GVPT728 Final Project

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2025-01-22

Download Potentially Necessary Packages

```
library(tidyverse)
library(tidycensus)
library(dplyr)
library(readr)
library(readxl)
library(haven)
library(ggfortify)
library(car)
library(huxtable)
library(lmtest)
library(ggdist)
library(fixest)
library(sandwich)
library(lmtest)
library(lme4)
library(modelsummary)
library(tableone)
library(knitr)
```

Import Dataset

```
hints6 <- read_sav("/Users/yaelbeshaw/R Scripts and Projects/NYU-APSTA-GE-2011/HINTS6_SPSS/hints6_publi
```

Select Variables of Interest for this Study

Dependent Variables

Health Information-Seeking Behaviors:

Electronic2_HealthInfo: "In the past 12 months, have you used the Internet to look for health or medical information?" (Binary)

Independent Variable

Frequency of Internet Usage:

UseInternet: Baseline binary indicator (yes/no).

SocMed_Visited: Frequency of visiting social media sites in the past 12 months (ordinal or categorical).

Controls

Internet Access

Type of internet access

1. Internet_DialUp
2. Internet_HighSpeed
3. Internet_Cell

Device ownership or access

HAVEDEVICE_CAT

Access Satisfaction

InternetConnection: Satisfaction with internet connection for health-related needs (ordinal scale).

Health Literacy:

ConfidentInternetHealth: "How confident are you that you can find helpful health resources on the Internet?" (Ordinal scale)

Trust in Information:

MisleadingHealthInfo: "How much of the health information that you see on social media do you think is false or misleading?" (Ordinal scale)

Health Status:

EverHadCancer

MedConditions_Diabetes, MedConditions_HighBP, MedConditions_HeartCondition, MedConditions_LungDisease, MedConditions_Depression

Demographics:

Age; Age

Gender; BirthGender

Race; RaceEthn5

Educational attainment; EducA

Geographic: CENSDIV

Urban vs Rural; PR_RUCA_2010: USDA 2010 Primary Rural-Urban Community Area Code

Economic Factors:

Income; HHInc

Employment: WorkFullTime(R4)

How many children: ChildrenInHH

Selection

```
select_data <- hints6 |>
  select(Electronic2_HealthInfo, #binary 1 or 2 *done
         UseInternet, #binary 1 or 2 *done
         SocMed_Visited, # 1 to 5 (every day to never) --flip *done
         Internet_DialUp, # binary 1 or 2 *done
         Internet_HighSpeed, # binary 1 or 2 *done
```

```
          Internet_Cell, # binary 1 or 2 *done
          HAVEDEVICE_CAT, #recode 4 as 0 *done
          InternetConnection, # 1 to 5 (extremly satisfied to not at all) -flip *done
          ConfidentInternetHealth, #1 to 5 (completely confident to not at all) -flip *done
          MisleadingHealthInfo, #1 to 5 (a lot to none (4), I dont use social (5)) -flip with 1 =0 *done
          EverHadCancer, #dummy- healthstatus *done
          MedConditions_Diabetes, #dummy - healthstatus *done
          MedConditions_HighBP, #dummy- healthstatus *done
          MedConditions_HeartCondition, #dummy - healthstatus *done
          MedConditions_LungDisease, #dummy- healthstatus *done
          MedConditions_Depression, #dummy- healthstatus *done
          Age, #continuous (18 to 99) use AgeGrpA/B for visualization *done
          BirthGender, # 0 == Male, 1 == Female *done
          RaceEthn5, # NHWhite, NHBlack, Hispanic, NHAsian, NHOther *done
          EducA, # Less than HS, HS, Some College, Collge and Beyond *done
          CENSDIV, # New England, Middle Atlantic, E/W North Central, South Atlantic, E/W South Central,
          PR_RUCA_2010, # Metropolitan, Micropolitian, Small Town, Rural (code 0 or 1) *done
          HHInc, # 1 to 5, increasing *done
          WorkFullTime, # 1 or 2 0,1 *done
          ChildrenInHH, # 0 to 9 *done
          AgeGrpB)
```

Data Preprocessing

Remove any missing data

```
clean_data <- select_data %>%
  mutate(across(everything(), ~ na_if(., -9))) %>%
  mutate(across(everything(), ~ na_if(., -7))) %>%
  mutate(across(everything(), ~ na_if(., -6))) %>%
  mutate(across(everything(), ~ na_if(., -5))) %>%
  mutate(across(everything(), ~ na_if(., -4))) %>%
  mutate(across(everything(), ~ na_if(., -2)))


data <- na.omit(clean_data)
```

Recodes

```
#Code 1 and 2 to 0 and 1
data$Electronic2_HealthInfo <- ifelse(data$Electronic2_HealthInfo == 1,
                                      1, 0)
data$UseInternet <- ifelse(data$UseInternet == 1,
                                      1, 0)
data$Internet_DialUp <- ifelse(data$Internet_DialUp == 1,
                                      1, 0)
data$Internet_HighSpeed <- ifelse(data$Internet_HighSpeed == 1,
                                      1, 0)
data$Internet_Cell <- ifelse(data$Internet_Cell == 1,
                                      1, 0)
data$BirthGender <- ifelse(data$BirthGender == 1,
                                      1, 0)
```

```r
data$WorkFullTime<- ifelse(data$WorkFullTime == 1,
                                    1, 0)

#Flip the ordinal variables from least to greatest
data$SocMed_Visited <- factor(data$SocMed_Visited,
                                levels = c(5, 4, 3, 2, 1))
levels(data$SocMed_Visited) <- c("1", "2", "3", "4", "5")


data$InternetConnection <- factor(data$InternetConnection,
                                levels = c(5, 4, 3, 2, 1))
levels(data$InternetConnection) <- c("1", "2", "3", "4", "5")


data$ConfidentInternetHealth <- factor(data$ConfidentInternetHealth,
                                levels = c(5, 4, 3, 2, 1))
levels(data$ConfidentInternetHealth) <- c("1", "2", "3", "4", "5")


#flip but 4 (no social media) becomes 0 instead
data$MisleadingHealthInfo <- factor(data$MisleadingHealthInfo,
                                levels = c(5, 4, 3, 2, 1))
levels(data$MisleadingHealthInfo) <- c("1", "2", "3", "4", "5")

# rural vs not
data$PR_RUCA_2010 <- ifelse(data$PR_RUCA_2010== 1 |
                              data$PR_RUCA_2010== 4|
                              data$PR_RUCA_2010== 7,
                            0,
                            1)

# any chronic conditions as a 1 or 2
data$HealthStatus <- ifelse(data$EverHadCancer == 1 |
                                data$MedConditions_Diabetes == 1 |
                                data$MedConditions_HighBP == 1 |
                                data$MedConditions_HeartCondition == 1 |
                                data$MedConditions_LungDisease == 1 |
                                data$MedConditions_Depression == 1,
                                1,
                                0)

# devices, none=0 and multiple is 4 instead
data$HAVEDEVICE_CAT <- ifelse(data$HAVEDEVICE_CAT == 4, 0,
                                 ifelse(data$HAVEDEVICE_CAT == 5, 4,
                                        data$HAVEDEVICE_CAT))

# turn internet type into one variable

# Combine the internet access types into one new variable
data$InternetAccessType <- NA  # Initialize the new variable with NA

# Assign categories based on the conditions for internet access types
data$InternetAccessType[data$Internet_DialUp == 1 &
```

```
                          data$Internet_HighSpeed == 1] <- 4
data$InternetAccessType[data$Internet_DialUp == 1 &
                          data$Internet_Cell == 1] <- 4
data$InternetAccessType[data$Internet_HighSpeed == 1 &
                          data$Internet_Cell == 1] <- 4

# Assign individual categories for the remaining conditions
data$InternetAccessType[data$Internet_DialUp == 1 &
                          is.na(data$InternetAccessType)] <- 1
data$InternetAccessType[data$Internet_HighSpeed == 1 &
                          is.na(data$InternetAccessType)] <- 2
data$InternetAccessType[data$Internet_Cell == 1 &
                          is.na(data$InternetAccessType)] <- 3

#recode the number of children

data$ChildrenInHH_recode <- ifelse(data$ChildrenInHH >= 4, 4, as.character(data$ChildrenInHH))
```

```
head(data)
```

