Suicide risk communication and intervention preferences for veterans and service members.

2023-08-14

Install Packages and Load Dataset

```
library(dataMaid)
library(lubridate)
library(summarytools)
library(ggstatsplot)
library(ggplot2)
library(gridExtra)
library(tidyr)
library(Rmisc)
library(ltm)
library(ggfortify)
library(ggpubr)
library(factoextra)
library(cluster)
library(nlme)
library(emmeans)
library(dplyr)
library(ggpubr)
```

```
#load data set
vettix<-read.csv("SSS_Poll_wVAQuestions.csv")
```

Clean and Set Variables

```
#Filter data to remove respondents that were never in the military, LEO reported branch, or Space Force
  #Space Force participants excluded due to small sample size and potential for identifiable data
#filter data to keep only veterans and currently serving participants
#Mutate data to create a dataframe counting all participants that took part in the SSS survey
#Mutate data to create a dataframe counting all participants that took part in the VA survey
table(vettix$Branch)

vettix<-vettix%>%
  filter(Branch != "I was never in the service" & Branch != "LEO" & Branch != "Space Force")%>%
  filter(Status == "I am a Severely Wounded Veteran" | Status == "I am a Veteran" | Status == "I am Cur
  mutate(SSS.Survey.Response=(Who.Family=="No"|Who.Family=="Yes"|How.Social.Media.General=="No"|How.Soc
  mutate(VA.Survey.Response=(Registered.With.VA !=""|VA.Disability.Claim=="Yes"|VA.Disability.Claim=="N

#Sanity check to ensure the filter had been successfully implemented
```

```r
table(vettix$Branch)
#Get a count of observations that included those participants that answered SSS survey questions
table(vettix$SSS.Survey.Response)

#Get a count of demographic variables to see the range, and remove values which are not reasonable, rep
table(vettix$Age)
#Remove all participants with an estimated age over 100
vettix$Age[vettix$Age>100]<-NA
table(vettix$Age2)
vettix$Age2[vettix$Age2>100]<-NA
table(vettix$Yrs.Served)
#Remove all participants with more than 65 years served
vettix$Yrs.Served[vettix$Yrs.Served>65]<-NA
#Replace all empty cells with an 'NA'
vettix[vettix==""]<-NA


#Create binned age variable
vettix$age.cat <- cut(vettix$Age2, breaks=c(18,25,35,45, 55, 65, 91), labels=c("18-24","25-34","35-44",
#Sanity check of categorization
vettix[,c(3,59)]

#Create binned years served variable
vettix$yrs.ser.cat <- cut(vettix$Yrs.Served, breaks=c(0,2,5,10,20,40,60), labels=c("0-2", "3-5", "6-10"
#Sanity check of categorization
vettix[,c(4,60)]

#create factor variables
vettix$Branch<-as.factor(vettix$Branch)
vettix$Status<-as.factor(vettix$Status)
vettix$Income<-as.factor(vettix$Income)
vettix$Education<-as.factor(vettix$Education)
vettix$Marital.Status<-as.factor(vettix$Marital.Status)
vettix$Highest.Rank<-as.factor(vettix$Highest.Rank)
vettix$Suicide.Thoughts[vettix$Suicide.Thoughts=="Yes"]<-"Yes."
vettix$Suicide.Thoughts[vettix$Suicide.Thoughts=="No"]<-"No."
vettix$Registered.With.VA[vettix$Registered.With.VA=="Yes"]<-"Yes."
vettix$Suicide.Thoughts<-as.factor(vettix$Suicide.Thoughts)
vettix$Registered.With.VA<-as.factor(vettix$Registered.With.VA)
table(vettix$Suicide.Thoughts)


#Create all other numeric dummy variables
