

Correlational Hypotheses & Designs

_____ Designs

- Research that examines the relation among variables
- Best used when:
 - you can't manipulate particular variables in the lab
 - you are interested in the unique relation between two variables
- Often used with survey data

Examples of Correlational _____

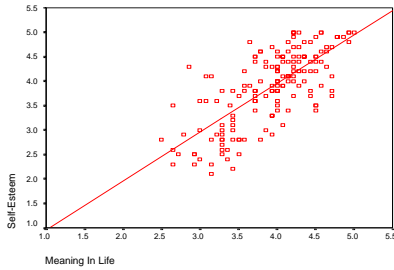
- Room temperature is positively associated with bringing to mind violent thoughts
- GPA is negatively associated with amount of drinking

Determining Correlations

- Scatterplots
- _____
 - Range: +1 to -1
 - .10 is weak, .30 is moderate, .50 is strong

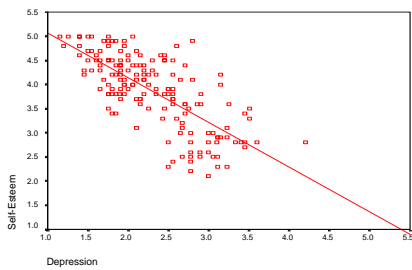
Correlation

- Scores on one variable increase as scores on the other variable increase



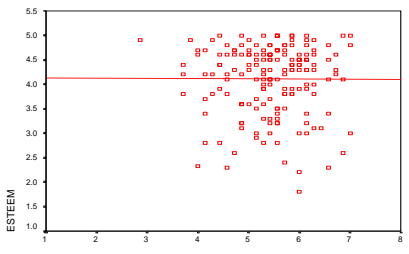
Correlation

- Scores on one variable increase as scores on the other variable decrease



Correlation

- Scores on one variable don't have any relation to scores on the other variable



The scatter plot displays a distribution of red square data points. The x-axis is labeled 'davis empathy' and ranges from 1 to 8. The y-axis is labeled 'ESTEEM' and ranges from 1.0 to 5.5. A horizontal red line is drawn across the plot at the y-value of 4.0. The points are scattered randomly above and below this line, indicating no correlation between the two variables.

Factors that influence of correlations

- Restricted range / variance of scores
- Low reliability of measures
- Outliers
- Sample size influences significance

Pros and Cons

- Pros
 - Can determine the unique relation of two variables
 - Mediation and moderation effects
- Cons
 - Can't determine direction of causation
 - Effects of outliers on magnitude
