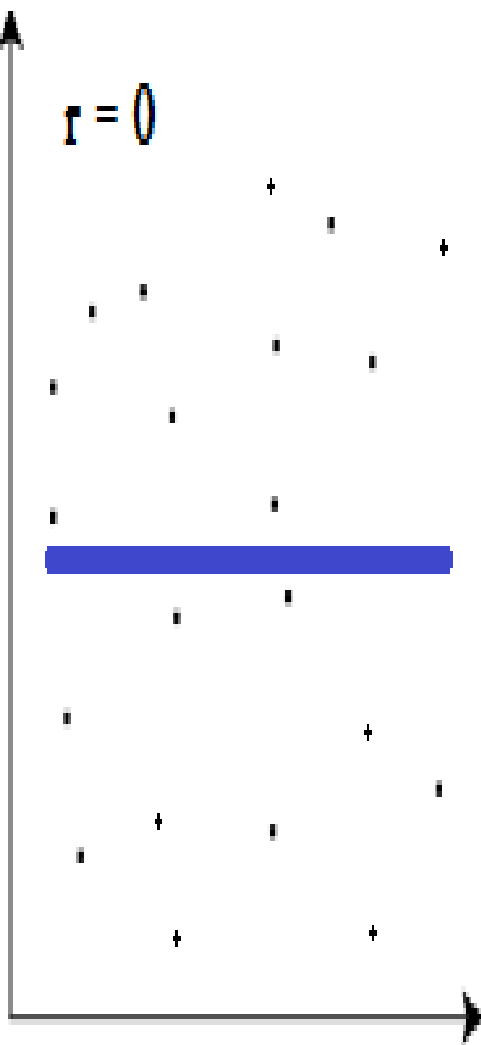
Correlation Coefficient

Shows Strength & Direction of Correlation

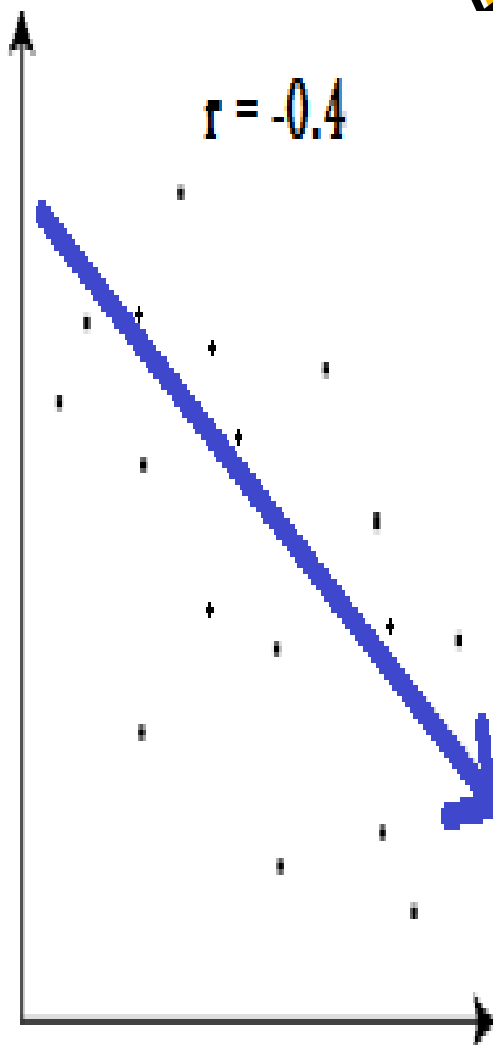




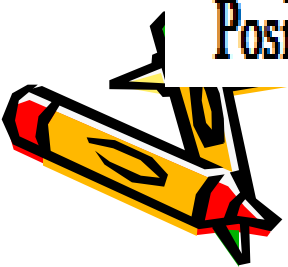
Positive Correlation



No correlation



Negative

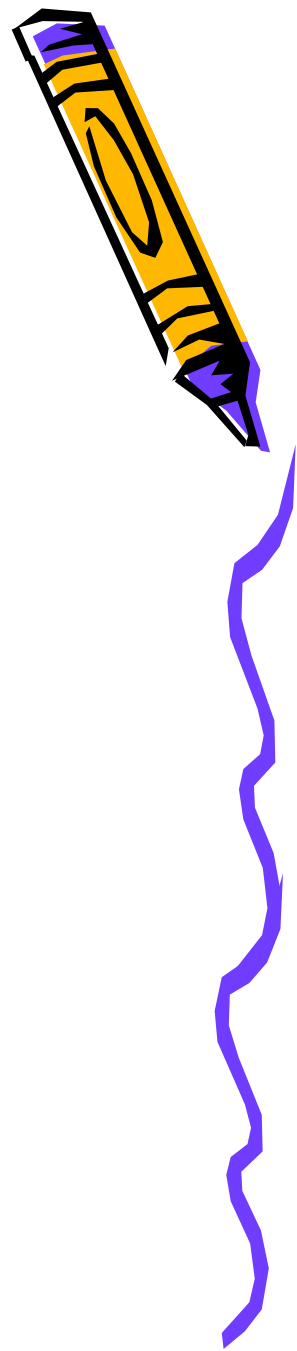


c. **Explanatory research:** this kind of research attempts to clarify **why and how** there is a relationship between two aspects of a situation or phenomenon.



It tries, for example, to explain why stressful living results in heart attacks; or how home environment affects children's level of academic achievement.





- This type of research can be conducted using:
- The Case study method
- The survey method
- The observational method