  #Yes will be signified by 1 and no will be signified by 0
vettix[vettix=="Yes"]<-1
vettix[vettix=="No"]<-0

#Set all continuous variables as numeric
vettix$Who.Family<-as.numeric(vettix$Who.Family)
vettix$Who.Military.Friend<-as.numeric(vettix$Who.Military.Friend)
vettix$Who.Non.Military.Friend<-as.numeric(vettix$Who.Non.Military.Friend)
vettix$Who.Boss<-as.numeric(vettix$Who.Boss)
vettix$Who.Chaplain<-as.numeric(vettix$Who.Chaplain)
```

```r
vettix$Who.MH.Provider<-as.numeric(vettix$Who.MH.Provider)
vettix$Who.Other.Provider<-as.numeric(vettix$Who.Other.Provider)
vettix$Who.VCL.SPL<-as.numeric(vettix$Who.VCL.SPL)
vettix$Who.VSO<-as.numeric(vettix$Who.VSO)
vettix$Who.No.One<-as.numeric(vettix$Who.No.One)

vettix$How.Social.Media.General<-as.numeric(vettix$How.Social.Media.General)
vettix$How.Social.Media.Suicide<-as.numeric(vettix$How.Social.Media.Suicide)
vettix$How.Online.Resources.General<-as.numeric(vettix$How.Online.Resources.General)
vettix$How.Online.Resources.Suicide<-as.numeric(vettix$How.Online.Resources.Suicide)
vettix$How.Contact.Others.General<-as.numeric(vettix$How.Contact.Others.General)
vettix$How.Contact.Others.Suicide<-as.numeric(vettix$How.Contact.Others.Suicide)
vettix$How.Others.Ask.General<-as.numeric(vettix$How.Others.Ask.General)
vettix$How.Others.Ask.Suicide<-as.numeric(vettix$How.Others.Ask.Suicide)
vettix$How.Not.At.All<-as.numeric(vettix$How.Not.At.All)

vettix$Allow.Knowing<-as.numeric(vettix$Allow.Knowing)
vettix$Allow.Lock.Up.Guns<-as.numeric(vettix$Allow.Lock.Up.Guns)
vettix$Allow.Gun.Access.Notification<-as.numeric(vettix$Allow.Gun.Access.Notification)
vettix$Allow.Holding.Guns<-as.numeric(vettix$Allow.Holding.Guns)
vettix$Allow.Providers.In.My.House<-as.numeric(vettix$Allow.Providers.In.My.House)
vettix$Allow.App.To.Help<-as.numeric(vettix$Allow.App.To.Help)
vettix$Allow.MH.Treatment<-as.numeric(vettix$Allow.MH.Treatment)
vettix$Allow.Resourcing<-as.numeric(vettix$Allow.Resourcing)
vettix$Allow.Nothing<-as.numeric(vettix$Allow.Nothing)

vettix$VA.Disability.Claim<-as.numeric(vettix$VA.Disability.Claim)
vettix$VA.Healthcare<-as.numeric(vettix$VA.Healthcare)
vettix$VA.Education<-as.numeric(vettix$VA.Education)
vettix$VA.Online.Records<-as.numeric(vettix$VA.Online.Records)
vettix$VA.Housing.Services<-as.numeric(vettix$VA.Housing.Services)
vettix$VA.Employment.Services<-as.numeric(vettix$VA.Employment.Services)
vettix$VA.Life.Insurance<-as.numeric(vettix$VA.Life.Insurance)
vettix$VA.Career.Resources<-as.numeric(vettix$VA.Career.Resources)
vettix$VA.Burial.Benefits<-as.numeric(vettix$VA.Burial.Benefits)

#create date and time variables
vettix$Who.Date<-as.POSIXct(vettix$Who.Time.Stamp, format="%m/%d/%Y %H:%M", tz="UTC")
vettix$How.Date<-as.POSIXct(vettix$How.Time.Stamp, format="%m/%d/%Y %H:%M", tz="UTC")
vettix$Allow.Date<-as.POSIXct(vettix$Allow.Time.Stamp, format="%m/%d/%Y %H:%M", tz="UTC")
vettix$Suicide.Thoughts.Date<-as.POSIXct(vettix$Suicide.Thoughts.Time.Stamp, format="%m/%d/%Y %H:%M", t:
vettix$Registered.With.VA.Date<-as.POSIXct(vettix$Registered.With.VA.Time.Stamp, format="%m/%d/%Y %H:%M
vettix$VA.Date<-as.POSIXct(vettix$VA.Time.Stamp, format="%m/%d/%Y %H:%M", tz="UTC")
vettix<-vettix[,-c(1,22,32,42,44,46,56)]
```

