Assignment 2

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*Is there an association between a citizen’s living condition and their perception of civil servant corruption?*

*Is the perception of media freedom associated with citizens’ satisfaction with democracy in Ghana?*

# SECTION 1:

library(descr)

## Warning: package 'descr' was built under R version 4.4.2

library(haven)

## Warning: package 'haven' was built under R version 4.4.2

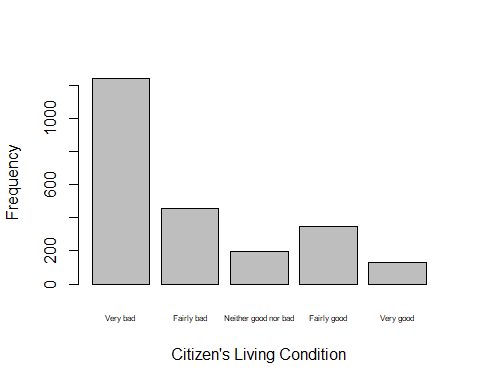
GH\_AFRO\_9 <- read\_sav("C:/Users/AiAsum/Downloads/afrobarometer\_release-dataset\_gha\_r9\_en\_2023-04-01.sav")

# Section 2:

vars <- c("Q4B", "Q38C", "Q33H", "Q31", "Q86C", "Q7A")   
cleanData <- GH\_AFRO\_9[vars]  
save(cleanData, file='PA2\_Research.RDATA')

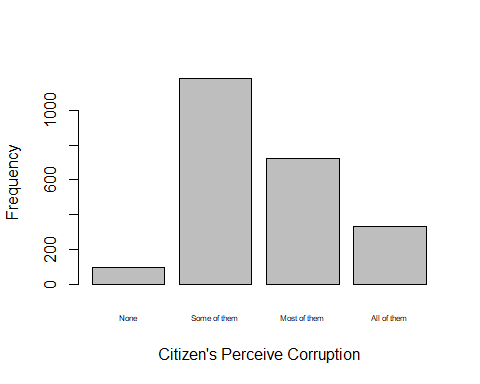
# Section three: Error handling of Variables

cleanData$Q4B <- as.character(cleanData$Q4B)  
  
cleanData$Q4B[cleanData$Q4B == "9" ] <- NA  
cleanData$Q4B[cleanData$Q4B == "-1" ] <- NA  
cleanData$Q4B[cleanData$Q4B == "8" ] <- NA  
  
cleanData$Q4B <- factor(cleanData$Q4B,  
 levels = c("1", "2", "3", "4", "5"),  
 labels = c("Very bad", "Fairly bad", "Neither good nor bad",  
 "Fairly good", "Very good"))  
  
  
  
### Coding and Error Handling for Q38C  
  
cleanData$Q38C <- as.character(cleanData$Q38C)  
cleanData$Q38C[cleanData$Q38C == "8"] <- NA  
cleanData$Q38C[cleanData$Q38C == "9"] <- NA  
cleanData$Q38C[cleanData$Q38C == "-1"] <- NA  
  
cleanData$Q38C <- factor(cleanData$Q38C,  
 levels = c("0", "1", "2", "3"),  
 labels = c("None", "Some of them", "Most of them", "All of them"))  
  
  
  
# Second research questions  
### Coding and Error Handling for Q33H  
  
cleanData$Q33H <- as.character(cleanData$Q33H)  
  
cleanData$Q33H[cleanData$Q33H == "8"] <- NA  
cleanData$Q33H[cleanData$Q33H == "9"] <- NA  
cleanData$Q33H[cleanData$Q33H == "-1"] <- NA  
  
cleanData$Q33H <- factor(cleanData$Q33H,  
 levels = c("0", "1", "2", "3"),  
 labels = c("Not at all free", "Not very free",  
 "Somewhat free", "Completely free"))  
  
### Coding and Error Handling for Q31  
  
cleanData$Q31 <- as.character(cleanData$Q31)  
  
cleanData$Q31[cleanData$Q31 == "8"] <- NA  
cleanData$Q31[cleanData$Q31 == "9"] <- NA  
cleanData$Q31[cleanData$Q31 == "-1"] <- NA  
  
cleanData$Q31 <- factor(cleanData$Q31,  
 levels = c("0", "1", "2", "3", "4"),  
 labels = c("Ghana is not a democracy", "Not at all satisfied",   
 "Not very satisfied", "Fairly satisfied",   
 "Very satisfied"))  
  
  
freq(cleanData$Q4B, cex.names=0.5, ylab = "Frequency", xlab = "Citizen's Living Condition")



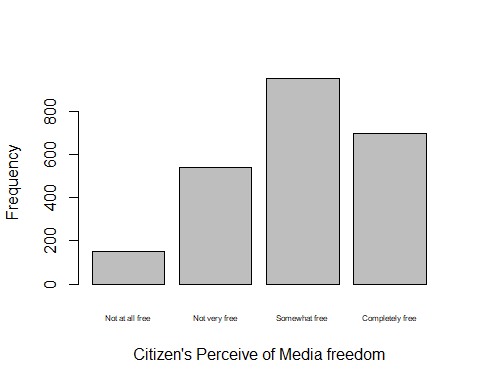
## cleanData$Q4B   
## Frequency Percent Valid Percent  
## Very bad 1238 52.25834 52.280  
## Fairly bad 458 19.33305 19.341  
## Neither good nor bad 198 8.35796 8.361  
## Fairly good 346 14.60532 14.611  
## Very good 128 5.40312 5.405  
## NA's 1 0.04221   
## Total 2369 100.00000 100.000

freq(cleanData$Q38C, cex.names=0.5, ylab = "Frequency", xlab = "Citizen's Perceive Corruption")



