

EXAM 5 STUDY GUIDE

CORRELATIONAL ANALYSIS

Correlation coefficient (r)

- Range
- How to interpret positive vs. negative
- Be able to rank based on magnitude
- Formula
- Be able to hand calculate

Coefficient of determination (r^2)

- How to obtain it
- How to interpret

Factors that influence magnitude of correlations

Restrictions on interpretation

Correlation vs. Regression analysis

Predictor vs. Outcome variables

What “controlling for” a variable means

Types of regression analysis:

- Simultaneous
- Stepwise
- Hierarchical

Multiple correlation coefficient (R)

- Definition
- How to interpret

R^2

- How to obtain it
- How to interpret

Standardized beta (β)

- How to interpret
- β vs. r

p -value

- Definition
- Indicators of Significance vs. Effect Size

SIMPLE EXPERIMENTS

Correlational vs. Experimental designs

- How to turn one into the other

Independent random assignment

Experimental vs. null hypotheses

Independent variable (IV)

- Definition
- IV vs. Levels of the IV
- Conceptual vs. Operational definition of the IV
- Manipulated vs. Non-manipulated IVs
- Experimental vs. Control groups

Dependent variable (DV)

- Definition

Internal validity issues in experiments

- Why we never have identical groups
- Confounds
- Solutions to confounds

External validity issues in experiments

Construct validity issues in experiments

- Assessing the validity of a manipulation
- Manipulation checks