### Title of the thesis

# Bachelorarbeit der Mathematisch-Naturwissenschaftlichen Fakultät der Eberhard Karls Universität Tübingen

Fachbereich Informatik
Experimentelle Kognitionswissenschaft

Vorgelegt von

Florian Friedrich Tübingen, den 14.9.2021

#### Abstract

One or two sentences providing a **basic introduction** to the field, comprehensible to a scientist in any discipline.

Two to three sentences of more detailed background, comprehensible to scientists in related disciplines.

One sentence *clearly* stating the **general problem** being addressed by this particular study.

One sentence summarizing the main result (with the words "here we show" or their equivalent).

Two or three sentences explaining what the **main result** reveals in direct comparison to what was thought to be the case previously, or how the main result adds to previous knowledge.

One or two sentences to put the results into a more **general context**.

Two or three sentences to provide a **broader perspective**, readily comprehensible to a scientist in any discipline.

(From: https://crsh.github.io/papaja\_man/r-markdown-components.html)

## Zusammenfassung

German translation of the abstract.

## Contents

A	Abstract Zusammenfassung				
Zι					
1	Intr	roduction	1		
	1.1	Sub-Headings	1		
	1.2	Formatting	1		
<b>2</b>	Main Section				
	2.1	Motivation	2		
	2.2	Methods	2		
		2.2.1 Images	2		
	2.3	Results	2		
3	Discussion				
4	References				
5	Statement				

# List of Figures

## List of Tables

#### 1 Introduction

To add a bit formatting, I start every new paragraph with three , non-breakable spaces (I'm not sure if this is the correct name, but it makes sense).

This way, the first line of every paragraph is a little bit indented. I like this, but of course this is not necessary. If you know how to 'automate' this in this template, please let me know!

#### 1.1 Sub-Headings

You can use headings and subheadings in the different content files just as if you were writing in the main document. Also, you can access citations from every file (e.g. Sumner, 2008).

#### 1.2 Formatting

Of course, **bold** and *italic* fonts can be achieved by using *asterisks* or *underscores* - you see, this is standard Markdown. You can even add comments in the text using the html-comment tags. Personally, I used such comments to add explanations or remove sections, just to get a good argumentative flow in my thesis.

#### 2 Main Section

#### 2.1 Motivation

#### 2.2 Methods

#### **2.2.1** Images

Images are a bit more complicated to include than in pure markdown. However, if you ever used LaTeX, this might not be so hard for you. You can use the \slcaption command to add a caption, from which the first sentence (up to the first dot) will be used as the figure's name in the table of contents. If you do not need this, you might actually use the easy markdown version. Use \label to refer to the figure number from every content file (Fig. 1).

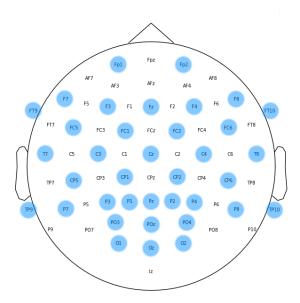


Figure 1: Electrode locations. The marked electrodes have been recorded in this experiment. The electrodes used for the EOG are not pictured.

#### 2.3 Results

I like to do the analyses in RMarkdown. I can then include these files in the thesis, so that the analysis results for the data (stored in the data subfolder in content) can be used in the text.

Depending on the settings print\_analysis and print\_analysis\_results the following section displays some R code or not. Even if the code is not shown, it is executed.

```
# this is where regular R stuff happens
x <- 3 + 4</pre>
```

After the heading, but before this section, I included an analysis script example. Using the first R section in the thesis.Rmd file, you can choose if these scripts are printed into the final pdf file.

#### 3 Discussion

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Also, the variable x from the analysis script is 7. Also, some inline math with this variable: the square root of this variable is **2.6457513**. Also, you can wrap markdown highlighting around such inline R stuff. And you can combine LaTeX and R:  $\sqrt{7} = 2.6457513$ .

## 4 References

Sumner, P. (2008). Mask-induced priming and the negative compatibility effect. Experimental  $Psychology,\ 55(2),\ 133-141.$ 

5 Statement

Hiermit erkläre ich, dass ich diese Arbeit selbst verfasst und keine anderen als die angegebenen Quellen

und Hilfsmittel genutzt habe, alle wörtlich oder oder sinngemäß aus anderen Werken übernommenen

Aussagen als solche gekennzeichnet habe, die Arbeit weder vollständig noch in wesentlichen Teilen

Gegenstand eines anderen Prüfungsverfahren gewesen ist und die Arbeit weder vollständig noch in

wesentlichen Teilen bereits veröffentlicht ist, sowie dass das in Dateiform eingereichte Exemplar mit

eingereichtem gebundenem Exemplar übereinstimmt.

Ich erkläre, dass ich die Richtlinine zur Sicherung guter wissenschaftlicher Praxis und zum Umgang mit

wissenschaftlichem Fehlverhalten an der Eberhard-Karls-Universität beachtet habe.

Name - Stadt, den 14.9.2021

6