

Non-Experimental Research Designs

Dr. Hanan A. Ezzat

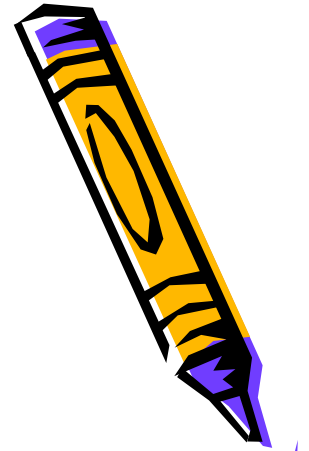


How to ... ?

Study the effect of widowhood on physical and psychological functioning

Experimental ???

Quasi-Experimental ???



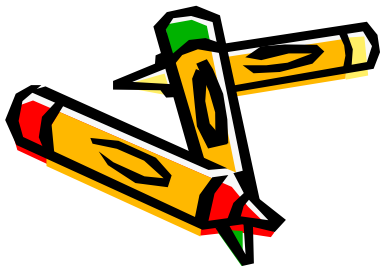
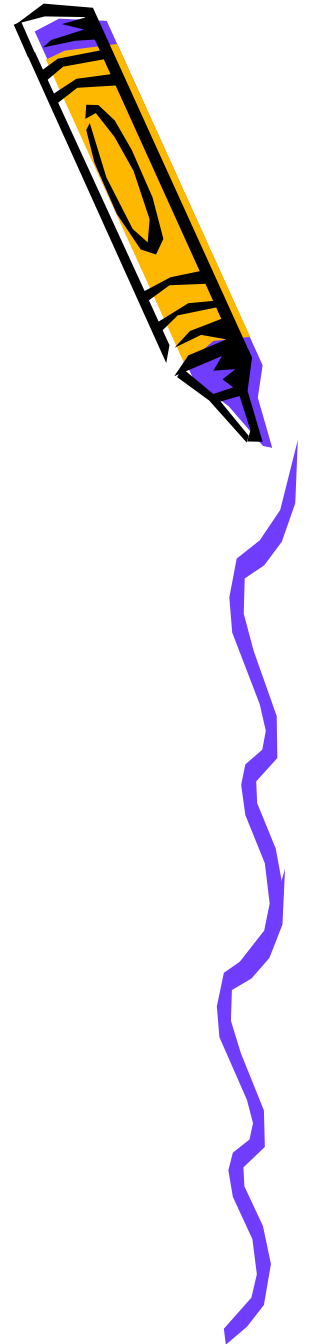
How to ... ?

Widowhood Vs No-widowhood
Can be...

Manipulated???

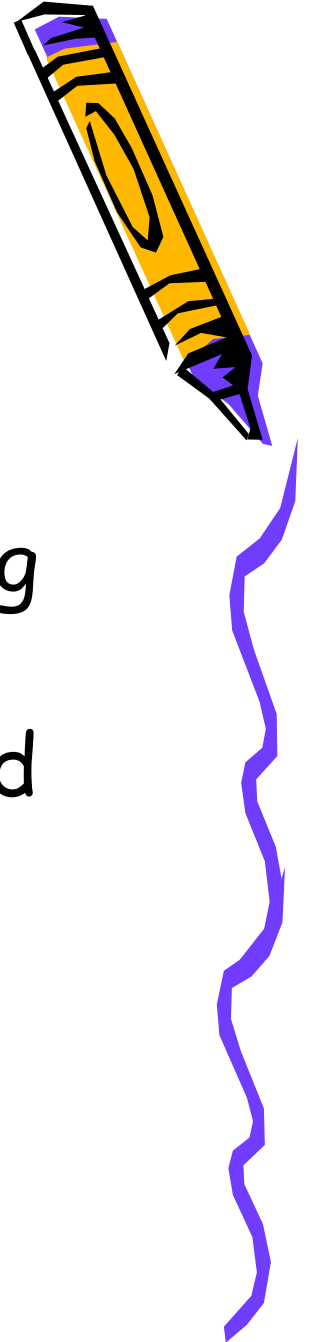
Controlled ???

Randomized ???



Thus ...

