ANNAMALAI UNIVERSITY
DEPT OF COMMERCE

WELCOME PARTICIPANTS

A PRESENTATION BY

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PRE TEST & PILOT STUDY

– SOME DO'S & DON'TS

AN INTEGRATED APPROACH

- The Objectivity
- The Reliability
- The Validity
- The Verifiability
- The Dependability
- The Accuracy

ALL THE ABOVE ARE RELATED TO THE QUALITY OF DATA COLLECTED FOR THE RESEARCH UNDERTAKEN, BECAUSE THEY ENSURE THE COURSE OF RESEARCH PROCESS TOWARDS THE CULMINATION POINT OF SUCCESS
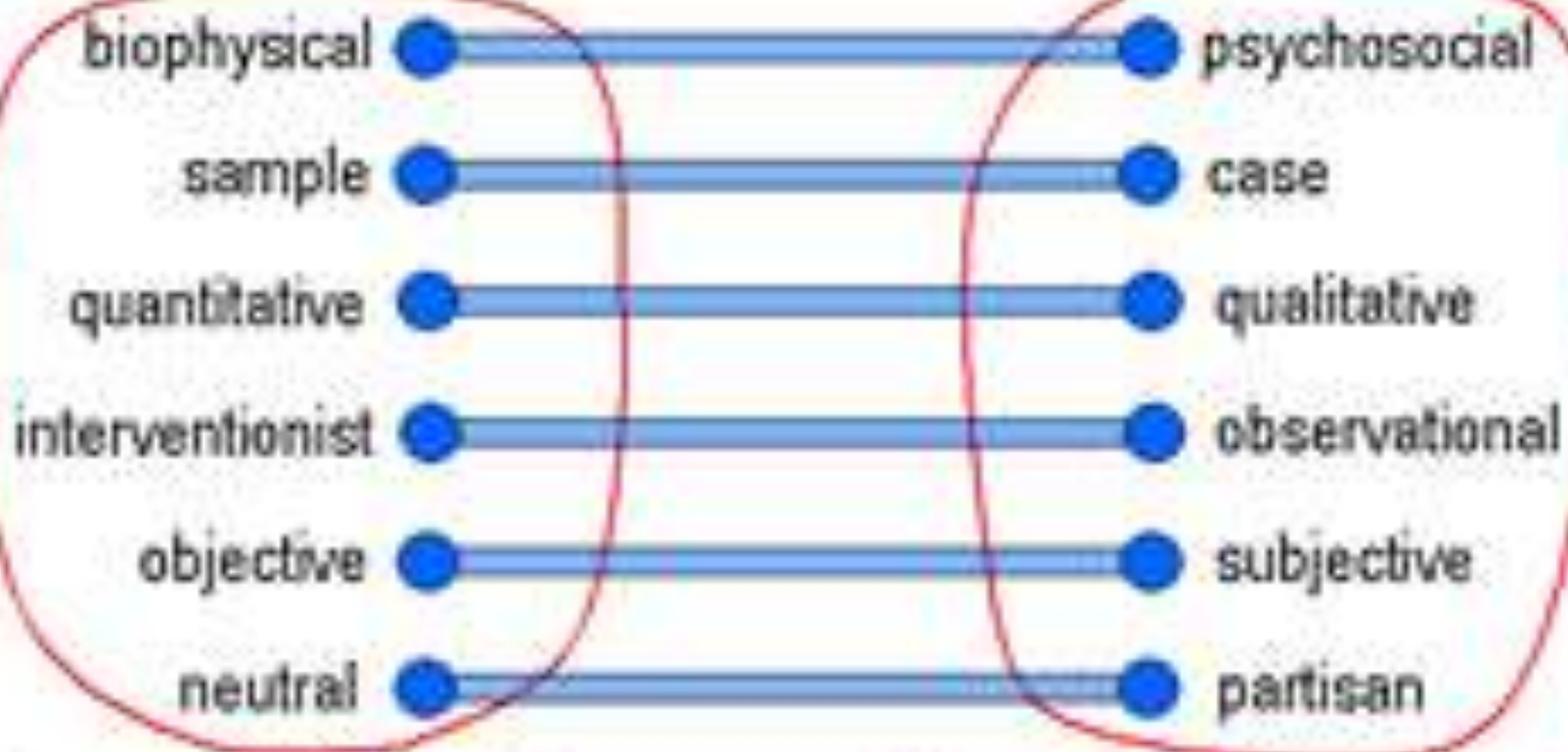
THE DILEMMA IN RESEARCH

