Screen Time Usage Project

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```r
library(ggplot2)
```

```
## Warning: package 'ggplot2' was built under R version 4.3.3
```

```r
library(readxl)
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ----------------------- tidyverse 2.0.0 --
## v dplyr     1.1.4      v readr     2.1.5
## v forcats   1.0.0      v stringr   1.5.1
## v lubridate 1.9.3      v tibble    3.2.1
## v purrr     1.0.2      v tidyr     1.3.1
## -- Conflicts ------------------------------------------- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```r
ScreenTime <- read_excel("C:/Users/Daniel Kouassi/Desktop/Spring 2024/DATA 211 -50 Data Science/Data/Sc

# Convert Worked variable to factor
ScreenTime$Worked <- factor(ScreenTime$Worked, levels = c("No", "Yes"))

# Perform one-sample t-test
t.test(ScreenTime$Daily_Screen_TimeInHours_Usage ~ ScreenTime$Worked, alternative = "less")
```

```
##
##  Welch Two Sample t-test
##
## data:  ScreenTime$Daily_Screen_TimeInHours_Usage by ScreenTime$Worked
## t = 3.7798, df = 7.8762, p-value = 0.9972
## alternative hypothesis: true difference in means between group No and group Yes is less than 0
## 95 percent confidence interval:
##      -Inf 2.529443
## sample estimates:
##  mean in group No mean in group Yes
##          5.425000          3.730769
```

```r
boxplot <- ggplot(ScreenTime, aes(x = Worked, y = ScreenTime$Daily_Screen_TimeInHours_Usage, fill = Work
  geom_boxplot() +
```

```
  labs(title = "Boxplot of Daily Screen Time Usage",
       x = "Worked (Yes/No)",
       y = "Daily Screen Time Usage (hours)") +
  scale_fill_manual(values = c("blue", "green")) +
  theme_minimal()

# Print the boxplot
print(boxplot)
```

Warning: Use of 'ScreenTime$Daily_Screen_TimeInHours_Usage' is discouraged.
i Use 'Daily_Screen_TimeInHours_Usage' instead.

Boxplot of Daily Screen Time Usage