¹ The title

First Author[1] & Ernst-August Doelle[1,2]

[1] Wilhelm-Wundt-University

[2] Konstanz Business School

Author Note

Add complete departmental affiliations for each author here. Each new line herein must be indented, like this line.

Enter author note here.

The authors made the following contributions. First Author: Conceptualization, Writing - Original Draft Preparation, Writing - Review & Editing; Ernst-August Doelle: Writing - Review & Editing.

Correspondence concerning this article should be addressed to First Author, Postal address. E-mail: my@email.com

14   Abstract

15   One or two sentences providing a **basic introduction** to the field, comprehensible to a

16   scientist in any discipline.

17   Two to three sentences of **more detailed background**, comprehensible to scientists

18   in related disciplines.

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

20   study.

21   One sentence summarizing the main result (with the words "**here we show**" or their

22   equivalent).

23   Two or three sentences explaining what the **main result** reveals in direct comparison

24   to what was thought to be the case previously, or how the main result adds to previous

25   knowledge.

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

27   Two or three sentences to provide a **broader perspective**, readily comprehensible to

28   a scientist in any discipline.

29   *Keywords:* keywords

30   Word count: X

₃₁   The title

₃₂   Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut efficitur commodo est

₃₃ quis mattis. Curabitur egestas enim sed est consectetur, eget porta quam viverra. Vivamus

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₄₁ vehicula. Mauris posuere ipsum ex.[1]

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₄₃ elementum mi, eu condimentum nulla mollis nec. Sed velit ex, interdum ac magna ut,

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₄₆ et magnis dis parturient montes, nascetur ridiculus mus. Integer libero diam, pellentesque

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₄₉ facilisis cursus sed congue lacus. Sed vel lacus in purus malesuada consequat ut ac odio. [2]

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₅₂ urna nulla dapibus lectus, in dignissim odio sapien a libero. Donec quis orci luctus felis

₅₃ viverra mattis. Sed diam leo, accumsan ornare auctor sit amet, ultricies eget tellus. Ut

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[1] Tragically this is no longer true. Many `kableExtra` functions now (as of Feb 2024) break spectacularly in papaja notebooks.

[2] This is a named footnote.

dignissim, risus et ornare laoreet, metus dui aliquet odio, quis fermentum elit ante ac lorem. Etiam venenatis consequat quam, vel convallis nisl varius sit amet. Pellentesque libero nulla, gravida nec feugiat sit amet, aliquet sed ex. Suspendisse nulla nibh, mollis a erat quis, pharetra semper nulla. Morbi blandit imperdiet mauris ut pellentesque. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum et elit diam. Nulla gravida faucibus ligula, eget consectetur ex aliquet vel. Sed finibus vestibulum nibh, at blandit velit faucibus vitae.

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Tables

Knitting R documents can render tables in several different forms. To start, you have your basic "console style." This is more or less what you'd see in the console you just ran the table (or called the object) in an R script or directly in the console.

```
## # A tibble: 3 x 4
##     cyl mean.mpg sd.mpg n.models
```

---

[3] Tragically this is no longer true. Many `kableExtra` functions now (as of Feb 2024) break spectacularly in papaja notebooks.

```
## <dbl> <dbl> <dbl> <int>
## 1     4  26.7  4.51    11
## 2     6  19.7  1.45     7
## 3     8  15.1  2.56    14
```

The `knitr` package contains the `kable()` function. Passing a dataframe into this function will produce a formatted table that's already pretty nice looking without needing additional modification. When you run the code chunk in R Studio, it is clearly different from the console version, but it's not exactly beautiful. However, that output that appears beneath your code chunk isn't the same as what you'll see when you actually knit it.

You don't need to do anything more than pipe the df to `kable()` to get this formatted table, but we can add optional arguments like `caption`.

Table 1

mpg stats by number of cylinders

cyl	mean.mpg	sd.mpg	n.models
4	26.66364	4.509828	11
6	19.74286	1.453567	7
8	15.10000	2.560048	14

From there we can add in many additional arguments to tweak the visuals of this already decently formatted table exactly to our preferences. Alternatively, we can use "wrapper" functions that add in a collection of tweaks for us, like the `apa_table()` function in `papaja`, which will knit the table in APA formatting.

In this example, rather than piping the df into the function (which we could have done), the df is saved as an object that is then used as the `data` argument. Because `apa_table()` is a wrapper, we can still use the same arguments with the basic `kable()` function, like `caption`.

Some wrapper functions, including `apa_table()`, rely on LaTeX formatting that can't render in R Studio. When you run the chunk in your R notebook, you'll just see a blank box. The APA formatted table will render in your Word or PDF document. Note that not all wrapper functions will have this "blank box problem." Other wrappers will not only not show up in R Studio, but will only render in either Word *or* PDF format.

Back to the basic kable, there is nearly unlimited customization you can employ, especially if you use the `kableExtra` package (which is exactly what it sounds like). Here are a handful of modifications I think you're most likely to want to know about:

1. Add a caption
2. Change column names
3. Specify column alignment
4. Format columns
5. Style table size and position
6. Make row- and column-specific tweaks
7. Group rows, columns, and cells
8. Add table (foot)notes

Many of the examples below are taken or adapted from the R Markdown Cookbook.

These tables modify column names and alignment identically but with slightly different syntax and add captions to describe each:

These tables specify format of numeric columns:

For the second half of the list (5-8), we need the `kableExtra` package. Most things that this package can do will work in both Word and PDF outputs, but Word does not support LaTeX formatting. As a result, the results are pretty iffy. Sticking with PDF output format is recommended. If you need to knit to a Word doc, refer to the package documentation for suggestions on how to do so.

