



University at Buffalo
The State University of New York

Scientific Methods in Psychology

PSY101 Introduction to Psychology
Spring 2014
SUNY at Buffalo

The Process of Research

- *Step 1: Initial observation or question*
 - Novel (new) idea
 - Original perspective
 - May stem from direct observation or from interest in phenomena with questions that remain open

The Process of Research

- *Step 1: Initial observation or question [cont'd]*
 - A *theory* is an organized set of concepts that explains a phenomenon
 - helps to frame questions being asked
 - often comprise claims about causal forces

The Process of Research

- *Step 1: Initial observation or question [cont'd]*
 - Idea that all events - physical, behavioral, and mental- are determined by specific causal factors that are potentially knowable is determinism
 - most theories assume determinism
 - we seek to answer questions, because we believe they may be a knowable answer

The Process of Research

- *Step 2: Form a hypothesis*
 - A *hypothesis* is tentative and testable statement about the relationship between factors and outcomes

(ex: if students do not attend class, then they will perform worse than students who do attend class.)
 - Research - providing empirical evidence- is necessary to verify the link between factors and outcomes proposed in the hypothesis

The Process of Research

- *Step 3: Design the study*
 - To test hypotheses, execute scientific method
 - Once data has been collected...