MedConditions_Diabetes	MedConditions_HighBP	MedConditions_HeartCondition	MedConditions_LungDise
2	1	2	2
1	1	1	2
2	1	2	2
2	2	2	1
2	2	2	2
1	2	2	2

Summary Statistics

```
key_vars <- c("Electronic2_HealthInfo", "UseInternet", "SocMed_Visited",
              "InternetAccessType", "HAVEDEVICE_CAT", "ConfidentInternetHealth",
              "MisleadingHealthInfo", "HealthStatus", "Age", "BirthGender",
              "RaceEthn5", "EducA", "CENSDIV", "PR_RUCA_2010", "HHInc",
              "WorkFullTime", "ChildrenInHH_recode", "AgeGrpB")

descriptive_table <- CreateTableOne(vars = key_vars, data = data, factorVars = key_vars)
print(descriptive_table)
```

```
##
##                                Overall
##   n                            4791
##   Electronic2_HealthInfo = 1 (%) 3650 (76.2)
##   UseInternet = 1 (%)          4211 (87.9)
##   SocMed_Visited (%)
##      1                          822 (17.2)
##      2                          279 ( 5.8)
```

```
##      3                            366 ( 7.6)
##      4                            589 (12.3)
##      5                           2735 (57.1)
##   InternetAccessType (%)
##      1                             24 ( 0.6)
##      2                            706 (16.8)
##      3                            260 ( 6.2)
##      4                           3215 (76.5)
##   HAVEDEVICE_CAT (%)
##      0                             85 ( 1.8)
##      1                            157 ( 3.3)
##      2                           1452 (30.3)
##      3                            256 ( 5.3)
##      4                           2841 (59.3)
##   ConfidentInternetHealth (%)
##      1                            206 ( 4.3)
##      2                            413 ( 8.6)
##      3                           1888 (39.4)
##      4                           1692 (35.3)
##      5                            592 (12.4)
##   MisleadingHealthInfo (%)
##      1                            787 (16.4)
##      2                             54 ( 1.1)
##      3                            689 (14.4)
##      4                           1818 (37.9)
##      5                           1443 (30.1)
##   HealthStatus = 1 (%)           3270 (68.3)
##   Age (%)
##      18                            21 ( 0.4)
##      19                            23 ( 0.5)
##      20                            17 ( 0.4)
##      21                            27 ( 0.6)
##      22                            32 ( 0.7)
##      23                            33 ( 0.7)
##      24                            37 ( 0.8)
##      25                            38 ( 0.8)
##      26                            47 ( 1.0)
##      27                            49 ( 1.0)
##      28                            61 ( 1.3)
##      29                            59 ( 1.2)
##      30                            71 ( 1.5)
##      31                            65 ( 1.4)
##      32                            63 ( 1.3)
##      33                            57 ( 1.2)
##      34                            82 ( 1.7)
##      35                            84 ( 1.8)
##      36                            67 ( 1.4)
##      37                            75 ( 1.6)
##      38                            77 ( 1.6)
##      39                            84 ( 1.8)
##      40                            62 ( 1.3)
##      41                            72 ( 1.5)
##      42                            59 ( 1.2)
##      43                            81 ( 1.7)
```