- PLEASE DRAW YOUR FAVOURITE ITEM
- PASS A STATEMENT
- CONSTRUCT A GOVT. PROJECT

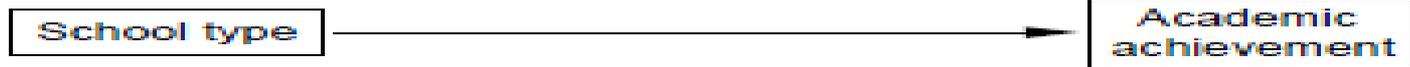# SOME EXCERCISES AND GAMES
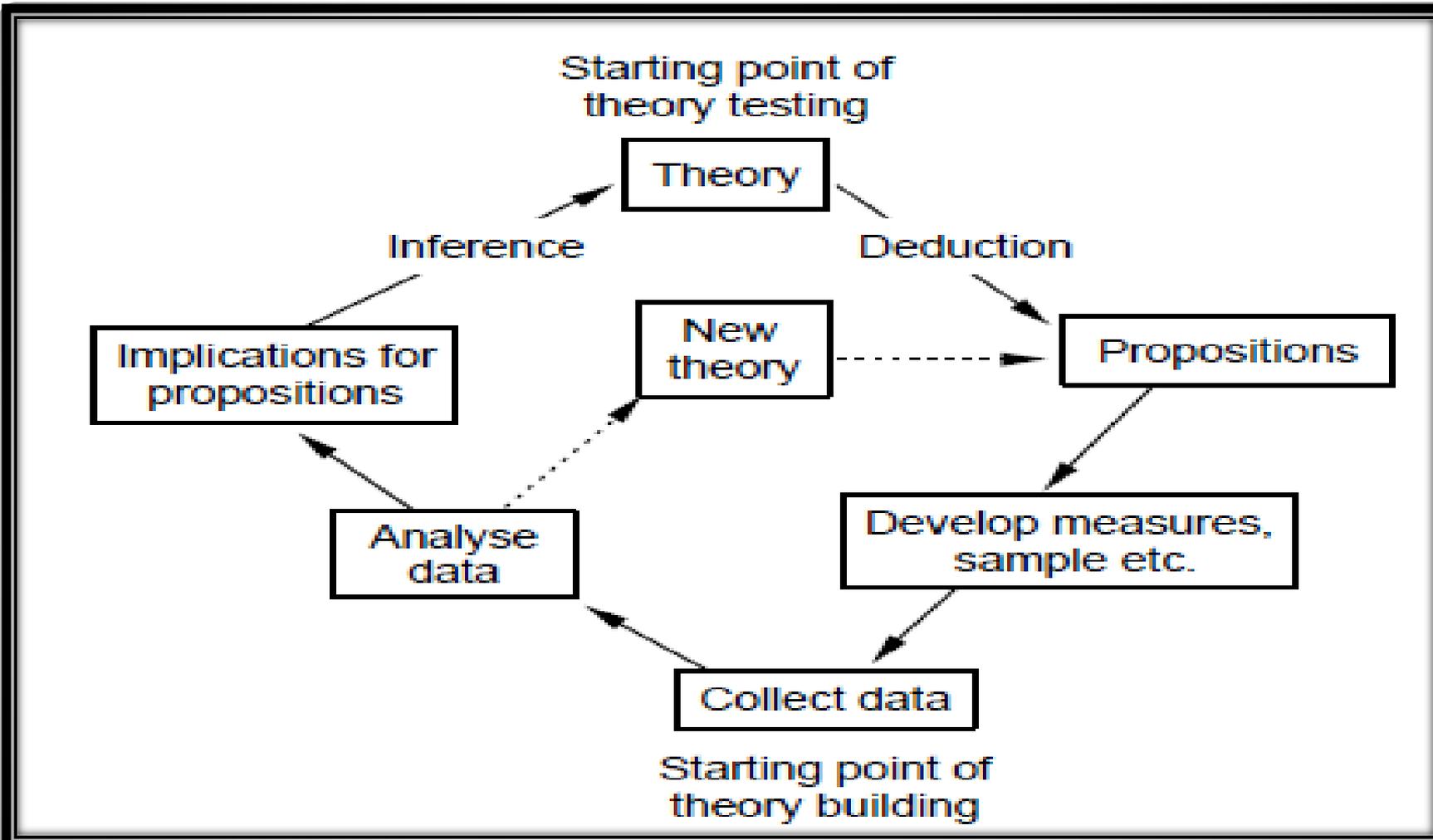
The Logic of Research Process

