Sample

ANOVA revealed that among daily, young adult smokers (my sample), number of cigarettes smoked per day (collapsed into 5 ordered categories, which is the categorical explanatory variable) and number of nicotine dependence symptoms (quantitative response variable) were significantly associated, F (4, 1308)=11.79, p=0001. Post hoc comparisons of mean number of nicotine dependence symptoms by pairs of cigarettes per day categories revealed that those individuals smoking more than 10 cigarettes per day (i.e. 11 to 15, 16 to 20 and >20) reported significantly more nicotine dependence symptoms compared to those smoking 10 or fewer cigarettes per day (i.e. 1 to 5 and 6 to 10). All other comparisons were statistically similar.

Report

ANOVA was conducted for determining effect of two categorical explanatory variables :- co2\_emi\_levels ( 4 levels ) and income\_level\_perperson ( 4 levels ) on the Quantitative response variable lifeexpectancy. Since both the explanatory variables has more than 2 levels in it Duncan post hoc test was conducted to determine which levels are different from the others

ANOVA co2\_emi\_levels

ANOVA revealed the association between co2\_emi\_levels and lifeexpectancy is significant (F=15.86 and p-value = <.0001

In the Duncan post hoc test it was revealed that life expectancy is better when co2 emissions are less (represented by levels 4 and 3 whose means are similar) than when it is higher represented by ( levels 2 and 1 whose means are similar ), it is best when it is level 4 , the lowest level of co2 emissions

*Code*

***proc******ANOVA****; class co2\_emi\_levels;*

*model lifeexpectancy = co2\_emi\_levels;*

*mean co2\_emi\_levels/duncan;*

***run****;*

ANOVA income\_level\_perperson

ANOVA revealed the association between income\_level\_perperson and lifeexpectancy is significant (F=58.32 and p-value = <.0001)

In the Duncan post hoc test it was revealed that life expectancy is better when the income levels are high (represented by levels 4 and 3 whose means are similar ) than when it is less represented by ( levels 2 and 1 whose means are similar) , it is best when it is level 4 , the highest income level,

*Code*

***proc******ANOVA****; class income\_level\_perperson;*

*model lifeexpectancy = income\_level\_perperson;*

*mean income\_level\_perperson/duncan;*

***run****;*