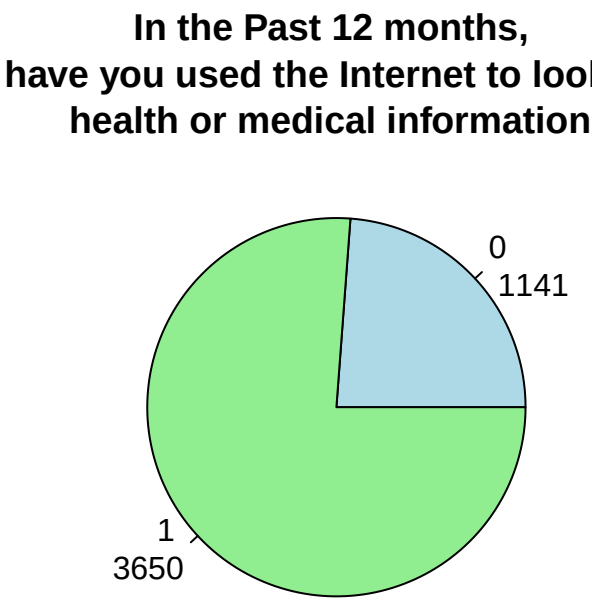
```
##      44                    71 ( 1.5)
##      45                    63 ( 1.3)
##      46                    63 ( 1.3)
##      47                    65 ( 1.4)
##      48                    53 ( 1.1)
##      49                    72 ( 1.5)
##      50                    78 ( 1.6)
##      51                    80 ( 1.7)
##      52                    81 ( 1.7)
##      53                    75 ( 1.6)
##      54                    85 ( 1.8)
##      55                   102 ( 2.1)
##      56                    79 ( 1.6)
##      57                   102 ( 2.1)
##      58                    98 ( 2.0)
##      59                   111 ( 2.3)
##      60                   109 ( 2.3)
##      61                    89 ( 1.9)
##      62                   119 ( 2.5)
##      63                   101 ( 2.1)
##      64                    99 ( 2.1)
##      65                   114 ( 2.4)
##      66                   119 ( 2.5)
##      67                   117 ( 2.4)
##      68                    95 ( 2.0)
##      69                   101 ( 2.1)
##      70                   115 ( 2.4)
##      71                    97 ( 2.0)
##      72                    89 ( 1.9)
##      73                    93 ( 1.9)
##      74                    75 ( 1.6)
##      75                    77 ( 1.6)
##      76                    59 ( 1.2)
##      77                    53 ( 1.1)
##      78                    46 ( 1.0)
##      79                    53 ( 1.1)
##      80                    40 ( 0.8)
##      81                    18 ( 0.4)
##      82                    33 ( 0.7)
##      83                    20 ( 0.4)
##      84                    23 ( 0.5)
##      85                    25 ( 0.5)
##      86                    17 ( 0.4)
##      87                    16 ( 0.3)
##      88                     9 ( 0.2)
##      89                    10 ( 0.2)
##      90                     7 ( 0.1)
##      91                    10 ( 0.2)
##      92                     6 ( 0.1)
##      93                     3 ( 0.1)
##      94                     6 ( 0.1)
##      95                     3 ( 0.1)
##      96                     1 ( 0.0)
##      97                     1 ( 0.0)
```

```
##      98                              1 ( 0.0)
##      99                              1 ( 0.0)
##   BirthGender = 1 (%)             1938 (40.5)
##   RaceEthn5 (%)
##      1                            2800 (58.4)
##      2                             755 (15.8)
##      3                             814 (17.0)
##      4                             255 ( 5.3)
##      5                             167 ( 3.5)
##   EducA (%)
##      1                             240 ( 5.0)
##      2                             798 (16.7)
##      3                            1362 (28.4)
##      4                            2391 (49.9)
##   CENSDIV (%)
##      1                             176 ( 3.7)
##      2                             508 (10.6)
##      3                             605 (12.6)
##      4                             230 ( 4.8)
##      5                            1177 (24.6)
##      6                             234 ( 4.9)
##      7                             736 (15.4)
##      8                             356 ( 7.4)
##      9                             769 (16.1)
##   PR_RUCA_2010 = 1 (%)              91 ( 1.9)
##   HHInc (%)
##      1                             708 (14.8)
##      2                             601 (12.5)
##      3                             627 (13.1)
##      4                             835 (17.4)
##      5                            2020 (42.2)
##   WorkFullTime = 1 (%)            2457 (51.3)
##   ChildrenInHH_recode (%)
##      0                            3602 (75.2)
##      1                             576 (12.0)
##      2                             383 ( 8.0)
##      3                             158 ( 3.3)
##      4                              72 ( 1.5)
##   AgeGrpB (%)
##      1                             782 (16.3)
##      2                            1048 (21.9)
##      3                            1408 (29.4)
##      4                            1015 (21.2)
##      5                             538 (11.2)
```

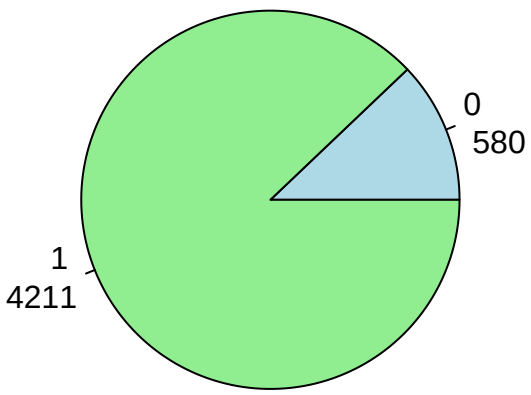
Visualizations

```
#DEPENDENT VARIABLE

freq_table <- table(data$Electronic2_HealthInfo)

pie(freq_table,
    main = "In the Past 12 months, \n have you used the Internet to look for \n health or medical infor
```

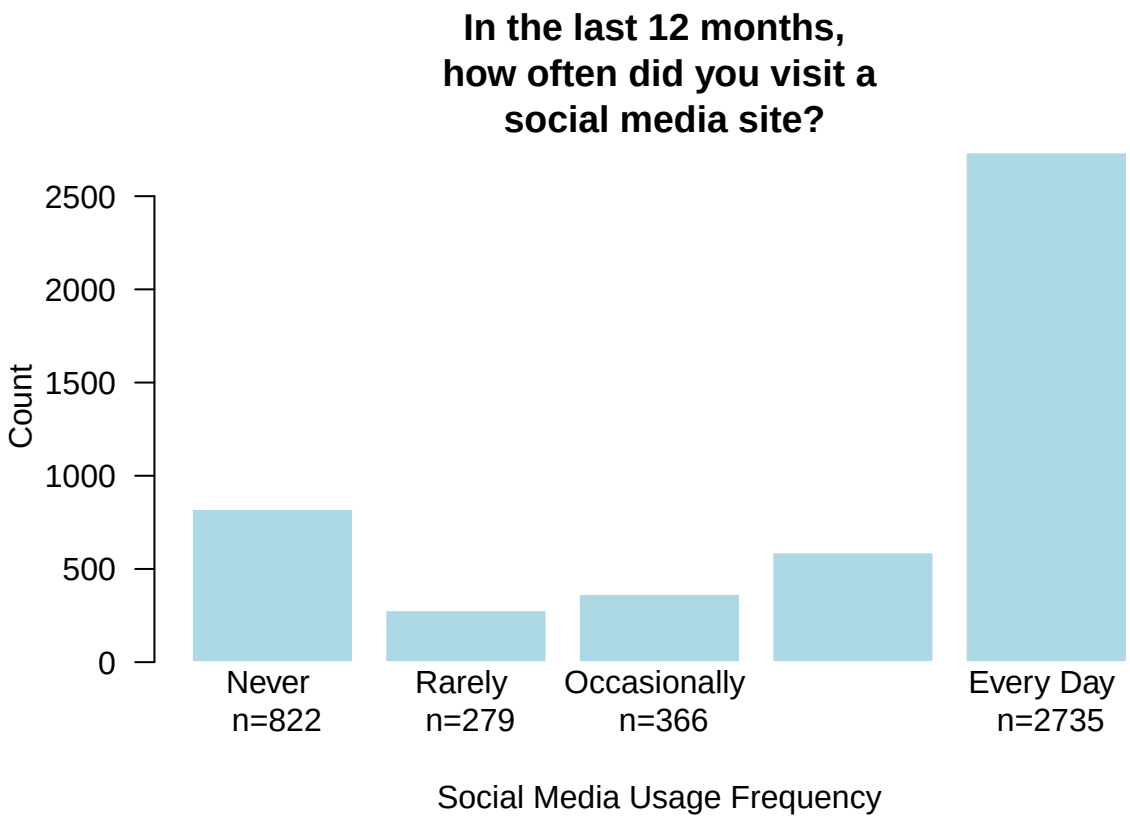
```
    col = c("lightblue", "lightgreen"),
    labels = paste(names(freq_table), "\n", freq_table))
```




```
#INDEPENDENT VARIABLE

freq_table <- table(data$ UseInternet)

pie(freq_table,
    main = "Do you ever go on-line to access the Internet \n or World Wide Web,\n or to send and receiv
    col = c("lightblue", "lightgreen"),  # Optional: colors for "No" and "Yes"
    labels = paste(names(freq_table), "\n", freq_table))  # Display the counts in the labels
```




```r
# Assuming the social media usage variable is 'SocMed_Visited' or similar
# Create a frequency table of social media usage
freq_table <- table(data$SocMed_Visited)

x_labels <- c("Never \n n=822", "Rarely \n n=279", "Occasionally \n n=366", "Frequently \n n= 589", "Ev

# Create the barplot
barplot(freq_table,
        main = "In the last 12 months, \n how often did you visit a \n social media site?",
        xlab = "Social Media Usage Frequency",
        ylab = "Count",
        col = "lightblue",
        border = "white",
        las = 1,  # Rotate x-axis labels if needed
        ylim = c(0, max(freq_table) + 5),  # Adjust y-axis for better spacing
        names.arg = x_labels)  # Adjust y-axis for better spacing
```




```
#CONTROLS

#internet type
freq_table <- table(data$InternetAccessType)

names(freq_table) <- c("Dial-Up", "High-Speed", "Cellular", "Multiple")

category_count_table <- data.frame(
  Category = names(freq_table),
  Count = as.vector(freq_table)
)

kable(category_count_table,
      caption = "Access Type")
```

