THEORIES AND GROUP RESEARCH DESIGNS

WEEK 7 SLIDES – SCWK 240

10/3/12

What is Theory?

A systematic set of interrelated statements intended to explain some aspect of social life or enrich our sense of how people conduct and find meaning in their lives

A "theory is what explains why an intervention causes an outcome" (Sherraden, 2000)

Why is Theory Important?

- For both practice and research, theory helps us make sense of and see patterns in diverse observations
- Theory helps direct our inquiry

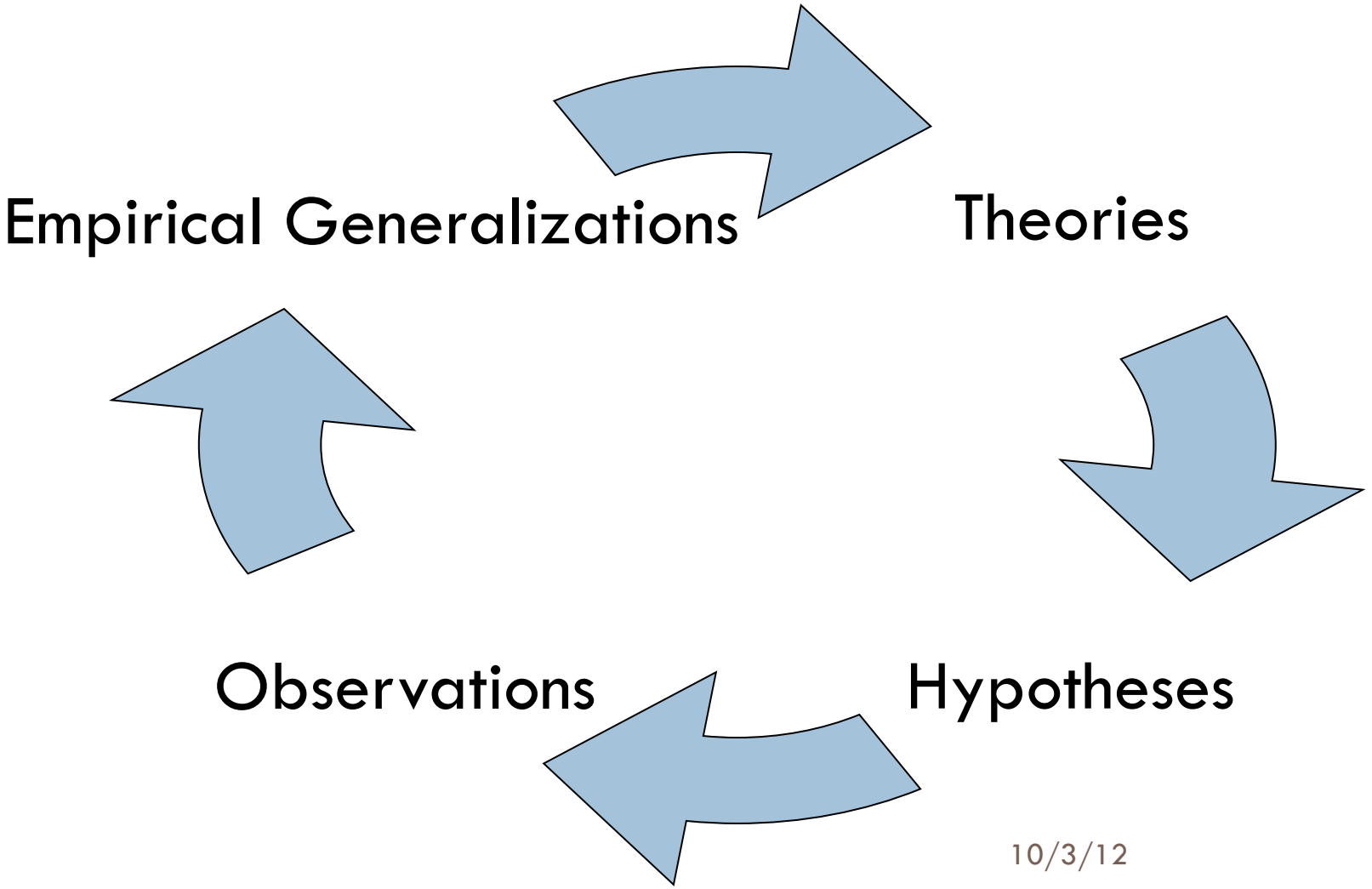
Theory and Practice

- Social work practice based on various theories of human development, human change, social change, community development, organizational change, families, etc.
- Without theory, we would not know why certain therapies/interventions worked, nor what to try.