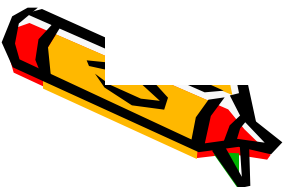


d. **Exploratory research:** it is a study which is undertaken to explore an area where little is known or to investigate the possibilities of undertaking a particular research study. It is flexible and can answer **what, who and why** questions



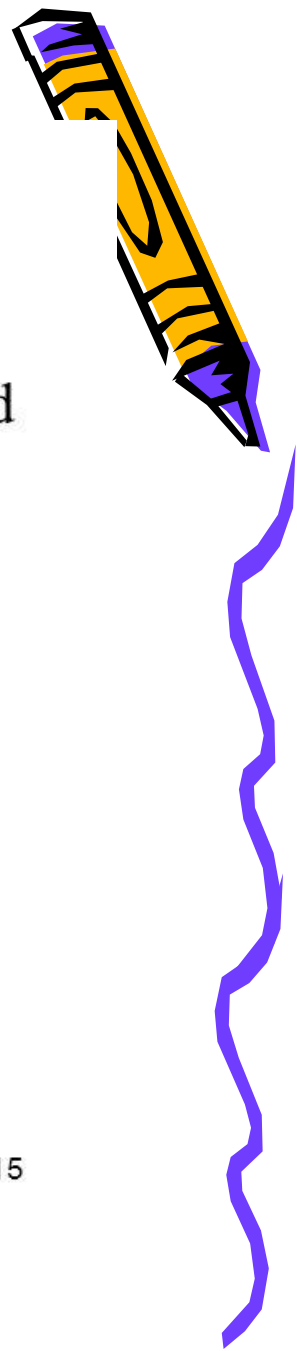
Exploratory Research

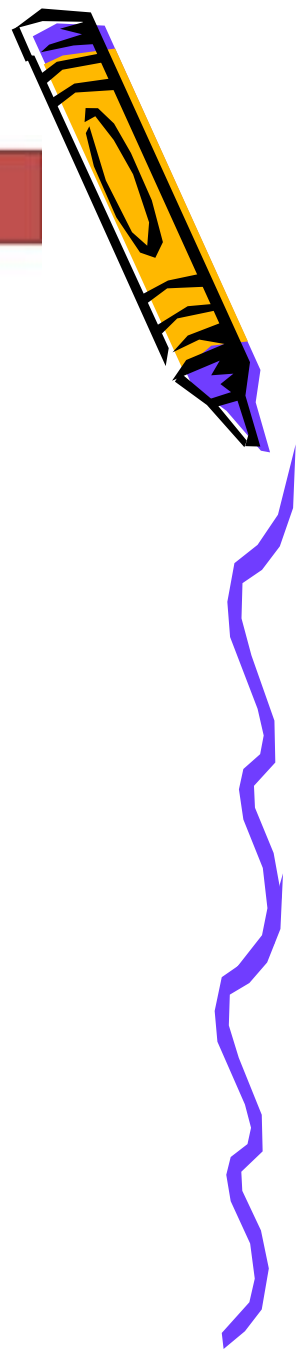
- Exploratory research is research conducted for a problem that has not been clearly defined. It often occurs before we know enough to make conceptual distinctions or posit an explanatory relationship. Exploratory research helps determine the best research design, data collection method and selection of subjects.



