

# Thesis Title

Thesis Subtitle

Author Name

Dissertation for MSc Data Science



School of Computing and Communications  
Lancaster University  
Lancaster, UK  
December 5, 2019



## **Abstract**

My abstract goes here...

# Contents

<b>Acknowledgements</b>	<b>iv</b>
<b>1 Introduction</b>	<b>1</b>
1.1 Background information . . . . .	1
1.2 Literature review . . . . .	1
<b>2 Methods</b>	<b>2</b>
2.1 Important main method . . . . .	2
2.2 Additional method . . . . .	2
<b>3 Results</b>	<b>3</b>
3.1 Main results . . . . .	3
<b>4 Discussion</b>	<b>6</b>
4.1 What I found . . . . .	6
4.2 What it means . . . . .	6
<b>5 References</b>	<b>7</b>
<b>Appendix of R code</b>	<b>8</b>

# List of Tables

3.1	Parameter estimates from regression of mpg on weight. . . . .	3
-----	---	---

# List of Figures

3.1	An example figure. . . . .	4
3.2	Another example figure. . . . .	4

# Acknowledgements

I would like to thank ...

# Chapter 1

## Introduction

### 1.1 Background information

- text 1
- text 2
- text 3
- more text
- more text

### 1.2 Literature review

One important development was made by Abrams, Gillies, and Lambert (2005).



# Chapter 2

## Methods

### 2.1 Important main method

Initial modelling was performed using linear regression as defined in equation (2.1).

$$y_i = \beta_0 + \beta_1 x_i + \varepsilon_i, \varepsilon_i \stackrel{iid}{\sim} N(0, \sigma^2) \quad (2.1)$$

### 2.2 Additional method

- text 6
- text 7

## Results

And here is an example table of regression coefficients in Table 3.1.

Table 3.1: Parameter estimates from regression of mpg on weight.

[illegible]

```
plot(pressure, pch = 19, type = "b")
```

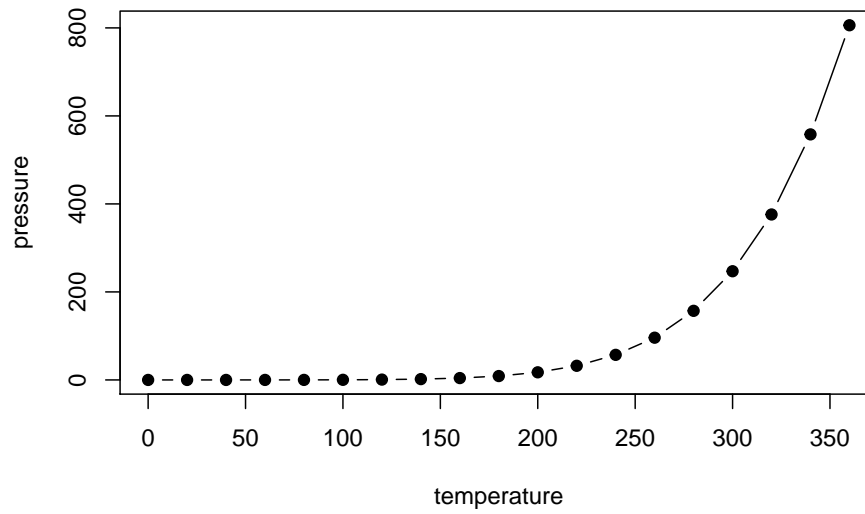


Figure 3.1: An example figure.

And we can include image files directly, such as Figure 3.2.

```
knitr::include_graphics("img/mtcars-scatter.png")
```

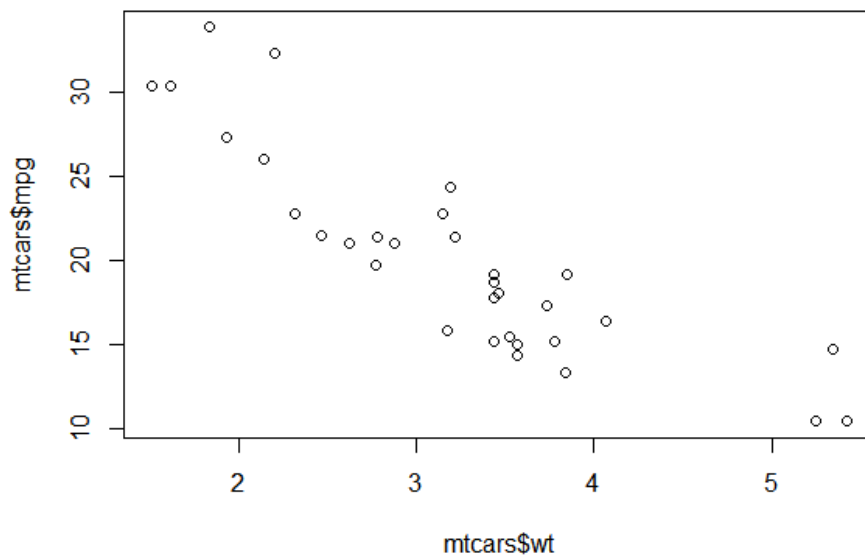


Figure 3.2: Another example figure.

To figure code chunks add the chunk option `fig.pos="H"` to use the LaTeX float package to try and position the figure where the code appears.

Also, this is how to reference a section, e.g. the Introduction was chapter 1 and the Literature Review was section 1.2.

## Chapter 4

# Discussion

### 4.1 What I found

- text 1
- text 2
- text 3
- more text
- more text

### 4.2 What it means

- text 6
- text 7

## Chapter 5

## References

Abrams, K. R., C. L. Gillies, and P. C. Lambert. 2005. “Meta-Analysis of Heterogeneously Reported Trials Assessing Change from Baseline.” *Statistics in Medicine* 24: 3823–44.

# Appendix of R code

```
model <- lm(y ~ x1 + x2, data = df)
summary(model)
```