

PSYC 4301: Psychological Tests and Measurements

Tarleton State University

Homework 2

1. Calculate and interpret the Pearson correlation coefficient for the relationship between *Introversion* and *Social dominance* for the following data:

Introversion score	0	0	1	1	2	2	4	5
Social-dominance score	4	5	4	2	1	3	2	1

2. The following data is designed to assess the relationship between sex and hair length. Calculate and interpret the phi coefficient from these data.

	Short hair	Long hair
Male	16	4
Female	8	12

3. Teachers were asked rate their attitude toward the students in their classes. A score of 0 was recorded for negative responses, whereas a score of 1 was recorded for positive responses. Calculate and interpret the point-biserial correlation to assess the relationship between this variable and grades on a midterm exam:

Teacher attitude	0	0	0	0	1	1	1	1	1	1
Midterm score	5	7	4	7	9	5	9	11	13	15

4. Two personality tests measure empathy and nurturance on an ordinal level. Calculate and interpret the Spearman correlation for the data below:

Empathy	3	5	8	10	9	17	12
Nurturance	2	4	7	5	6	10	14