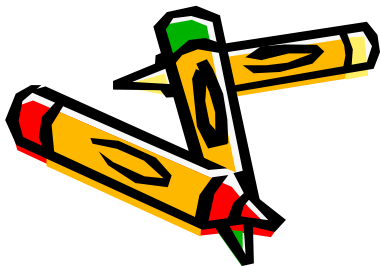
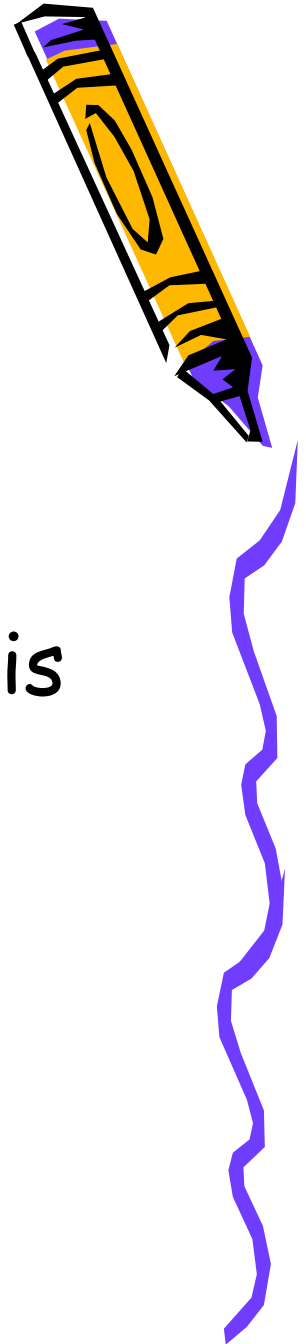
we would have to proceed by taking the two groups (widows and non-widows) *as they naturally occur* and *comparing* their psychological and physical well-being



So... How to define...

Non-experimental research design

A design in which the researcher is a *passive agent*, who *observes*, *measures*, and *describes* a phenomenon as it occurs or exists.



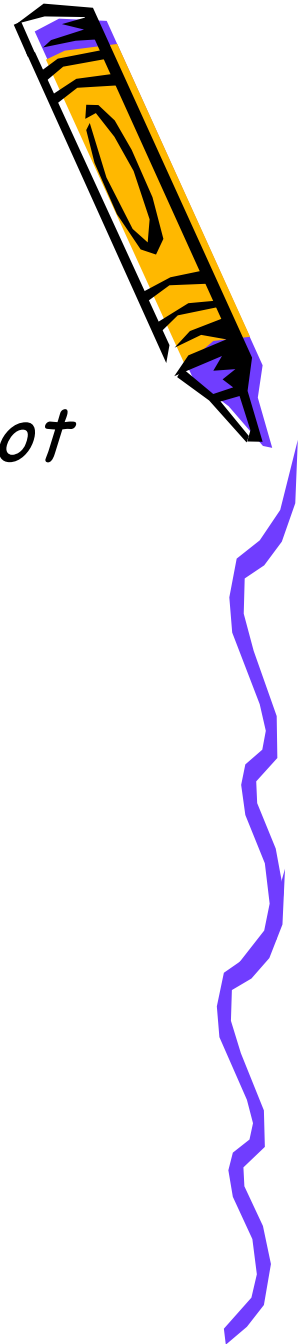
Characteristics of non-experimental design

- No *manipulation*.
- No *causality* establishment.
- A *question or hypothesis* is proposed.
- A variable, two or more... *different level of complexity*.
- Gives an *overall picture* of a phenomenon rather than examining degree &/or type of this relation.



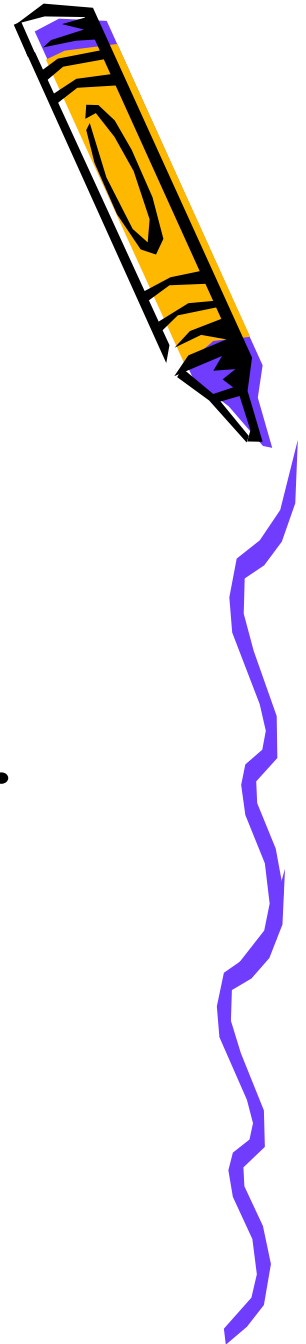
When to choose ???