Table 1: Access Type

Category	Count
Dial-Up	24
High-Speed	706
Cellular	260
Multiple	3215

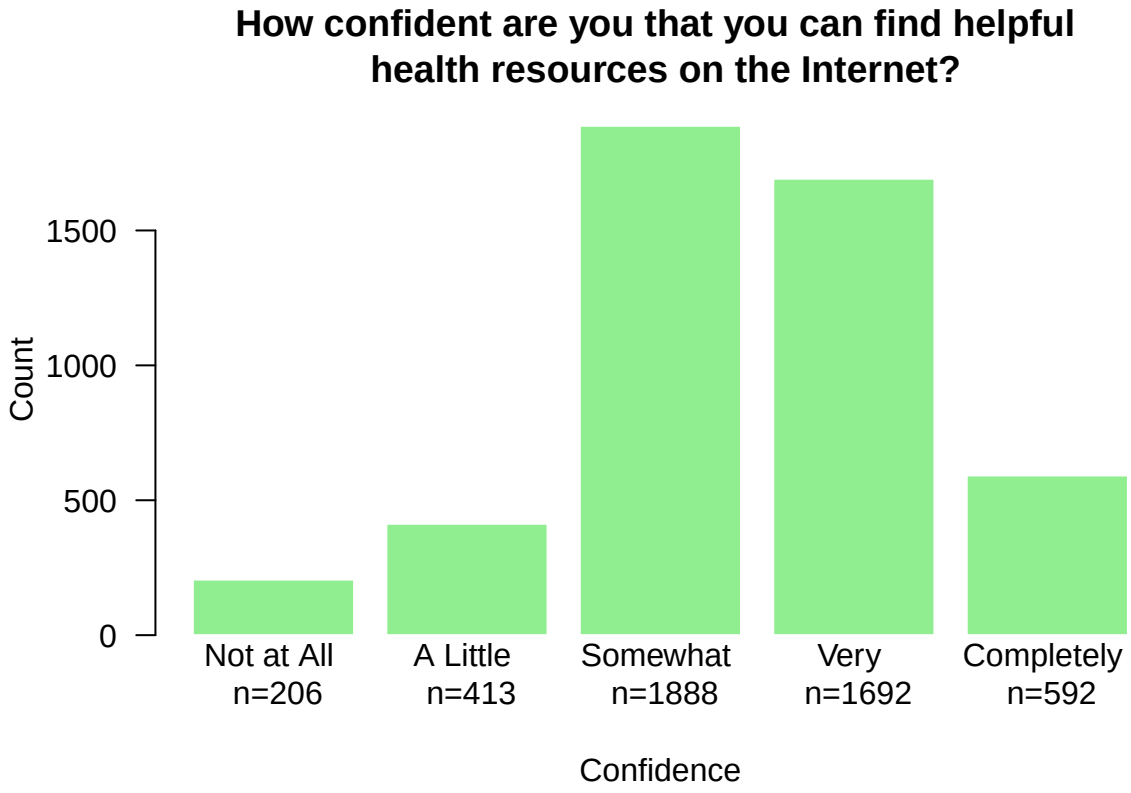
```
#device type
freq_table <- table(data$HAVEDEVICE_CAT)
```

```r
names(freq_table) <- c("Tablet Computer Only", "Smartphone Only", "Basic Cell Only",
                       "None", "Multiple Devices")

category_count_table <- data.frame(
  Category = names(freq_table),
  Count = as.vector(freq_table)
)

kable(category_count_table,
      caption = "Device Type")
```