Filter for SSS Specific Survey Columns (removing VA related questions)

```r
#remove columns specific to VA utilization
vettix.sss=vettix[ , c(1:39, 50, 52:55)]
#Remove all data rows that did not participate in the SSS Survey
vettix.sss=subset(vettix.sss, SSS.Survey.Response == 1)
```

```
#Use only responses in which we have a complete survey
complete.data=na.omit(vettix.sss)
```

Total number of participants prior to removing samples that were not complete was 38,185. The complete data set, including only samples in which every variable was collected was 31,180. For use in cluster analysis and other statistical measures, we chose to proceed with the complete data set.

Create Demographics Summary Table

```
library(vtable)
#Print table statistics in R Markdown
st(complete.data, out='browser')
```

Create Summary Data

```
#Create sum totals for the number of people each participants indicted they would be willing to reach o

complete.data=complete.data %>%
  mutate(Total.who = rowSums(across(c(11:20))))
complete.data=complete.data %>%
  mutate(Mean.who = rowMeans(across(c(11:20))))

#Create sum totals for the number of ways each participants indicted they would be willing express them
complete.data=complete.data %>%
  mutate(Total.how = rowSums(across(c(21:29))))
complete.data=complete.data %>%
  mutate(Mean.how = rowMeans(across(c(21:29))))

#Create sum totals for the number ways participants would allow others to intervene

complete.data=complete.data %>%
  mutate(Total.allow = rowSums(across(c(30:38))))
complete.data=complete.data %>%
  mutate(Mean.allow = rowMeans(across(c(30:38))))

complete.data=complete.data %>%
  mutate(mean.comm = rowMeans(across(c(48,50))))
complete.data=complete.data %>%
  mutate(Total.comm = rowSums(across(c(47,49))))
```

Calculate Proportion of Participants who chose any multi-select option with a question

```
#subset data frame to only include the columns for who/how/allow multi-select responses with additional
averages=complete.data[, c(11:39)]
```

```
average.overall=averages %>%
  summarise_all(.funs = c(mean="mean"))
average.overall
```

```
##   Who.Family_mean Who.Military.Friend_mean Who.Non.Military.Friend_mean
## 1       0.6217126                0.5106479                    0.1802117
##   Who.Boss_mean Who.Chaplain_mean Who.MH.Provider_mean Who.Other.Provider_mean
## 1    0.04384221        0.2280308            0.4478191               0.1053881
##   Who.VCL.SPL_mean Who.VSO_mean Who.No.One_mean How.Social.Media.General_mean
## 1        0.2621552    0.1694035       0.1008659                     0.1756575
##   How.Social.Media.Suicide_mean How.Online.Resources.General_mean
## 1                    0.05028865                           0.21517
##   How.Online.Resources.Suicide_mean How.Contact.Others.General_mean
## 1                          0.194644                        0.3263951
##   How.Contact.Others.Suicide_mean How.Others.Ask.General_mean
## 1                        0.275465                    0.2719051
##   How.Others.Ask.Suicide_mean How.Not.At.All_mean Allow.Knowing_mean
## 1                   0.2153945           0.1539769          0.4813021
##   Allow.Lock.Up.Guns_mean Allow.Gun.Access.Notification_mean
## 1               0.2642399                          0.1905388
##   Allow.Holding.Guns_mean Allow.Providers.In.My.House_mean
## 1               0.2438101                        0.2009942
##   Allow.App.To.Help_mean Allow.MH.Treatment_mean Allow.Resourcing_mean
## 1              0.1292816               0.3634381               0.41966
##   Allow.Nothing_mean Suicide.Thoughts_mean
## 1           0.114272                    NA
```

```
#calculate the average percentage of participants that selected each available option by group variable
averages=averages %>% group_by(Suicide.Thoughts) %>%
  summarise_all(.funs = c(mean="mean"))

#transition the data from wide to long format, creating a Response and Percentage column grouped by Sui
averages <- gather(averages, Response, Percentage, Who.Family_mean:Allow.Nothing_mean, factor_key=TRUE)

#Remove the _mean naming scheme added to each multi-select response during the calculation process
averages$Response = gsub("_mean",'',averages$Response)
```

