

Bivariate Measures of Association

Nominal Measures of Association

| Measure | Requirements | Range | Interpretation |
|------------|----------------------------------|-------|--|
| Phi | 2x2 nominal crosstab | 0-1 | Indirect (0-.10=weak, .11-.30=moderate, .30+=strong) |
| Cramer's V | Bigger than 2x2 nominal crosstab | 0-1 | Indirect (0-.10=weak, .11-.30=moderate, .30+=strong) |
| Lambda | 2x2 nominal crosstab or bigger | 0-1 | Direct |

Ordinal and Scale Measures of Association

| Measure | Requirements | Range | Interpretation |
|----------------|------------------|---------|---------------------------------|
| Gamma | Ordinal crosstab | -1 to 1 | Direct |
| Spearman's Rho | Scales | -1 to 1 | Indirect, or, direct if squared |

Indirect Interpretation:
0-.30 = weak
.31-.60 = moderate
.61+ = strong

?

What if you have one ordinal and one interval-ratio variable?

Interval-Ratio Measure of Association

| Measure | Requirements | Range | Interpretation |
|-------------|----------------------------|---------|---------------------------------|
| Pearson's R | 2 interval ratio variables | -1 to 1 | Indirect, or, direct if squared |

Indirect Interpretation:

0-.30 = weak

.31-.60 = moderate

.61+ = strong