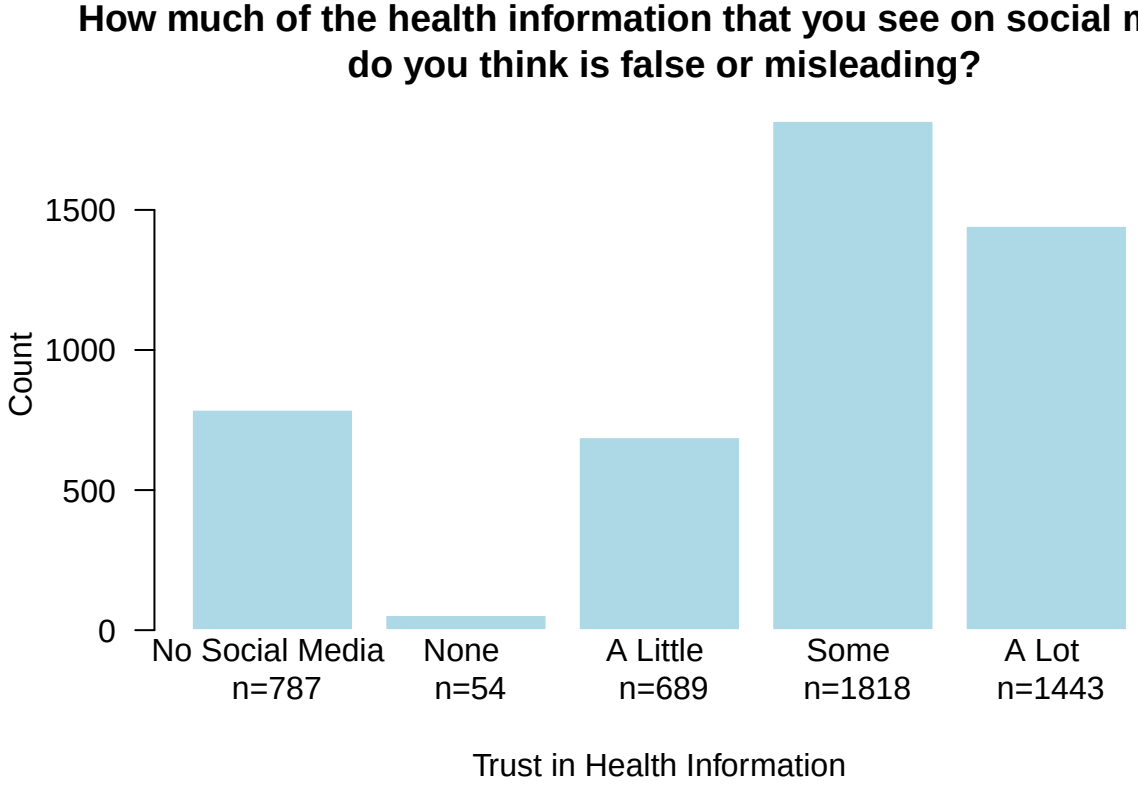
Table 2: Device Type

Category	Count
Tablet Computer Only	85
Smartphone Only	157
Basic Cell Only	1452
None	256
Multiple Devices	2841

```r
#ConfidentInternetHealth

freq_table <- table(data$ConfidentInternetHealth)

x_labels <- c("Not at All \n n=206", "A Little \n n=413", "Somewhat \n n=1888", "Very \n n=1692", "Compl

# Create the barplot
barplot(freq_table,
        main = "How confident are you that you can find helpful \n health resources on the Internet?",
        xlab = "Confidence",
        ylab = "Count",
        col = "lightgreen",
        border = "white",
        las = 1,  # Rotate x-axis labels if needed
        ylim = c(0, max(freq_table) + 5),  # Adjust y-axis for better spacing
        names.arg = x_labels)  # Adjust y-axis for better spacing
```

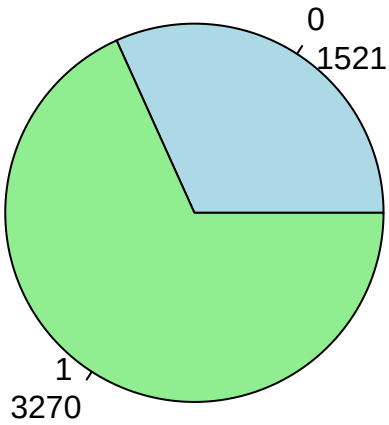



```r
#trust MisleadingHealthInfo

freq_table <- table(data$MisleadingHealthInfo)

x_labels <- c("No Social Media \n n=787", "None \n n=54", "A Little \n n=689", "Some \n n=1818", "A Lot

# Create the barplot
barplot(freq_table,
        main = "How much of the health information that you see on social media \n do you think is fals
        xlab = "Trust in Health Information",
        ylab = "Count",
        col = "lightblue",
        border = "white",
        las = 1,  # Rotate x-axis labels if needed
        ylim = c(0, max(freq_table) + 5),  # Adjust y-axis for better spacing
        names.arg = x_labels)  # Adjust y-axis for better spacing
```

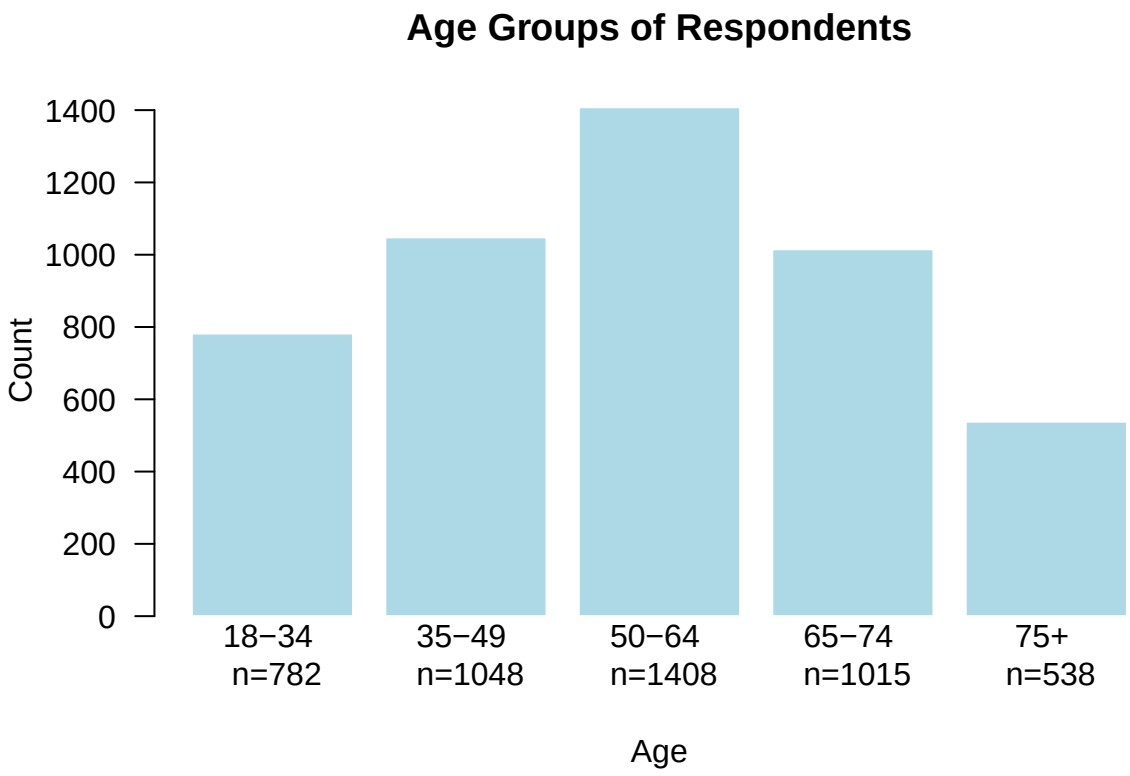



```
#DEMOGRAPHIC CONTROLS

#HEALTH
freq_table <- table(data$HealthStatus)

pie(freq_table,
    main = "Have you ever had Cancer or another Chronic Condition? \n (i.e., Diabetes, High BP, Heart C
    col = c("lightblue", "lightgreen"),
    labels = paste(names(freq_table), "\n", freq_table))
```