Dimensions of Research

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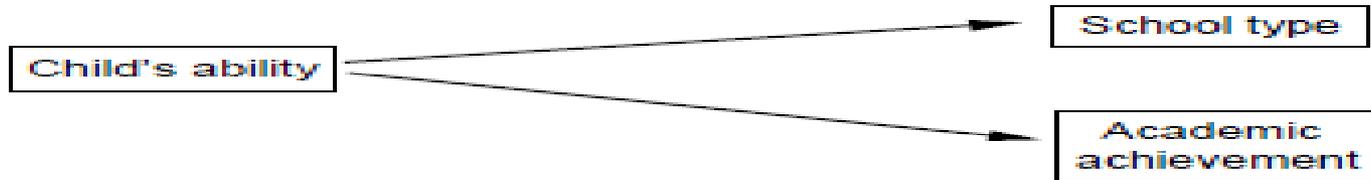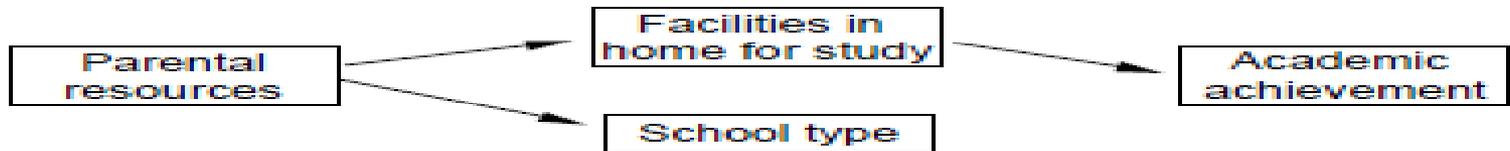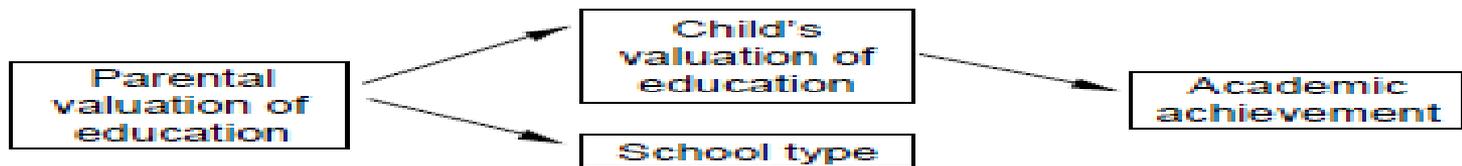
Casual and Non-casual Explanations of the Relationships

Three Types of Casual Relationships in Research

a) Direct causal relationship

Gender ──────────────────► Income level
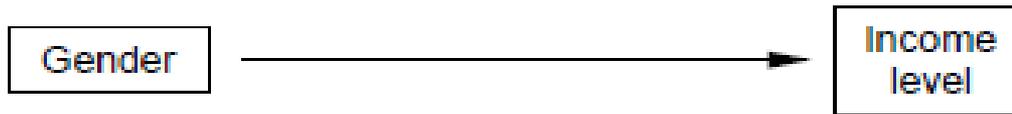
b) Indirect causal relationship: a causal chain

