

Chapter 4: Correlation and Prediction

Correlation (Pearson Product Moment)

Attributes of r

Correlation Formula

Correlation Issues

- ❑ Causation
- ❑ $-1.00 < r < +1.00$
- ❑ Coefficient of determination (r^2)
- ❑ Curvilinear or linear
- ❑ Range restriction
- ❑ Prediction
- ❑ Error of prediction
- ❑ Standard error of estimate

Limitations of r

Correlation and Prediction

Equation for a Line

Standard Error of Estimate (SEE)

Multiple Regression

- ❑ A single dependent variable
- ❑ Multiple independent variables
- ❑ Skinfold example
- ❑ R is used to represent MR
 - (r for simple regression with one independent variable)

Error (Residual) Scores

SPSS Examples