Exploratory Research

- A type of research conducted to explore or search through a problem or situation to provide insights and understanding. Usually based on small samples.
- Purposes of exploratory research (Malhotra, 2006):
 - Formulate a problem or define it more precisely
 - Identify alternative courses of action
 - Develop hypotheses
 - Isolate key variables and relationships for further examination.
 - Gain insights for developing an approach to the problem
 - Establish priorities for further research.





EXPLORATORY RESEARCH

Exploratory research is a type of research conducted for a problem that has not been clearly defined. Exploratory research helps determine the best research design, data collection method and selection of subjects.

- The results of exploratory research are not usually useful for decision-making by themselves, but they can provide significant insight into a given situation
- Exploratory research is not typically generalizable to the population at large.
- Exploratory research can be quite informal, **relying on secondary research** such as reviewing available literature and/or data, or qualitative approaches such as informal discussions with consumers, employees, management or competitors, and more formal approaches through in-depth interviews, focus groups, projective methods, case studies or pilot studies.

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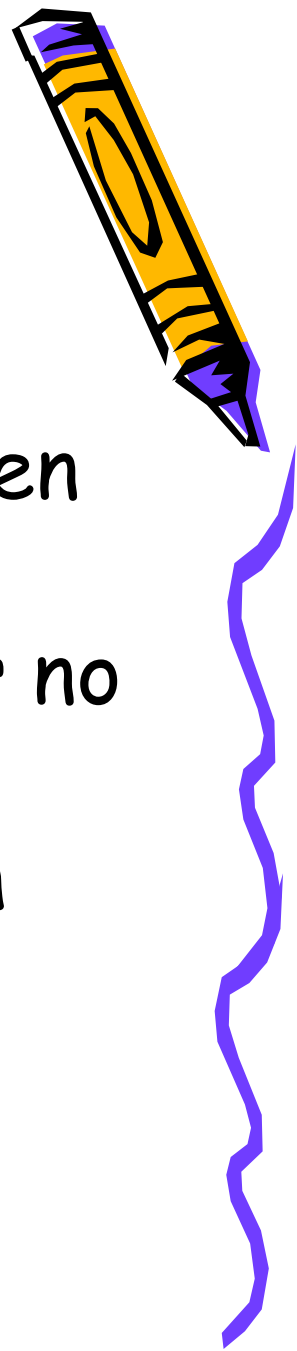
RESEARCH

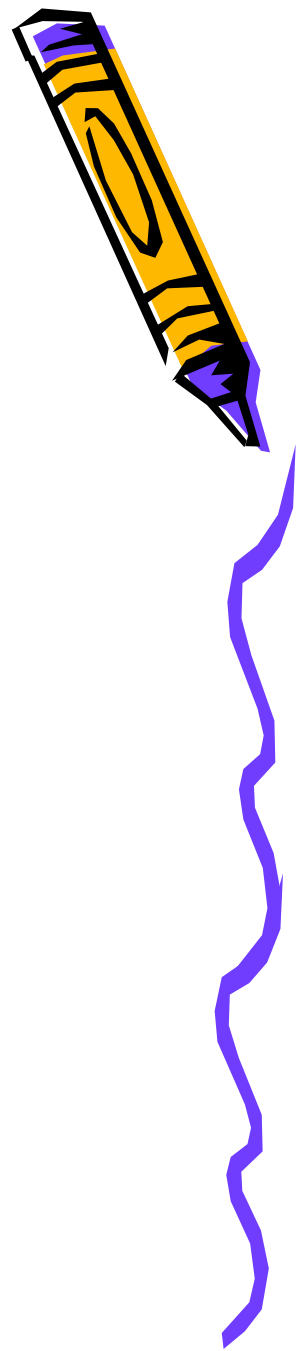
QUALITATIVE RESEARCH

QUANTITATIVE RESEARCH



When a study is carried out to determine its **feasibility**, it is also called a feasibility study or a **pilot study**. It is usually carried out when a researcher wants to explore an area about which s/he has little or no knowledge. A small scale study is undertaken to decide if it is worth carrying out a detailed study.