- *Independent variables are inherently not manipulated.*
- *Ethical constraints on manipulation.*
- *Practical constraints on manipulation.*

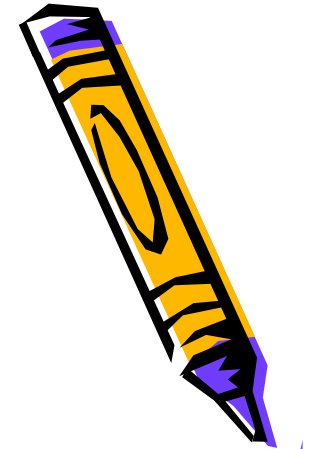


Types of Non-Experimental Research Designs

- Pure descriptive design.
- Correlational descriptive design.
- Other types.



Types of Non-Experimental Research Designs



Pure Descriptive

Correlational Descriptive

Retrospective

Prospective

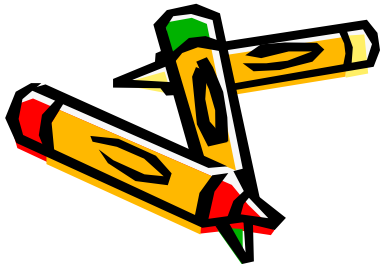
Others:

Surveys.

Needs Assessment

Historical Research

Case Studies.

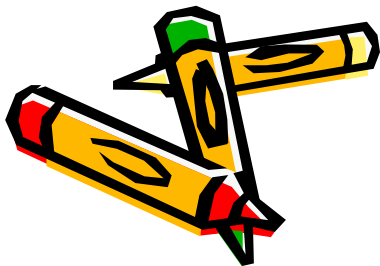


I. Pure descriptive design

Aims to ...

Obtain information about a current existing phenomenon of interest in terms of *frequency* of occurrence rather than to describe a relationship between variables.

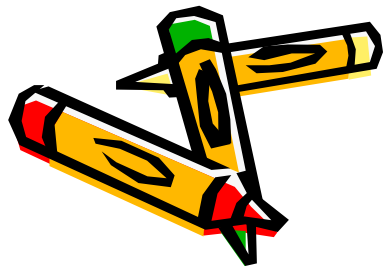
research proposition here
is always
a *Question.*



For example ...

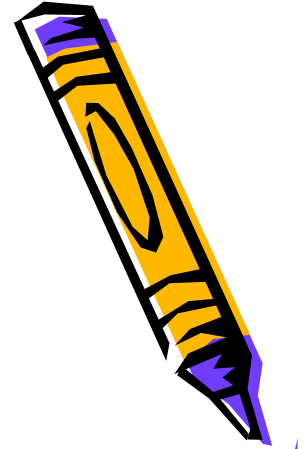
"Saudi women's experience of menopause"

In this study, the experience of menopause among Saudi women needs to be *described*.

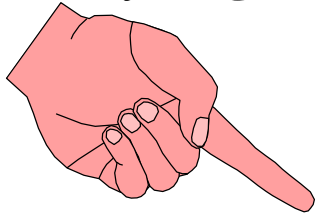


II. Correlational descriptive research design

Explores the interrelationship between variables of interest *without* any *active intervention or manipulation* of the *independent variable* by the researcher.

