

Chapter 1: Developmental Research Methods

Why are some children more popular than others?

- I. Naturalistic Observation
 - A. Advantages
 1. Natural
 2. Provides clues for future research
 - B. Disadvantages
 1. May never observe important behaviors
 2. Does not explain underlying causes
 3. May be influenced by observer's biases
 4. Being observed may effect children's behavior
- II. Ethnographic Observation
 - A. Observer immerses self as active participant in the group
 1. Studying effectiveness of community intervention
 2. Advantage: very rich understanding of group
 3. Disadvantage: Easy to become biased
- III. Structured Observations
 - A. Advantages
 1. Better control over situation
 2. More limited set of behaviors to observe
 - B. Disadvantages
 1. May never observe important behaviors
 2. Does not explain underlying causes
- IV. Interviews
 - A. Advantages
 1. Allows insights about what participants are thinking about
 2. Quick method to gather a lot of information
 3. Like observation, gives initial insights
 - B. Disadvantages
 1. Participants may not report accurate information
 2. Limited generalization
 3. Limited causation
- V. Design: Correlation Studies
 - A. Allows you to determine whether there is a relationship among variables of interest
 1. Physical attractiveness related to popularity in children
 - B. Correlation Coefficient
 1. GPA and SAT score...are they related?
 2. Correlation statistic is a way to find out
 3. Indicates direction of relationship (+ or -).... $r = +.37$
 4. Indicates strength of relationship (0 to 1)
 - C. Direction of Relationship
 1. + positive: Both scores go up or both scores go down
 2. - negative: One score goes up while the other goes down
 - D. Strength of Relationship

1. Goes from 0 to 1
 2. 1 = the variables are completely related to each other. If you know the score of one variable you can calculate the other
 3. 0 = There is no relationship
- E. Correlation does NOT mean causation, just how they relate
1. About +.4 correlation between popularity of children's names and popularity rating by other children
 2. About +.4 correlation between children's attractiveness and their popularity
- F. How Correlations used in Developmental Psych?
1. Used to understand the stability of behaviors over time
- G. Correlation Studies
1. Advantages:
 - a) Allows discovery of what variables are related to each other
 - b) Useful for understanding relative stability of behaviors over time
 2. Disadvantages:
 - a) Correlation does not imply causation
- H. How do we Interpret Correlations?
1. Square the correlation (r) it explains how much of the total variance of one variable is explained or accounted for by the other variable
- VI. Formal Experiments
- A. Advantages
1. Scientific control and rigor
 2. Allows for influence of casualty
- B. Disadvantages
1. Setting may be unnatural and artificial
 2. May not adequately duplicate the complexity of the world
- C. Marshmallow Study
1. How much can kids resist temptation....Hilarious!!!
 2. Manipulate independent and measure the dependent
- VII. Designs for Examining Development
- A. Cross-Sectional Designs
1. Different ages are compared at one time
 2. Advantages:
 - a) Efficient way to compare behaviors at different ages
 - b) Primary tool
 3. Disadvantages:
 - a) Does NOT allow for study of stability or individual differences
 - b) Can be contaminated by cohort effects (due to the participants having been born during different cultural times)
- B. Longitudinal Designs
1. Same children compared over a period of time
 2. Advantages:
 - a) Allows for study of change over time
 - b) Gives insights about individual differences
 3. Disadvantages
 - a) Are costly and time consuming

- b) May have biases due to drop-out rates
 - c) May have biases due to repetitive testing
- C. Microgenetic Designs
 - 1. Same children are compared over a short period of time
- D. Sequential Design
 - 1. Different ages are compared over different periods of time
- VIII. Concerns unique to Developmental Studies
 - A. Language limitations
 - B. Lack of familiarity with tasks
 - C. Response biases (Yes and no questions...usually its yes)
 - D. Limited attention spans
 - E. Behavioral issues such as lack of cooperation
 - F. Ethical Issues and limitations