¹²¹ This package includes the `kbl()` function, which is *identical* to `kable()`. If you have

¹²² `kableExtra` loaded you can use either, but the advantage of using `kbl()` is that it will

¹²³ throw an obvious error if you don't have the package loaded, which you might not notice

¹²⁴ otherwise.

¹²⁵ To use styling functions in the `kableExtra` package, you'll create a kable with

¹²⁶ `kable()` or `kbl()` and pipe (`%>%`) it into the style function. Examples in this section come

¹²⁷ from the `kableExtra` package documentation.

¹²⁸ By default, knitr will place tables wherever it thinks the best place in your document

¹²⁹ for that table will be. This is often great, but sometimes it's a very bad guesser. It will

¹³⁰ also guess the size/scale your table should be. You can control these things yourself.

¹³¹ In Table 7, the `hold_position` style option "pins" the table where you call it. Most

¹³² examples from here on will include this argument.

¹³³ Table 8, shows the use of the `scale_down` option (with `hold_position`) to scale a

¹³⁴ wide table down to fit on the page. This can be used instead of or in addition to printing

¹³⁵ the table in landscape page format. See the `kableExtra` docs for how to do that.

¹³⁶ You can also scale *up* a table to make a small/narrow table full width with either the

¹³⁷ `scale_up` option (Table 9) or `full_width` argument (Table 10).

¹³⁸ When you have very long tables that would extend over multiple pages, use the

¹³⁹ `longtable` argument, usually in combination with the `repeat_header` option (Table 11).

Table 11

Use the 'longtable' argument in the kbl() to intelligently manage very long tables. Use the repeat header LaTeX option

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160.0	110	3.90	2.620	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160.0	110	3.90	2.875	17.02	0	1	4	4

Table 11

Use the 'longtable' argument in the kbl() to intelligently manage very long tables. Use the repeat header LaTeX option (continued)

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Datsun 710	22.8	4	108.0	93	3.85	2.320	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258.0	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360.0	175	3.15	3.440	17.02	0	0	3	2
Valiant	18.1	6	225.0	105	2.76	3.460	20.22	1	0	3	1
Duster 360	14.3	8	360.0	245	3.21	3.570	15.84	0	0	3	4
Merc 240D	24.4	4	146.7	62	3.69	3.190	20.00	1	0	4	2
Merc 230	22.8	4	140.8	95	3.92	3.150	22.90	1	0	4	2
Merc 280	19.2	6	167.6	123	3.92	3.440	18.30	1	0	4	4
Merc 280C	17.8	6	167.6	123	3.92	3.440	18.90	1	0	4	4
Merc 450SE	16.4	8	275.8	180	3.07	4.070	17.40	0	0	3	3
Merc 450SL	17.3	8	275.8	180	3.07	3.730	17.60	0	0	3	3
Merc 450SLC	15.2	8	275.8	180	3.07	3.780	18.00	0	0	3	3
Cadillac Fleetwood	10.4	8	472.0	205	2.93	5.250	17.98	0	0	3	4
Lincoln Continental	10.4	8	460.0	215	3.00	5.424	17.82	0	0	3	4
Chrysler Imperial	14.7	8	440.0	230	3.23	5.345	17.42	0	0	3	4
Fiat 128	32.4	4	78.7	66	4.08	2.200	19.47	1	1	4	1
Honda Civic	30.4	4	75.7	52	4.93	1.615	18.52	1	1	4	2
Toyota Corolla	33.9	4	71.1	65	4.22	1.835	19.90	1	1	4	1
Toyota Corona	21.5	4	120.1	97	3.70	2.465	20.01	1	0	3	1
Dodge Challenger	15.5	8	318.0	150	2.76	3.520	16.87	0	0	3	2
AMC Javelin	15.2	8	304.0	150	3.15	3.435	17.30	0	0	3	2
Camaro Z28	13.3	8	350.0	245	3.73	3.840	15.41	0	0	3	4

Table 11

Use the 'longtable' argument in the kbl() to intelligently manage very long tables. Use the repeat header LaTeX option (continued)

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Pontiac Firebird	19.2	8	400.0	175	3.08	3.845	17.05	0	0	3	2
Fiat X1-9	27.3	4	79.0	66	4.08	1.935	18.90	1	1	4	1
Porsche 914-2	26.0	4	120.3	91	4.43	2.140	16.70	0	1	5	2
Lotus Europa	30.4	4	95.1	113	3.77	1.513	16.90	1	1	5	2
Ford Pantera L	15.8	8	351.0	264	4.22	3.170	14.50	0	1	5	4
Ferrari Dino	19.7	6	145.0	175	3.62	2.770	15.50	0	1	5	6
Maserati Bora	15.0	8	301.0	335	3.54	3.570	14.60	0	1	5	8
Volvo 142E	21.4	4	121.0	109	4.11	2.780	18.60	1	1	4	2
Mazda RX41	21.0	6	160.0	110	3.90	2.620	16.46	0	1	4	4
Mazda RX4 Wag1	21.0	6	160.0	110	3.90	2.875	17.02	0	1	4	4
Datsun 7101	22.8	4	108.0	93	3.85	2.320	18.61	1	1	4	1
Hornet 4 Drive1	21.4	6	258.0	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout1	18.7	8	360.0	175	3.15	3.440	17.02	0	0	3	2
Valiant1	18.1	6	225.0	105	2.76	3.460	20.22	1	0	3	1
Duster 3601	14.3	8	360.0	245	3.21	3.570	15.84	0	0	3	4
Merc 240D1	24.4	4	146.7	62	3.69	3.190	20.00	1	0	4	2
Merc 2301	22.8	4	140.8	95	3.92	3.150	22.90	1	0	4	2
Merc 2801	19.2	6	167.6	123	3.92	3.440	18.30	1	0	4	4
Merc 280C1	17.8	6	167.6	123	3.92	3.440	18.90	1	0	4	4
Merc 450SE1	16.4	8	275.8	180	3.07	4.070	17.40	0	0	3	3
Merc 450SL1	17.3	8	275.8	180	3.07	3.730	17.60	0	0	3	3
Merc 450SLC1	15.2	8	275.8	180	3.07	3.780	18.00	0	0	3	3

