1. What are three lessons you learned relative ANOVA and Nonparametric tests?

2. Application of A Nonparametric Test - Chi-Square Test of Independence

Given the following contingency table problem:

The use of cellular phones in automobile has increased in the last few years. Of concern to traffic experts, as well as manufacturers of cellular phones, is the effect on road accidents rates. The observed frequencies are given below.

|  |  |  |
| --- | --- | --- |
|  | Had Accident in the Last Year | Did not Have an Accident in the Last Year |
| Cellular phone in use  | **25** | **300** |
| Cellular phone not in use | **50** | **400** |

A)   How many degrees of freedom are there in the above contingency table?

B)   Compute the expected frequency for each cell.

C)   Based on the data in the table above, do you think there is a relationship between cellular phone use and road accidents that occurred last year? [Test at α = 0.05 level. Show a 5-step hypothesis testing, Ho: being no relationship between cell phone and road accident and H1 being there is relationship].-L

**[**Use Megstat, Chi-square/crosstabulation, Goodness of fit test function.