Gender ──► Field of training ──► Occupation ──► Promotion opportunities ──► Income level
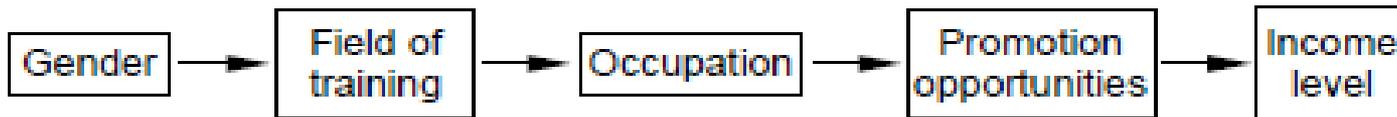
c) A more complex causal model of direct and indirect causal links
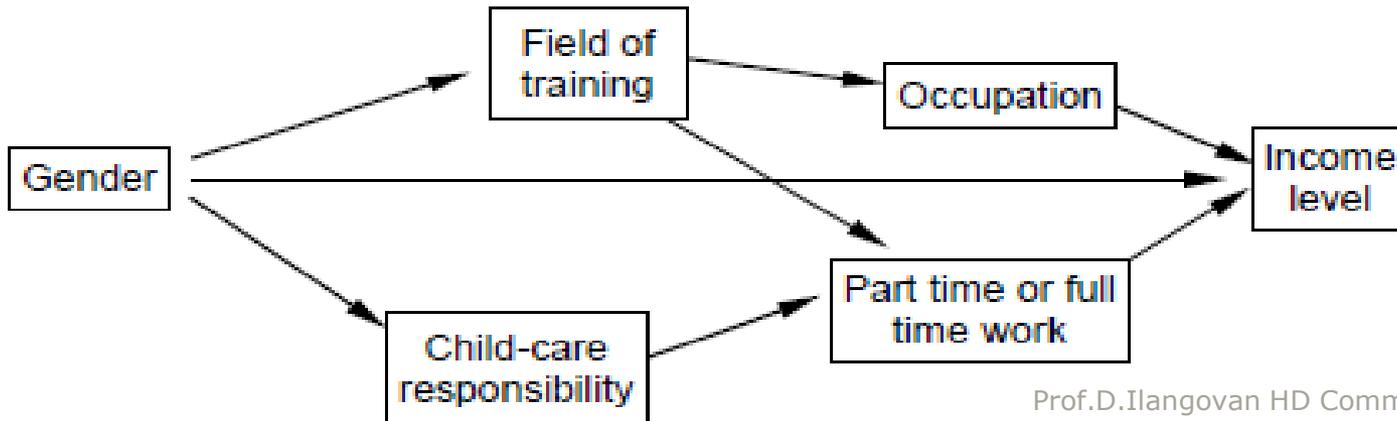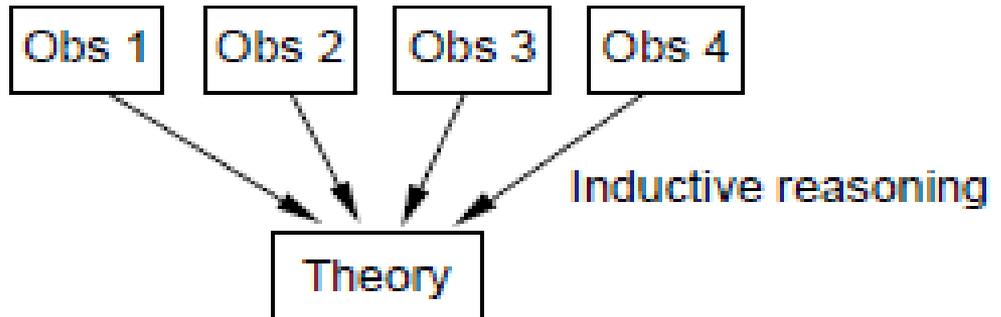
Gender ──► Field of training ──► Occupation ──► Income level
Gender ──────────────────► Income level
Gender ──► Child-care responsibility ──► Part time or full time work ──► Income level

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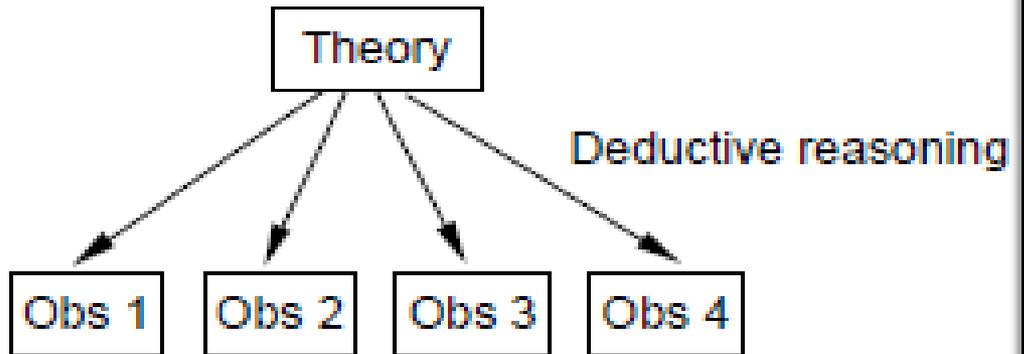
Theory Testing & Theory Building in Research

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FIGURE 1–7 A schematic representation of inductive reasoning