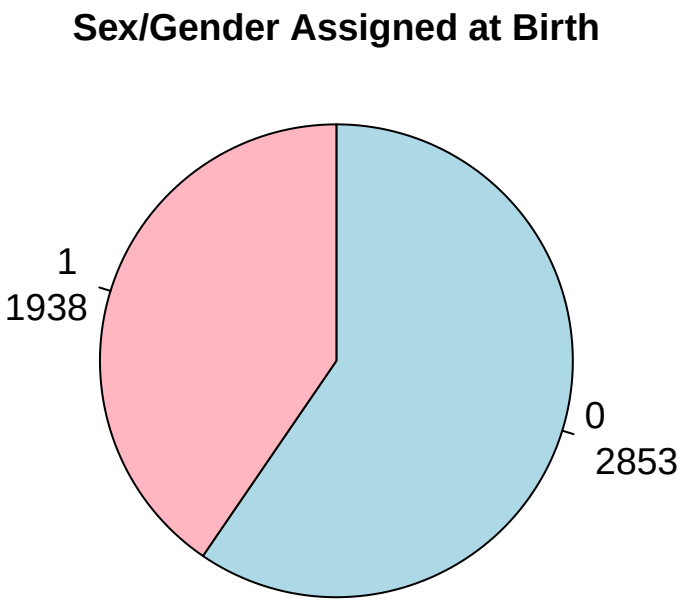
Have you ever had Cancer or another Chronic Condition?
(i.e., Diabetes, High BP, Heart Condition, Lung Disease, Depressior




```r
#AGE
freq_table <- table(data$AgeGrpB)

x_labels <- c("18-34 \n n=782", "35-49 \n n=1048", "50-64 \n n=1408", "65-74 \n n=1015", "75+ \n n=538")

# Create the barplot
barplot(freq_table,
        main = "Age Groups of Respondents",
        xlab = "Age",
        ylab = "Count",
        col = "lightblue",
        border = "white",
        las = 1,  # Rotate x-axis labels if needed
        ylim = c(0, max(freq_table) + 5),  # Adjust y-axis for better spacing
        names.arg = x_labels)  # Adjust y-axis for better spacing
```




```r
# SEX at BIRTH
freq_table <- table(data$BirthGender)

pie(freq_table,
    main = "Sex/Gender Assigned at Birth",
    col = c("lightblue", "lightpink"),
    labels = paste(names(freq_table), "\n", freq_table),
    radius = 1,  # Adjust the size of the pie chart (default is 1)
    cex = 1.2,  # Label text size (increase for readability)
    clockwise = TRUE,  # Make the chart clockwise
    border = "black",  # Remove borders around the slices
    init.angle = 90  # Start the first slice at 90 degrees
)
```




```
# RACE

freq_table <- table(data$RaceEthn5)

names(freq_table) <- c("NHWHite", "NHBlack", "Hispanic",
                       "NHAsian", "NHOthers")

category_count_table <- data.frame(
  Category = names(freq_table),
  Count = as.vector(freq_table)
)

kable(category_count_table,
      caption = "Race")
```

Table 3: Race

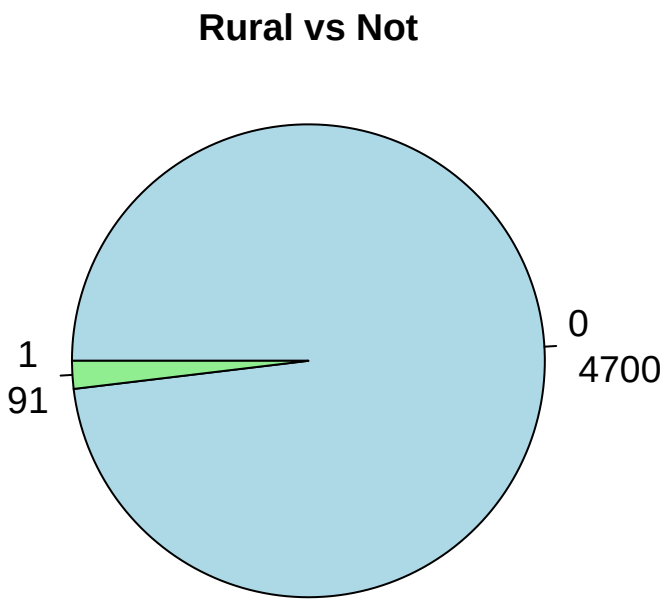
Category	Count
NHWHite	2800
NHBlack	755
Hispanic	814
NHAsian	255
NHOthers	167

```r
#EDUCATION

freq_table <- table(data$EducA)

names(freq_table) <- c("< High School", "High School Grad", "Some College",
                       "College Grad +")

category_count_table <- data.frame(
  Category = names(freq_table),
  Count = as.vector(freq_table)
)

kable(category_count_table,
      caption = "Education")
```