Table 11

Use the 'longtable' argument in the kbl() to intelligently manage very long tables. Use the repeat header LaTeX option (continued)

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Cadillac Fleetwood1	10.4	8	472.0	205	2.93	5.250	17.98	0	0	3	4
Lincoln Continental1	10.4	8	460.0	215	3.00	5.424	17.82	0	0	3	4
Chrysler Imperial1	14.7	8	440.0	230	3.23	5.345	17.42	0	0	3	4
Fiat 1281	32.4	4	78.7	66	4.08	2.200	19.47	1	1	4	1
Honda Civic1	30.4	4	75.7	52	4.93	1.615	18.52	1	1	4	2
Toyota Corolla1	33.9	4	71.1	65	4.22	1.835	19.90	1	1	4	1
Toyota Corona1	21.5	4	120.1	97	3.70	2.465	20.01	1	0	3	1
Dodge Challenger1	15.5	8	318.0	150	2.76	3.520	16.87	0	0	3	2
AMC Javelin1	15.2	8	304.0	150	3.15	3.435	17.30	0	0	3	2
Camaro Z281	13.3	8	350.0	245	3.73	3.840	15.41	0	0	3	4
Pontiac Firebird1	19.2	8	400.0	175	3.08	3.845	17.05	0	0	3	2
Fiat X1-91	27.3	4	79.0	66	4.08	1.935	18.90	1	1	4	1
Porsche 914-21	26.0	4	120.3	91	4.43	2.140	16.70	0	1	5	2
Lotus Europa1	30.4	4	95.1	113	3.77	1.513	16.90	1	1	5	2
Ford Pantera L1	15.8	8	351.0	264	4.22	3.170	14.50	0	1	5	4
Ferrari Dino1	19.7	6	145.0	175	3.62	2.770	15.50	0	1	5	6
Maserati Bora1	15.0	8	301.0	335	3.54	3.570	14.60	0	1	5	8
Volvo 142E1	21.4	4	121.0	109	4.11	2.780	18.60	1	1	4	2

140   By default, tables are aligned center on the page, but they can also be aligned left or
141 right. Note that alignment does not apply to full width tables. Table 12 uses the `position`
142 `= "left"` `argument` to align left. Oddly, aligning right in the same way doesn't work as
143 expected. In theory you can "float right" rather than position right, but this can produce

errors. It's unlikely you'll need to right align a table though.

You can make style adjustments to the whole table (e.g., font fact, background color, bold/italic) or to specific rows and columns. Table **??** includes three `column_spec` functions to modify properties in columns 2, 6, and 9.

Table **??** includes two `row_spec` functions to modify properties in rows 1 and rows 3-5.

You can "group" rows and columns, basically equivalent to merging cells in a spreadsheet. This is commonly needed for multi-level headers or organizing non-rectangular data (like a lot of model output). Table **??** uses the `add_header_above()` function to do so.

You can group more than once and format these header rows individually. Use the total number of rows to specify how many columns to group, not the number of rows in the grouped row below it (Table 13).

Grouping rows is a little different. Table 14 uses the `pack_rows()` function to effectively add "header rows" throughout the table.

Alternatively, use `collapse_rows()` (Table 15) for more of a "merge cells" effect.

Finally, you can add notes or footnotes below your table with the `footnote()` function. Table 16 includes the 'general' argument for an unlabeled note and 'number', 'alphabet', and 'symbol' for footnotes with ordered labels.

There is **so much more** you can do with kables! ~~I am personally a huge fan of kables and the kableExtra package because it works beautifully with papaja~~[4], but you can also explore other packages for making beautiful tables:

- flextable

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[4] Tragically this is no longer true. Many `kableExtra` functions now (as of Feb 2024) break spectacularly in papaja notebooks.

