Traditional Model of Science

![Diagram showing the traditional model of science with steps: Ideas/interests, Theoretical understandings, Hypotheses, Test using data.]

Traditional model of science: Definitions

- **Theory**: proposition to explain social regularity
- **Hypothesis**: expectation derived from theory
- **Method**: translate into testable hypotheses
- **Deduction**: using theory to derive hypotheses
- **Problems?**
- **Induction**: reformulating theory
How Science Really Works:
Definitions

- **Theory**: proposition or set of propositions
- **Hypothesis**: formal statement (express direction)
- **Conceptualization**: how to measure
- **Operationalization**: exact measurement
- **Empirical data collection/Data analysis**
- **Empirical generalization**
- **Reformulating theory**: feedback
Empirical example

Sex  \rightarrow  Political Attitudes

1=Male
2=Female

1=?
2=?
etc.