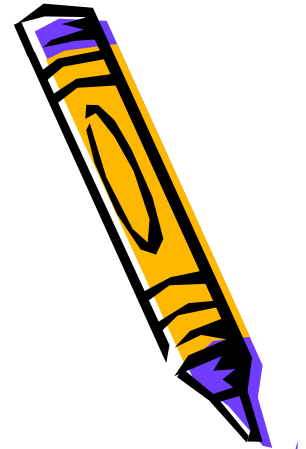


II. Correlational descriptive research design



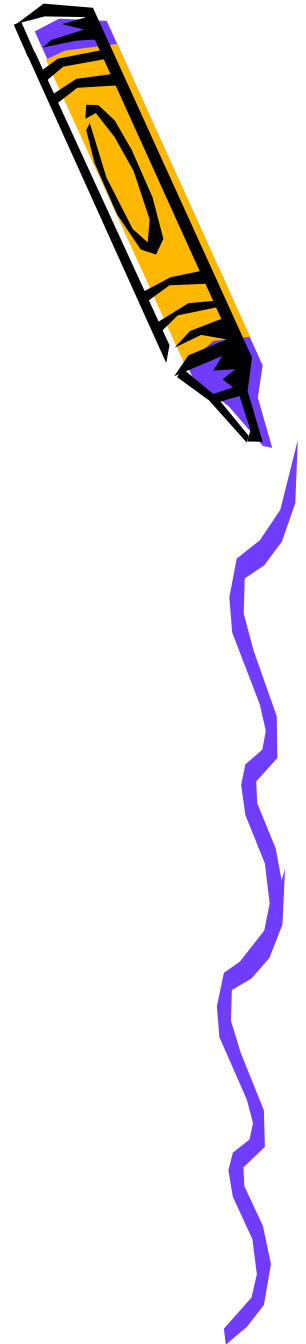
Characteristics

- Describes only *the existing relationship* without fully understanding or explaining the complex causal pathway that exists.
- it is a relationship that is *not causal* in nature.
- It is an *associative relationship*.

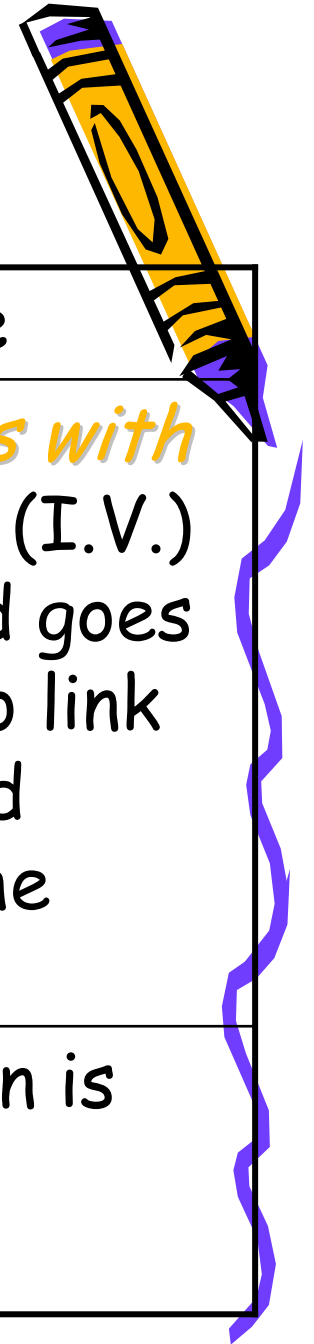


Types of correlational descriptive research design

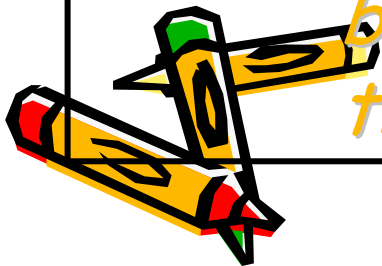
- *Retrospective* correlational descriptive research
- *Prospective* correlational descriptive research



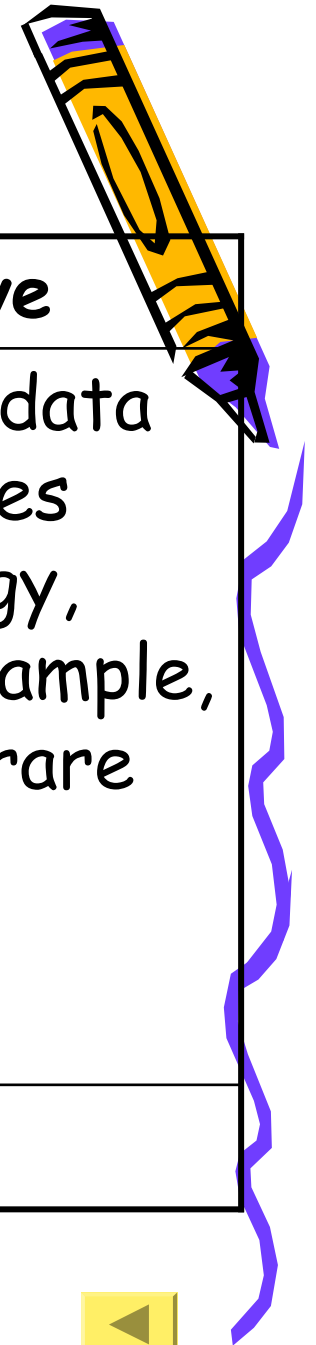
Retrospective Vs Prospective correlational descriptive research designs:



