Replace with Main Title

Your Name

2017-01-31 14:41:28

```
> summary(cmc)
```

```
    WifeAge          WifeEd         HusbEd       NumChild
 Min.   :16.00   low     :152   low     : 44   Min.   : 0.000
 1st Qu.:26.00   med low :334   med low :178   1st Qu.: 1.000
 Median :32.00   med high:410   med high:352   Median : 3.000
 Mean   :32.54   high    :577   high    :899   Mean   : 3.261
 3rd Qu.:39.00                                 3rd Qu.: 4.000
 Max.   :49.00                                 Max.   :16.000
     WifeRel     WifeWork   HusbOcc     SOLindex        Media
 Non-Islam: 220   Yes: 369   1:436   low     :129   Good    :1364
 Islam    :1253   No :1104   2:425   med low :229   Not Good: 109
                             3:585   med high:431
                             4: 27   high    :684


   Contraceptive
 No-use    :629
 Long-term :333
 Short-term:511
```

```
> library(abind, pos=22)
```

```
> library(e1071, pos=23)
```

```
> numSummary(cmc[,c("NumChild", "WifeAge")], statistics=c("mean", "sd", "IQR",
+    "quantiles"), quantiles=c(0,.25,.5,.75,1))
```

```
              mean       sd IQR 0% 25% 50% 75% 100%    n
NumChild  3.261371 2.358549   3  0   1   3   4   16 1473
WifeAge  32.538357 8.227245  13 16  26  32  39   49 1473
```

```
> numSummary(cmc[,"NumChild"], groups=cmc$Contraceptive, statistics=c("mean",
+   "sd", "IQR", "quantiles"), quantiles=c(0,.25,.5,.75,1))
```

```
               mean       sd IQR 0% 25% 50% 75% 100% NumChild:n
No-use     2.934817 2.655462   3  0   1   2   4   12        629
Long-term  3.738739 2.104406   3  1   2   3   5   13        333
Short-term 3.352250 2.049675   2  0   2   3   4   16        511
```

```
> local({
+   .Table <- with(cmc, table(Contraceptive))
+   cat("\ncounts:\n")
+   print(.Table)
+   cat("\npercentages:\n")
+   print(round(100*.Table/sum(.Table), 2))
```

```
+ })
```

```
counts:
Contraceptive
    No-use  Long-term Short-term
       629        333        511

percentages:
Contraceptive
    No-use  Long-term Short-term
     42.70      22.61      34.69
```

```
> local({
+   .Table <- with(cmc, table(HusbOcc))
+   cat("\ncounts:\n")
+   print(.Table)
+   cat("\npercentages:\n")
+   print(round(100*.Table/sum(.Table), 2))
+ })
```

```
counts:
HusbOcc
  1   2   3   4
436 425 585  27

percentages:
HusbOcc
    1     2     3     4
29.60 28.85 39.71  1.83
```

```
> with(cmc, tapply(NumChild, list(Contraceptive), median, na.rm=TRUE))
```

```
    No-use  Long-term Short-term
         2          3          3
```

```
> library(nortest, pos=24)
```

```
> with(cmc, shapiro.test(NumChild))
```

```
    Shapiro-Wilk normality test

data:  NumChild
W = 0.91266, p-value < 2.2e-16
```

```
> local({
+   .Table <- xtabs(~Contraceptive+HusbOcc, data=cmc)
+   cat("\nFrequency table:\n")
+   print(.Table)
+   cat("\nColumn percentages:\n")
+   print(colPercents(.Table))
+   .Test <- chisq.test(.Table, correct=FALSE)
+   print(.Test)
+ })
```

```
Frequency table:
             HusbOcc
Contraceptive   1   2   3   4
   No-use     158 200 258  13
   Long-term  156  79  93   5
   Short-term 122 146 234   9

Column percentages:
             HusbOcc
Contraceptive     1     2     3    4
   No-use      36.2  47.1  44.1 48.1
   Long-term   35.8  18.6  15.9 18.5
   Short-term  28.0  34.4  40.0 33.3
   Total      100.0 100.1 100.0 99.9
   Count      436.0 425.0 585.0 27.0

    Pearson's Chi-squared test

data:  .Table
X-squared = 65.401, df = 6, p-value = 3.573e-12
```

```
> t.test(NumChild~WifeRel, alternative='two.sided', conf.level=.95,
+   var.equal=FALSE, data=cmc)
```

```
    Welch Two Sample t-test

data:  NumChild by WifeRel
t = -3.5059, df = 376.02, p-value = 0.00051
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.7631665 -0.2147193
sample estimates:
mean in group Non-Islam     mean in group Islam
               2.845455                3.334397
```

```
> library(mvtnorm, pos=25)
```

```
> library(survival, pos=25)
```

```
> library(MASS, pos=25)
```

```
> library(TH.data, pos=25)
```

