Project.final

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Introduction

```r
depression <- read.delim("/Users/xojess/Desktop/depress_081217.txt", header=TRUE,sep="\t")
dim(depression)
```

```
## [1] 294  37
```

```r
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
```

```r
library(ggplot2)
library(sjPlot)
```

```
## Registered S3 methods overwritten by 'parameters':
##   method                           from
##   as.double.parameters_kurtosis    datawizard
##   as.double.parameters_skewness    datawizard
##   as.double.parameters_smoothness  datawizard
##   as.numeric.parameters_kurtosis   datawizard
##   as.numeric.parameters_skewness   datawizard
##   as.numeric.parameters_smoothness datawizard
##   print.parameters_distribution    datawizard
##   print.parameters_kurtosis        datawizard
##   print.parameters_skewness        datawizard
##   summary.parameters_kurtosis      datawizard
##   summary.parameters_skewness      datawizard
```

```
## #refugeeswelcome
```

Description:

This data set will include information on depression and who tends to be the most depressed, male or female. There were more than 294 participants in this study and there were around 34 different origns of these people to make the breakdown much simpler. The variables I will be focusing on will be the religion and education to see if these factors play a role in one's depression.

Marital

I chose this variant because someone's happiness connects to whether or not they have a partner or are single. I feel this inspection would be very cool to look deeper into because I feel those who are married are way more depressed than those that are single or never married because having a partner and being fully committed into a marrige can take a huge toll on a person and change their feelings over time.

Income:

One's income can clearly identify whether or not they are depressed. I think those who make more money are far less depressed because they have nothing to worry about in terms of money. Those who have very low income may be more depressed because they aren't able to spend money freely in fact, they have to budget and be on a tight schedule with it.

UNVIVARIATE DESCRIPTIONS

```
summary(depression$marital)
```

```
##    Length     Class      Mode
##       294 character character
```

```
table(depression$marital)
```

```
##
##     Divorced       Married Never Married     Separated       Widowed
##           43           127            73            13            38
```