Theory

Tentative Hypothesis

Pattern

Observation

Inductive Reasoning

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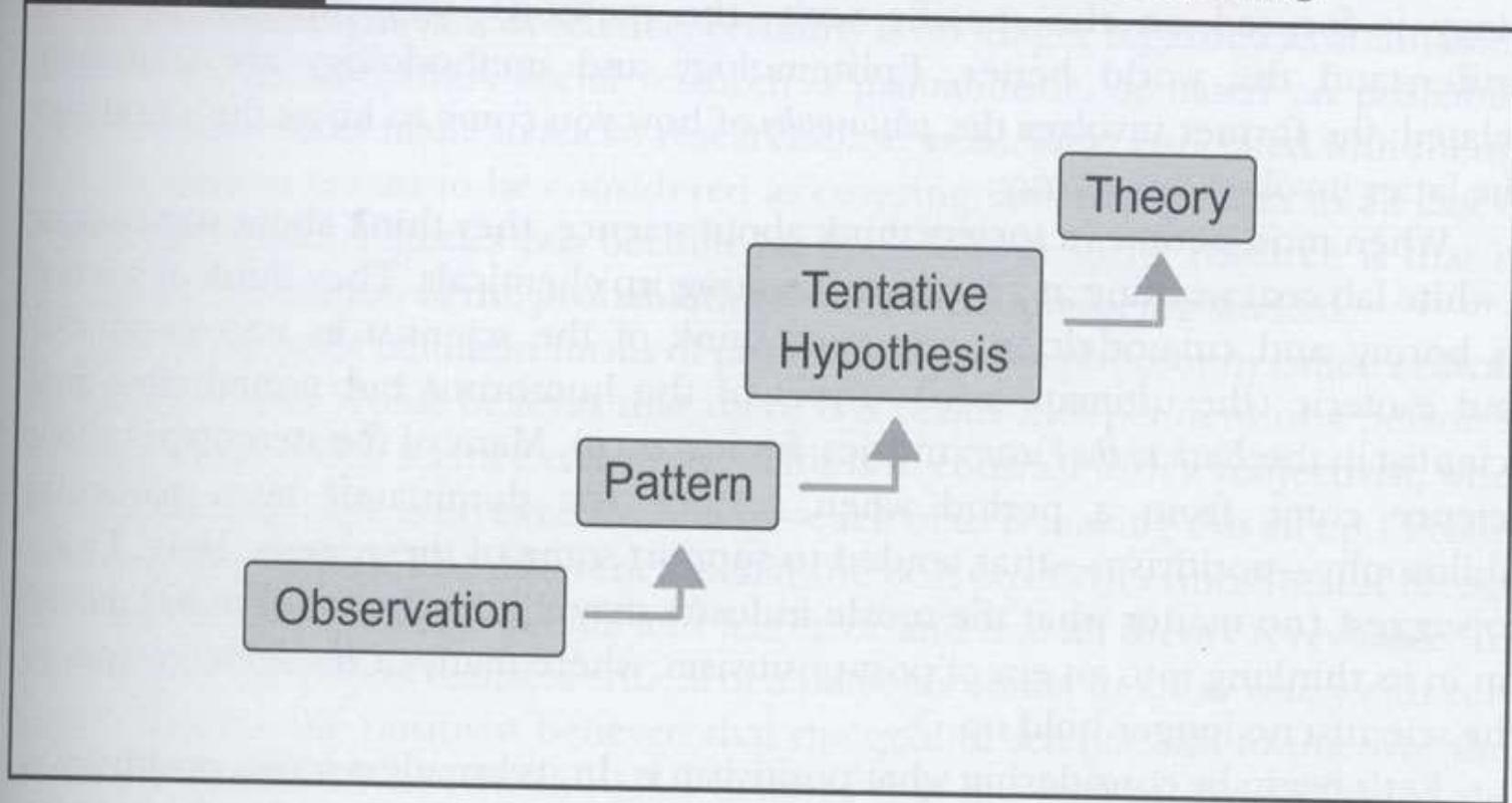
FIGURE 1–6 A schematic representation of deductive reasoning

Theory

Hypothesis

Observation

Confirmation

Deductive Reasoning

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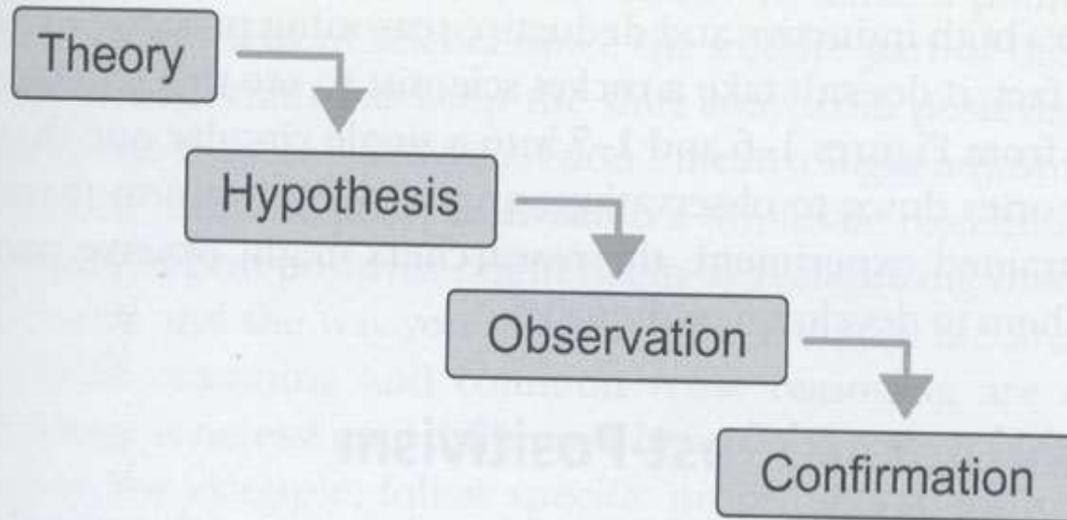
Relationship Between Research Design and Data Collection Method

