

manuscript example

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Abstract Using some common datasets, we demonstrate the use of Quarto to create a manuscript with multiple sections and figures. The manuscript includes an overview of the `mtcars` dataset, plots of the `mtcars` dataset, an overview of the `iris` dataset, and plots of the `iris` dataset.

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1 Introduction

Here we are going to write a long manuscript with many sections and figures. The analyses are arranged into different folders for clarity.

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2 Methods

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3 Results

3.1 mtcars overview

car model	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160	110	3.90	2.620	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875	17.02	0	1	4	4
Datsun 710	22.8	4	108	93	3.85	2.320	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360	175	3.15	3.440	17.02	0	0	3	2
Valiant	18.1	6	225	105	2.76	3.460	20.22	1	0	3	1

?@tbl-mtcars-head shows the first few rows of the mtcars dataset. The dataset contains 32 observations and 11 variables. The variables are mpg, cyl, disp, hp, drat, wt, qsec, vs, am, gear, and carb.

cyl	mpg	disp	hp	drat	wt	qsec
4	26.7	105.1	82.6	4.1	2.3	19.1
6	19.7	183.3	122.3	3.6	3.1	18.0
8	15.1	353.1	209.2	3.2	4.0	16.8

?@tbl-mtcars-summary shows the means of the mtcars dataset. Only the first 6 variables are shown.