Cross ref with Annerman et al, 2022 Of these disclosures, over 87% of them were informal forms
of support including friends, family, and domestic partners. The remaining 13% reported to
medical professionals, mental health professionals and crisis hotlines.

```
#Informal=Boss, Non-mil friend, Chaplain, Mil Friend, Family
#Formal=Other provider, VSO, VCL SPL, MH Provider

dir.comp=complete.data[, c(11:39)]

dir.comp.tot=dir.comp %>%
  summarise_all(.funs = c(mean="mean"))
dir.comp.tot
```

```
##   Who.Family_mean Who.Military.Friend_mean Who.Non.Military.Friend_mean
## 1       0.6217126                0.5106479                    0.1802117
```

```
##    Who.Boss_mean Who.Chaplain_mean Who.MH.Provider_mean Who.Other.Provider_mean
## 1    0.04384221       0.2280308            0.4478191                0.1053881
##    Who.VCL.SPL_mean Who.VSO_mean Who.No.One_mean How.Social.Media.General_mean
## 1       0.2621552    0.1694035       0.1008659                     0.1756575
##    How.Social.Media.Suicide_mean How.Online.Resources.General_mean
## 1                     0.05028865                           0.21517
##    How.Online.Resources.Suicide_mean How.Contact.Others.General_mean
## 1                          0.194644                       0.3263951
##    How.Contact.Others.Suicide_mean How.Others.Ask.General_mean
## 1                        0.275465                     0.2719051
##    How.Others.Ask.Suicide_mean How.Not.At.All_mean Allow.Knowing_mean
## 1                    0.2153945           0.1539769          0.4813021
##    Allow.Lock.Up.Guns_mean Allow.Gun.Access.Notification_mean
## 1                0.2642399                          0.1905388
##    Allow.Holding.Guns_mean Allow.Providers.In.My.House_mean
## 1                0.2438101                        0.2009942
##    Allow.App.To.Help_mean Allow.MH.Treatment_mean Allow.Resourcing_mean
## 1               0.1292816               0.3634381               0.41966
##    Allow.Nothing_mean Suicide.Thoughts_mean
## 1           0.114272                     NA
```

```r
informal=mean(0.62, 0.51, 0.18, 0.04, 0.22)
formal=mean(0.44, 0.11, 0.26, 0.17)

#Who only
who.sums=colSums(dir.comp[sapply(dir.comp, is.numeric)])
who.sums=as.data.frame(who.sums)
who.sums <- tibble::rownames_to_column(who.sums, "Question")
names(who.sums)[names(who.sums) == 'who.sums'] <- 'freq'
who.inf=who.sums[c(1:5), ]
who.for=who.sums[c(6:9), ]
who.sums=who.sums[c(1:9), ]

informal=sum(who.inf$freq)/sum(who.sums$freq)
formal=sum(who.for$freq)/sum(who.sums$freq)
```

