week9

Charlene Zhang

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Libraries

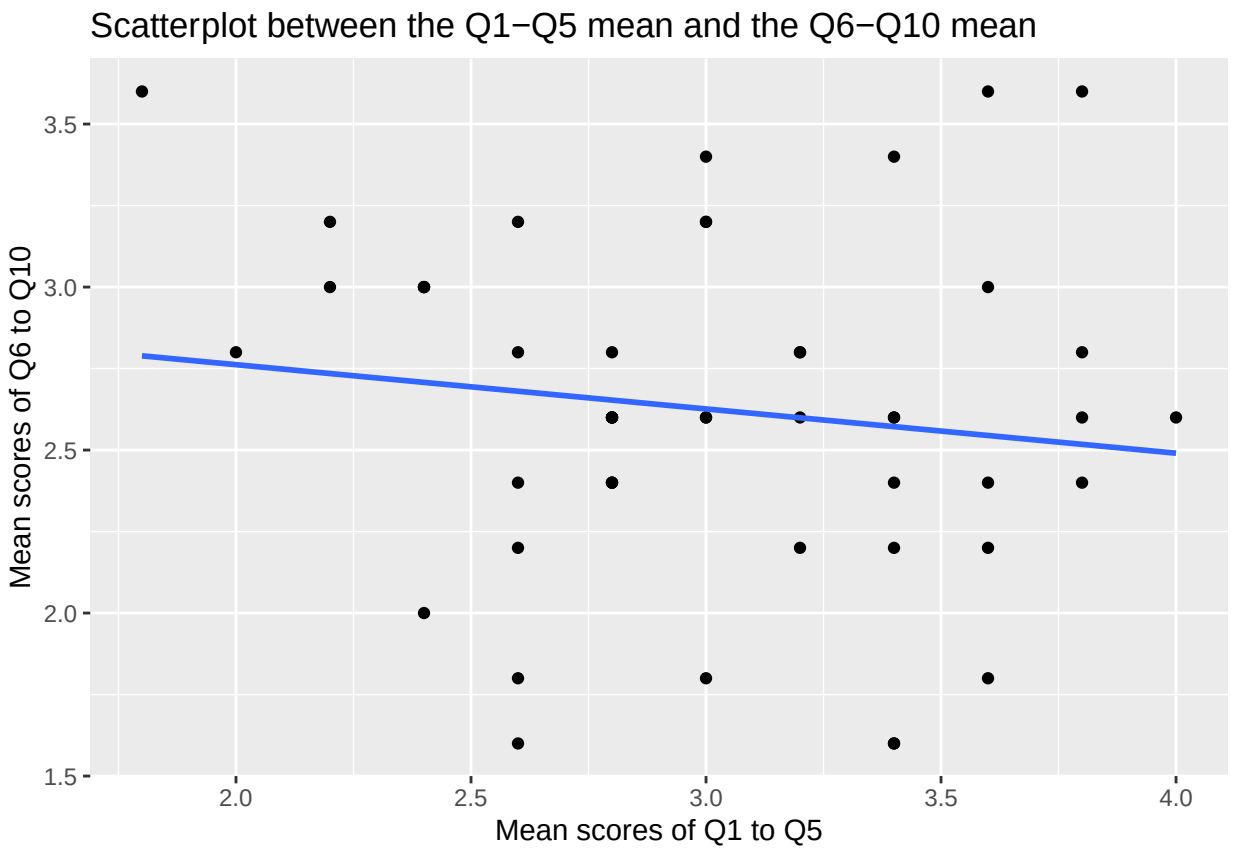
Data Import

- Read in Data from Week3 as a Tibble
- Converted timeStart and timeEnd to POSIX variables
- Converted gender and condition to factor variables
- Created mean scores of Q1 to Q5 and means scores for Q6 to Q10 for subsequent visualization and analysis

```
week9_tbl <- read_csv("../data/week3.csv") %>%
  mutate(timeStart=ymd_hms(timeStart),
         timeEnd=ymd_hms(timeEnd),
         gender=factor(gender,levels=c("M","F"),labels=c("Male","Female")),
         condition=factor(condition,levels=c("A","B","C"),labels=c("Block A","Block B","Control")),
         Q1_Q5=rowMeans(select(.,q1:q5),na.rm=TRUE),
         Q6_Q10=rowMeans(select(.,q6:q10),na.rm=TRUE))
```

```
## Parsed with column specification:
## cols(
##   timeStart = col_character(),
##   timeEnd = col_datetime(format = ""),
##   condition = col_character(),
##   gender = col_character(),
##   q1 = col_double(),
##   q2 = col_double(),
##   q3 = col_double(),
##   q4 = col_double(),
##   q5 = col_double(),
##   q6 = col_double(),
##   q7 = col_double(),
##   q8 = col_double(),
##   q9 = col_double(),
##   q10 = col_double()
## )
```

Visualization



This is a scatterplot that shows the relationshiip between mean scores of Q1-Q5 and mean scores of Q6-Q10, with an OLS regression line.

Analysis

```
corr <- cor.test(week9_tbl$Q1_Q5,week9_tbl$Q6_Q10)$estimate
p <- cor.test(week9_tbl$Q1_Q5,week9_tbl$Q6_Q10)$`p.value`
```

The correlation was -0.1364998 (p = 0.3496752), which is not statistically significant.