Covid Depression Case Study

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2025-03-31

Data Import

```
library(readxl)
library(ggplot2)
```

```
## Warning: package 'ggplot2' was built under R version 4.4.3
```

```
# Import your data
CV <- read_excel("Covid_Depression_Case_Studyxlsx.xlsx")

# Preview the data
head(CV)
```

```
## # A tibble: 6 × 10
##   Study        Country `Sampling Method`   Sample_Size `Mean Age` Percent_Female
##   <chr>        <chr>   <chr>                     <dbl>      <dbl>          <dbl>
## 1 Ahmed        China   Convenience Sampli…        1074       33.5           46.8
## 2 Gao et al    China   Convenience Sampli…        4872       32.2           67.7
## 3 Huang & Zhao China   Convenience Sampli…        7236       35.3           54.6
## 4 Kazmi et al. India   Randon Sampling            1000        0             62
## 5 Let et al.   China   Convenience Sampli…        1593       32.3           61.3
## 6 Mazza et al  Italy   Convenience Sampli…        2766       32.9           71.7
## # ℹ 4 more variables: Response_Rate <dbl>, Depression_assessment <chr>,
## #   Depression_Prevalence <dbl>, Quality_score <dbl>
```

Calculate Females and Males

```
# Calculate number of females
CV$Females <- (CV$Percent_Female) * (0.01 * CV$Sample_Size)
CV$Females <- round(CV$Females, digits = 0)

# Calculate number of males
CV$Males <- CV$Sample_Size - CV$Females
```

Plot the Data

```
ggplot(data = CV, mapping = aes(x = Study)) +
  geom_point(aes(y = Females), color = "darkred") +
  geom_point(aes(y = Males), color = "steelblue") +
  scale_size_manual(values = c(6)) +
  ylab("Males and Females") +
  scale_colour_manual(breaks = c("Females", "Males"), values = c("darkred", "steelblue"))
```