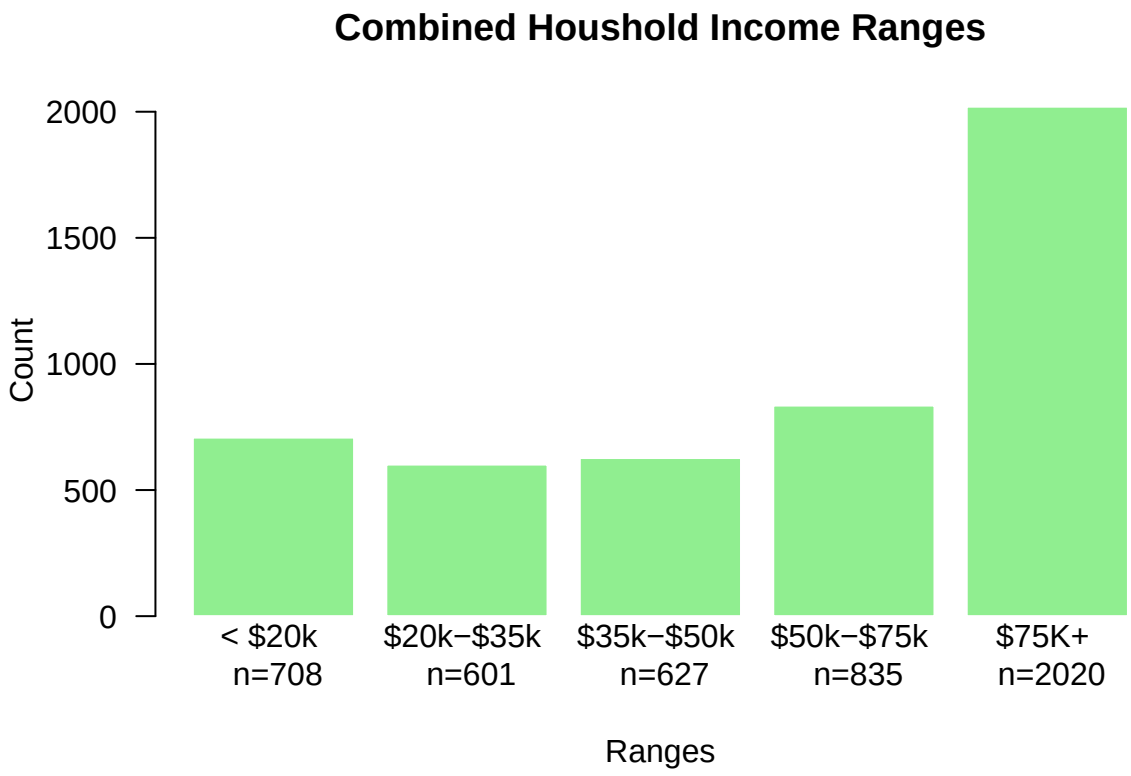
Table 4: Education

Category	Count
< High School	240
High School Grad	798
Some College	1362
College Grad +	2391

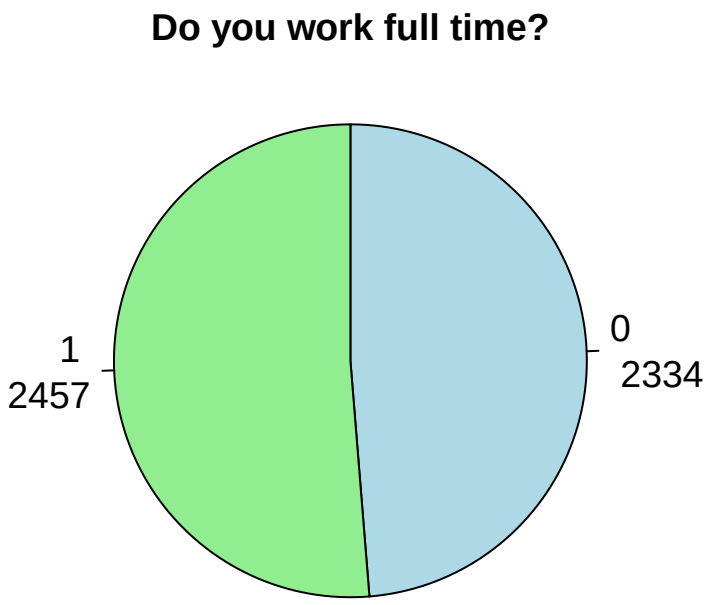
```r
# CENSUS
freq_table <- table(data$PR_RUCA_2010)

pie(freq_table,
    main = "Rural vs Not",
    col = c("lightblue", "lightgreen"),
    labels = paste(names(freq_table), "\n", freq_table),
    radius = 1,  # Adjust the size of the pie chart (default is 1)
    cex = 1.2,  # Label text size (increase for readability)
    clockwise = TRUE,  # Make the chart clockwise
    border = "black",  # Remove borders around the slices
    init.angle = 180  # Start the first slice at 90 degrees
)
```