Design type	Experiment	Case study	Longitudinal design	Cross-sectional design
Method of data collection	Questionnaire Interview (structured or loosely structured) Observation Analysis of documents Unobtrusive methods	Questionnaire Interview (structured or loosely structured) Observation Analysis of documents Unobtrusive methods	Questionnaire Interview (structured or loosely structured) Observation Analysis of documents Unobtrusive methods	Questionnaire Interview (structured or loosely structured) Observation Analysis of documents Unobtrusive methods

- Both Primary and Secondary Data are obviously important in social science research
- Sources of PD are normally collected by the researchers from the respondents themselves
- Sources of SD are the journals, newspapers, magazines, reports, monographs, web pages, etc
- More challenging one is the former and there need to be some basic tools for collection of PD

CONSTRUCTION OF RESEARCH TOOLS

I   Tests

II   Cumulative Record Cards

III Research Schedule

IV   Research Questionnaire

V   Pre-Test

VI   Pilot Study

VARIOUS TYPES OF/ TOOLS OF DATA COLLECTION

1) Achievement Test
2) Diagnostic Test
3) Intelligence Test
4) Aptitude Test
5) Attitude Test
6) Personality Test

TYPES OF TESTS
AS A RESEARCH TOOL

- Reliability
- Validity
- Objectivity
- Discrimination
- Comprehensiveness
- Usability

CHARACTERISTICS OF A GOOD TEST

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1. Very frequently used in social science research
2. Cumulative record provides the data essential for comparing the present with that of the past
3. The investigator can access relevant & ready made information from those cards anytime
4. In social sciences these cards are used to study the trend in any behaviour, prices, growth and so on.

CUMULATIVE RECORD CARDS

1. Index Card
2. Matter Card
3. Master Card

While the first one includes basic information about the source of information, the second one details about the actual information in condensed form and so the third one tells about the entire approach and segments of data collected and review of literature made.

Sample Cards for circulation among participants:

TYPES OF CUMULATIVE RECORD CARDS

- The most important tool for data collection in social science research
- It is similar to that of a mailed questionnaire
- Techniques of preparation of a schedule are the same with the mailed questionnaire
- Schedules are administered in person either by the researcher or by the designated enumerator
- Schedules are filled in not by the respondent but by the researcher/enumerator him/herself

RESEARCH SCHEDULE

- Questionnaire is a schedule to be filled up by an informant rather than by the researcher

- Questionnaire is an art and It should be cleverly constructed to elicit more reliable and authentic information

- The respondent must be able to understand the questions, purposely asked for in sequence

RESEARCH QUESTIONNAIRE / SCHEDULE

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- Covering Letter
- A descriptive title of the Research Study
- Purpose of the Study
- Name of the Sponsoring Agency/Institution
- Name & Address to which it is to be returned
- The Method of Filling it up
- A Guarantee for secrecy of the Respondent

DESIGN OF A QUESTIONNAIRE / SCHEDULE

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a. Clear expression of items
b. Use of right words wherever possible
c. Provision of reasonable basis for response selection
d. Avoidance of non –essential specificity
e. Avoidance of non- functional words
f. Avoid trivial questions
g. Suggested answers need to be as simple as possible
h. Applicability of the question to the current situation
i. Avoid asking opinion, unless it is unavoidable

j. Avoid question too suggestive or inviting elusive responses
k. Phrase questions academically to avoid any embarrassment
l. Avoid multiple responses having narrow difference between each other
m. Include as many as check-mark questions for quick and easy responses
n. Questions can avoid deep thinking on the part of respondents
o. Avoid the use of words which are susceptible to double meaning
p. Include questions for cross checking of answers to confirm earlier ones
q. Straight and simple ones are welcome

