Multivariate Analysis: Homework #1

Due on March 10, 2021

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Contents

1 My Section Header 1

english english . .

Please see the documentation of RMarkdown for more details on how to write RMarkdown documents.

Download a testlogo from here: https://raw.githubusercontent.com/sebastiansauer/yart/master/docs/logo.png and uncomment the respective line in the header.

For finetuning of design options, please check the tex template. There you will find some variables such as `$classoption$`. Those variables may be addressed in the yaml header of the yart file.

1.1 My Section Header 2

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- Aufzählungen (nummeriert oder nicht) sind möglich.

- Sonderzeichen werden unterstützt: äüß.

- LaTeXwird unterstützt.

- Und damit auch "schöne" Formeln: $e^{ln(e)} = e$ (stimmt das?).

- Ein Überblick zur **Markdown-Syntax** findet sich hier.

- Ein paar Gimmicks: H_2O, This ~~is deleted text.~~, feas*ible*, not feas*able*, lang—ganz lang.

- Use `\ts` as a shorthand for `\thinspace` to get "z. B." instead of "z. B." (thin space between the two letters)

- Footnotes are supported[1].

- Zitationen sind möglich, im beliebigen Format, z.B. APA6. Das Format wird über die Variable `cls` definiert (im Kopfteil oben). Die entsprechende Datei muss im gleichen Ordner liegen wie diese Rmd-Datei. Die Datei mit den bibliographischen Informationen wird über die Variable `bibliography` angegeben. Auch diese Datei muss sich im gleichen Ordner befinden wie diese Rmd-Datei.

- Besonders schön ist es, dass man R direkt einbinden kann über knitr. Hier findet sich eine gute Anleitung.

We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study.

2   R-Code

So bindet man R-Code ein:

```r
x <- c(1,2,3)
mean(x)
```

```
## [1] 2
```

3   Citation

Put the file with the references in the same folder as the rmd-file. Uncomment/insert a line in the yaml header such as `bibliography: bib.bib`, where `bib.bib` is the name of your bib-file. Similarly, if you want to format the citation in a certain style, put the respective csl-file in the same folder as this document and uncomment/insert this line in the yaml header: `csl: apa6.csl`, where `apa6.csl` is the style file.

Use this format for citation: `[\@bibtexkey]`. Put all the bibliography data in one bibliography file.

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[1]Fußnoten sind bei Pandoc eine Art von Links.

Don't forget to cite software and data. R and R packages can be cited in the following way:

```
citation()
citation("rmarkdown")
```

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4 Tabellen

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So erstellt man "von Hand" eine Tabelle in Markdown:

```
 Right    Left    Center    Default
 -------   ------ ----------  -------
      12    12       12            12
     123    123      123          123
       1    1        1              1
```

Table: Table caption

Das ist das Ergebnis:

Table 1: Table caption

Right	Left	Center	Default
12	12	12	12
123	123	123	123
1	1	1	1

There are comfortable and powerful R packages available for rendering markdown tables such as Huxtable, or xtable, and other.

Table with R package `xtable`; note that this package needs to be installed to run this example.

```
data(mtcars)


library(xtable)
print.xtable(
  xtable(head(daten),
        label="tab:daten",
        caption="Datenstruktur für eine within-Analyse"),
  comment=FALSE)
```

5   Figures

Use knit to insert images. Figures can be referenced, too.

6   References

[If some literature is cited, it appears here]