

# **Beer Preferences for Thursday Night Football: A Balanced Incomplete Block Design Experiment**

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## **Abstract**

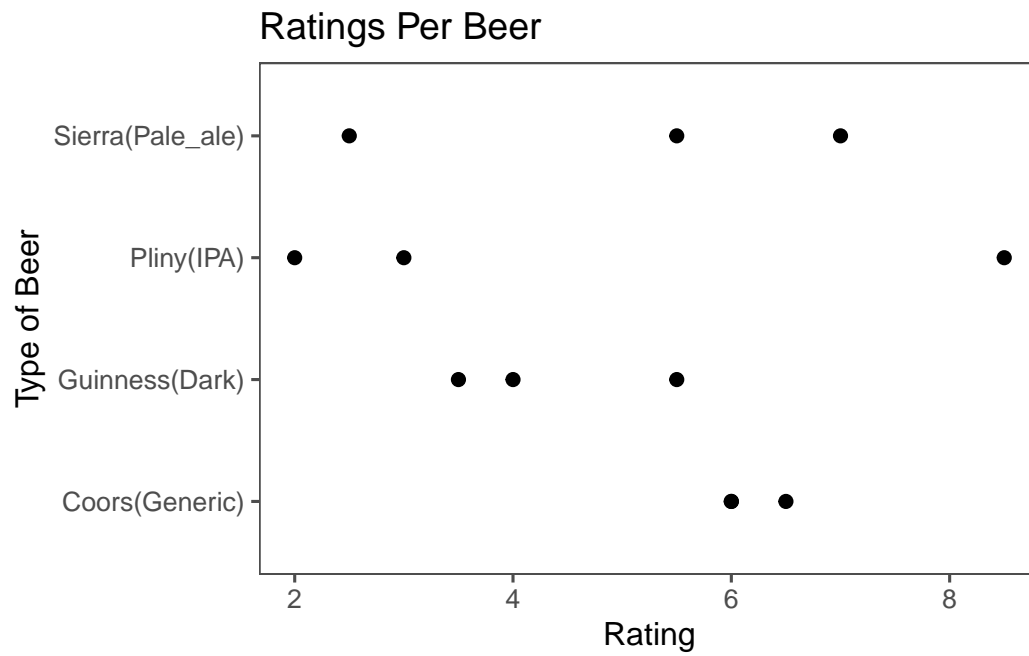
## **Introduction**

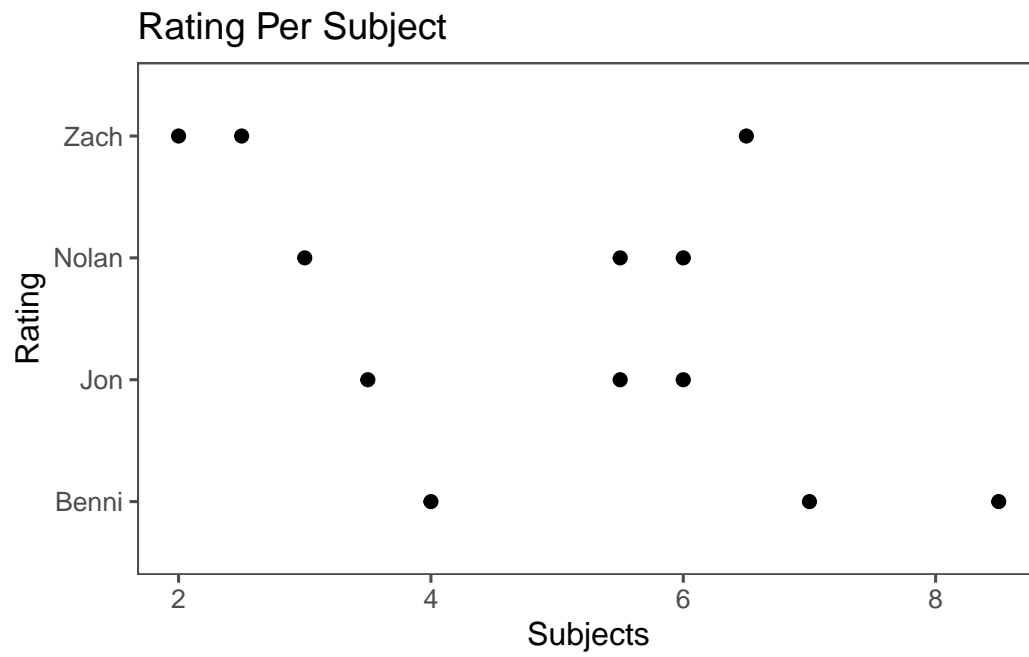
## Methods

## Results

Table 1: Beer Ratings by Participant

Beers	Nolan	Jon	Beni	Zach
Sierra(Pale_ale)	NA	5.5	7.0	2.5
Coors(Generic)	6.0	6.0	NA	6.5
Guinness(Dark)	5.5	3.5	4.0	NA
Pliny(IPA)	3.0	NA	8.5	2.0





## Conclusion

## Appendix

### Code Used

#### Libraries Used

```
library(tidyverse)
library(ggthemes)
library(tidyr)
library(knitr)
```

#### Data Code

```
# Data input
beers <- c("Sierra(Pale_ale)", "Coors(Generic)", "Guinness(Dark)", "Pliny(IPA)")
Nolan <- c(NA, 6, 5.5, 3)
Jon <- c(5.5, 6, 3.5, NA)
Benni <- c(7, NA, 4, 8.5)
Zach <- c(2.5, 6.5, NA, 2)

raw_data <- data.frame(beers, Nolan, Jon, Benni, Zach)

# Data Cleaning

pivoted_raw_data <- pivot_longer(raw_data,
                                cols=-beers,
                                names_to = "names",
                                values_to = "rating")

cleaned_data <- pivoted_raw_data %>%
  drop_na(rating)

#Table
raw_data %>%
  kable(
    caption = "Beer Ratings by Participant",
    col.names = c("Beers", "Nolan", "Jon", "Beni", "Zach"),
    align = "c"
  )
```



## Plots

Code for Plot 1 {.anchor #plot1}

```
cleaned_data %>%  
  ggplot(aes(x = rating,  
             y = beers))+  
  geom_point(size = 2)+  
  theme_few()+  
  ggtitle("Ratings Per Beer")+  
  ylab("Type of Beer")+  
  xlab("Rating")
```

```
cleaned_data %>%  
  ggplot(aes(x = rating,  
             y = names))+  
  geom_point(size = 2)+  
  theme_few()+  
  ggtitle("Rating Per Subject")+  
  xlab("Subjects")+  
  ylab("Rating")
```