Wilcoxon Functions

Wilcox’s website address has changed since the book was published. Latest versions of the functions for robust analysis by Wilcox are available by executing:

```r
source("http://dornsife.usc.edu/assets/sites/239/docs/Rallfun-v25")
```

Code changes/Package Updates.

- Page 14 line 11. 'j14the' >>> 'the'
- Chapter 4: After the book was published Hadley Wickham updated ggplot2, and some of the syntax changed considerably (see [http://docs.ggplot2.org/current/](http://docs.ggplot2.org/current/)). Please let me know of anything that doesn’t work, but here are a few problems that I know about already.
  - Line graphs not working. This is a bug introduced in ggplot2 0.9.3 There will likely be a fix soon (a version 0.9.3.1). In the meantime, a temporary fix can be found by executing (I didn’t write this fix and it could create other problems)
    ```r
    install.packages("devtools")
    library(devtools)
    source_gist("https://gist.github.com/4578531")
    ```
  - Page 155 (R’s Souls’ Tip 4.3) `scale_fill_manual("Gender", c("Female" = "Blue", "Male"="Green"))` should be `scale_fill_manual("Gender", values= c("Female" = "Blue", "Male"="Green"))`. [Thanks Steffen Wild].
  - The `opts()` function is depreciated and has been replaced by the `theme()` function. This has implications for anything in the chapter that uses `opts()`. There is a very good transition guide to help you transfer from `opts()` to `theme()` [here](https://github.com/hadley/ggplot2/issues/732). Needless to say I will have to update the chapter/code at some point. If you correct any code then please email it to me if you feel so inclined. To get rid of the legend use `theme(legend.position = "none")` instead of `opts()`.
- P. 156: the `factor()` function has changed, so you’ll get an error using:
  ```r
  hiccups$Intervention_Factor<-factor(hiccups$Intervention, levels = hiccups$Intervention)
  ```
  Instead, you need to execute this (to order the levels as they are in the book rather than alphabetic):
  ```r
  hiccups$Intervention_Factor<-factor(hiccups$Intervention, levels(hiccups$Intervention)[c(1, 4, 2, 3)])
  ```
- P. 199 (R’s Souls’ Tip 5.4): the final command:
  ```r
  dlf$meanHygiene<-ifelse(dlf$daysMissing < 2, NA, rowMeans(cbind(dlf$day1, dlf$day2, dlf$day3), na.rm = TRUE))
  ```
  should be (note the position of NA — it has moved to the end of the command):
  ```r
  dlf$meanHygiene<-ifelse(dlf$daysMissing < 2, rowMeans(cbind(dlf$day1, dlf$day2, dlf$day3), na.rm = TRUE), NA)
  ```

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1 I have used this patch on three different machines (Macs) and had no issues at all. However, Isaac van Patten emailed to say that the patch had messed up his system. He said he:

“... had to delete R 2.15.2 altogether and reinstall it. What will work is to remove ggplot2 0.9.3 from the library and then go to the archives and load ggplot2 0.9.1 from the source code ... using the older version it draws the graphs as needed.”

Like I said, it’s not my patch, so use it at your own risk. It works fine for me, but it can cause problems. See
• P. 226 (Section 6.5.7): bootTau<- function(liarData,i) cor(liarData ... won’t run without a space before cor, there is a space in the book but because of the typesetting that isn’t necessarily clear. It’s safer to bracket the function {}, so you could write this function as (Thanks Jan Dittrich):

```r
bootTau<- function(liarData,i){cor(liarData ...
```

• P. 235 (section 6.6.2): a required dependency for the ggm package is no longer supported by CRAN – the graph package is no longer available. It is being maintained at Bioconductor.org but requires individual download and installation. It also requires some other dependencies from Biocoductor, BiocGenerics & RBGL, to be downloaded and installed in your library folder. To do this execute:

```r
source("http://bioconductor.org/biocLite.R")
biocLite(c("BiocGenerics", "RBGL"))
install.packages("ggm")
```

Once this was done, the material in Section 6.6.2 will work. Without it you cannot load the ggm package. One other thing that is not obvious is a data frame must just be the variables included in the partial correlation for the var() argument (e.g. – it’ll choke if you forget to strip out the subject numbers!). [Thanks, Isaac T. Van Patten, Radford University and Jeff P.]

• P. 299: bootReg <- function(formula, data, indices)
  o Indices should be I to match the data[i, ] two lines below. The code sample is correct, just the book that’s wrong.

**Typos**

• Page 194: dlt should read dlf (thanks Bastian Wimmer):

• Page 212 (third variable problem): Reference to Jane Superbrain Box 1.1 should be 1.4.
• Page 299, line 3 and 5 from the bottom. advert >>> advert time. >>> time).
• Page 224, line 3 and 6 from the top, miss-typing. liarData = >>> liarData <-
• Page 329: Variable name **Cured** should say **Intervention**.
• Page 379, line 12 from the top. statistics). -------> statistics.
• Page 382, line 4 from paragraph 2. -40 and 47 -------> 40 and 47
• Page 388: Equation’s equal sign is omitted.
• P. 818, line 3 from bottom, begins with "catData". Subsequently, when I refer to this data-frame (e.g., on p. 821, line 7 from bottom), I call it "catsData". I meant to call it "catsData" throughout. [Ronald Wyllys]

Thanks to everyone spotting mistakes, especially @jongminbag