As I stated above, I felt those who were married were may more depressed than those who are single. According to this table data set, we can clearly see the married column has 54 more depressed people than the never married column.

```
ggplot(depression, aes(x=marital)) + geom_bar()
```
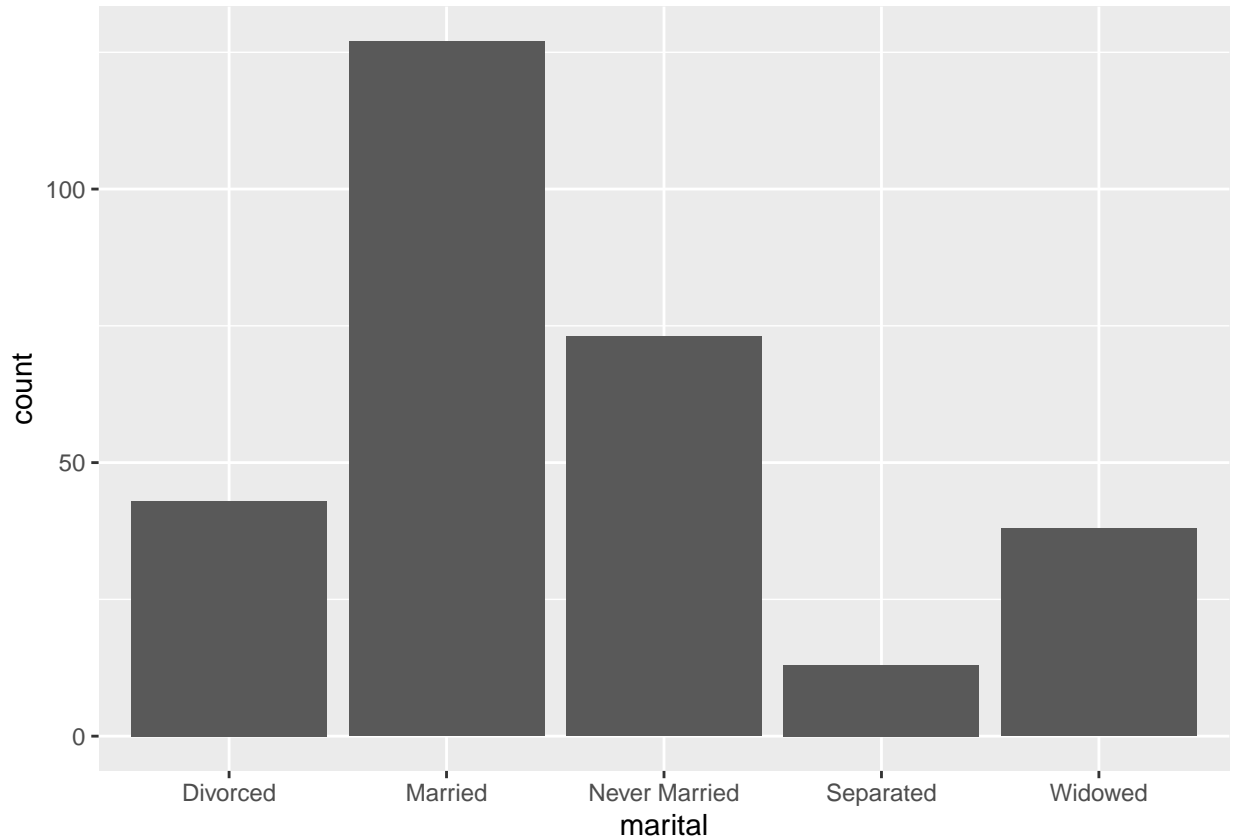
This ggplot gives a little bit more of a clear picture of the different levels of those depressed and their marital status. The separated bar is the lowest out of the 5 and I think that is because they left their partner before getting depressed or as soon as they