Point Biserial Correlations

1. Below is data concerning number of driving errors for legally intoxicated drivers (alcohol) and those with no alcohol in their system (control). Is there a relationship between intoxication and driving performance? Test at alpha = .05.

alcohol	**control**
9	4
7	7
6	3
10	6

2. The following data is from an experiment examining two drug treatments on pain ratings (higher the rating, the greater the pain). Is there a relation between treatment and pain rating when using alpha = .05?

What proportion of variability in pain ratings can be explained by treatment?

If you conducted an independent samples t-test on this data, what would your t-observed value be?

treatment 1	**treatment 2**
10	11
2	5
1	2
15	18
7	9