Manual or automatic: how does affect fuel performance?

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Saturday, January 24, 2015

Summary

In this report we present the results of a comparison between manual and automatic vehicles, measured in miles per gallon of fuel (mpg). The results shows that automatic cars has a better performance than manual cars. The expected difference was estimated in XXX mpg.

Introduction

We used a data set that consists of the measurements of 11 variables from observations of cars from 32 cars.

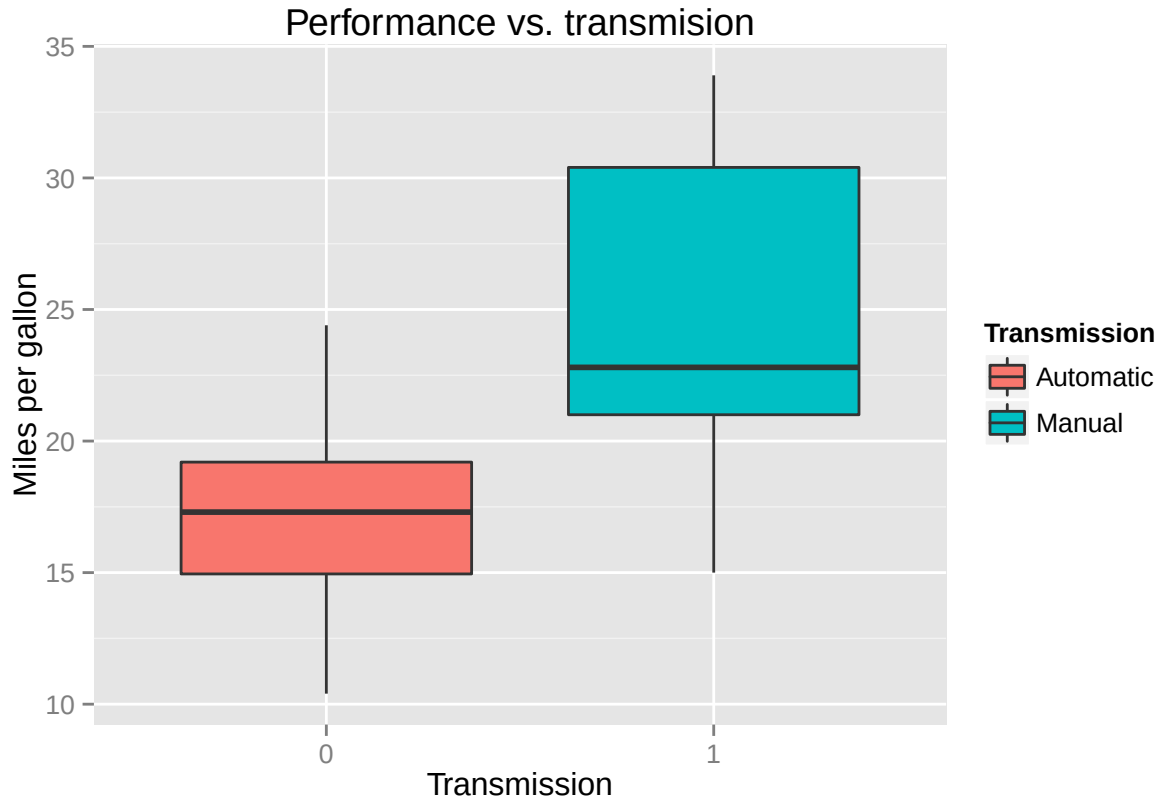
Methodology

We use the software statistical enviroment `R` and the package `ggplot2` for graphics.