167 • gt table

168 • xtable

169 • stargazer

170   – This one is designed to simplify tables for regression output

Figures and images

172   Phasellus finibus ac est vitae consectetur. Donec a condimentum nisi, ut accumsan
173 leo. Praesent ut viverra est. Praesent sit amet posuere arcu, ac cursus sem. Cras volutpat
174 ut urna et tincidunt. Ut leo ante, varius ut congue eget, maximus a eros. Fusce mollis
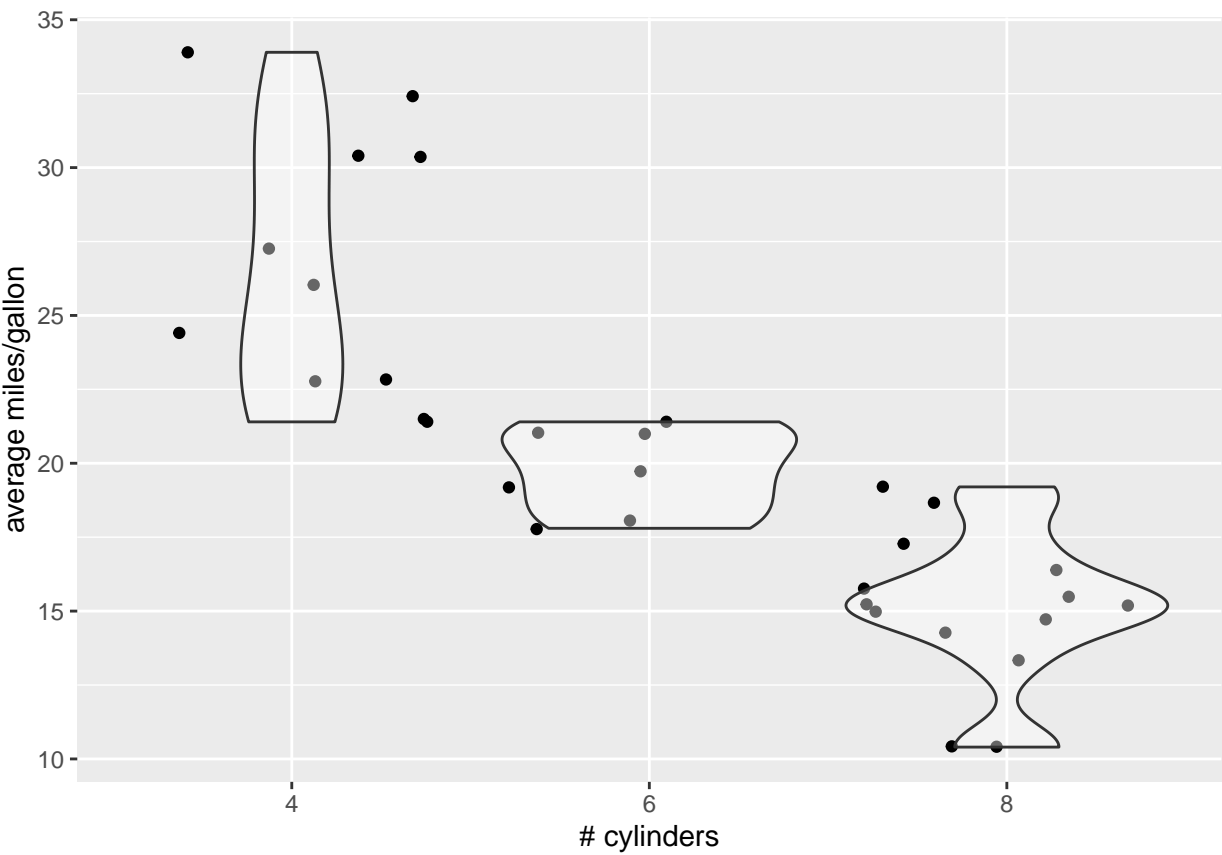175 luctus ligula et tristique. Nulla facilisi.

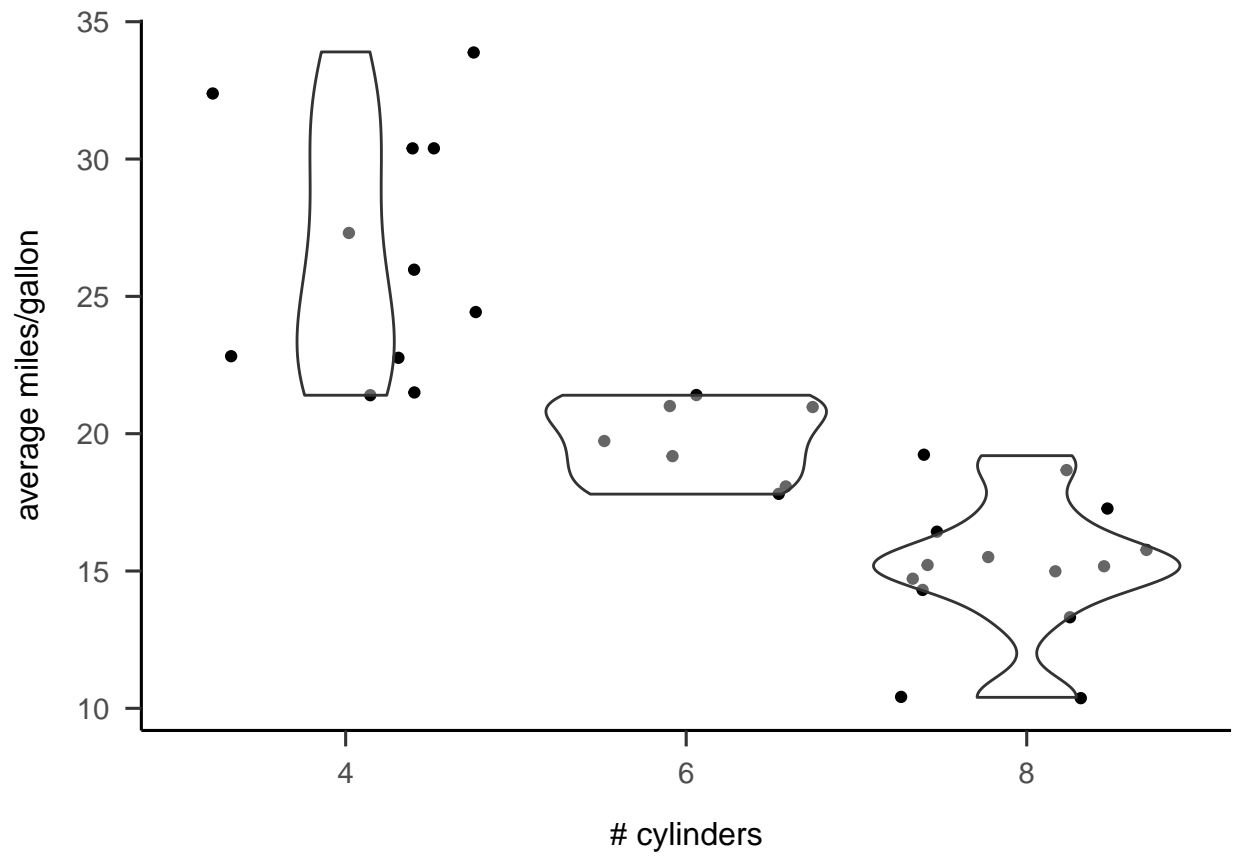*Figure 1*. distribution of mpg by number of cylinders (2, 4, or 6)

