

Worked out Example for Cohen's *K*

a.

		Curator B		Total
		Yes	No	
Curator A	Yes	8	2	10
	No	3	22	25
Total		11	24	35

Count Table for Annotator Agreement between Curators A and B

Construct the Count Table for curator agreement between curators A and B by comparing annotations made by the two curators. Yes=Annotated. No=Not Annotated. In this example, curators A and B annotated 8 of the same sentences. Curator A annotated 2 sentences that Curator B did not, and Curator B annotated 3 sentences that Curator A did not. There were 22 remaining sentences out of the 35 total that neither curator annotated.

b.

		Curator B		Total
		Yes	No	
Curator A	Yes	0.2286	0.05714	0.2857
	No	0.08571	0.6286	0.7143
Total		0.3143	0.6857	1.0

Frequency Table for Annotator Agreement between Curators A and B

Construct the Frequency Table for curator agreement between curators A and B by dividing all values in the count table by the total number of annotations (which is 35).

c.

Calculate the observed (P_o) and expected (P_e) proportion of agreement and Cohen's *K* from the Frequency Table.

$$P_o = 0.2286 + 0.08571 = 0.3143$$

$$P_e = (0.2857 \times 0.3143) + (0.7143 \times 0.6857) = 0.5796$$

$$K = (0.3143 - 0.5796) / (1.0 - 0.5796) = 0.6602$$