CONSTRUCTION TIPS FOR A QUESTIONNAIRE/SCHEDULE

- The Size [scope of survey, space for answers / comments, paper size, font size and sub-titles]
- Number of pages [fewer the pages, the higher will be the percentage of return – 4 pages]
- Lay out [No over crowding, neat print, orderly/ impressive first page, grouping the questions]
- Interviewer Instructions   [directions, guidance, examples, references, meaning and relevance]

PHYSICAL FORMAT OF A QUESTIONNAIRE/SCHEDULE

- Quality and Colour of the paper [to create a sense of commitment on the part of respondent
- Arrangement of the items of the questionnaire [to make the respondent feel comfortable]
- Covering letter[s] - to ensure authenticity
- Follow-up letter[s] – to ensure responsibility
- Tips for avoiding practical problems on either side [case by case approach through follow up]

Physical Format Cont…..d

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I. To enrich the design and orderly content
II. To ensure the validity and reliability
III. Pre-test would include lay-out, question sequence, word meaning, difficult questions, instructions, and branching under sub-titles
IV. Researcher should conduct the pre-test
V. Respondents need to be representatives
VI. Critical pre-test calls for heterogeneous target population and
VII. The pre-test would end at the Meaningful modification of the questionnaire

PRE-TESTING THE QUESTIONNAIRE/SCHEDULE

a. It is a small scale replica of the main study & a dress rehearsal and serves as a guide post
b. Requires adequate sample frame
c. Enables the researcher to acquire prior knowledge of sample units
d. Rough estimation of non-contacts & refusals possible
e. Suitable method of data collection could be determined
f. Scope for understanding the content of the questionnaire/schedule
g. It enables tests of efficiency
h. It provides training to the interviewers
i. It enables estimation of survey cost and duration

PILOT STUDY – WHAT & WHY?

1. Testing the Quality of mailing list

2. Checking the percentage of returns

3. Checking the effectiveness of data gathering process

4. Bias control advanced mechanism

5. Ensuring the reliability and validity

6. Ensuring the usefulness of data/ information collected

7. Minimizing the cost of enumeration

It is not wise to avoid pilot study as it ensures quality of the research done and serving as a guide within the range of a Research Supervisor.

CATEGORIES / PURPOSES OF PILOT STUDIES

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ESSENTIALS OF A PRE TEST AND PILOT STUDY [DO'S]

1. REMOVE YOUR OVER CONFIDENCE
2. ADD CAUTION TO VERIFY YOUR FAMILIARITY WITH THE SUBJECT MATTER
3. ENSURE PERSONAL CONTACT WITH THE SECTION OF TARGET AUDIENCE
4. TEST YOURSELF TO MATCH THE THEORY AND PRACTICE OF THE SUBJECT
5. PROVE THAT YOU ARE ON THE DOT

PREVENTION IS BETTER THAN CURE

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1. DON'T GO BEYOND YOUR SELECTED AREA OF YOUR STUDY
2. DON'T IGNORE YOUR APPROVED LIMITS OF THE TARGET AUDIENCE
3. DON'T DEVIATE RESPONDENTS FROM YOUR FOCUL POINT OF RESEARCH
4. DON'T INVITE NEW AUDIENCE ONCE YOU STARTED PRE TEST & PILOT STUDY
5. DON'T MODIFY THE TOOLS BEFORE COMPLETION OF BOTH THE PT & PS
6. DON'T CHANGE THE ORDER OF PT & PS

SOME DON'TS FOR REFERENCE

A RESEARCH PROBLEM WELL PUT IS HALF SOLVED –M.H.GOPAL

A PRE-TEST AND PILOT STUDY ORDERLY CONDUCTED IS THE PRELUDE FOR RELIABLE ANALYSIS & RESULTS – D.ILANGOVAN

THE WATCH WORDS

DEDICATED TO MY GURU
PROF.M.O.M. THANK YOU ALL

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DEPARTMENT OF COMMERCE
INNOVATIVE TEACHING METHODS

WELCOME PARTICIPANTS

INNOVATIVE TEACHING IN HIGHER EDUCATION

By

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Dimensions of Teaching Hr. Education

- It is Three Dimensional
- Teaching
- Research and
- Extension
- The depth of research and the end results of extension fully depend upon the 'quality' , 'efficacy', 'inspirational' and 'extent of reach' aspects of teaching
- A teacher is not merely a communicator, rather he is one who 'inspires' his/her wards
- Inspiration emerges from out of innovation

Continuous Improvements Need Innovation

■ It is imperative that in a globally competitive environment, to survive and grow, every organization should carry out continuous improvements in every aspect. This calls for the organizations to become creative and innovative. The organizations need to learn to manage and maximize the creativity of it's people.