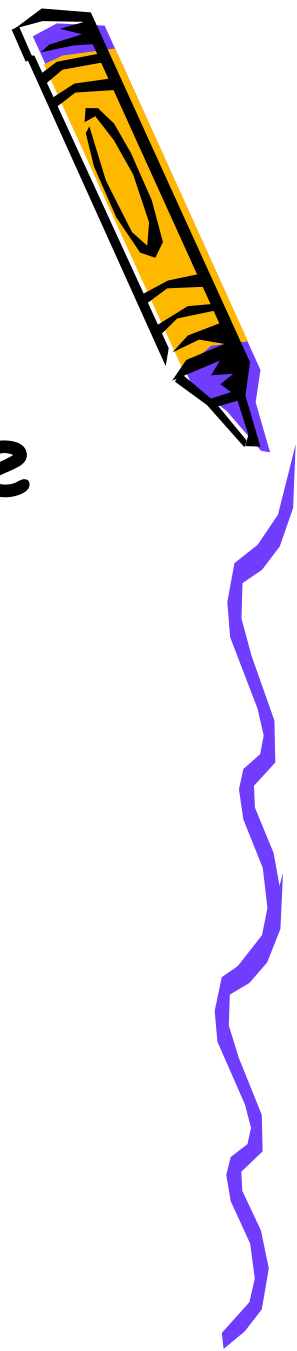




- This type of research can be conducted using:
- The observational method
- The survey method
- The case study method



3. Types of research: Mode of enquiry perspective



From the point of view of the mode of enquiry perspective, there are two types of research:

- **Quantitative research (structured research):** The main objectives of this research is to quantify the variation and diversity in a phenomenon, situation or attitude.



- a. **Qualitative research (unstructured):** A qualitative study describes the variation and diversity in a phenomenon, situation or attitude with a flexible approach so as to identify as much variation and diversity as possible.