3.2 mtcars plots

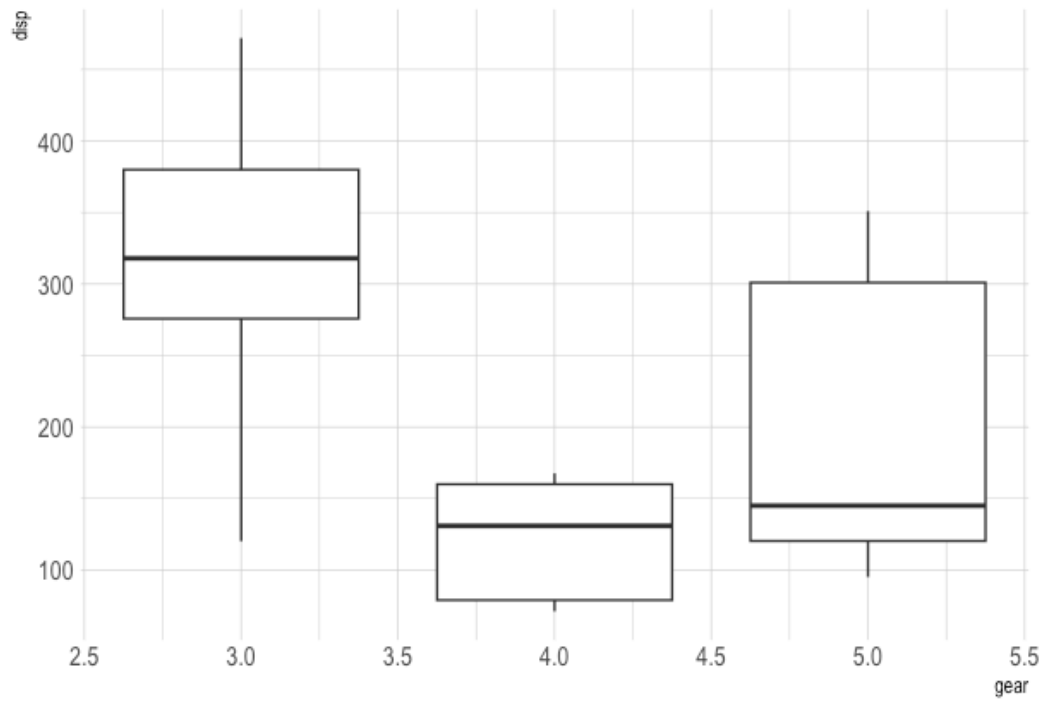


Figure 1

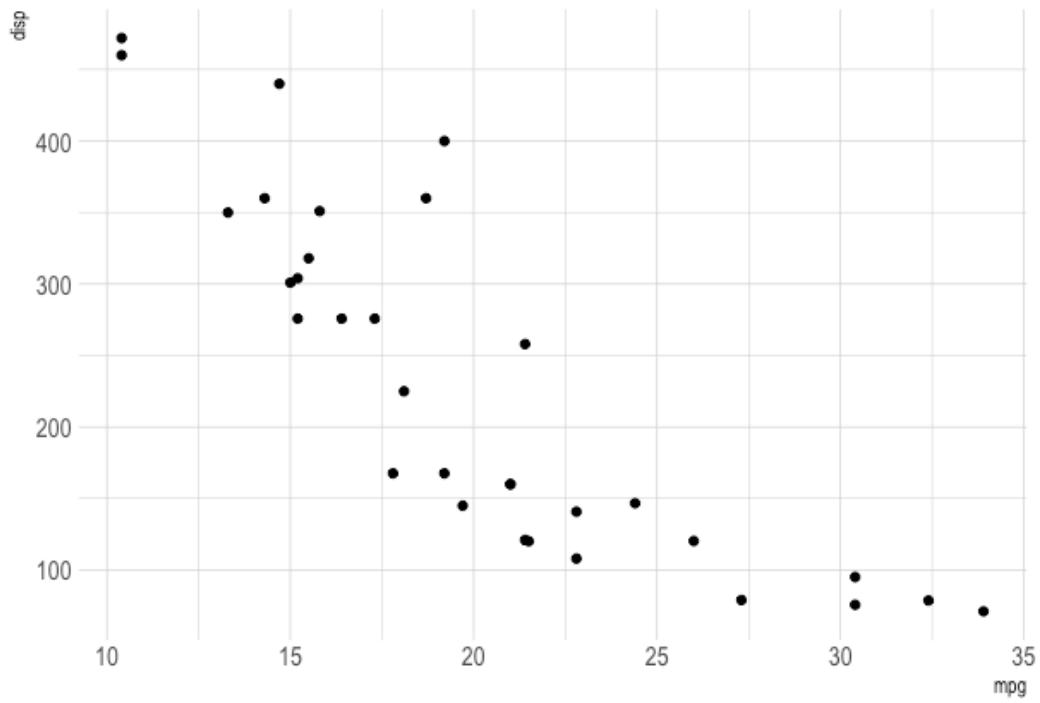


Figure 2

Figure 1 shows the boxplot of disp in the mtcars dataset for different gears. Figure 2 shows the scatter plot between mpg and disp in the mtcars dataset.

Combined plots

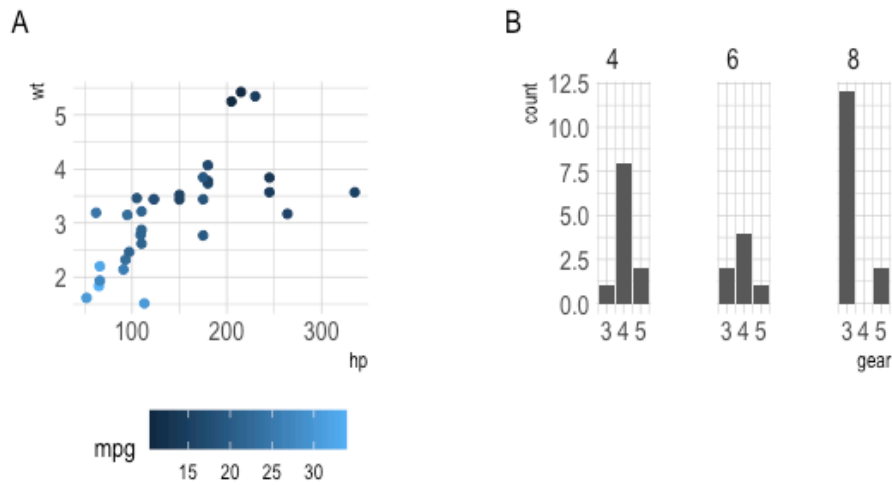


Figure 3

Figure 3 shows the combined plot of a colored scatter and a bar plot for the `mtcars` dataset. Figure 3 A indicates weight has positive correlation with hp, with higher weights having larger horsepower, accompanied by lower mpg. We can see that four forward gears are most popular for cars with 4 or 6 cylinders, while 3 gears are most popular for cars with 8 cylinders (Figure 3 B).