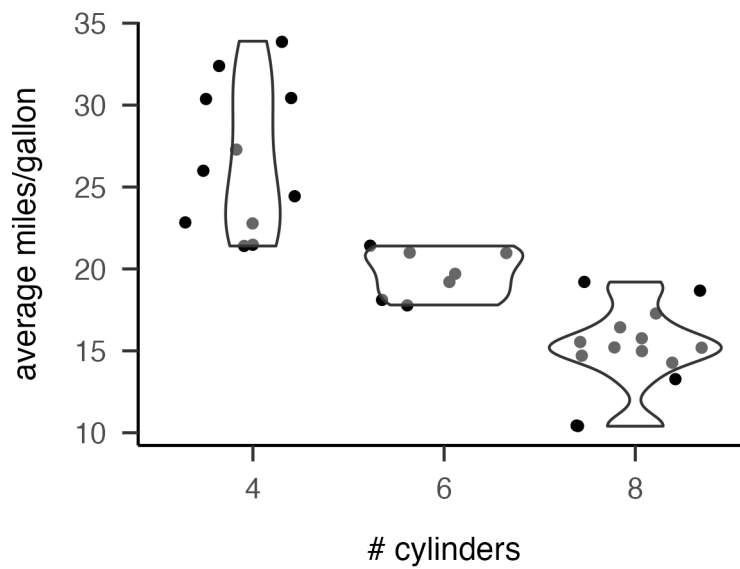*Figure 2*. distribution of mpg by number of cylinders (2, 4, or 6)

Figure 3. now we can import the saved figure too

Figure 4. yowza

Figure 5. yowza
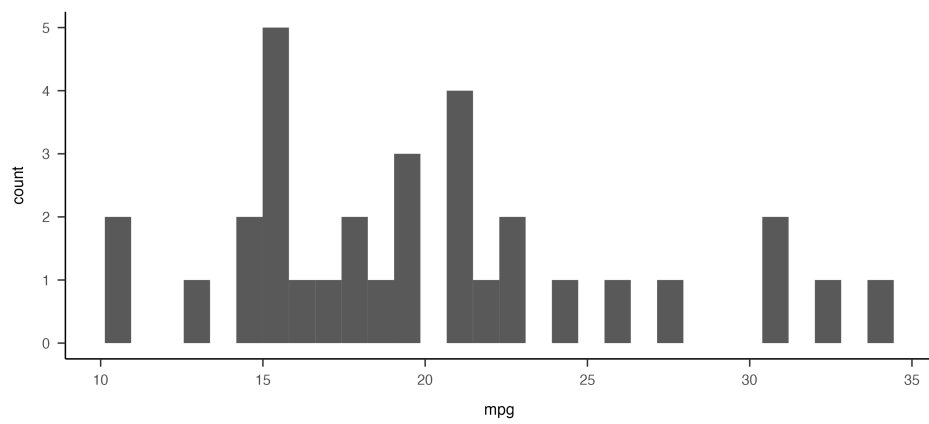

Figure 6. histogram of mpg values across all car models.

₁₇₆ Maecenas in fermentum enim. Sed elit diam, mollis rutrum turpis nec, pretium

₁₇₇ pellentesque massa. Aliquam nulla enim, venenatis eu mattis id, posuere sit amet lectus.

₁₇₈ Nullam auctor sit amet metus ut pharetra. Curabitur lorem libero, dignissim vitae dui ac,

₁₇₉ tristique hendrerit velit. Sed ac ultricies mi. Pellentesque sem tellus, blandit eget lacinia

₁₈₀ at, vehicula id sapien.

₁₈₁ Curabitur finibus euismod nulla vel ornare. Morbi semper eros a placerat

₁₈₂ ullamcorper. Fusce rutrum ipsum vestibulum urna sodales, iaculis elementum massa

₁₈₃ rhoncus. Vestibulum at erat ut enim hendrerit tristique vitae non ex. Duis dapibus, ex at

₁₈₄ suscipit consequat, diam ipsum molestie nunc, id posuere dui est vitae odio. Orci varius

₁₈₅ natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Nunc sed

₁₈₆ dictum arcu. Duis mattis vel urna ac ullamcorper. Vivamus eu elit nec mi iaculis rutrum

₁₈₇ eget quis metus. Aliquam molestie vehicula placerat. Etiam bibendum quis mi et

₁₈₈ malesuada. Mauris et imperdiet ligula, volutpat cursus orci. Aenean non dolor cursus,

₁₈₉ pretium nisl ac, porttitor neque. Donec consequat lorem leo, elementum sagittis eros

₁₉₀ molestie quis.

