

# Weight regression

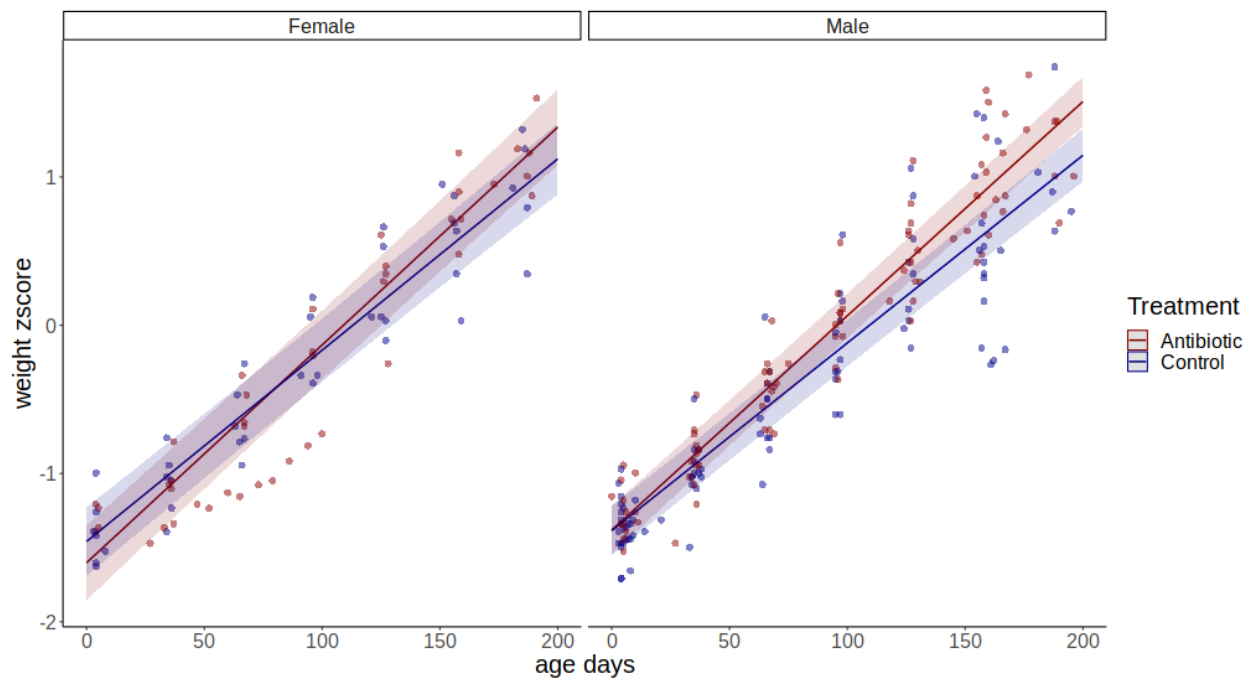
Noah Siegel

05 January, 2023, 16:54

```
suppressPackageStartupMessages({  
  library(plyr)  
  library(tidyverse)  
  library(sjPlot)  
  library(lmerTest)  
  library(readxl)  
  library(xlsx)  
  library(kableExtra)  
})
```

Weight Z-scores

Residual plot



Model table

	Sum Sq	Mean Sq	NumDF	DenDF	F value	Pr(>F)
Sex	0.07475	0.07475	1	40.63651	1.93655	0.17161
Treatment	0.01679	0.01679	1	40.63651	0.43499	0.51327
age_days	146.37418	146.37418	1	227.07171	3792.35249	0.00000
Sex:Treatment	0.01878	0.01878	1	40.63651	0.48659	0.48942
Sex:age_days	0.01138	0.01138	1	227.07171	0.29476	0.58772
Treatment:age_days	0.62614	0.62614	1	227.07171	16.22235	0.00008
Sex:Treatment:age_days	0.00000	0.00000	1	227.07171	0.00005	0.99436