■ Every teacher is an organization by himself/ herself and need to be innovative in their own way

Definition & Levels of Innovation

- Innovation (Syntropy) is a mental and emotional attitude which looks at all knowledge and experience in a new way.

- It helps to generate new ideas, to devise original processes, to invent unique products and services that serve the implied or expressed need of mankind.

- **Levels of Innovation are** Nuts & bolts type creativity, Invention, Discovery & Seminal

If you can dream it, you can do it!!

- **Leadership** is all about innovating, initiating, creating and envisioning. Walt Disney once said that if you can dream it, you can do it. Every teacher is a leader.
- **Innovation: A Whole Brain Model**
- **Left Brain Model**
- Analytical, Mathematical, Technical, Problem solving
- Controlled, Conservative, Planned, Organized, Administrative
- **Right Brain Model**
- Imaginative, Synthesizing, Artistic, Holistic, Conceptual
- Interpersonal, Emotional, Musical, Spiritual

The Secret to Innovation

- Once you have got your challenge, you will find it remarkably easy to generate ideas that solve it. But before you start brainstorming, there are a couple of things you should bear in mind..

- Generate ideas first. Nothing more. Only after you have finished generating ideas should you even think about reviewing them and decide which one(s) to implement.

- When generating ideas, whether alone or in a group, prohibit any criticism whatsoever. Moreover, it is essential that you make note of every idea no matter how silly, daft or impossible it may seem. The silliest ideas are sometimes the most creative and often highly inspirational.

- Do not stop at the first idea that comes to mind. The first good idea that comes to mind is seldom the most creative - largely because it is almost always the most obvious. Better to generate lots of ideas and then decide which ideas to choose.

- Thus the secret to generating great ideas is to start with a great challenge. Then generate, generate, generate ideas.

What is Teacher Leadership?

- A number of research studies have identified the characteristics of teacher leaders, including the following:

- Collaboration with peers, parents, and communities that engages   them in dialogues of open inquiry.

- Risk taking and participation in decision making.

- Demonstrated expertise in instruction and the willingness to share that knowledge with other professionals, engage in continuous action research, and consistently participate in a professional learning curve.

- Social consciousness and political activity (Wynne, 2001).

- Frequent reflection on their work and staying on the cutting edge of what's best for their students.

Innovation and the Learning Process

- **Step I   : Look**
- **Step II : See what you look at**
- **Step III : Understand what you see**
- **Step IV: Learn from what you understood**
- **Step V : Act on what you learn**

Process of Innovative Teaching

- **P = Perception and understanding of the problem**
- **I = Information transferal relevant to the problem**
- **C= Comprehension of the information**
- **C= Conviction to propose solutions and actions**
- **A= Application of the solution and actions**
- **Remember the abbreviation** 'PICCA'

Stages in Innovative Teaching in Hr. Education

- I   Getting Connected
- II Sharing the wealth – Wealth of knowledge
- III Making it Happen
- IV Replace unhealthy habits with healthy ones
- V Celebrating the Success

Innovation Process of Teaching & Learning in Hr. Education

Learning Process in Hr. Education.	Higher Education Standards and Requirements	Covey's Habits in Hr. Education	Frank's Creative Process of Hr. Education
Look	Perception	Knowledge	Forage
See	Information	Skills	Reflect
Understand	Comprehension	Desire	Adopt
Learn	Conviction		Nurture
Act	Application		Knuckle Down

Blocks to Innovation

- 1. Perceptual Blocks
- 2. Intellectual Blocks
- 3. Emotional Blocks
- 4. Cultural Blocks
- 5. Environmental Blocks

Qualities of a Innovative Teacher in Hr. Education

- Challenge the status-quo
- Confront assumptions
- Exhibit curiosity
- Like to investigate new possibilities
- Tend to take initiative in most matters
- Are highly imaginative
- Are future oriented
- Tend to think visually
- See possibilities within the seemingly impossible

Qualities ………. Cont…d.

- **Are not afraid of taking risks**
- **Are prepared to make mistakes**
- **Are adaptable to different work environments**
- **Are adaptable to changing circumstances**
- **See relationships between seemingly disconnected elements**
- **Distill unusual ideas down to their underlying principles**
- **Synthesize diverse elements**
- **Are able to spot underlying patterns in events**
- **Are able to cope up with paradoxes**
- **Look beyond the first "right idea"**

THANK YOU ALL