SOC 4015/5050: Lecture 12 Functions

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Packages

- `ggplot2`
- `ggthemes`
- `RColorBrewer`
- `stats`

Creating Plots for Dissemination

Increase Geom Size

```
ggplot2::geom(size = val)
```

Add Stroke to Scatter Plot Points

```
ggplot2::geom_point(mapping = aes(fill = var), pch = 21)
```

Increase Font Size on Entire Plot

```
ggplot2::theme_grey(base_size = val)
```

Alternative Themes

The `ggthemes` package contains 14 alternative themes, see their introductory vignette for a list. Each theme has its own function (e.g. `ggthemes::theme_hc()`).

Labels Function

```
ggplot2::labs(
  title = "plot title",
  subtitle = "plot subtitle",
  caption = "caption text",
  x = "x-axis label",
  y = "y-axis label"
)
```

Adjust Legend Sizing

```
ggplot2::theme(legend.key.size = unit(val, units =
"cm"))
```[1]

[1] `ggplot2` accepts inches and millimeters as units of measure in addition to centimeters.

Legend Title and Labels

```
ggplot2::scale_fill_discrete(labels = c("label1",
  "label2"), name = "legend title")
```[2]

[2] If the `geom` uses the `color` argument and not `fill`, this would need to be `ggplot2::scale_color_discrete()`.

Color Brewer

Display All Palettes

```
RColorBrewer::display.brewer.all()
```

Create Vector of Hex Values from Palette

```
RColorBrewer::brewer.pal(n, "name")
```

Add Discrete Color Palette

```
ggplot2::scale_fill_brewer(palette = "name",
  labels = c("label1", "label2"),
  name = "legend title")
```

Linear Model

```
stats::lm(formula = yvar ~ xvar, data = dataFrame)
```