₁₉₁ Donec sollicitudin sollicitudin ullamcorper. Quisque ac ultrices massa. In orci urna,

₁₉₂ sollicitudin sit amet eleifend eu, tincidunt quis urna. Nulla auctor iaculis nunc non

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₁₉₄ tempor congue ante ac elementum. Etiam erat magna, suscipit in volutpat nec, vestibulum

₁₉₅ placerat neque. Sed sed mi leo. Vivamus bibendum dui quis ligula tempor, eu ultrices velit

₁₉₆ sodales. Aenean eu tincidunt odio. Vivamus ante massa, aliquet vitae sagittis non,

₁₉₇ pellentesque quis quam.

₁₉₈ Suspendisse nunc sem, pellentesque non euismod sed, porttitor sit amet ante.

₁₉₉ Praesent feugiat erat a commodo lacinia. Morbi eleifend egestas ligula, nec blandit mi

₂₀₀ consectetur nec. Vivamus vestibulum diam eget mi venenatis facilisis. Mauris nec ligula et

₂₀₁ nisi iaculis ultricies ac a enim. Nullam congue risus in ex dapibus ullamcorper. Quisque

202 pretium ex eget rhoncus convallis. Sed ante eros, semper euismod dignissim ut, consectetur

203 rhoncus justo. Fusce lacinia metus ut sapien tincidunt posuere. Suspendisse malesuada,

204 tellus ac tincidunt ornare, diam sapien porttitor leo, sed mollis dolor ante vitae orci.

205 Aliquam nisi nisi, posuere eu lobortis sit amet, egestas eget massa.

206 Quisque posuere massa et augue finibus aliquam. Morbi iaculis accumsan metus, eget

207 lobortis ligula facilisis vitae. Integer arcu turpis, consectetur luctus mollis eu, iaculis

208 convallis arcu. Aenean at eros bibendum, tempus sapien ac, cursus eros. Suspendisse

209 pretium neque sit amet erat maximus, vitae malesuada orci auctor. Nam nulla ligula,

210 eleifend quis nibh ut, ornare mattis eros. Maecenas auctor diam at efficitur accumsan. In

211 imperdiet elit vitae orci feugiat tristique eget ut dui. Morbi ut ipsum magna. Maecenas

212 rhoncus non velit sit amet bibendum. Nullam sit amet risus sit amet velit mattis sagittis.

213 Nunc id nisl tincidunt, laoreet felis quis, sagittis massa. Phasellus eu justo nec tortor

214 molestie bibendum quis eu enim. Duis quis sagittis purus, vitae aliquet metus. Proin ex

215 eros, pharetra ultrices quam quis, volutpat congue erat. Cras luctus sapien ipsum, vel

216 suscipit libero dignissim a.

217 Proin elementum tempus sollicitudin. Nam bibendum consequat metus vitae gravida.

218 Mauris consequat velit nibh, blandit blandit nunc viverra sit amet. Donec tincidunt elit sed

219 lacus malesuada viverra. Nulla vel neque nisi. Cras mollis tortor id magna varius

220 condimentum. Donec eu mauris pharetra risus sodales viverra. Nunc quis velit eleifend,

221 porta arcu nec, tincidunt sapien. Donec at dolor massa. Nam blandit sollicitudin velit sit

222 amet convallis. Vivamus at pretium tortor, ut pulvinar mi. Aenean vitae varius nulla. Sed

223 sapien magna, porttitor quis urna sit amet, luctus iaculis tellus. Mauris vel sollicitudin

224 quam, sed congue turpis. Pellentesque vitae ipsum a neque feugiat laoreet.

Chunk references

The average miles per gallon across cars with different numbers of cylinders is shown in Figure 2, as also summarized in Table **??**. Carbon production (e.g., see Figure 5 is an an extremely unfortunate side effect of human industry that has immense consequences for the sustainability on life on Earth. Cars vary in their gasoline efficiency (Figure 6).

Morbi ut nulla non justo imperdiet pellentesque a placerat odio. Nulla mattis diam dolor, ac lacinia ipsum aliquet non. Morbi ac malesuada quam. Ut vel venenatis quam. Morbi dapibus mi quis leo imperdiet, at tempor nunc porttitor. Cras et tortor posuere, pretium dolor vel, sodales justo. Duis condimentum varius eros, id accumsan felis laoreet ut. Etiam ex nunc, ullamcorper eget condimentum sit amet, commodo eu erat. Donec id lacinia erat. Quisque ultricies sit amet justo vitae malesuada.

Nullam at lectus nisl. Donec id nisl odio. Sed egestas orci nec eleifend rhoncus. Sed suscipit vel tellus blandit consectetur. Quisque eu nibh arcu. Proin non libero facilisis, accumsan velit vel, porttitor ex. Aliquam venenatis, diam et auctor aliquet, nisl tortor ullamcorper sem, sed elementum libero sem volutpat arcu. Maecenas pharetra justo eros, ac sodales sem maximus sed. Donec cursus varius libero a condimentum. In eleifend sollicitudin tellus, in gravida risus vulputate ut. Aliquam erat volutpat. Pellentesque finibus erat nec efficitur elementum.

