Example Report

Frank Harrell*

Fictitious Person[†]

November 9, 2015

Contents

1 Descriptive Statistics2 FEV vs. Age2

1 Descriptive Statistics

```
getHdata(FEV)
latex(describe(FEV), file='')
```

6 Variables FEV 654 Observations

id
age [years]
n missing unique Info Mean .05 .10 .25 .50 .75 .90 .95 654 0 17 0.99 9.931 5 6 8 10 12 14 15 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 Frequency 2 9 28 37 54 85 94 81 90 57 43 25 19 13 8 6 3 % 0 1 4 6 8 13 14 12 14 9 7 4 3 2 1 1 0
fev [liters]
n missing unique Info Mean .05 .10 .25 .50 .75 .90 .95 654 0 575 1 2.637 1.445 1.612 1.981 2.547 3.119 3.813 4.289 lowest : 0.791 0.796 0.839 1.004 1.072 highest: 5.102 5.224 5.633 5.638 5.793
height [inches]
n missing unique Info Mean .05 .10 .25 .50 .75 .90 .95 654 0 56 1 61.14 51.0 53.0 57.0 61.5 65.5 68.5 70.0 lowest : 46.0 46.5 47.0 48.0 49.0, highest: 72.0 72.5 73.0 73.5 74.0
sex
n missing unique $654 ext{ 0} ext{ 2}$
female (318, 49%), male (336, 51%)
smoke n missing unique 654 0 2 non-current smoker (589, 90%), current smoker (65, 10%)
I have a question about the data. Do all the values make sense? Are these data applicable to our research question?

I have a question about the data. Do all the values make sense? Are these data applicable to our research question? Did we really land a man on the moon?

No, I don't think we landed a man on the moon, but I do think that hundreds of aliens from an advanced civilization visited us in the 1950s and forgot to say hello.

FH

I'm convinced

FP FH

This section is for the Supplemental Material section. Code that goes below is executed in the original order of appearance, not at the end. But the code and its output appear only at the end.

2 FEV vs. Age

Figure 1 shows the raw data for some of the key variables.

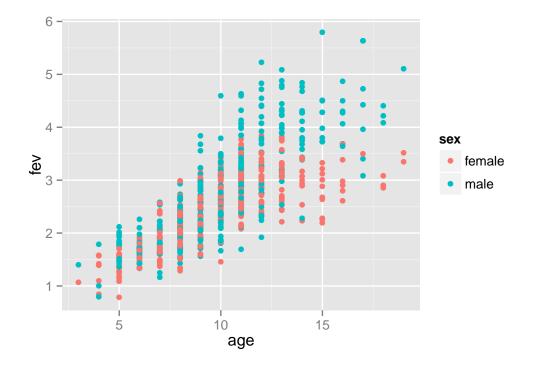


Figure 1: Scatterplot of age vs. FEV stratified by sex

TO DO:

- 1. See if other variables need to be accounted for
- 2. See if age and sex interact

FH

Bibliography

- [1] Frank E. Harrell. Hmisc: A package of miscellaneous R functions. 2015. URL: http://biostat.mc.vanderbilt.edu/Hmisc.
- [2] Frank E. Harrell. rms: R functions for biostatistical/epidemiologic modeling, testing, estimation, validation, graphics, prediction, and typesetting by storing enhanced model design attributes in the fit. Implements methods in Regression Modeling Strategies, 2nd edition. 2015. URL: http://biostat.mc.vanderbilt.edu/rms.

^{*}Department of Biostatistics, Vanderbilt University School of Medicine, f.harrell@vanderbilt.edu

Department of Irreproducible Research, Slapout College, fp@sloppy.com

BIBLIOGRAPHY BIBLIOGRAPHY

[3] R Development Core Team. R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing. Vienna, Austria, 2015. URL: http://www.R-project.org.

[4] Yihui Xie. knitr: A general-purpose package for dynamic report generation in R. R package version 1.5. 2013. URL: http://CRAN.R-project.org/package=knitr.