3.3 Iris overview

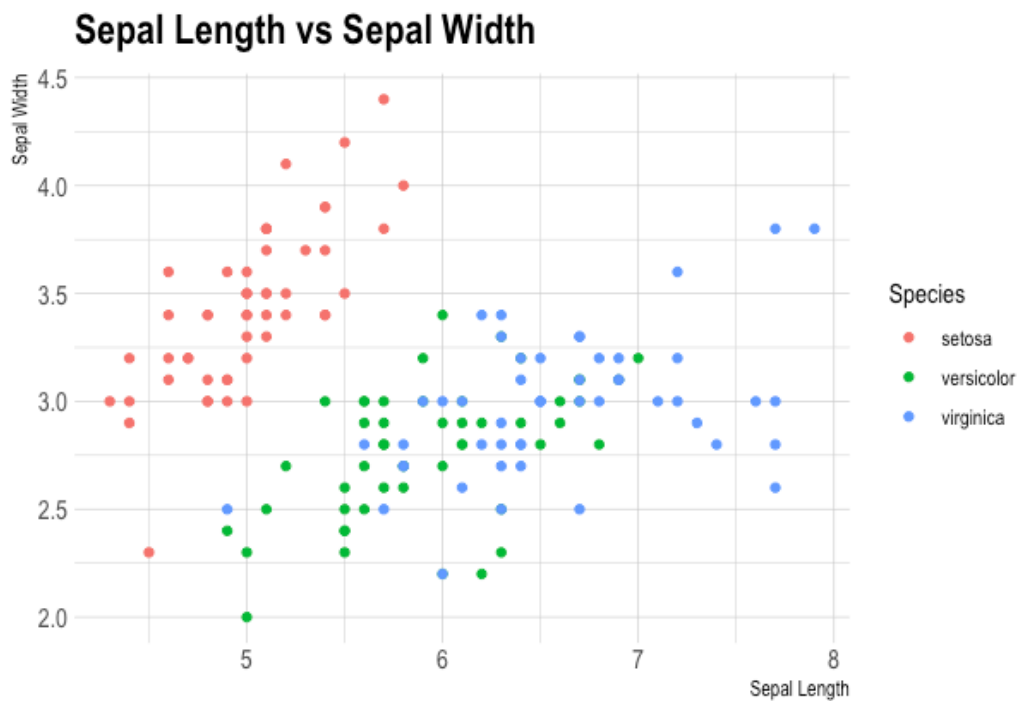
Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
5.1	3.5	1.4	0.2	setosa
4.9	3.0	1.4	0.2	setosa
4.7	3.2	1.3	0.2	setosa
4.6	3.1	1.5	0.2	setosa
5.0	3.6	1.4	0.2	setosa
5.4	3.9	1.7	0.4	setosa

?@supptbl-iris-head shows the first few rows of the iris dataset. The dataset contains 150 observations and 5 variables. The variables are Sepal.Length, Sepal.Width, Petal.Length, Petal.Width, and Species.