Theory and Research

- Theory that guides practice guides the research about that practice
- Research is a systematic way of testing the theoretical basis of an intervention or a relationship between variables
- Hypotheses predict what will be observed if the theory is correct
- When observations are consistent with what theory predicts = Empirical support

Relationship of Theories to Research Designs



Common Theories in Social Welfare

- **Human development:** Piaget's stage theory, Bandura's social learning theory, Kohlberg's theory of moral reasoning
- **Human behavior:** conflict theory, theories of empowerment, social construction, attachment theory, systems theory, social network theory
- **Macro theory:** theories of community change, social disorganization theory

Three Criteria for Inferring Causality

1. **Cause precedes the effect in time**
2. **Two variables must be empirically correlated with one another**
3. **The observed empirical relationship cannot be explained away by a third variable that influences the dependent or independent variable (or both)**

Key Terms

- **Random Assignment**: is a method of assigning cases to one group or another, based solely on selection procedures that involve chance and therefore are free from human biases.
- **Treatment or Independent Variable**: the stimulus, manipulation or intervention that the researcher creates or delivers to one set of participants or clients.
- The **Control Group** are those who do not receive the treatment or independent variable under study.

Key Terms (Continued)

- **Dependent Variable** is the outcome or condition that may change as a result of being subjected to or exposed to the treatment or an independent variable.
- **Pretest** is the measurement of the dependent variable prior to treatment or intervention.
- An **Experimental Group** are those who receive the treatment or are exposed to the independent variable under study.

Pre-Experimental, Experimental, and Quasi-Experimental Designs

Notations:

X = introduction of stimulus, intervention, or treatment

O = observation/measurement

Pre- Experimental Designs

One shot case study:

X O

One group pretest-posttest design:

O X O

True Experimental Designs

Essential components

1) Random assignment
   (**Random selection*)
2) Experimental group and control group
3) Compare changes between the groups

Experimental Research

- Usually associated with the natural sciences
- Gold Standard
  - establishment of cause and effect.
- Difficult to conduct with social work research.
  - Difficult to manipulate the variables of interest e.g. socio-economic group.
  - Ethical issues usually prevent application is social work.

Experimental Research

- Classic experimental design
  - Randomly allocate subject to either an experimental or control group
  - Pre-test both
  - Experiment performed on the experimental group
  - Post-test on both

Experimental Designs

Pretest-posttest control group design

(Classic experimental design)

R O X O

R O O

Posttest only control group design

R X O

R O

Quasi-Experimental Research

- Similar to experiments but without random assignment to the groups. Intact groups used.
- Lack of internal validity – how can we be sure that *x* caused *y* if there was some engineering of the groups?
- Two main types:
    1. non-equivalent control group
    2. time series designs

Quasi-Experimental Designs

Non-equivalent comparison group design

O X O

O O

Time-series design

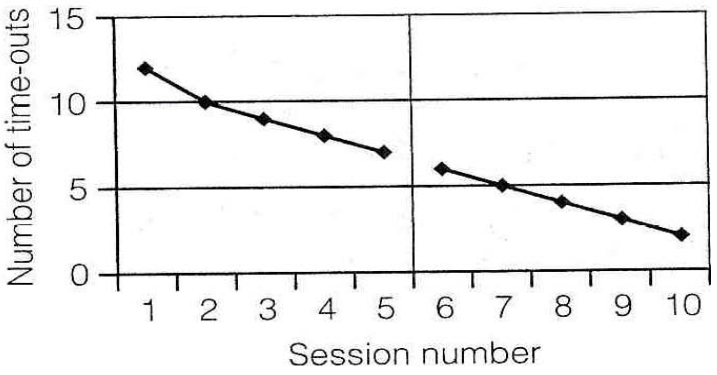
O O O O O X O O O O O

Time Series Analyses

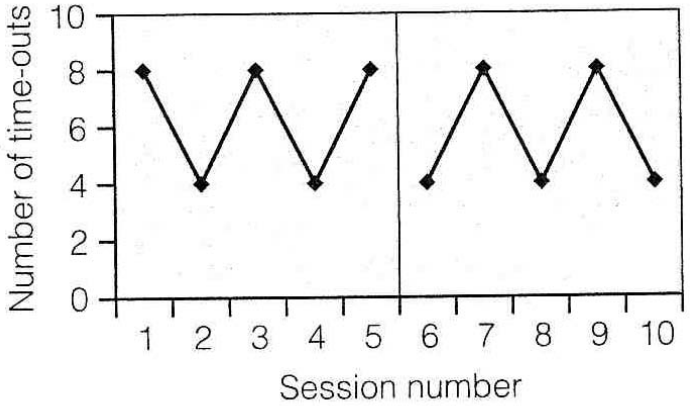
- **Useful when you cannot randomize participants and where it is possible to obtain a series of assessments of the dependent variable at pre-treatment and post-treatment.**
- **With Single Participants:**
  - **Does the treatment produce the same effect each time?**
  - **Are treatment effects cumulative, or does the participant return to baseline?**
  - **Does the participant's response become less variable over treatment times?**

Times-Series Design Patterns

Pattern 1



Pattern 2



Pattern 3