

Topic 1 – Research Designs

Major approaches to research

- Experimental research: random assignment of subjects to groups. Controls extraneous variables, manipulates IV, assess causality.
 - Between:
 - Within:
- Quasi-experimental research: some kind of intervention/manipulation/treatment but not much control. Lacks randomization, looking for group differences.
- Non-experimental research: examine nature of observed relationships between groups (e.g. pubertal timing and grade differences). No manipulation, use of pre-existing or intact groups.
- Correlational research: examine nature of observed relationship between two variables (body dissatisfaction and self-esteem), no manipulation.
- Descriptive research: describing individuals, observational research, case studies

Internal validity

- Are the conclusions valid for the study?
- The validity of a research study is the degree to which the study accurately answers questions it was intended to answer
- Threat to validity: questions or doubts about the study
 - Extraneous variable: Any variable that a research is not directly interested in is
 - Confounding variable: any variable that influences the two variables being studied, provides an alternative explanation for the relationship
 - Environmental variables: e.g. time of testing, different experimenters
 - Assignment bias: e.g. use of intact groups, groups may vary in participant characteristics
 - Examining groups over time: the changes in the participants may due to some other factor i.e. history, maturation
 - History: other events that happen during the study e.g. other programs in school
 - Maturation: changes in the participants e.g. changes in weight