2. Research Strategies and Methodology
Research: Why?

- Developmental psychologists test theories
- Study behavior or trait that changes over time
- When does it change?
- How does it change?
2.1 Experimental
2.2 Correlational
2.3 Observational
2.4 Cross-Sectional
2.5 Longitudinal
2.6 Cross Sequential
2.7 Case Study
2.1 Experimental
Experimental design

- Study cause/effect
- Samples of population
- Experimental/control groups if needed
- Independent variable: what gets manipulated
- Dependent variable: what gets measured for change
Experimental example

• Cause-effect of praise on 10-year olds’ helpfulness

• Independent variable: amount of praise given to each child

• Dependent variable: measure of helpfulness after 3 days
2.2 Correlational
Correlation

• Relationship between 2 things or events

• Example: compare effects of heredity & environment on trait using mono- and dizygotic twins

• Look for variation in both kinds of twins
Correlation

• Result: variation in both kinds of twins

→ Trait affected by both environment/heredity
Correlation

• Statistics of correlation
• +1 perfect positive correlation
• 0 no correlation
• -1 perfect negative correlation
2.3 Observational
Observational study

- Note behaviors or traits in a group
- Group might be sample of larger population
- Example: studying verbal behavior of children playing unsupervised
2.4 Cross-Sectional
Cross-sectional study

• “Snapshot”
• Collect data on group at one point in time
• Example: ask group of teens opinions on curfew
2.5 Longitudinal
Longitudinal study

• Study cohort (same-age group) through time

• Example: interview group born in 2010 at one-year intervals, noting changes in attitudes toward opposite sex
2.6 Cross Sequential
Cross-sequential

- Combining longitudinal and cross-sectional

- Example: interview cohorts born in 1990, 2000, and 2010 at intervals of 5 years

- Study many years of life in shorter time than with just one cohort
2.7 Case Study
Case study

• Observe one individual or group

• Subject has unusual traits or in unusual circumstance

• Example: study refugee child’s school adaptation

• Reported as narrative with analysis, supported by theory