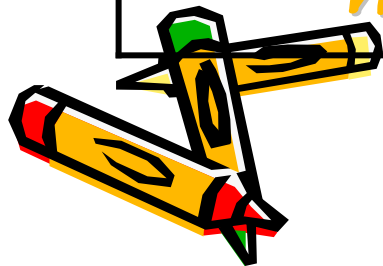
Retrospective	Prospective
Researcher <i>starts with a presumed effect</i> (D.V.) in the <i>present</i> and goes <i>back</i> in time to link it with a presumed cause in the <i>past</i> (I.V.).	Researcher <i>starts with a presumed cause</i> (I.V.) in the <i>present</i> and goes <i>forward</i> in time to link it with a presumed effect (D.V.) in the <i>future</i> .
Research direction is <i>backward, in time</i>	Research direction is <i>forward, in time</i> .



Retrospective Vs Prospective correlational descriptive research designs:



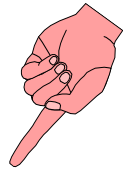
Retrospective	Prospective
<p><i>Easier</i>, data collected in a limited time by investigation of records or asking subjects about some previous information, behavior, or instances.</p>	<p><i>Difficult</i>, data collection; takes time and energy, needs larger sample, esp. if D.V. is rare such as malformation.</p>
<p><i>Weaker</i></p>	<p><i>Stronger</i></p>



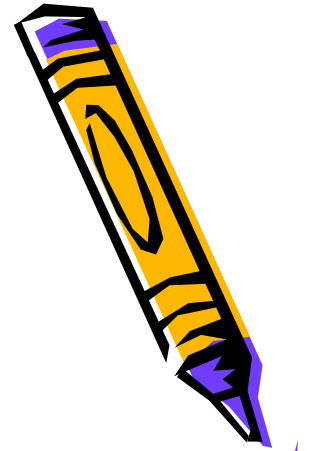
III. Other non-experimental research designs:

a. Surveys:

"Studies in which information is obtained from a population or sample of individuals by means of *self-report*".



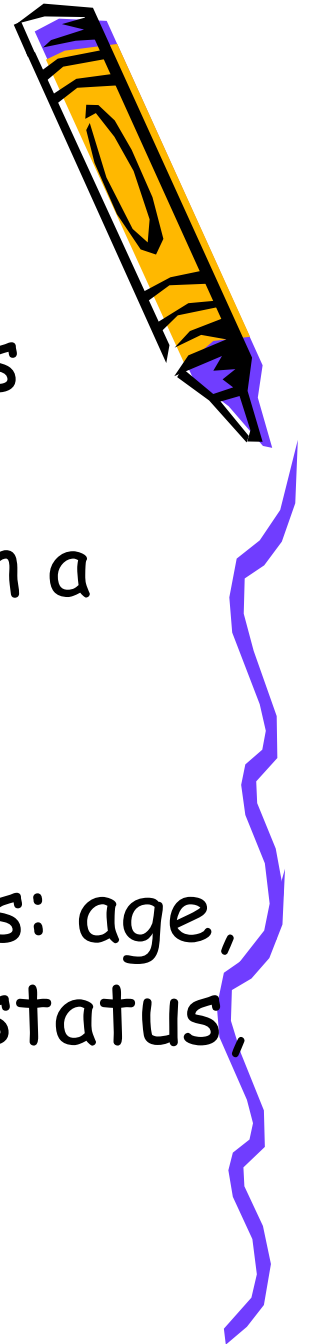
Self reporting means that the subjects responses to a series of questions posed by the researcher.



