

The {here} package

Fire safety, continued

The problem with `setwd()`

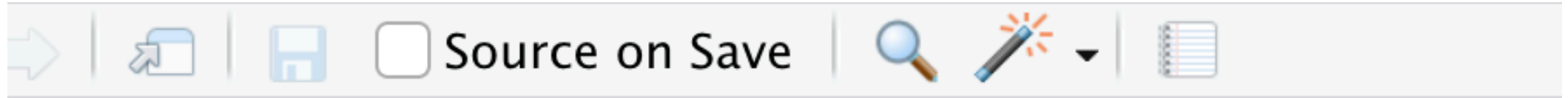
- `setwd()` changes the working directory, leading to potential issues in collaboration and reproducibility
 - You and I don't have the same file structure!
 - For example, my current working directory is

```
1 getwd()
```

```
[1] "/Users/l.smith/Documents/Teaching/Emory/epi590r-2024"
```

- It's also really annoying to change your working directory when you move around files and folders, even if it's just you using them

Do you think this code from 2015 still works?

The image shows a snippet of R code within the RStudio environment. At the top, a portion of the RStudio toolbar is visible, including icons for running code, saving, and a search icon, along with the text 'Source on Save'. Below the toolbar, the R code is displayed with line numbers 1 through 7 on the left. The code consists of three lines: a comment, a removal of objects command, a directory change command, and a data loading command.

```
1 #Create results table for poster
2 rm(list=ls())
3 setwd("~/Box Sync/Behavior Outcomes/")
4
5 #Load data
6 load("./Data/behavior_datasets.Rdata")
7
```

Referring to files with the `here` package

```
1 source(here::here("R", "functions.R"))
2
3 dat <- read_csv(here::here("data", "raw", "data.csv"))
4
5 p <- ggplot(dat) + geom_point(aes(x, y))
6
7 ggsave(plot = p,
8         filename = here::here("results", "figures", "fig.pdf"))
```

You can also separate the file paths with `/`:

```
1 dat <- read_csv(here::here("data/raw/data.csv"))
```

How it works

- Construct file paths with reference to the top directory holding your `.Rproj` file.
- `here::here("data", "raw", "data.csv")` for me, here, becomes
`"/Users/l.smith/Documents/Teaching/Emory/epi590r-2024/data/raw/data.csv"`
 - If I change my working directory to somewhere else within my project, it will still give me that path
- And if I send you my code to run, it will become whatever file path *you* need it to be, as long as you're running it within the R Project.

Referring to the `here` package

```
1 here::here()
```

is equivalent to

```
1 library(here)
2 here()
```

I just prefer to write out the package name whenever I need it, but you can load the package for your entire session if you want.

Exercises

1. Install the `{here}` package:

```
install.packages("here")
```

2. Make sure you're in your in-class R project! In the console, run:

```
here::here()
```

 to print your project directory

```
getwd()
```

 to print your working directory

What do you notice?

3. In the console, run:

```
setwd("data")
```

 to set your working directory

Then run the same lines as above. What do you notice?

Exercises, cont.

4. Download the next `.R` script from the website and use your file browser to put it in the R folder in your project.
 - Run through the code line-by-line.
 - Compare it with the code from the last section.

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