

SOC 4930/5050: Week 08 Functions Quick Reference

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Packages

- base
- broom
- car
- effsize
- ggplot2
- ggridges
- pwr
- stargazer
- stats

LaTeX Descriptive Statistics Table

```
stargazer::stargazer(dataFrame, title = "title")
```

Coerce Tibble to Data Frame

```
base::as.data.frame(objectName)
```

Levene's Test

```
car::leveneTest(yVar ~ xVar, data = dataFrame)
```

One-Sample T Test

```
stats::t.test(dataFrame$yVar, mu = val)
```

Two-Sample (Independent) T Test

```
stats::t.test(dataFrame$yVar ~ dataFrame$xVar,
  var.equal = FALSE)
```

*Reshaping Data**Wide to Long*

```
tidyr::gather(dataFrame, key, value, ...)
```

Long to Wide

```
tidyr::spread(dataFrame, key, value)
```

Dependent T Test

```
stats::t.test(dataFrame$y1, dataFrame$y2, paired = TRUE)
```

Tidy Output

```
broom::tidy(testFunction)
```

*Cohen's d**Independent Observations*

```
effsize::cohen.d(dataFrame$yVar ~ dataFrame$xVar,
  pooled = TRUE, paired = FALSE)
```

Dependent Observations

```
effsize::cohen.d(dataFrame$y1, dataFrame$y2,
  paired = TRUE)
```

Finding n

```
pwr::pwr.t.test(d, power, sigLevel, type, alternative)
```

Plots for Mean Difference

Box Plot

```
ggplot2::geom_boxplot(mapping = aes(aesthetic))
```

Violin Plot

```
ggplot2::geom_violin(mapping = aes(aesthetic))
```

Violin Plot with Mean Points

```
ggplot2::geom_violin(mapping = aes(aesthetic)) +  
ggplot2::stat_summarystat_summary(fun.y = mean,  
  geom = "point")
```

You need to set the base aesthetic mapping in your initial `ggplot()` call.

Ridge Plot

```
ggridges::geom_density_ridges(mapping = aes(aesthetic))
```