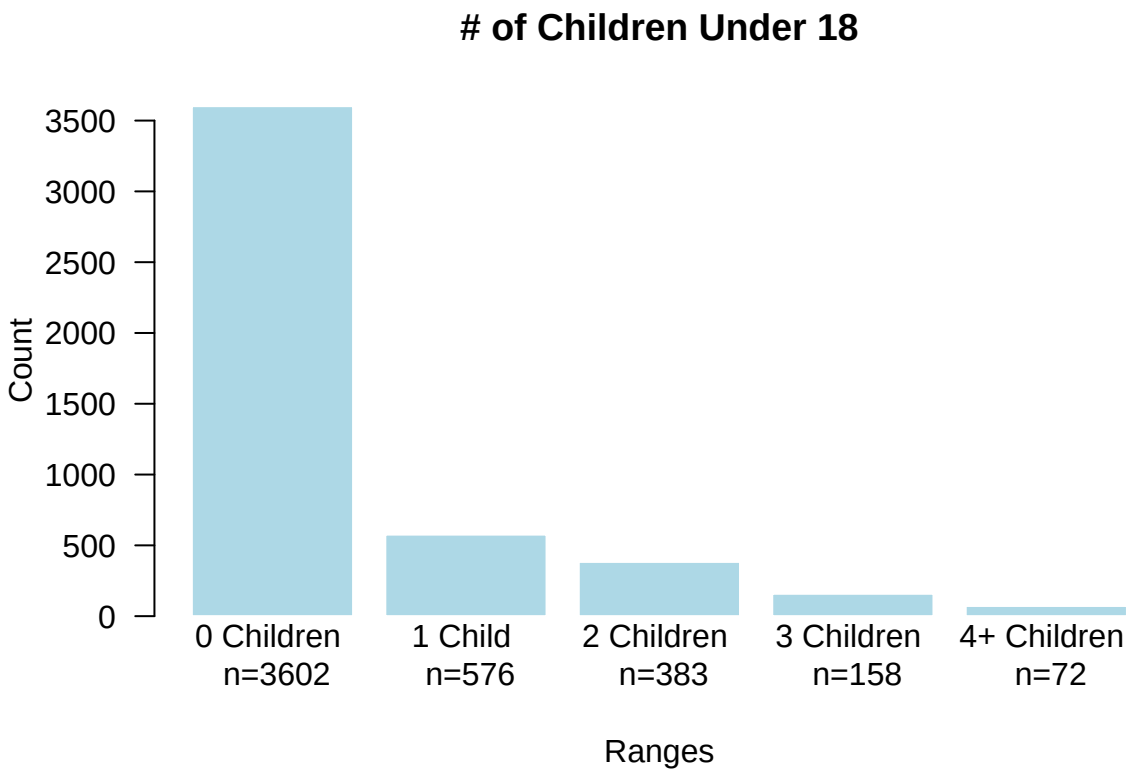

```r
# Economic

freq_table <- table(data$HHInc)

x_labels <- c("< $20k \n n=708", "$20k-$35k \n n=601", "$35k-$50k \n n=627", "$50k-$75k \n n=835", "$75

# Create the barplot
barplot(freq_table,
        main = "Combined Houshold Income Ranges",
        xlab = "Ranges",
        ylab = "Count",
        col = "lightgreen",
        border = "white",
        las = 1,  # Rotate x-axis labels if needed
        ylim = c(0, max(freq_table) + 5),  # Adjust y-axis for better spacing
        names.arg = x_labels)  # Adjust y-axis for better spacing
```




```r
freq_table <- table(data$WorkFullTime)

pie(freq_table,
    main = "Do you work full time?",
    col = c("lightblue", "lightgreen"),
    labels = paste(names(freq_table), "\n", freq_table),
    radius = 1,  # Adjust the size of the pie chart (default is 1)
    cex = 1.2,  # Label text size (increase for readability)
    clockwise = TRUE,  # Make the chart clockwise
    border = "black",  # Remove borders around the slices
    init.angle = 90  # Start the first slice at 90 degrees
)
```




```r
freq_table <- table(data$ChildrenInHH_recode)

x_labels <- c("0 Children \n n=3602", "1 Child \n n=576", "2 Children \n n=383", "3 Children \n n=158",

# Create the barplot
barplot(freq_table,
        main = "# of Children Under 18",
        xlab = "Ranges",
        ylab = "Count",
        col = "lightblue",
        border = "white",
        las = 1,  # Rotate x-axis labels if needed
        ylim = c(0, max(freq_table) + 5),  # Adjust y-axis for better spacing
        names.arg = x_labels)  # Adjust y-axis for better spacing
```




```r
# Logistic Regression Models

## Model 1: Frequency of internet usage as a predictor
model1 <- glm(Electronic2_HealthInfo ~ + UseInternet+ SocMed_Visited , family = binomial, data = data)
#summary(model1)


## Model 2: Alongside Controls
model2 <- glm(Electronic2_HealthInfo ~ UseInternet+ SocMed_Visited +
                InternetAccessType + HAVEDEVICE_CAT + ConfidentInternetHealth +
                MisleadingHealthInfo, family = binomial, data = data)
#summary(model2)


## Model 3: Adding demographic factors
model3 <- glm(Electronic2_HealthInfo ~ SocMed_Visited + UseInternet +
                InternetAccessType + HAVEDEVICE_CAT + ConfidentInternetHealth +
                MisleadingHealthInfo +
                HealthStatus+ Age+ BirthGender+ RaceEthn5+ EducA + PR_RUCA_2010 +
                ChildrenInHH_recode, family = binomial, data = data)
#summary(model3)

## Model 4: Adding demographic and economic factors
model4 <- glm(Electronic2_HealthInfo ~ SocMed_Visited + UseInternet +
                InternetAccessType + HAVEDEVICE_CAT + ConfidentInternetHealth +
                MisleadingHealthInfo +
```

```
                HealthStatus+ Age+ BirthGender+ RaceEthn5+ EducA + PR_RUCA_2010 +
                ChildrenInHH_recode + HHInc + WorkFullTime, family = binomial, data = data)
#summary(model4)

model_list<-list("Baseline" = model1, "Health Related Controls" = model2,
                 "Add Demographics" = model3,
                 "Add Economic Facots" = model4)
modelsummary(model_list, output = "huxtable")
```

```
# Compare models using AIC
#model_comparison <- AIC(model1, model2, model3)
#print(model_comparison)

# Regression diagnostics
## Residuals plot for model 3
#par(mfrow = c(2, 2))
#plot(model3)

# Export summary tables for presentation
## Descriptive statistics table
#summary_table <- descriptive_table %>%
  #as.data.frame() %>%
  #gt() %>%
  #tab_header(title = "Descriptive Statistics")

## Model summaries
#model_summaries <- list(
  #"Model 1" = summary(model1)$coefficients,
  #"Model 2" = summary(model2)$coefficients,
  #"Model 3" = summary(model3)$coefficients
#)

# Export tables and plots as needed
```

	Baseline	Health Related Controls	Add Demographics	Add Economic Facots
(Intercept)	-18.938	-2.451	-3.800	-3.707
	(267.044)	(0.334)	(0.496)	(0.504)
UseInternet	20.157			
	(267.044)			
SocMed_Visited2	0.468	0.103	-0.052	-0.032
	(0.208)	(0.231)	(0.236)	(0.237)
SocMed_Visited3	0.195	-0.261	-0.306	-0.285
	(0.176)	(0.213)	(0.219)	(0.220)
SocMed_Visited4	0.816	0.229	0.114	0.118
	(0.170)	(0.211)	(0.215)	(0.216)
SocMed_Visited5	0.887	0.105	0.039	0.023
	(0.123)	(0.177)	(0.182)	(0.182)
InternetAccessType		0.208	0.182	0.153
		(0.057)	(0.061)	(0.062)
HAVEDEVICE_CAT		0.249	0.204	0.172
		(0.045)	(0.047)	(0.047)
ConfidentInternetHealth2		1.162	1.105	1.082
		(0.284)	(0.296)	(0.298)
ConfidentInternetHealth3		1.999	1.910	1.839
		(0.260)	(0.272)	(0.273)
ConfidentInternetHealth4		2.791	2.659	2.580
		(0.270)	(0.282)	(0.284)
ConfidentInternetHealth5		2.665	2.534	2.465
		(0.296)	(0.309)	(0.311)
MisleadingHealthInfo2		0.097	0.255	0.404
		(0.449)	(0.460)	(0.461)
MisleadingHealthInfo3		0.346	0.439	0.520
		(0.197)	(0.204)	(0.205)
MisleadingHealthInfo4		0.696	0.681	0.708
		(0.176)	(0.181)	(0.181)
MisleadingHealthInfo5		0.833	0.777	0.775
		(0.178)	(0.183)	(0.184)