Research Problems

TMSL

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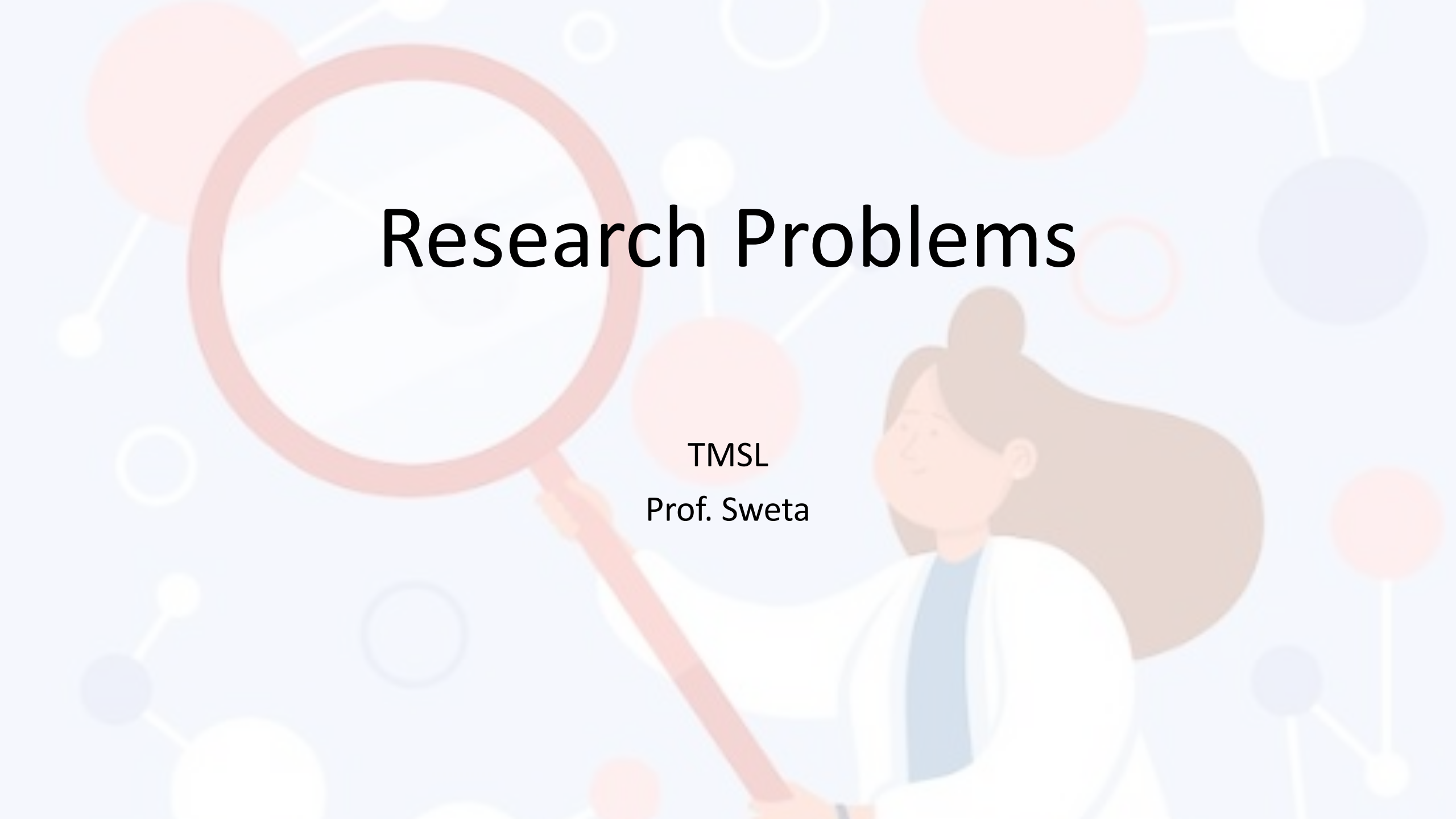

Research Problem Identification

- A simplistic view of the research process is one that has four stages, namely-

1) Problem identification and definition
2) Research design
3) Data collection
4) Analysis of data for problem solution

- Some of the more common modes of management research problem identification and definition:

1. A manager uses the services of a management scientist or consultant for solving an organizational problem. The manager poses the problem in terms of difficulties felt and symptomatically presents the issues. The researcher, during the interactive dialogue digs out the research problem from the practical one stated by the manager.

2. An experienced management researcher has a deep understanding of the ongoing research work of other researchers and cognitively identifies a potential research problem and works on it.

3. A research scholar is initiated into research. He acquires knowledge in a broad area of interest and makes a systematic study of research literature. With the guidance of his supervisor, he selects a problem area after narrowing down various possibilities and arrives at the broad structure of the problem. He may consciously adopt a two-step process in research problem definitions using a pilot study

Generating research problem definition

- Depending upon whether the type of research involves hypothesis testing of a statistical relationship or a mathematical model building, the research problem definition may follow two patterns:

(i) Generation of hypotheses

(ii) Formulation of the problem

i) Generation of Hypothesis

- Usually tentative propositions or declarative statements regarding the description or relations are first generated, which are later converted into hypotheses.
- Hypotheses are built on the basis of theoretical work that has already been done.
- Examples of such work are the existence of a research gap, an unanswered research question, or an unsolved research problem.
- Hypothesis generation will be facilitated by broad knowledge of the area and good knowledge of research techniques.

- **A list of variables generally used in hypothesis generation is given below:**

1. Independent variable (resultant variable): A variable that influences the dependent variable.
2. Dependent variable (criterion variable): The effect in an experiment
3. Extraneous variable (non-observable): Independent variable other than the one manipulated in an experiment, (independent variables that are not related to the purpose of the study), which affects the result. Unless controlled, they become sources of errors.
4. Moderating variable: Values that are not variable, which directly influence the dependent variable but modify or moderate the influence on one or more independent variables on the dependent variables.
5. Mediating variable: Values that affect the relationship between independent and dependent variable but is not causal with respect to dependent variables.
6. Discrete variable: Values that the variable can take are non-continuous (for example, integer variable).
7. Continuous variable: Values that the variable can take are continuous.
8. Dummy variable: Used in algebraic manipulations, but is a variable in a technical sense only.