In Surveys:

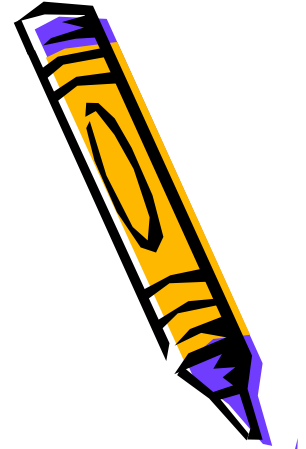
The content of survey researches is limited by the extent to which respondents are *willing to report* on a topic

Most surveys secure data about *demographic characteristics* such as: age, sex, education, occupation, marital status, income....etc



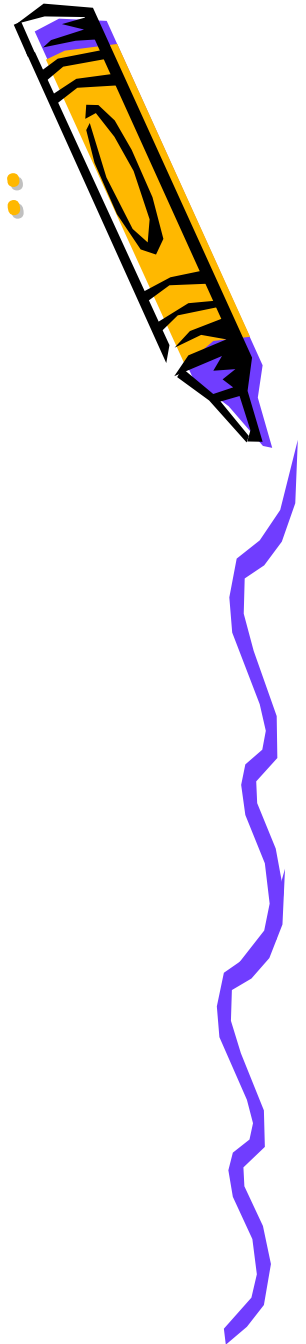
For example:

- "The sleeping patterns among X population".
- "The compliance in taking medication among".
- "Saudi's knowledge about X".
- "Saudi's attitudes about X".



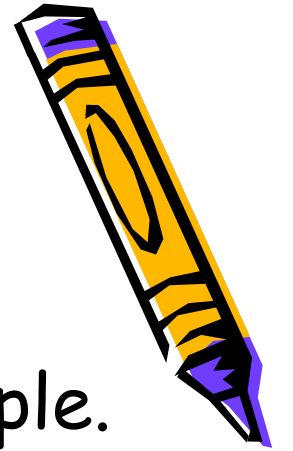
Data collection methods for surveys:

- *Personal interviews.*
- *Telephone interviews.*
- *Questionnaires.*



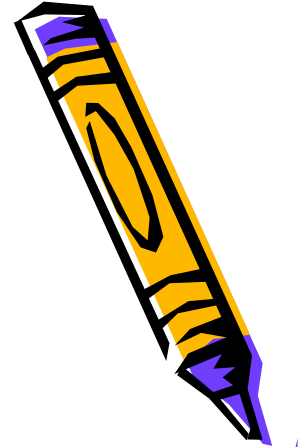
Advantages of surveys

- Applied to a population or a real big sample.
- Focus on a wide range of topics, i.e., too many variables.
- Data collected by surveys can be used for many purposes.
- In most cases, a lot of information is gathered with a relatively short period of time.