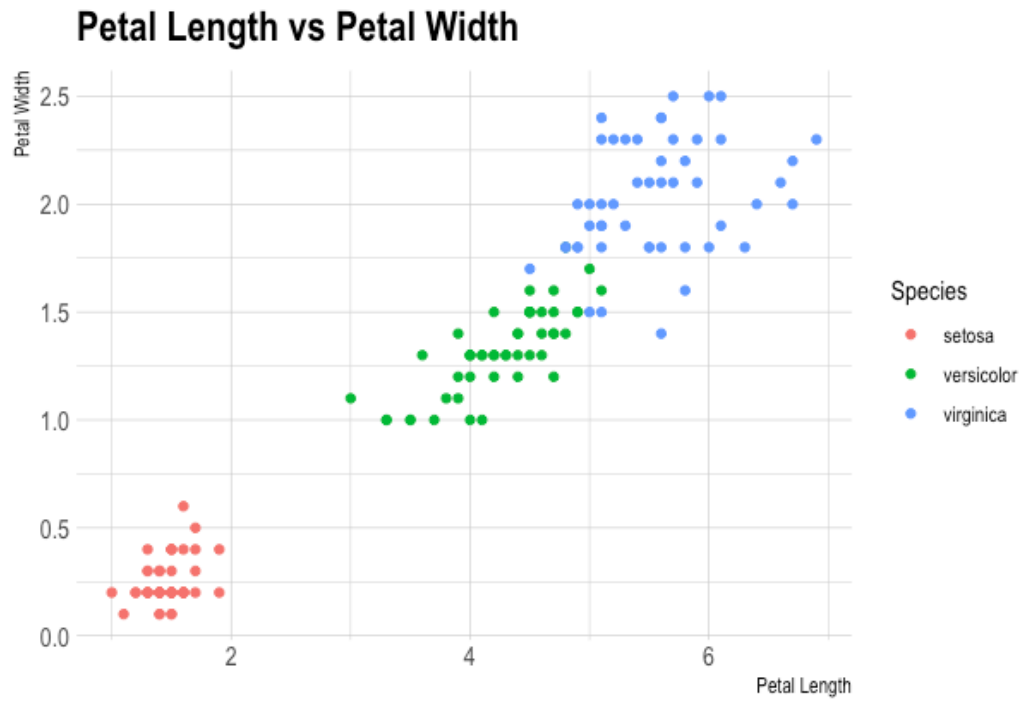
Species	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width
setosa	5.0	3.4	1.5	0.2
versicolor	5.9	2.8	4.3	1.3
virginica	6.6	3.0	5.6	2.0

?@supptbl-iris-summary shows the means of the iris dataset.

3.4 Iris plots



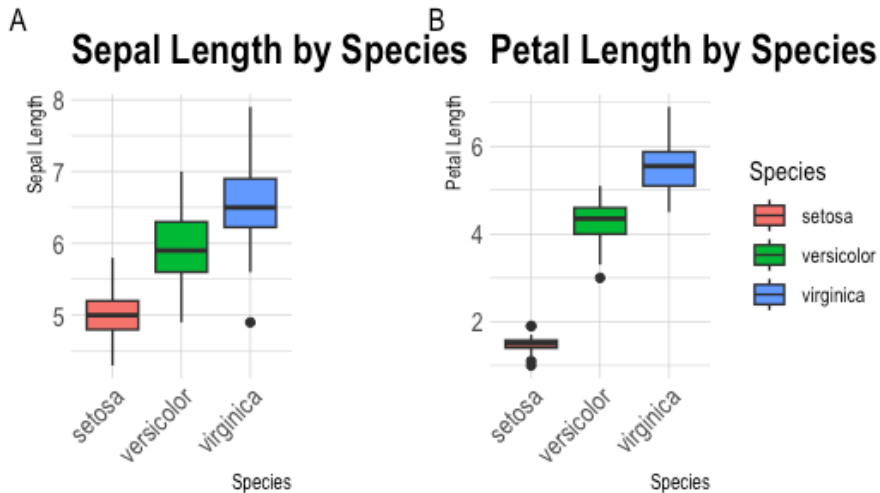
Supplementary Fig. 1



Supplementary Fig. 2

Supplementary Fig. 1 shows the scatter plot of sepal length and sepal width for the iris dataset. Supplementary Fig. 2 shows the scatter plot of petal length and petal width for the iris dataset.

Sepal and Petal Length by Species



Supplementary Fig. 3

Supplementary Fig. 3 shows the combined boxplot of sepal and petal length for the iris dataset. The sepal length is larger for the *virginica* species compared to the other two species (Supplementary Fig. 3 A). Similarly, the petal length is larger for the *virginica* species compared to the other two species (Supplementary Fig. 3 B).

4 Discussion

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5 Conclusion

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6 References

Bibliography