

Depression Variables

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2024-09-30

```
knitr::opts_chunk$set(fig.width=6, fig.height=4) # This sets all figure sizes in the document unless otherwise specified.
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##   filter, lag
```

```
## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union
```

```
library(ggplot2)
library(forcats)
```

Introduction I was interested in the data set regarding depression and the factors that may, or may not, contribute to someone battling depression. I was diagnosed with generalized anxiety and depression disorder in my 30s, so the data seemed particularly interesting to me.

```
Depress<-read.table("C:/Users/Stephanie/OneDrive/Desktop/MATH_130/data/Depress.txt", header=TRUE, sep="\t")
head(Depress)
```

```
##   ID SEX AGE MARITAL EDUCAT EMPLOY INCOME RELIG C1 C2 C3 C4 C5 C6 C7 C8 C9 C10
## 1  1  2  68      5      2      4      4      1  0  0  0  0  0  0  0  0  0  0
## 2  2  1  58      3      4      1     15      1  0  0  1  0  0  0  0  0  0
## 3  3  2  45      2      3      1     28      1  0  0  0  0  1  0  0  0  0
## 4  4  2  50      3      3      3      9      1  0  0  0  0  1  1  0  3  0
## 5  5  2  33      4      3      1     35      1  0  0  0  0  0  0  0  3  3
## 6  6  1  24      2      3      1     11      1  0  0  0  0  0  0  0  0  1
##   C11 C12 C13 C14 C15 C16 C17 C18 C19 C20 CESD CASES DRINK HEALTH REGDOC TREAT
## 1  0  0  0  0  0  0  0  0  0  0  0  0  2  2  1  1
## 2  0  1  0  0  1  0  1  0  0  0  4  0  1  1  1  1
## 3  0  0  0  1  1  1  0  0  0  0  4  0  1  2  1  1
## 4  0  0  0  0  0  0  0  0  0  0  5  0  2  1  1  2
## 5  0  0  0  0  0  0  0  0  0  0  6  0  1  1  1  1
## 6  0  1  2  0  0  2  1  0  0  0  7  0  1  1  1  1
##   BEDDAYS ACUTEILL CHRONILL
## 1      0      0      1
## 2      0      0      1
## 3      0      0      0
## 4      0      0      1
## 5      1      1      0
## 6      0      1      1
```

Univariate Exploration

This will show the number of males and females diagnosed.

```
Depress$SEX <-factor(Depress$SEX, labels=c("male", "female"))
table(Depress$SEX)
```

```
##
##   male female
##   111    183
```

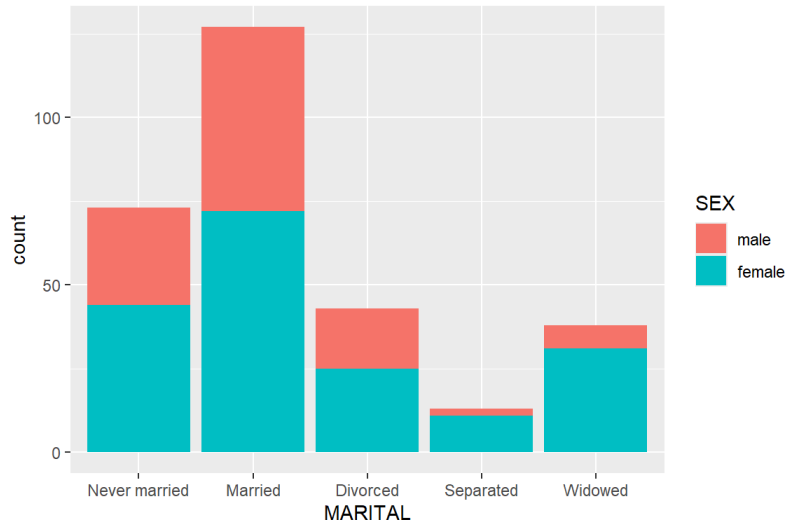
Bivariate Exploration

The following table will show each sex's marital status.

```
Depress$SEX <-factor(Depress$SEX, labels=c("male", "female"))
Depress$MARITAL<-factor(Depress$MARITAL, labels=c("Never married", "Married", "Divorced", "Separated", "Widowed"))
table(Depress$SEX)
```

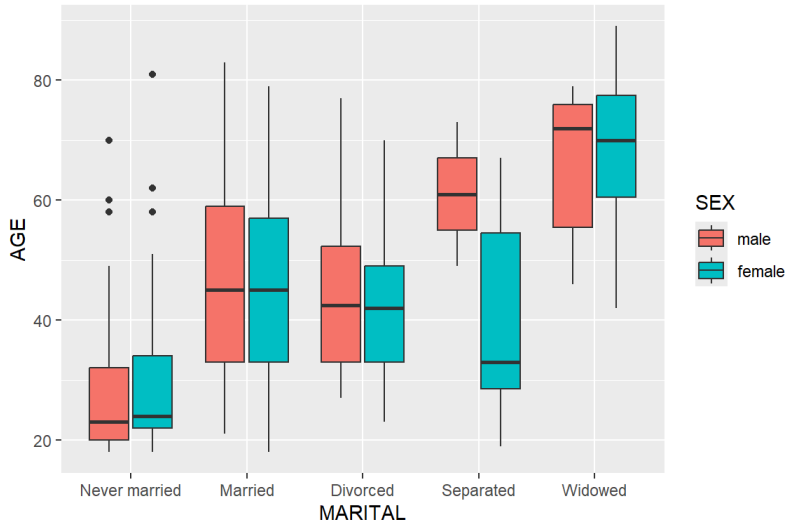
```
##
##  male female
##   111   183
```

```
ggplot(Depress, aes(x=MARITAL, fill=SEX)) + geom_bar()
```



And the following chart shows relative to age.

```
ggplot(Depress, aes(x=MARITAL, y=AGE, fill=SEX)) + geom_boxplot()
```



Conclusion

To me, the most interesting information was the difference in ages and marital status, especially under separation.