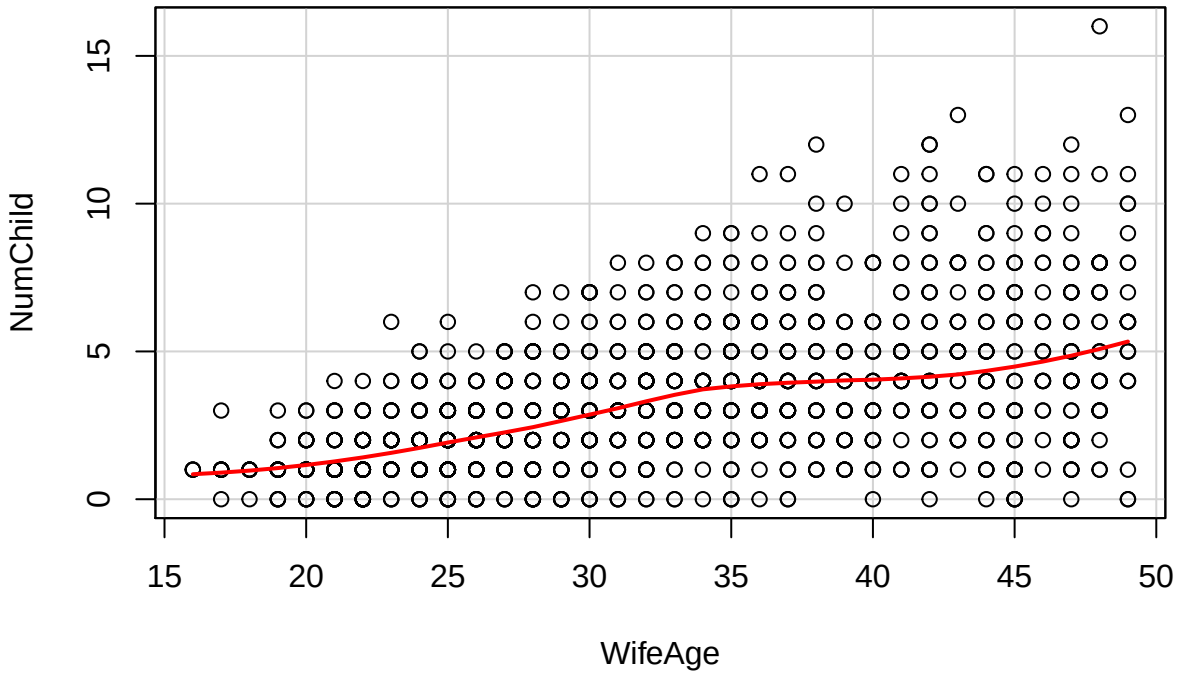
```
> library(multcomp, pos=25)
```

```
> AnovaModel.1 <- aov(NumChild ~ WifeEd, data=cmc)
> summary(AnovaModel.1)
```

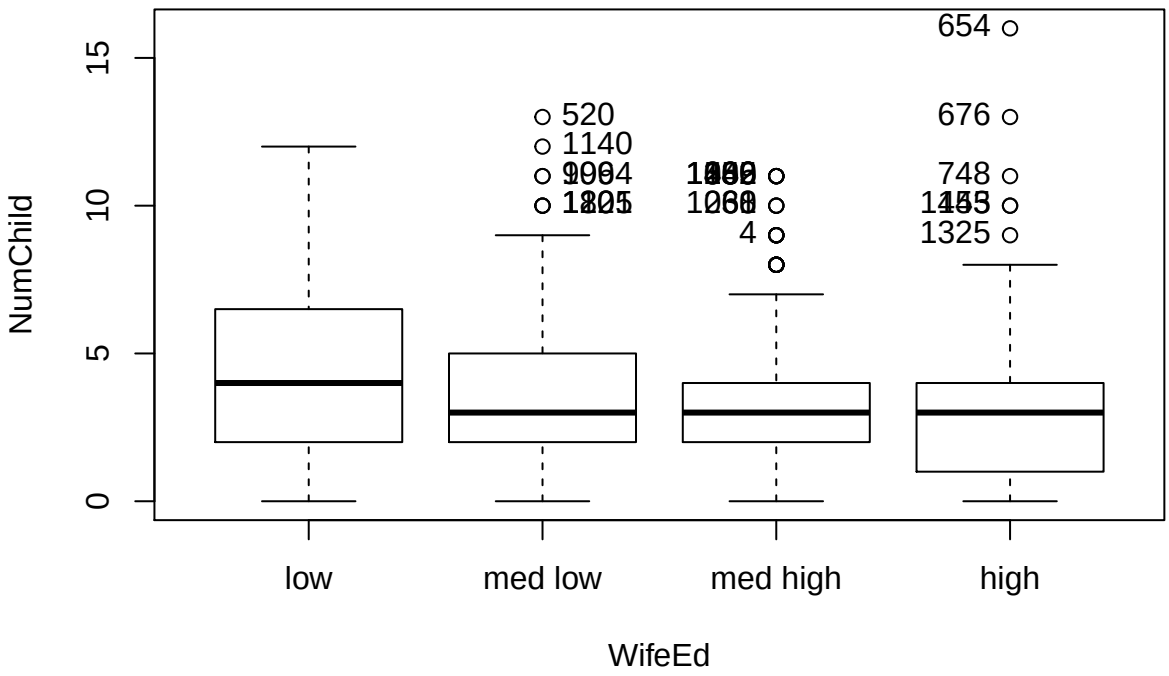
```
              Df Sum Sq Mean Sq F value   Pr(>F)
WifeEd         3    332  110.54   20.67 4.06e-13 ***
Residuals   1469   7857    5.35
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
> with(cmc, numSummary(NumChild, groups=WifeEd, statistics=c("mean", "sd")))

             mean       sd data:n
low      4.421053 2.946603    152
med low  3.508982 2.484470    334
med high 3.234146 2.340001    410
high     2.831889 1.976728    577
> scatterplot(NumChild~WifeAge, reg.line=FALSE, smooth=TRUE, spread=FALSE,
+   boxplots=FALSE, span=0.5, ellipse=FALSE, levels=c(.5, .9), data=cmc)
```




```
> Boxplot(NumChild~WifeEd, data=cmc, id.method="y")
```




```
 [1] "180"  "520"  "999"  "1064" "1121" "1140" "1205" "250"  "486"  "562"
[11] "1002" "1139" "1345" "61"   "268"  "1030" "4"    "445"  "654"  "676"
[21] "748"  "1153" "1325"
```