

```

``` r
dataset = rio::import("ExamAnxiety.sav")
data = dataset
```

```

Correlation  
=====

Create a scatterplot matrix  
-----

```

``` r
jmv::corrMatrix(
  data = dataset,
  vars = vars(Code, Revise, Anxiety, Exam),
  flag = TRUE,
  n = TRUE,
  ci = TRUE,
  plots = TRUE,
  plotDens = TRUE,
  plotStats = TRUE)
```

```

```

##
## CORRELATION MATRIX
##
## Correlation Matrix
##

```

|      |         | Code         | Revise     | Anxiety    |
|------|---------|--------------|------------|------------|
| Exam |         |              |            |            |
|      | Code    | Pearson's r  |            |            |
|      |         | p-value      |            |            |
|      |         | 95% CI Upper |            |            |
|      |         | 95% CI Lower |            |            |
|      |         | N            |            |            |
|      | Revise  | Pearson's r  | -0.2218286 |            |
|      |         | p-value      | 0.0243239  |            |
|      |         | 95% CI Upper | -0.0295735 |            |
|      |         | 95% CI Lower | -0.3982564 |            |
|      |         | N            | 103        |            |
|      | Anxiety | Pearson's r  | 0.1135652  | -0.7092493 |
|      |         | p-value      | 0.2533730  | < .0000001 |
|      |         | 95% CI Upper | 0.3004859  | -0.5977733 |
|      |         | 95% CI Lower | -0.0817562 | -0.7938168 |
|      |         | N            | 103        | 103        |
|      | Exam    | Pearson's r  | -0.0977938 | 0.3967207  |
|      |         | p-value      | 0.3257336  | 0.0000334  |
|      |         |              |            | 0.0000031  |

|    |              |            |           |            |
|----|--------------|------------|-----------|------------|
| ## | 95% CI Upper | 0.0975776  | 0.5481602 | -0.2705591 |
| ## | 95% CI Lower | -0.2859075 | 0.2200938 | -0.5846244 |
| ## | N            | 103        | 103       | 103        |

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## Note. \* p < .05, \*\* p < .01, \*\*\* p < .001

![] (Week-6-correlation-Rnotebook\_files/figure-markdown\_github/unnamed-chunk-2-1.png)

I couldn't see how to create a scatterplot matrix in Jamovi right away so I found some R functions. The code is below.

```
``` r
# The pairs and plots functions are part of baseR

# pairs using column numbers
pairs(data[,2:4], pch = 19)

# pairs using formula format
pairs(~Revise + Exam + Anxiety, data=data, pch = 19)
```
```

![] (Week-6-correlation-Rnotebook\_files/figure-markdown\_github/unnamed-chunk-3-1.png)

```
``` r
# Plot
plot(data[, 2:4], pch=20, cex=1.5, col="#69b3a2")
```
```

![] (Week-6-correlation-Rnotebook\_files/figure-markdown\_github/unnamed-chunk-3-2.png)

```
``` r
# the ggpairs function is part of GGally package which expands ggplot2 package

library(ggplot2)
library(GGally)

# ggpairs using column numbers
GGally::ggpairs(data, columns=2:4)
```
```

![] (Week-6-correlation-Rnotebook\_files/figure-markdown\_github/unnamed-chunk-3-3.png)

```
``` r
# ggpairs using column names
GGally::ggpairs(data, columns=c('Revise', 'Exam', 'Anxiety'), lower =
list(continuous = "smooth"))
```
```

![] (Week-6-correlation-Rnotebook\_files/figure-markdown\_github/unnamed-chunk-3-4.png)