Results

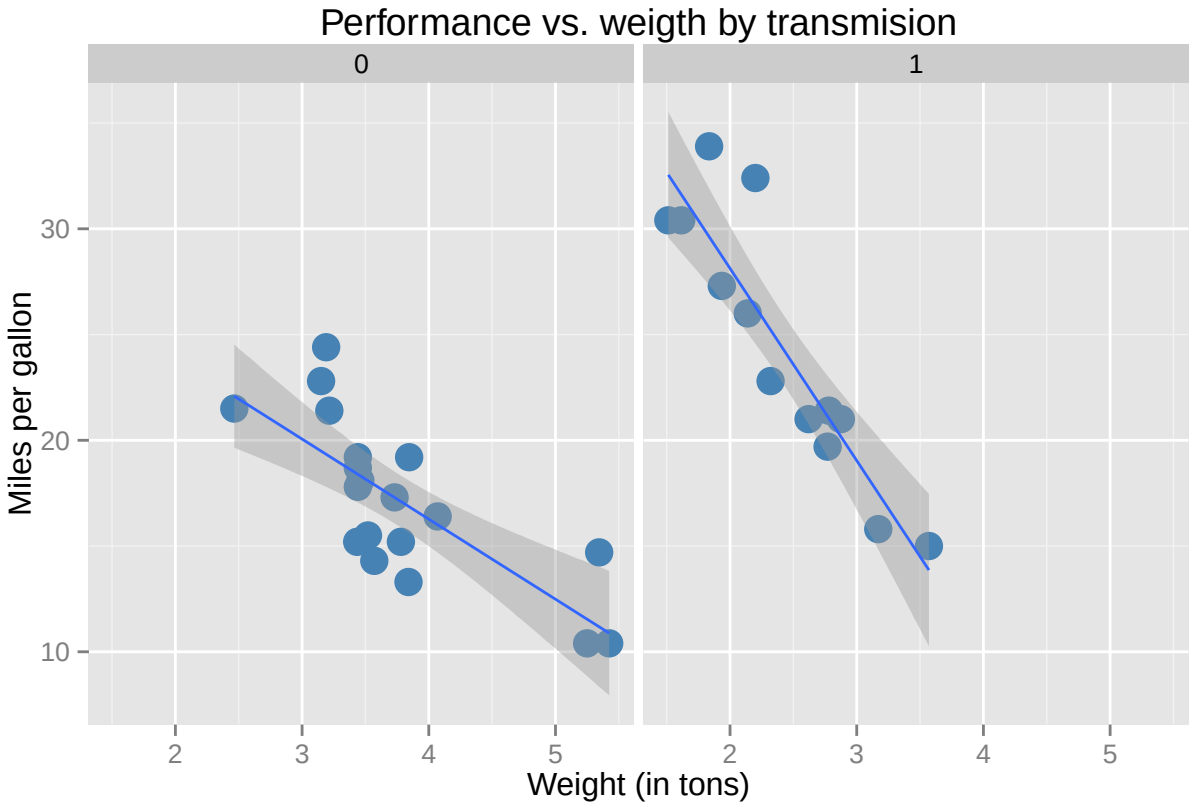
First we estimate asimple mode

```
g<-ggplot(data=mtcars,aes(factor(am),mpg))
g+geom_boxplot(aes(fill=factor(am,labels=c("Automatic","Manual"))))+
  xlab("Transmission")+ylab("Miles per gallon")+labs(fill="Transmission")+
  ggtitle("Performance vs. transmision")
```

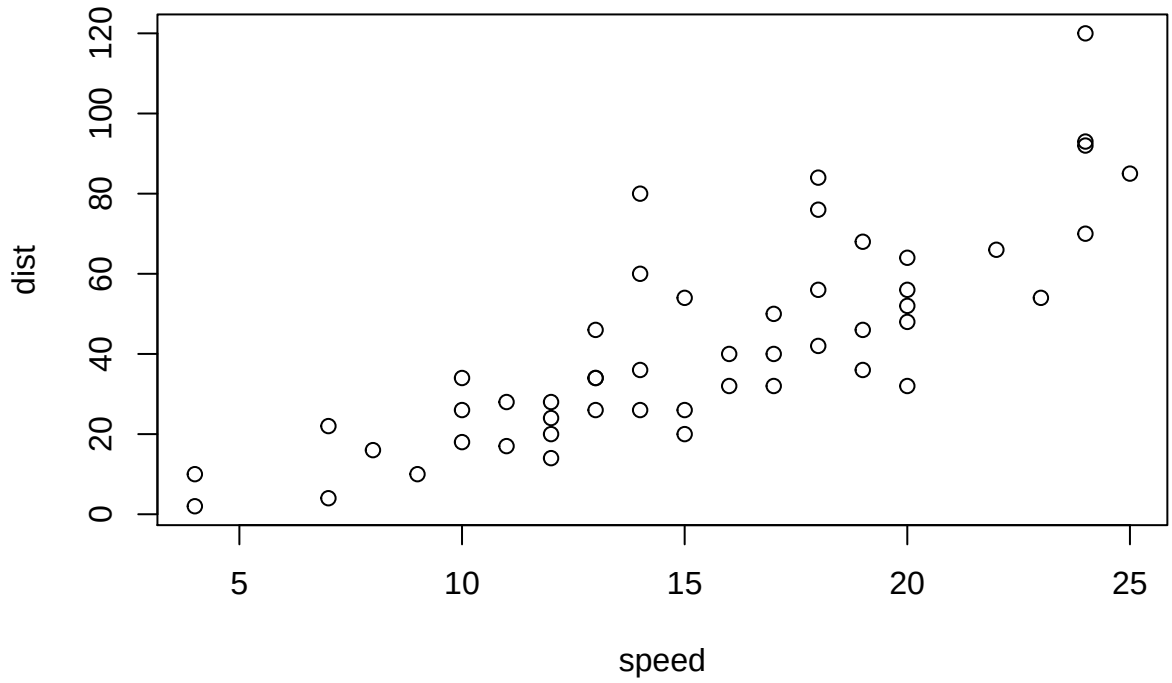


Second, we introduced a

```
g<-ggplot(data=mtcars,aes(x=wt,y=mpg))+geom_point(color="steelblue",size=5)
g+facet_grid(.~am)+geom_smooth(method="lm")+
  xlab("Weight (in tons)")+ylab("Miles per gallon")+ggtitle("Performance vs. weigth by transmision")
```



You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

plot(mtcars$cyl, mtcars$hp, pch=16)