Cras venenatis, augue non tempor interdum, libero tellus vestibulum metus, ac sollicitudin risus neque non nibh. Nunc ac magna nisl. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aenean mauris tellus, vulputate a dictum eu, ullamcorper in dui. Suspendisse tempor, justo eu dictum convallis, elit velit tempor mi, id feugiat est erat sit amet lectus. Aenean vel libero eu enim lacinia condimentum ac ac augue. Morbi in justo eu nisl porta porta. Nullam vitae ligula ac ipsum mollis lacinia. Sed vulputate eros vel odio viverra porttitor. Vestibulum fermentum placerat velit, a egestas turpis ultricies quis. Vivamus at purus semper, luctus diam ut,

venenatis justo. Aliquam dignissim risus at ipsum pellentesque, in auctor felis vehicula. Duis quis fringilla enim.

Sed aliquam turpis interdum erat elementum, ac semper ipsum tempor. Vivamus nisi massa, pulvinar quis dapibus in, egestas faucibus lectus. Nam eleifend massa urna. Integer placerat, lacus id molestie maximus, tortor ante imperdiet ligula, id scelerisque arcu diam et erat. Aenean hendrerit nibh ullamcorper, consequat eros ultrices, fringilla libero. Morbi a metus non lacus imperdiet euismod. Duis a lectus nec purus maximus consectetur. Curabitur feugiat risus orci, ut consequat nulla facilisis at. Cras varius tincidunt placerat. Duis gravida odio sit amet sapien ultrices, vitae vulputate elit imperdiet. Pellentesque justo nulla, tincidunt id mauris sit amet, volutpat ornare sapien.

Quisque at elementum nisi, ut euismod dolor. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas ultrices tempus sem, a finibus dui dignissim vel. Aliquam commodo maximus lectus id cursus. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Morbi vitae elit mi. Aliquam ultricies risus magna, id vestibulum justo pretium vitae. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Cras ornare ligula ligula, at vehicula magna laoreet vel. Donec semper quam vitae eros consequat, id auctor tellus aliquet. Aliquam eget vestibulum eros. Integer hendrerit in turpis eu elementum. Nunc eget elementum massa.

Nullam ultricies tortor auctor ultricies convallis. Phasellus eu ligula tincidunt, facilisis arcu ac, tincidunt mi. Maecenas gravida facilisis nisl nec pulvinar. Integer dui dui, dictum vel velit et, posuere tempus orci. Cras erat ex, venenatis eu nisi eu, congue aliquet dui. Pellentesque dignissim auctor mauris in suscipit. Vivamus convallis fringilla ante ac molestie. Ut pretium fringilla molestie. Nullam maximus elit id justo convallis cursus. Phasellus sagittis quam aliquam fermentum mollis. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Phasellus vitae ultricies est. Quisque

277 eleifend mauris enim. Sed sed egestas est. Donec pretium risus orci, non placerat elit

278 tempus at.

279   Maecenas viverra nulla sed justo tincidunt porta. In non suscipit lacus. Duis sapien

280 nulla, cursus nec turpis sed, faucibus imperdiet tortor. Sed euismod dictum diam nec

281 pellentesque. Ut finibus eget mauris ac vulputate. Duis luctus cursus finibus. Vivamus ac

282 purus tincidunt, interdum leo nec, ultrices ante. Suspendisse velit sem, tincidunt sit amet

283 porta eu, commodo a ligula. Etiam quis ligula non purus sollicitudin faucibus at et massa.

284 Praesent fringilla turpis et turpis convallis blandit. Curabitur et risus non sapien blandit

285 commodo. Nulla sodales gravida erat, sed fringilla metus imperdiet ac. Sed interdum

286 gravida leo vitae luctus.

287   Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus

288 mus. Nam quam libero, porttitor ac elit sit amet, condimentum sagittis diam. Morbi

289 luctus, diam posuere tempor imperdiet, nisl magna commodo orci, nec sagittis risus lacus

290 eget purus. Sed vel neque feugiat, luctus turpis vitae, volutpat arcu. Nulla facilisi.

291 Curabitur quis nunc fermentum tellus maximus bibendum. Quisque porttitor id arcu eu

292 imperdiet.

293

References

Table 2

Change each column name and text alignments, each with a list of strings.

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
4.6	3.4	1.4	0.3	setosa
5.0	3.4	1.5	0.2	setosa
4.4	2.9	1.4	0.2	setosa
4.9	3.1	1.5	0.1	setosa
5.4	3.7	1.5	0.2	setosa
4.8	3.4	1.6	0.2	setosa
4.8	3.0	1.4	0.1	setosa
4.3	3.0	1.1	0.1	setosa
5.8	4.0	1.2	0.2	setosa
5.7	4.4	1.5	0.4	setosa
5.4	3.9	1.3	0.4	setosa
5.1	3.5	1.4	0.3	setosa
5.7	3.8	1.7	0.3	setosa
5.1	3.8	1.5	0.3	setosa
5.4	3.4	1.7	0.2	setosa
5.1	3.7	1.5	0.4	setosa
4.6	3.6	1.0	0.2	setosa
5.1	3.3	1.7	0.5	setosa
4.8	3.4	1.9	0.2	setosa
5.0	3.0	1.6	0.2	setosa

Table 3

Use 'gsub' function to replace periods with spaces and change text alignments with a single 'shortcut' string.

