Exploring Data

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```
library(readr)
Spring2023Dataset <- read_csv("~/CSVs/Spring2023Dataset.csv")
```

```
## Rows: 69 Columns: 18

## -- Column specification ----------------------------------------------------
## Delimiter: ","
## chr (10): ToppingPref, GiveUp, TextOften, Active, Generous, Gender, CoffeeFr...
## dbl  (8): SpendOnYou, LongestRun, PizzaToppings, TextsSent, TextsReceived, G...

##
## i Use `spec()` to retrieve the full column specification for this data.
## i Specify the column types or set `show_col_types = FALSE` to quiet this message.
```

```
head(Spring2023Dataset)
```

```
## # A tibble: 6 x 18
##   SpendOnYou LongestRun PizzaToppings ToppingPref GiveUp TextsSent TextsReceived
##        <dbl>      <dbl>         <dbl> <chr>       <chr>      <dbl>         <dbl>
## 1        400          1             3 Mostly veg~ Meat          50            50
## 2        850          7             4 Mostly veg~ Caffe~        20            25
## 3        550        2.5             4 Mostly mea~ <NA>          23            24
## 4       1000        0.5             2 Mostly veg~ Meat          20            20
## 5        400         10             2 Mostly mea~ Desse~        15            20
## 6        300          1             2 Mostly mea~ Caffe~         0             1
## # ... with 11 more variables: GroupText <dbl>, TextOften <chr>, Active <chr>,
## #   Generous <chr>, Gender <chr>, HighwayAlone <dbl>, HighwayPassenger <dbl>,
## #   CoffeeFreq <chr>, StudyLocationOriginal <chr>, Personality <chr>,
## #   StudyLocation <chr>
```
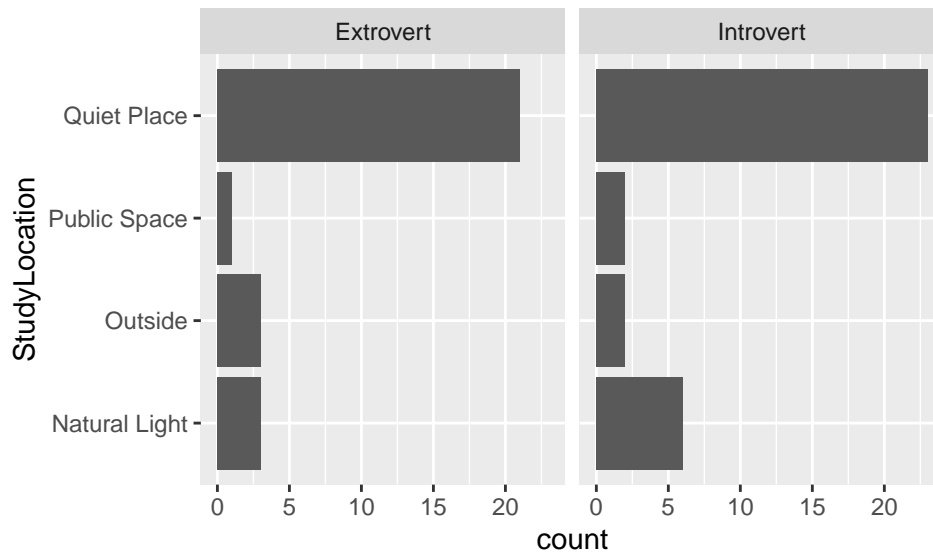
Study Location

Response Variable: Study Location

Explanatory Variable: Personality

```
#gf_bar(~StudyLocation|Personality,data=na.omit(Spring2023Dataset))
gf_barh(~StudyLocation|Personality,data=na.omit(Spring2023Dataset))
```

According to the graphs, the preferred study location seems to be a **Quiet Place** for introverts and extroverts alike.

```
tally(~StudyLocation|Personality, data=na.omit(Spring2023Dataset), format="prop")
```

```
##                Personality
## StudyLocation    Extrovert  Introvert
##   Natural Light 0.10714286 0.18181818
##   Outside       0.10714286 0.06060606
##   Public Space  0.03571429 0.06060606
##   Quiet Place   0.75000000 0.69696970
```
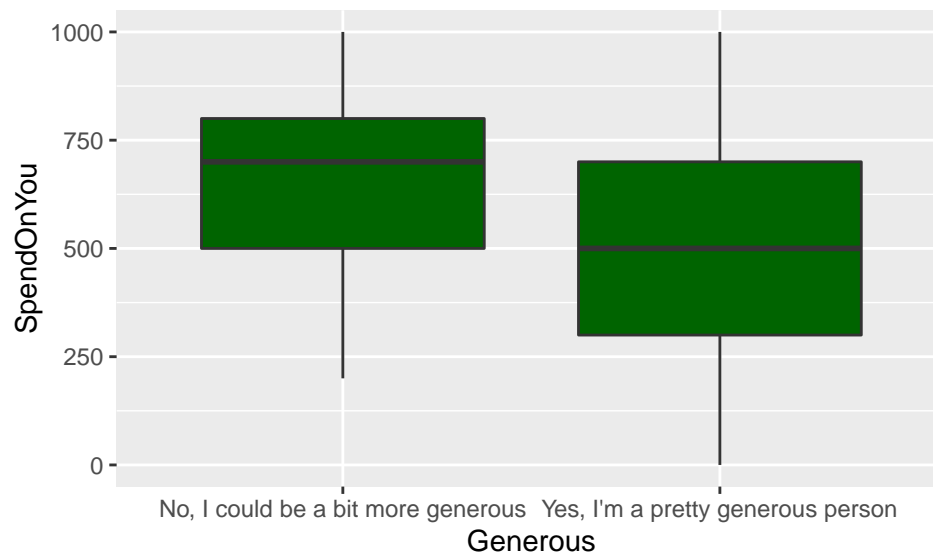
I Predicted that extroverted people would prefer a public space and introverted people would prefer quieter spaces. In reality, ~75% of extroverts prefer studying in a quiet place.

Generosity

Response Variable: Generous

Explanatory Variable: Money Spent on yourself

```
gf_boxplot(SpendOnYou~Generous, fill="darkgreen", data=na.omit(Spring2023Dataset))
```

The middle 50% of the less generous seem to spend more on themselves than the more generous.

```
favstats(SpendOnYou~Generous, data=na.omit(Spring2023Dataset))
```

```
##                                Generous min  Q1 median  Q3  max     mean      sd
## 1 No, I could be a bit more generous 200 500    700 800 1000 661.1111 261.9372
## 2  Yes, I'm a pretty generous person   0 300    500 700 1000 500.9423 287.5336
##      n missing
## 1  9       0
## 2 52       0
```

The numerical summaries show that the majority of people in Dr. Davidson's Statistic classes think that they are generous people.