Example for using RMarkdown to create scientific manuscripts

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Abstract

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Contents

Analysis

Use r chunks for your analysis and use the results later.

Report your stats

The loaded example data contain the speed of cars and the distances taken to stop. The correlation between these two variables is significant, $r = .807$, $p < .001$.

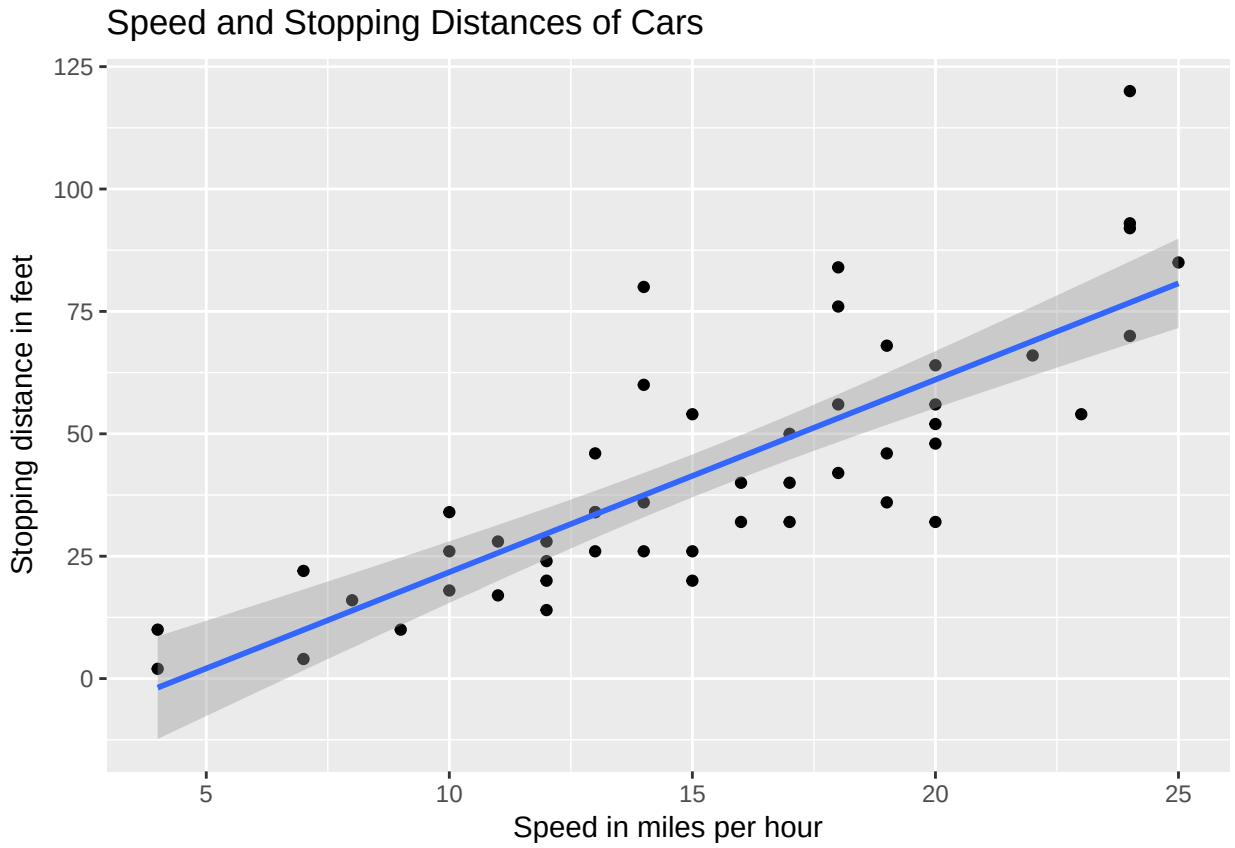

Figure 1: There is a significant correlation between the speed of a car and the distance it needs to stop, $r = .807$, $p < .001$.

Show your graphs

You add nicely rendered graphs to your text. For that it is important to specify that you want the respected chunk to be included but not echoed.

Writing your text and cite

The nice thing about RMarkdown is that you can write the whole manuscript with that includes using citations. You can have the standard way of citing at the end of a sentence (Quent, 2017a, 2017b). As Quent (2017a) shows, you can also have it that way. Most reference management software (e.g. Zotero or Mendeley) alow you to export the refereneces in BibTeX format. In this case, the references are saved in BibTeX format in the references.bib file.

Your fancy formulas

You are able to create fancy formulars by innserting LaTex bits surrounded by $ signs. Today, we will use a correlation:

$$r = \frac{\Sigma(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\Sigma(x_i - \bar{x})^2 \Sigma(y_i - \bar{y})^2}}$$

References

Quent, J. A. (2017a). This is a title. *Made up journal*, *1*(1), 1–2.

Quent, J. A. (2017b). This is another title. *Proceedings in the world of fantasy*, *3*(10), 44–99.