## Session Information

```
## R version 3.6.3 (2020-02-29)
## Platform: x86_64-conda-linux-gnu (64-bit)
## Running under: Ubuntu 18.04.6 LTS
##
## Matrix products: default
## BLAS/LAPACK: /home/nasiegel/miniconda3/envs/mldgut/lib/libopenblas-r0.3.21.so
##
## locale:
##  [1] LC_CTYPE=en_US.UTF-8      LC_NUMERIC=C
##  [3] LC_TIME=en_US.UTF-8      LC_COLLATE=en_US.UTF-8
##  [5] LC_MONETARY=en_US.UTF-8  LC_MESSAGES=en_US.UTF-8
##  [7] LC_PAPER=en_US.UTF-8     LC_NAME=en_US.UTF-8
##  [9] LC_ADDRESS=en_US.UTF-8   LC_TELEPHONE=en_US.UTF-8
## [11] LC_MEASUREMENT=en_US.UTF-8 LC_IDENTIFICATION=en_US.UTF-8
##
## attached base packages:
## [1] stats      graphics  grDevices  utils      datasets  methods    base
##
## other attached packages:
##  [1] kableExtra_1.3.4  xlsx_0.6.5      readxl_1.3.1    lmerTest_3.1-3
##  [5] lme4_1.1-27       Matrix_1.3-3    sjPlot_2.8.8    forcats_0.5.1
##  [9] stringr_1.4.0     dplyr_1.0.6     purrr_0.3.4     readr_1.4.0
## [13] tidyr_1.1.3       tibble_3.1.2    ggplot2_3.3.3   tidyverse_1.3.1
## [17] plyr_1.8.6
##
## loaded via a namespace (and not attached):
##  [1] nlme_3.1-152      fs_1.5.0         lubridate_1.7.10
##  [4] webshot_0.5.2     insight_0.14.0   httr_1.4.2
##  [7] numDeriv_2016.8-1.1 tools_3.6.3      backports_1.2.1
## [10] utf8_1.2.1        R6_2.5.0         sjlabelled_1.1.8
## [13] DBI_1.1.1         colorspace_2.0-1 withr_2.5.0
## [16] tidyselect_1.1.1  emmeans_1.6.0    compiler_3.6.3
## [19] performance_0.7.2 cli_3.5.0         rvest_1.0.0
## [22] xml2_1.3.2        labeling_0.4.2    bayestestR_0.9.0
## [25] scales_1.1.1      mvtnorm_1.1-1     systemfonts_1.0.2
## [28] digest_0.6.27     minqa_1.2.4       rmarkdown_2.19
## [31] svglite_2.0.0     pkgconfig_2.0.3   htmltools_0.5.4
## [34] dbplyr_2.1.1      fastmap_1.1.0     rlang_1.0.6
## [37] rstudioapi_0.13   farver_2.1.0      generics_0.1.0
## [40] jsonlite_1.7.2    magrittr_2.0.1    parameters_0.13.0
```

## [43] Rcpp_1.0.9	munsell_0.5.0	fansi_0.4.2
## [46] lifecycle_1.0.0	stringi_1.6.2	yaml_2.2.1
## [49] snakecase_0.11.0	MASS_7.3-54	grid_3.6.3
## [52] sjmisc_2.8.7	crayon_1.4.1	lattice_0.20-44
## [55] ggeffects_1.1.0	haven_2.4.1	splines_3.6.3
## [58] xlsxjars_0.6.1	sjstats_0.18.1	hms_1.1.0
## [61] knitr_1.33	pillar_1.6.1	boot_1.3-28
## [64] estimability_1.3	effectsize_0.4.4-1	reprex_2.0.0
## [67] glue_1.4.2	evaluate_0.14	modelr_0.1.8
## [70] vctrs_0.3.8	nloptr_1.2.2.2	cellranger_1.1.0
## [73] gtable_0.3.0	assertthat_0.2.1	xfun_0.36
## [76] xtable_1.8-4	broom_0.7.6	viridisLite_0.4.0
## [79] rJava_1.0-4	tinytex_0.31	ellipsis_0.3.2