Quantitative Methods

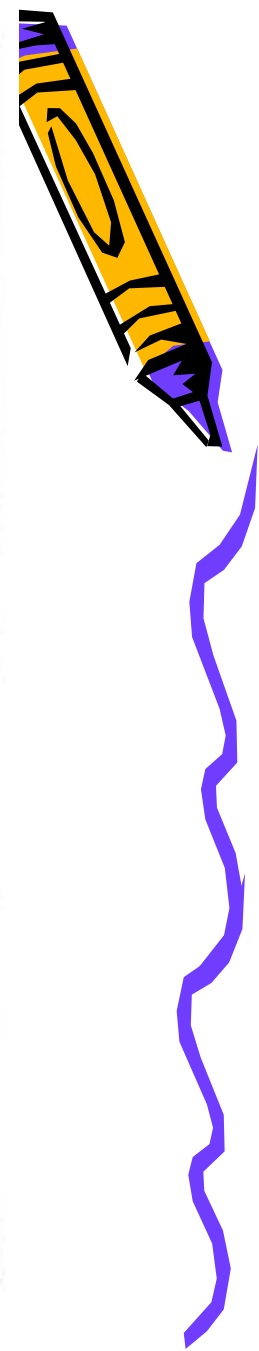


Qualitative Methods

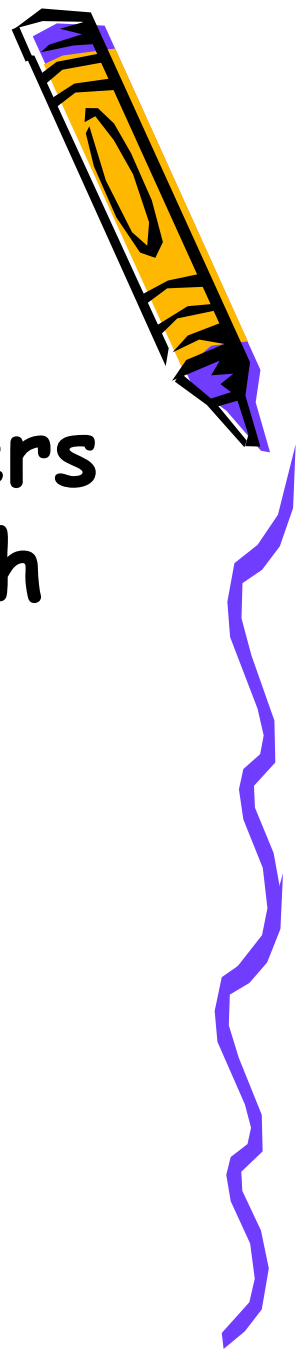


	Qualitative	Quantitative
Conceptual	Concerned with understanding human behaviour from the informant's perspective Assumes a dynamic and negotiated reality	Concerned with discovering facts about social phenomena Assumes a fixed and measurable reality
Methodological	Data are collected through participant observation and interviews Data are analysed by themes from descriptions by informants Data are reported in the language of the informant	Data are collected through measuring things Data are analysed through numerical comparisons and statistical inferences Data are reported through statistical analyses

Source: Adapted from Minichiello et al. (1990, p. 5)

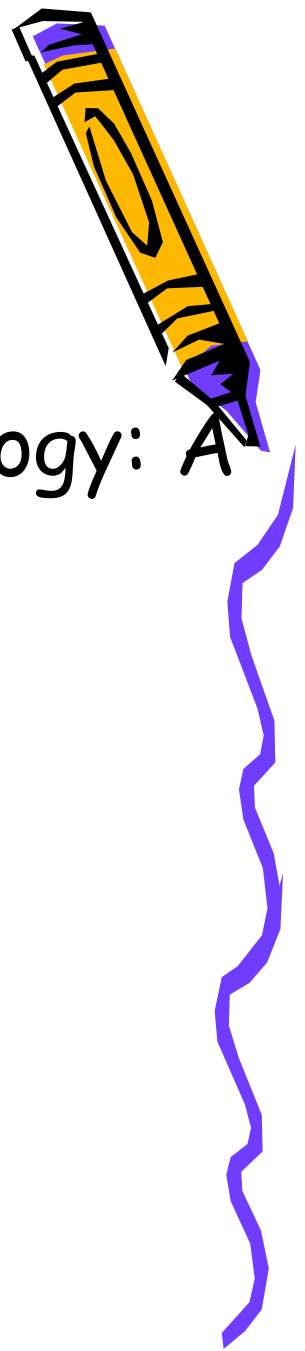


Many scientist and researchers
advocate a combined approach
to social sciences.

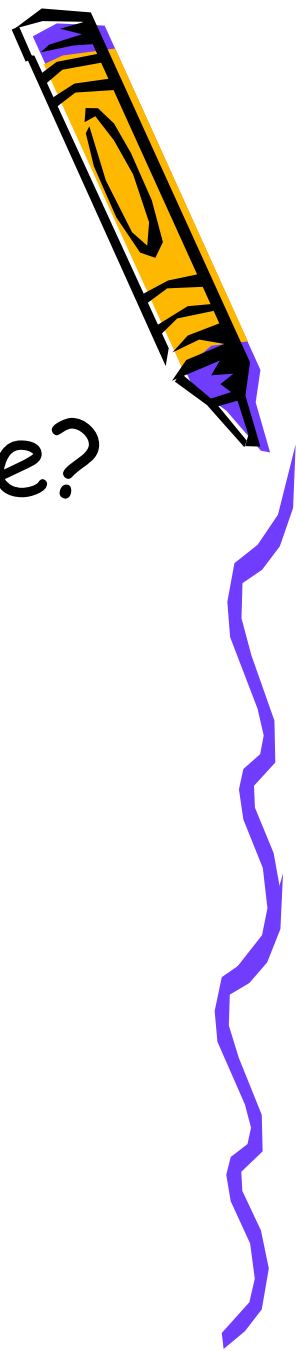


References

- Kumar, R. (2011). Research methodology: A step-by step guide for beginners. London: Sage Publications.



Can you summarize the course?



Homework



Write an essay in which you compare quantitative and qualitative approaches in terms of research methods and data gathering tools.