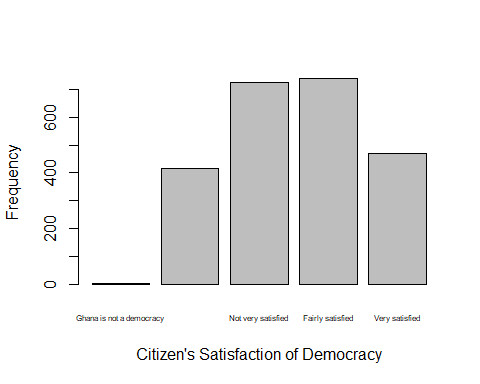
## cleanData$Q38C   
## Frequency Percent Valid Percent  
## None 98 4.137 4.199  
## Some of them 1182 49.894 50.643  
## Most of them 723 30.519 30.977  
## All of them 331 13.972 14.182  
## NA's 35 1.477   
## Total 2369 100.000 100.000

freq(cleanData$Q33H, cex.names=0.5, ylab = "Frequency", xlab = "Citizen's Perceive of Media freedom")



## cleanData$Q33H   
## Frequency Percent Valid Percent  
## Not at all free 150 6.332 6.418  
## Not very free 540 22.794 23.107  
## Somewhat free 951 40.144 40.693  
## Completely free 696 29.379 29.782  
## NA's 32 1.351   
## Total 2369 100.000 100.000

freq(cleanData$Q31, cex.names=0.5, ylab = "Frequency", xlab = "Citizen's Satisfaction of Democracy")



## cleanData$Q31   
## Frequency Percent Valid Percent  
## Ghana is not a democracy 3 0.1266 0.1274  
## Not at all satisfied 417 17.6024 17.7145  
## Not very satisfied 725 30.6036 30.7986  
## Fairly satisfied 739 31.1946 31.3934  
## Very satisfied 470 19.8396 19.9660  
## NA's 15 0.6332   
## Total 2369 100.0000 100.0000

# Section 4 -

# Section 5

# Is there an association between a citizen's living condition and their perception of civil servant corruption? Q4B -- present living, Q38C corruption of civil servant  
# Living Condition Explainatory  
# Curruption Reponse  
# Table to show proportion of living conditions in each corruption variable  
living\_corruption\_table <- table(cleanData$Q38C, cleanData$Q4B)  
  
living\_corruption\_table\_colProp <-prop.table(living\_corruption\_table, 2)   
round(living\_corruption\_table\_colProp, 3)

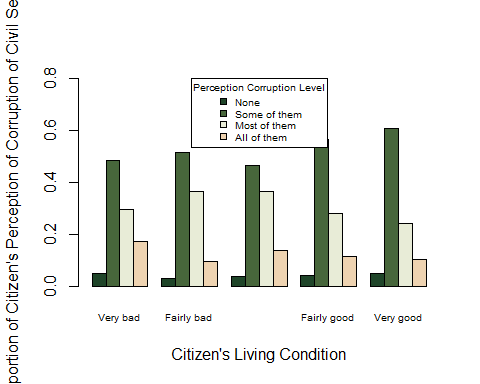
##   
## Very bad Fairly bad Neither good nor bad Fairly good Very good  
## None 0.048 0.029 0.035 0.041 0.048  
## Some of them 0.483 0.514 0.465 0.566 0.608  
## Most of them 0.297 0.363 0.364 0.280 0.240  
## All of them 0.172 0.094 0.136 0.114 0.104

# Second Research  
#Is the perception of media freedom associated with citizens' satisfaction with democracy in #Ghana?  
# Satisfaction of democracy - response  
# Media freesom is expla  
media\_democracy <- table(cleanData$Q31, cleanData$Q33H)  
  
media\_democracy\_colProp <-prop.table(media\_democracy, 2)   
round(media\_democracy\_colProp, 3)

##   
## Not at all free Not very free Somewhat free  
## Ghana is not a democracy 0.000 0.000 0.003  
## Not at all satisfied 0.413 0.227 0.135  
## Not very satisfied 0.233 0.390 0.342  
## Fairly satisfied 0.160 0.273 0.363  
## Very satisfied 0.193 0.110 0.156  
##   
## Completely free  
## Ghana is not a democracy 0.000  
## Not at all satisfied 0.143  
## Not very satisfied 0.216  
## Fairly satisfied 0.308  
## Very satisfied 0.333

# SECTION 4:

colors1 <- c("#1F4529", "#47663B", "#E8ECD7", "#EED3B1")  
colors2 <- c("#181C14", "#FC8F54", "#697565", "#ECDFCC", "#AA5486")  
  
barplot(  
 living\_corruption\_table\_colProp,   
 beside = TRUE,   
 cex.names = 0.6,  
 ylim = c(0, 0.8),  
 col = colors1,   
 xlab = "Citizen's Living Condition",   
 ylab = "Proportion of Citizen's Perception of Corruption of Civil Servants"  
)  
  
legend(  
 "top",   
 legend = rownames(living\_corruption\_table\_colProp),  
 fill = colors1,  
 title = "Perception Corruption Level",  
 cex = 0.6  
)



barplot(  
 media\_democracy\_colProp,   
 beside = TRUE,   
 cex.names = 0.6,  
 ylim = c(0, 0.65),  
 col = colors2,   
 xlab = "Perception of Freedom of Media",   
 ylab = "Proportion of Satisfaction of Democracy"  
)  
  
legend(  
 "top",   
 legend = rownames(media\_democracy\_colProp),  
 fill = colors2,  
 title = "Satisfaction of Democracy",  
 cex = 0.6  
)

