

# HW3

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2024-11-02

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#Install package needed to read an .xlsx file

#install.packages("readxl")

library(readxl)

#loaded the package and its dependencies

#importing the .xlsx data file and referncing it as an object called TextMessages

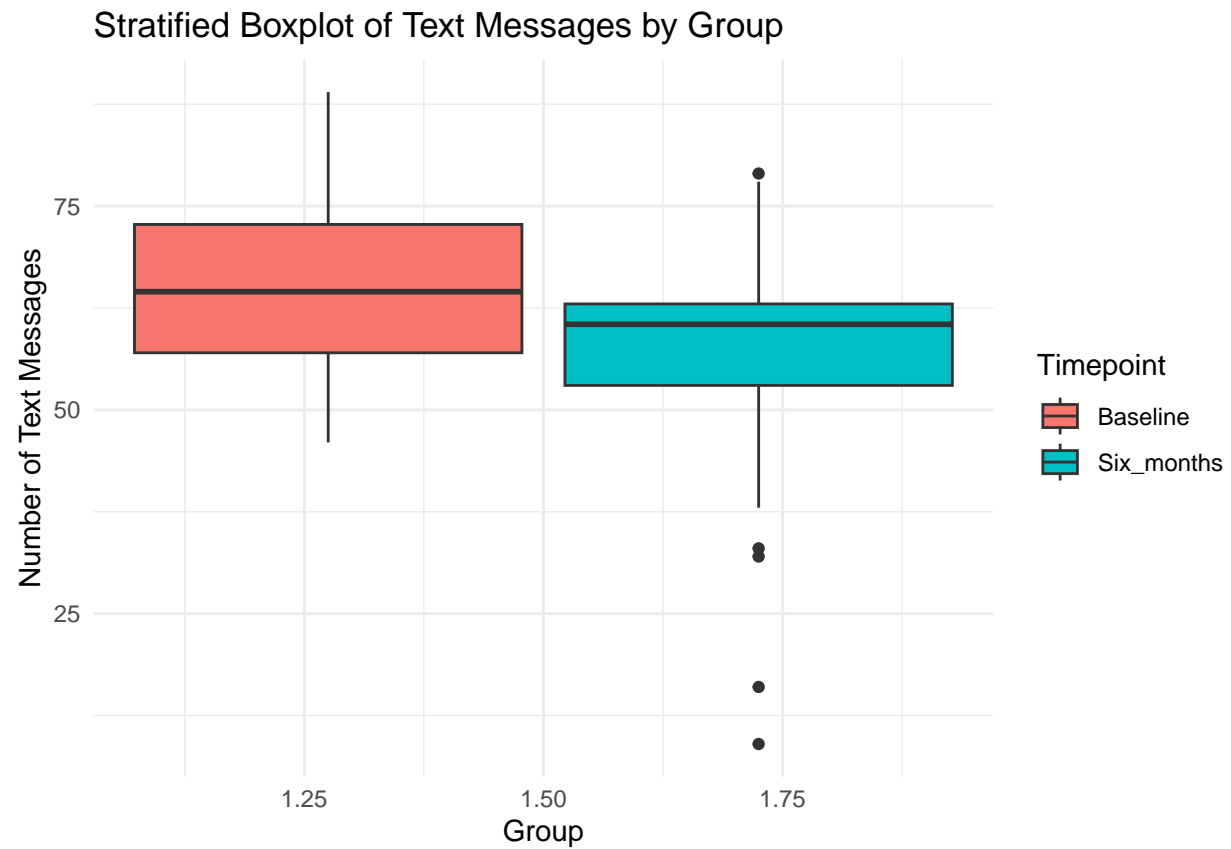
TextMessages <- read_excel("TextMessages.xlsx")

#load the necessary libraries

library(ggplot2)

TextMessages_long <- data.frame(
  Participant = rep(TextMessages$Participant, 2),
  Group = rep(TextMessages$Group, 2),
  Timepoint = rep(c("Baseline", "Six_months"), each = nrow(TextMessages)),
  TextMessages = c(TextMessages$Baseline, TextMessages$Six_months)
)

ggplot(TextMessages_long, aes(x = Group, y = TextMessages, fill = Timepoint)) +
  geom_boxplot() +
  labs(title = "Stratified Boxplot of Text Messages by Group",
       x = "Group",
       y = "Number of Text Messages") +
  theme_minimal()
```



*## The boxplot allows us to compare the distribution of text messages between  
#the two groups at different timepoints*