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
4.6	3.4	1.4	0.3	setosa
5.0	3.4	1.5	0.2	setosa
4.4	2.9	1.4	0.2	setosa
4.9	3.1	1.5	0.1	setosa
5.4	3.7	1.5	0.2	setosa
4.8	3.4	1.6	0.2	setosa
4.8	3.0	1.4	0.1	setosa
4.3	3.0	1.1	0.1	setosa
5.8	4.0	1.2	0.2	setosa
5.7	4.4	1.5	0.4	setosa
5.4	3.9	1.3	0.4	setosa
5.1	3.5	1.4	0.3	setosa
5.7	3.8	1.7	0.3	setosa
5.1	3.8	1.5	0.3	setosa
5.4	3.4	1.7	0.2	setosa
5.1	3.7	1.5	0.4	setosa
4.6	3.6	1.0	0.2	setosa
5.1	3.3	1.7	0.5	setosa
4.8	3.4	1.9	0.2	setosa
5.0	3.0	1.6	0.2	setosa

Table 4

All numeric data in all columns display at most 4 decimal places

X1	X2	X3
0.9148	1e+03	955.9356
0.9371	1e+05	47.8847
0.2861	1e+07	-1104.5994

Table 5

Round columns to 5, 0, and 2 digits (respectively).

X1	X2	X3
0.91481	1e+03	955.94
0.93708	1e+05	47.88
0.28614	1e+07	-1104.60

Table 6

Round all data to max 3 decimal places and do not use scientific notaiton.

X1	X2	X3
0.915	1,000	955.936
0.937	100,000	47.885
0.286	10,000,000	-1,104.599

Table 7

Table will appear exactly where you call it.

	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0	6	160	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875
Datsun 710	22.8	4	108	93	3.85	2.320
Hornet 4 Drive	21.4	6	258	110	3.08	3.215
Hornet Sportabout	18.7	8	360	175	3.15	3.440

Table 8

When you have a wide table that will normally go out of the page, and you want to scale down the table to fit the page, you can use the scale down option.

	mpg	cyl	disp	hp	drat	wt	mpg	cyl	disp	hp	drat	wt	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0	6	160	110	3.90	2.620	21.0	6	160	110	3.90	2.620	21.0	6	160	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875	21.0	6	160	110	3.90	2.875	21.0	6	160	110	3.90	2.875
Datsun 710	22.8	4	108	93	3.85	2.320	22.8	4	108	93	3.85	2.320	22.8	4	108	93	3.85	2.320
Hornet 4 Drive	21.4	6	258	110	3.08	3.215	21.4	6	258	110	3.08	3.215	21.4	6	258	110	3.08	3.215
Hornet Sportabout	18.7	8	360	175	3.15	3.440	18.7	8	360	175	3.15	3.440	18.7	8	360	175	3.15	3.440

Table 9

Use the scale up option to stretch to full page width.

	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0	6	160	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875
Datsun 710	22.8	4	108	93	3.85	2.320
Hornet 4 Drive	21.4	6	258	110	3.08	3.215
Hornet Sportabout	18.7	8	360	175	3.15	3.440

Table 10

Stretch a small table to fit the page with the full width option.

	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0	6	160	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875
Datsun 710	22.8	4	108	93	3.85	2.320
Hornet 4 Drive	21.4	6	258	110	3.08	3.215
Hornet Sportabout	18.7	8	360	175	3.15	3.440

Table 12

Align your table (not the text, the whole table), 'left' or 'center' (the default) with the position argument.

	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0	6	160	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875
Datsun 710	22.8	4	108	93	3.85	2.320
Hornet 4 Drive	21.4	6	258	110	3.08	3.215
Hornet Sportabout	18.7	8	360	175	3.15	3.440

Table 13

Group multiple times and format these header rows individually.

	Group 6					
	Group 4				Group 5	
	Group 1		Group 2		Group 3	
	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0	6	160	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875
Datsun 710	22.8	4	108	93	3.85	2.320
Hornet 4 Drive	21.4	6	258	110	3.08	3.215
Hornet Sportabout	18.7	8	360	175	3.15	3.440

Table 14

Group rows using packing.

	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0	6	160.0	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160.0	110	3.90	2.875
Datsun 710	22.8	4	108.0	93	3.85	2.320
Group 1						
Hornet 4 Drive	21.4	6	258.0	110	3.08	3.215
Hornet Sportabout	18.7	8	360.0	175	3.15	3.440
Valiant	18.1	6	225.0	105	2.76	3.460
Duster 360	14.3	8	360.0	245	3.21	3.570
Group 2						
Merc 240D	24.4	4	146.7	62	3.69	3.190
Merc 230	22.8	4	140.8	95	3.92	3.150
Merc 280	19.2	6	167.6	123	3.92	3.440

Table 15

Collapse rows for more of a 'merge cells' effect.

C1	C2	C3	C4
a	c	1	0
		2	1
		3	0
		4	0
		5	0
		6	0
		7	1
	d	8	1
		9	1
		10	1
b	c	11	0
		12	1
	d	13	0
		14	1
		15	1

Table 16

Add unordered (general) and ordered footnotes.

	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0	6	160	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875
Datsun 710	22.8	4	108	93	3.85	2.320
Hornet 4 Drive	21.4	6	258	110	3.08	3.215
Hornet Sportabout	18.7	8	360	175	3.15	3.440

Note:

Here is a general comments of the table.

[1] Footnote 1;

[2] Footnote 2;

[a] Footnote A;

[b] Footnote B;

[*] Footnote Symbol 1;

[†] Footnote Symbol 2