SOC 4015/5050: Lecture 10 Equations

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Pearson's r

Calculating r

$$r = \frac{\sum_{i=1}^{n} (x-\bar{x})(y-\bar{y})}{(n-1)s_x s_y} \tag{1a}$$

Percent of Variance Explained

$$r^2 \tag{1b}$$

Calculating Degrees of Freedom (v)

$$v = n - 2 \tag{1c}$$

Calculating t

$$t = \frac{r}{\sqrt{\frac{1-r^2}{v}}} \tag{1d}$$