

Dependence of Fuel Efficiency on Transmission Type

Peter Thompson

Dependence of Fuel Efficiency on Transmission Type

Executive Summary

stuff

quick summary

```
library(ggplot)
```

```
## Error in library(ggplot): there is no package called 'ggplot'
```

```
str(mtcars)
```

```
## 'data.frame':   32 obs. of  11 variables:
## $ mpg : num  21 21 22.8 21.4 18.7 18.1 14.3 24.4 22.8 19.2 ...
## $ cyl : num   6  6  4  6  8  6  8  4  4  6 ...
## $ disp: num  160 160 108 258 360 ...
## $ hp  : num  110 110  93 110 175 105 245  62  95 123 ...
## $ drat: num   3.9 3.9 3.85 3.08 3.15 2.76 3.21 3.69 3.92 3.92 ...
## $ wt  : num   2.62 2.88 2.32 3.21 3.44 ...
## $ qsec: num   16.5 17 18.6 19.4 17 ...
## $ vs  : num   0  0  1  1  0  1  0  1  1  1 ...
## $ am  : num   1  1  1  0  0  0  0  0  0  0 ...
## $ gear: num   4  4  4  3  3  3  3  4  4  4 ...
## $ carb: num   4  4  1  1  2  1  4  2  2  4 ...
```

```
h<-ggplot(data=mtcars,aes(y=mpg,x=wt,colour=factor(cyl))) + geom_point(size=2)
```

```
## Error in eval(expr, envir, enclos): could not find function "ggplot"
```

```
print(h)
```

```
## Error in print(h): object 'h' not found
```

mainly interested in mpg vs am.

consider mpg vs am mpg vs am + disp mpg vs am + disp + cyl mpg vs am +
disp + cyl + wt

```
fit<-lm(data=mtcars,mpg ~ factor(am))  
fit2<-lm(data=mtcars,mpg ~ factor(am) + disp    )  
fit3<-lm(data=mtcars,mpg ~ factor(am) + disp  + wt )
```

Appendix