felt it coming to them which is good but this graph also helps show to really make sure to put your happiness before someone else's. Income:

```
summary(depression$income)
```
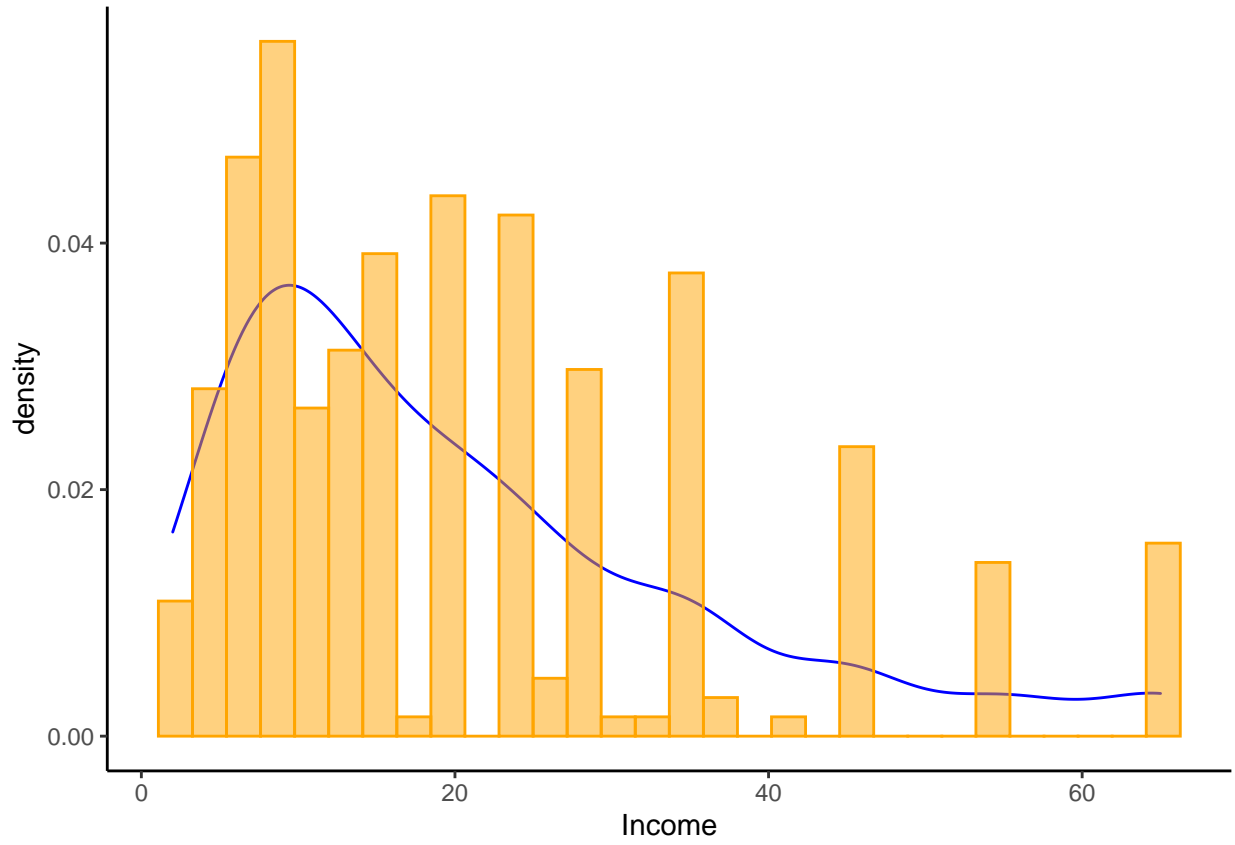
```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    2.00    9.00   15.00   20.57   28.00   65.00
```

```
mean(depression$income)
```
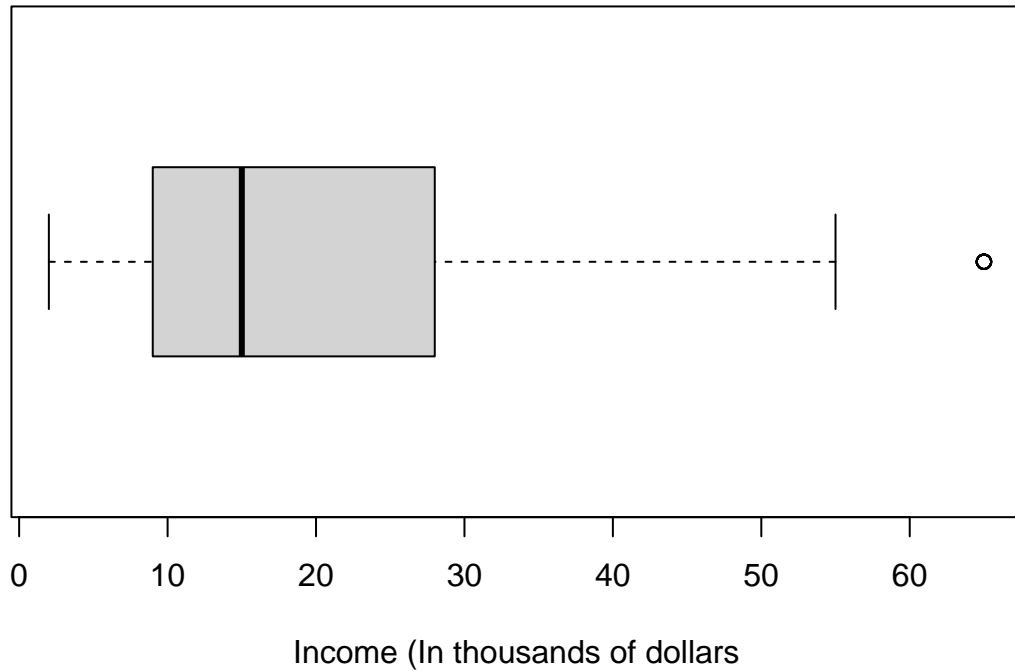
```
## [1] 20.57483
```

```
ggplot(depression, aes(x=income)) + geom_density(col="blue")+ geom_histogram(aes(y=..density..),colour=
```

```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```

