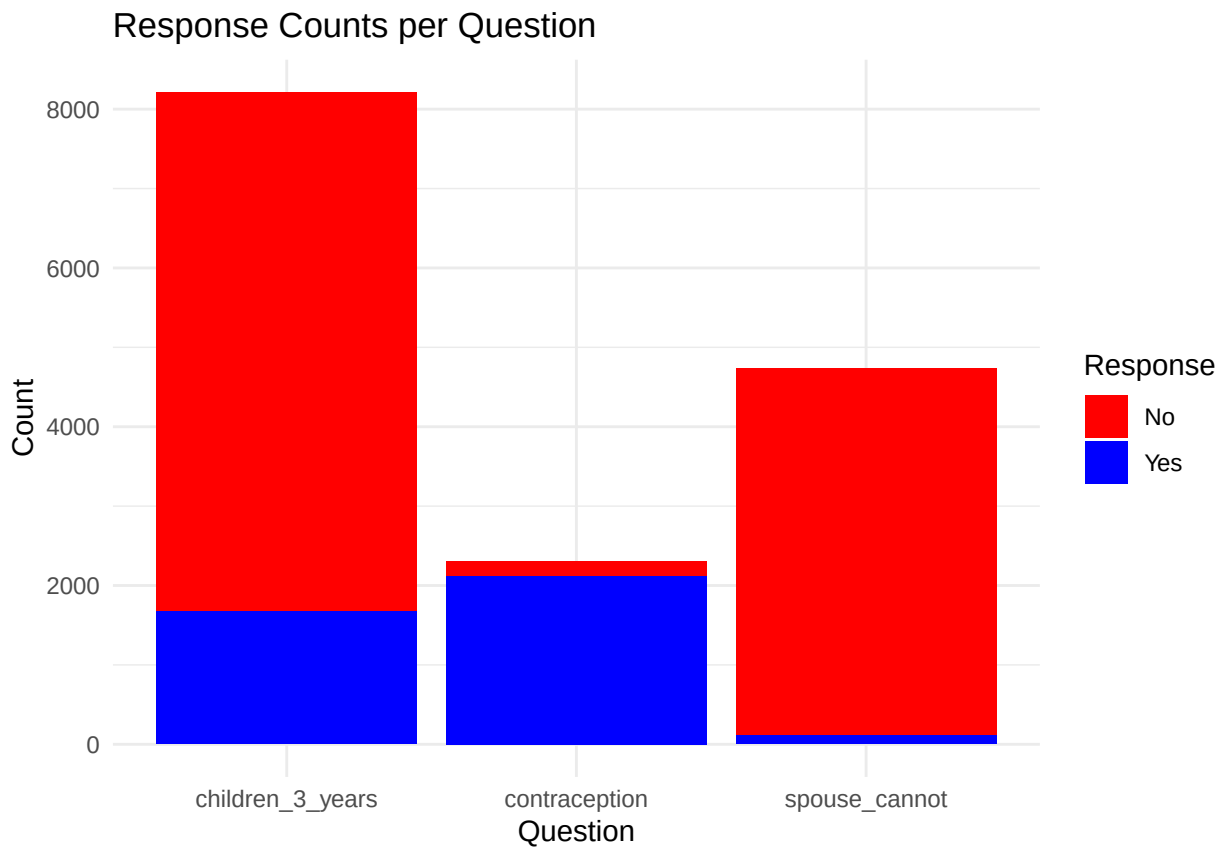
RRWM replication of Kate's work_Pratik Mahajan

2023-10-11

```
gss_data<- read.csv("gss_data.csv")
```

```
# 1. Recoding FI_505 variable
gss_data$contraception <- ifelse(gss_data$FI_505 == 1, 1,
                                 ifelse(gss_data$FI_505 == 2, 0, NA))
gss_data$FI_505 <- NULL

# 2. Recoding FI_105 variable
gss_data$children_3_years <- ifelse(gss_data$FI_105 %in% c(1, 2), 1,
                                    ifelse(gss_data$FI_105 %in% c(3, 4), 0, NA))
gss_data$FI_105 <- NULL

# Corrected recoding for FI_240
gss_data$spouse_cannot <- ifelse(gss_data$FI_240 == 1, 1,
                                 ifelse(gss_data$FI_240 == 2, 0, NA))
gss_data$FI_240 <- NULL
```

```
library(tidyr)
library(ggplot2)

# Create subset with the required columns
subset_gss <- gss_data[, c("contraception", "children_3_years", "spouse_cannot")]

# Reshape the data
subset_long <- gather(subset_gss, key = "variable", value = "value")

# Ensure the value column is of factor type with explicit levels
subset_long$value <- factor(subset_long$value, levels = c(0, 1))

# Drop rows with NA values
subset_long <- subset_long[!is.na(subset_long$value),]

# Plotting with stacked bars
plot <- ggplot(subset_long, aes(x = variable, fill = value)) +
  geom_bar(position = "stack") +
  labs(title = "Response Counts per Question",
       x = "Question",
       y = "Count",
       fill = "Response") +
  scale_fill_manual(values = c("red", "blue"), labels = c("No", "Yes")) +
  theme_minimal()

print(plot)
```




```
#install.packages("stargazer")
library(stargazer)
```

```
##
## Please cite as:

##  Hlavac, Marek (2022). stargazer: Well-Formatted Regression and Summary Statistics Tables.

##  R package version 5.2.3. https://CRAN.R-project.org/package=stargazer
```

```
# Subset the data omitting NA values
data_subset <- gss_data[!is.na(gss_data$contraception) & !is.na(gss_data$children_3_years) & !is.na(gss

# Create the linear regression model
model <- lm(contraception ~ children_3_years + spouse_cannot, data = data_subset)
```

```
stargazer(model, type = "text", title="Regression Results", single.row = TRUE)
```

```
##
## Regression Results
## ================================================
##                         Dependent variable:
##                     ---------------------------
##                              contraception
```

```
## ------------------------------------------------
## children_3_years          -0.142*** (0.012)
## spouse_cannot
## Constant                  0.966*** (0.007)
## ------------------------------------------------
## Observations                    2,058
## R2                              0.060
## Adjusted R2                     0.059
## Residual Std. Error       0.266 (df = 2056)
## F Statistic           130.950*** (df = 1; 2056)
## ================================================
## Note:                *p<0.1; **p<0.05; ***p<0.01
```