¹ Example manuscript to demonstrate the R2APA markdown template

² Frederik Aust

³ University of Cologne

⁴ The R2APA-template and further instructions can be retrieved from

⁵ https://github.com/crsh/r2apa. Hail and praises may be sent to frederik.aust@uni-koeln.de.

6   Abstract

7   This example manuscript demonstrates how to use RStudio and RMarkdown to produce an

8   APA conform manuscript. Using pandoc this file can be converted to HTML, LaTeX/PDF,

9   or Word documents. At this point, only PDF documents conform to the APA mansucript

10 guidelines.

11   Example manuscript to demonstrate the R2APA markdown template

12   As you may have heard, recently, there has been a growing interest in reproducible
13 research. Reproducible data analysis is an easy to implement yet important aspect of the
14 strive towards reproducibility. For users of the scripting language R, RMarkdown has been
15 suggested as one possible framework for reproducible analyses. This example document
16 assumes you have hoped onto the band wagon and know how to use RMarkdown to conduct
17 and comment your analyses. If you're new to RMarkdown I recommend you get to grips
18 with it first.

19   I use RStudio (which makes use of pandoc) to create my documents, but the general
20 process should work when using pandoc directly from the command line. When you click
21 RStudio's *Knit* button a document will be generated that includes both content as well as
22 the output of any embedded R code chunks within the document. You can embed an R code
23 chunk like this:

```r
summary(cars)
```

```
24 ##      speed           dist
25 ##  Min.   : 4.0   Min.   :  2
26 ##  1st Qu.:12.0   1st Qu.: 26
27 ##  Median :15.0   Median : 36
28 ##  Mean   :15.4   Mean   : 43
29 ##  3rd Qu.:19.0   3rd Qu.: 56
30 ##  Max.   :25.0   Max.   :120
```

31   For prettier tables, I suggest you take a look at the `xtable` package (for an example,
32 see last page of this document; as required by the APA guidelines, the table is printed to the
33 final pages of the document) although there are other ways of doing this. Unfortunately, for
34 now, the caption is set to the left page margin. :(

```r
library(xtable)
print(
  xtable(summary(cars), caption = "Pretty table produced with the xtable-package.")
  , comment = FALSE
  , booktabs = TRUE
  , caption.placement = "top"
  , include.rownames = FALSE
)
```

35   You can also embed plots, for example:

```r
plot(cars)
```

36   As required by the APA guidelines, the figure is printed to the final pages of the
37 document. In RStudio you may have to click the gear (edit the RMarkdown format options),
38 switch to the tab "Figures" and check the option "Render figures with captions" to make
39 this work.

40   The line numbering can be deactivated in the header of this document by removing the
41 `lineno` argument.

42   Finally, you can easily insert citations (e.g., Baumer, Cetinkaya-Rundel, Bray, Loi, &
43 Horton, 2014). Citing without parentheses is, of course, also possible: Baumer et al. (2014).
44 The citation style is set in the header of this document. The relevant references will, of
45 course, be added to the documents references automatically.

46   That's all I have for now. Enjoy writing your manuscript. If you have an trouble or
47 ideas for improve ments, send me an E-Mail, open an issue on GitHub or make a pull request
48 with the fix. ;)

References

Baumer, B., Cetinkaya-Rundel, M., Bray, A., Loi, L., & Horton, N. J. (2014). R Markdown: Integrating A Reproducible Analysis Tool into Introductory Statistics. *ArXiv E-Prints.* Retrieved from http://adsabs.harvard.edu/abs/2014arXiv1402.1894B

Table 1

Pretty table produced with the xtable-package.

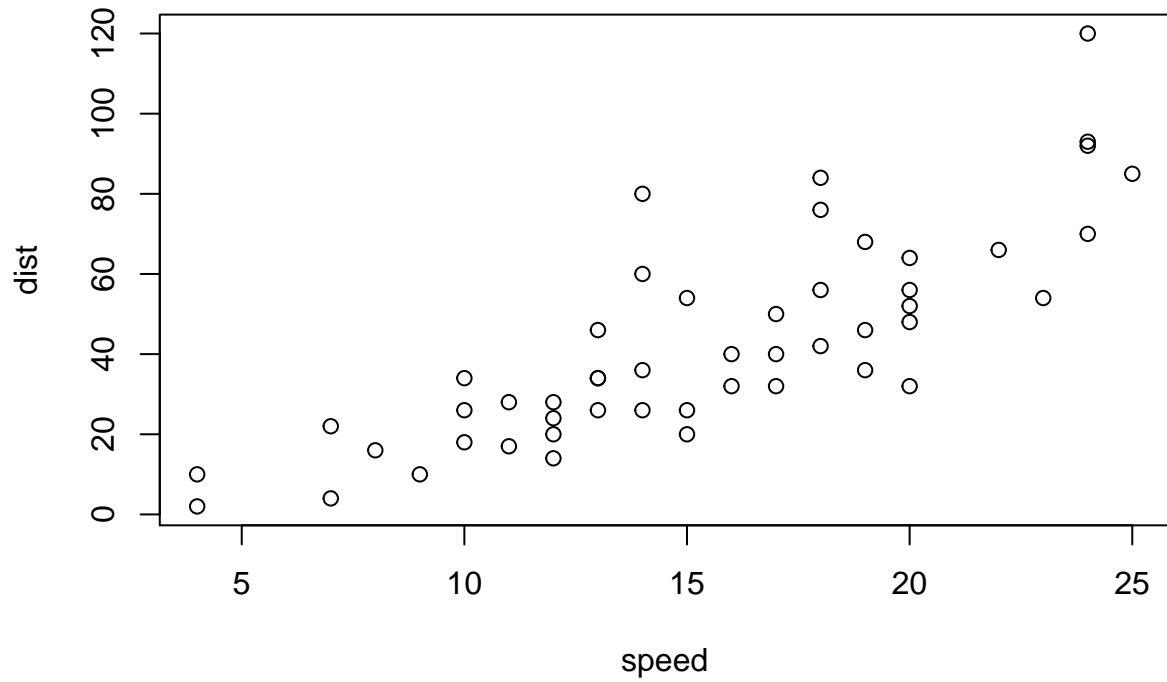| speed	dist
Min. : 4.0	Min. : 2
1st Qu.:12.0	1st Qu.: 26
Median :15.0	Median : 36
Mean :15.4	Mean : 43
3rd Qu.:19.0	3rd Qu.: 56
Max. :25.0	Max. :120

Figure 1. Exmple figure created by in-document R code.