Research Methods

- Types of research
- Developmental research designs
- Ethics

Types of Research

- Descriptive
- Correlational
- Experimental

Descriptive Research

Example:

How do adolescents spend their time?
People with whom adolescents spend their time (Csikszentmihalyi & Larson, 1994)

- Friends
- Alone
- Family
- Others
- Classmates

Correlational Research

Example:

Are children’s friendships related to their relationships with siblings?

Becoming a sibling...

<table>
<thead>
<tr>
<th>Peer play quality</th>
<th>Sibling interaction at 6 months</th>
<th>Sibling interaction at 14 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.44*</td>
<td>.47*</td>
</tr>
</tbody>
</table>

Fantasy play .25 .51*

(Kramer & Gottman, 1992)
Interpretation

- affective experience
- emotional support
- working through issues
- particular child characteristics

Experimental Research

Example:

Does drawing improve children’s memory for an event?
The Effects of Drawing on Memory Performance (Butler et al, 1995)

Measures

- Independent variable: drawing vs telling alone
- Dependent variable: memory performance
The Effects of Drawing on Memory Performance (Butler et al, 1995)

Developmental Designs

- Cross-sectional
- Longitudinal
- Sequential
- Microgenetic

Children’s Memory for Medical Emergencies: 2 Years Later

Peterson, 1999
Mean Percent of Relevant Components Recalled at 2 years

Cross-sectional
- Cheap and fast
- tells little about how change occurs
- cohort effects

Longitudinal
- see patterns of change
- subjects are own control
- expensive
- high drop out rates
- practice effects
- how to assess same behavior at different ages
- other events cloud conclusions
Prosocial Development from 7 to 19

Age in Years

(Eisenberg et al., 1995)

Cross-sequential

• same strength and weaknesses as longitudinal, just not as striking
• less time, less $

Microgenetic

• target process of change
Infant Locomotion (Adolph, 1997)

Strategies on “Safe” and “Risky” Declines
Microgenetic

• Expensive
• High drop out rates
• Practice effects/boring

Are you doing all you can to stimulate your infant’s development?

The Objectives of Babyscapes

• Facilitate parent-child bonding
• Provide multi-sensory learning
• Increase attention span
Experimental Design

• Random assignment
c  random sampling rare
  representative sampling
• Selection bias
• Subject variables
• Differential “mortality”

Ethics:
Selected Issues

• Do no harm!
• Informed consent
• Confidentiality
• Obtain necessary assistance
• Beneficial treatments