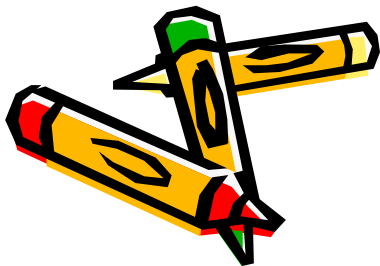
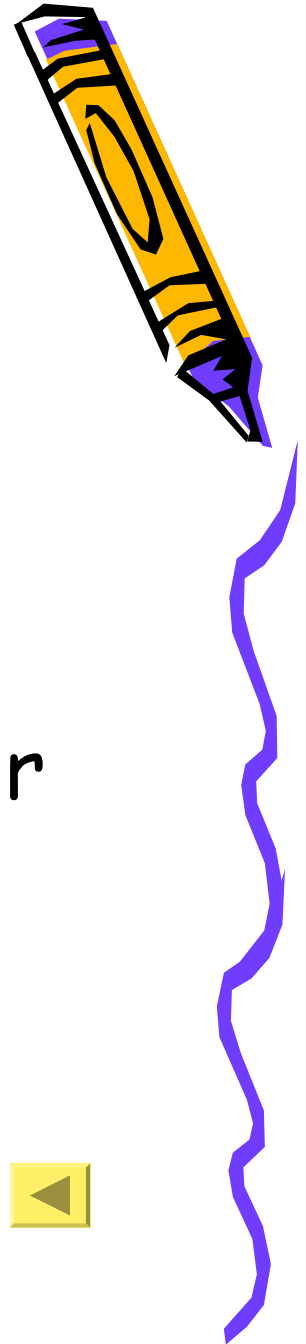
Disadvantages of surveys

- Collected data are relatively *superficial*.
- *No control* over independent variables.
- It reveals *no causal relationships*.
- It needs a *lot of time* for *analysis of data*.
- Sometimes needs a lot of *time* and *energy*.



*III. Other non-experimental
research designs:
b) Needs assessment:*

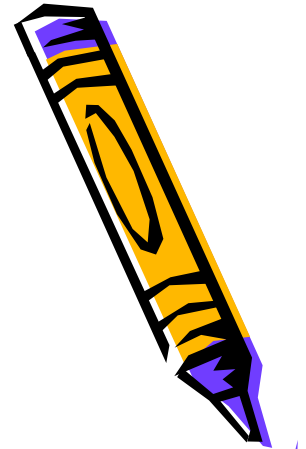
A study in which a researcher collects data for *estimating the needs* of a group, organization, or community.



III. Other non-experimental research designs:

c. Historical research:

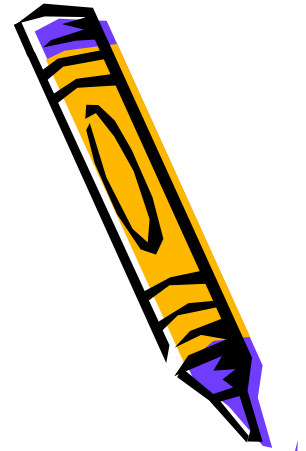
- Systematic collection and critical evaluation of data related to *past occurrences*.



III. Other non-experimental research designs:

c. Historical research:

- It answers *questions* or *hypothesis* regarding *trends, causes, or effects related to past events* that may shed light on present behaviors, practices or phenomenon.



III. Other non-experimental research designs:

c. Historical research:

- Data for such researches are found in written materials whether books, periodicals, journals, reports, newspapers, letters, meetings minutes, photos, films, tapes...etc..



III. Other non-experimental research designs:

d) Case studies:

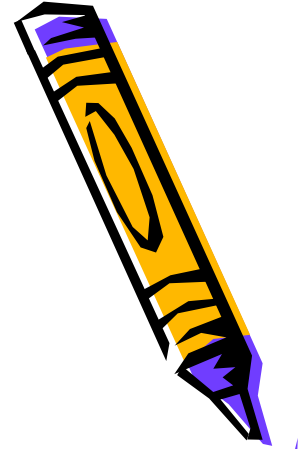
- An *in-depth investigation* of an individual, family, group, or any small social unit.
- It *investigates a current phenomenon within its real life context*, especially when the boundaries between the phenomena and its context are not clear.