```
boxplot(depression$income, horizontal= TRUE, main= "Distribution of Income Status",
        xlab="Income (In thousands of dollars")
```

## Distribution of Income Status

Income (In thousands of dollars

In this box plot, it is shown that depressed people are making $10,000 to less than $30,000 as their income. Based on this data, it is clear to assume they are possibly in the middle class or beginning of the wealthy class so my prediction of the wealthy being more depressed than the underclass was correct.

BIVARIATE COMPARISON

```
ggplot(depression, aes(x=marital, y=income, fill=income,)) + geom_boxplot(alpha=0.6) + theme(legend.pos
scale_fill_brewer(palette="Spectral") +ylab ("Income(In thousands of dollar") + xlab ("Marital Status")
```

Income vs Marital Status
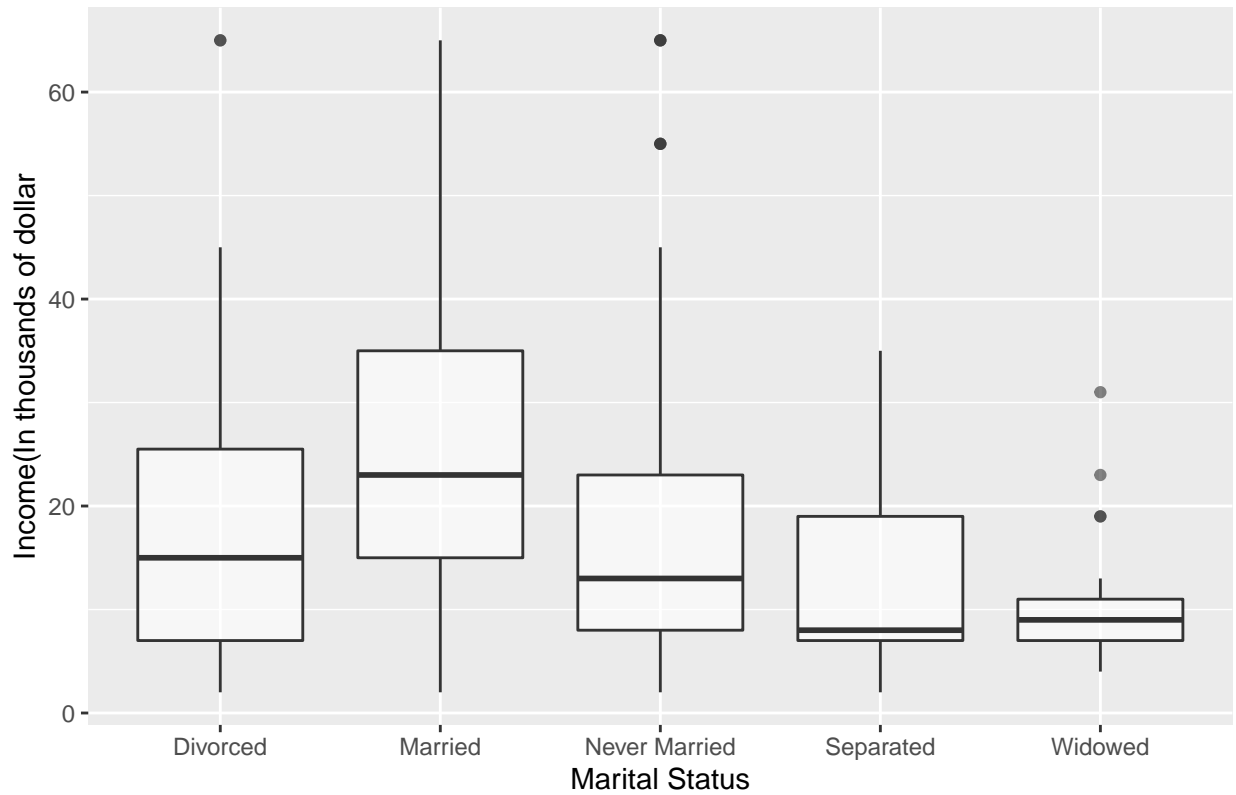
Write:

Although the married are more depressed, they are the one's making the most money and possibly have the better jobs. What is very shocking is the widowed box plot is so tiny and they only make under $20,000 such like the never married and the separated.