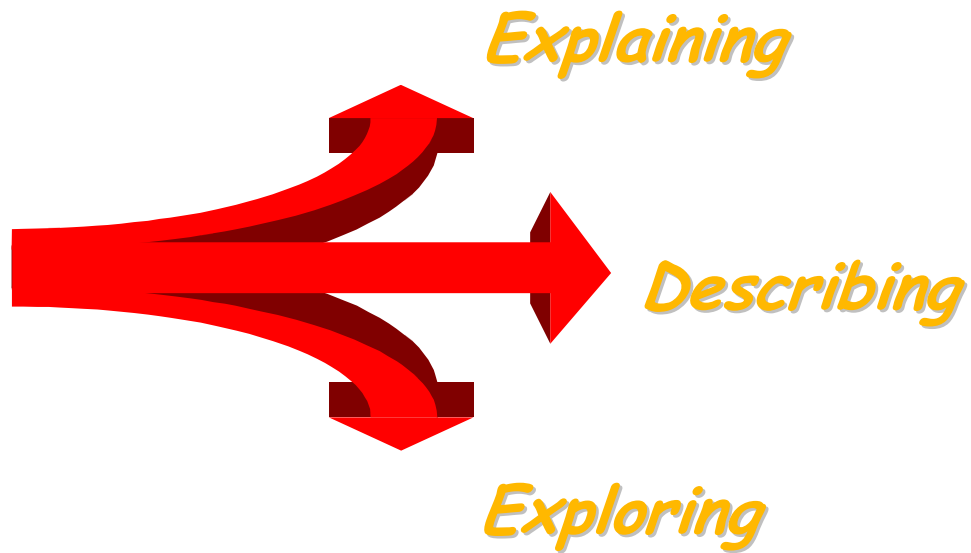
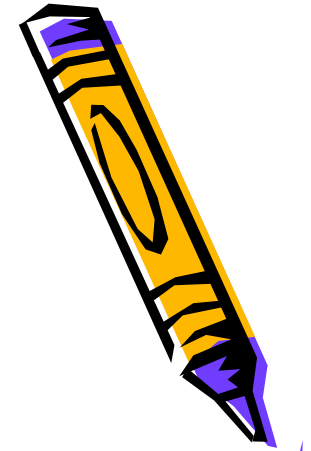
III. Other non-experimental research designs:

d) Case studies:

- Case studies address multiple variables that are *measured* at *several points* in *time*.



The *purpose* of case study may include:



relationships
between
phenomena.



data collection methods

One or more of the following techniques used to collect data:

- *Questionnaire.*
- *Statistical records.*
- *Observation. devices.*
- *Physical measurement.*
- *Psychological measurement.*
- *Reporting.*
- *Interview.*
- *Rating*



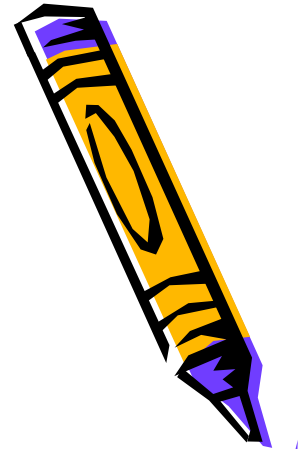
d) Case studies:

Advantages:

- Production of hypothesis to be tested in the future.

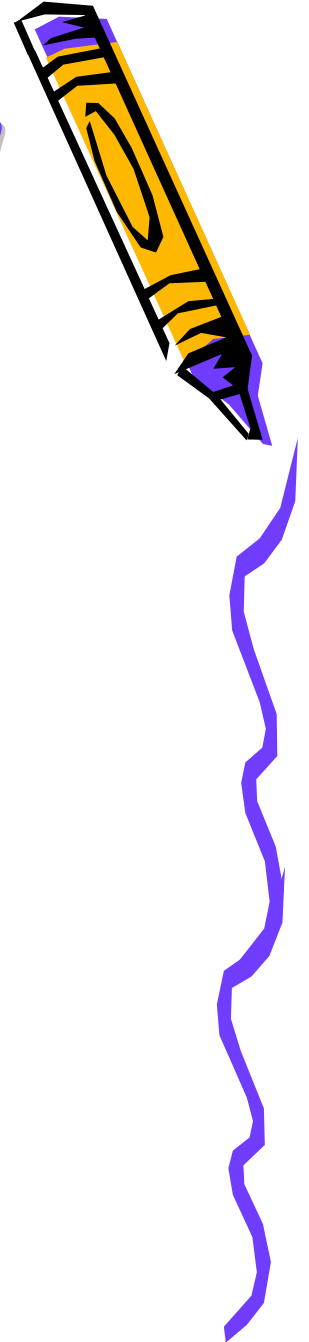
Disadvantages:

- Results can *never* be generalized.
- Have *no specific* research design.



Characteristics of a good research design:

- 1. Appropriateness to the research problem.*
- 2. Lack of bias.*
- 3. Control.*
- 4. Precision.*
- 5. Internal validity.*
- 6. External validity.*



ANY
QUESTIONS
???

DISCUSSIONS