Figure 1: If you had thoughts of suicide, whom would you trust to talk with about those thoughts?

```r
#Create data frame containing options available for this questions
who = averages[1:30,]
##Remove the "who" header for the response option, and order the variables by decreasing values for grap
who$Response = gsub("Who.",'',who$Response)
who = who[(order(-who$Percentage)),]
#Turn Proportion into Percentage
who$Percentage=(who$Percentage*100)
#Round percentages to one decimal point
who$Percentage=round(who$Percentage,1)

p3=ggdotchart(who, y = "Percentage", x = "Response",
          color = "Suicide.Thoughts",      # Color by groups
```

```r
        palette = c("I prefer not to say" = "bisque3",
                            "No." = "cadetblue4", "Yes." = "coral4"), # Custom color palette
        sorting = "ascending",  # Sort value in descending order
        rotate = TRUE,  # Rotate vertically
        #position=position_dodge(0.2),
        dot.size = 5,    # Large dot size'
        label = round(who$Percentage,1), repel=T, # Add dot labels
        label.rectangle=T,
        font.label = list(color = "Suicide.Thoughts", size = 6, face="bold", vjust=-1.5),
        add="segments",
        ggtheme = theme_pubr()) +
  ylab("Percentage") +
  ggtitle("") +
    theme(plot.title = element_text(hjust = 0.5, size=14, face="bold")) +
   theme(axis.title.y=element_text(face="bold"),
          strip.text=element_text(face="bold", size=12),
          legend.title =element_text(size=10),
        axis.title.x =element_text(face="bold")) +
    theme_cleveland()

p3
```
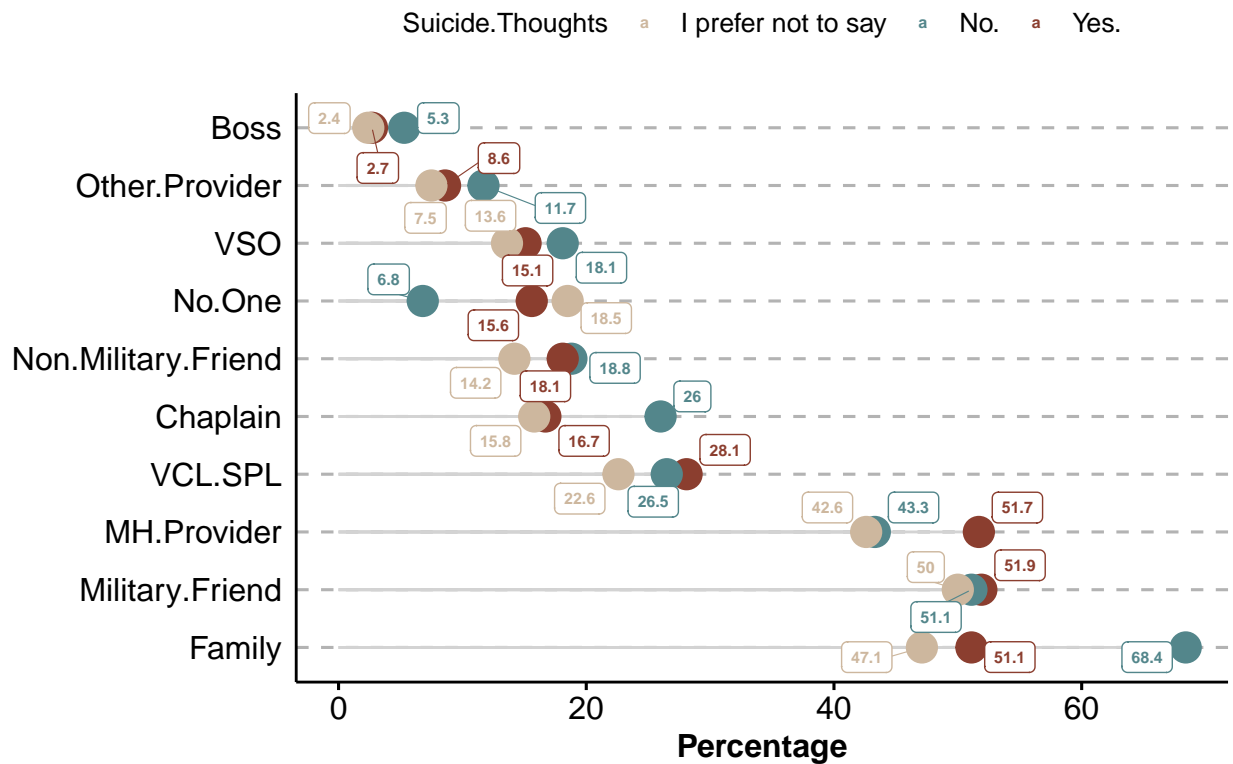


```r
#save file as png for publication
ggsave(p3, file="who.png", height=5, width=6, dpi = 300)
```

Figure 2: If you had thoughts of suicide, how would you bring it up with others?

```r
#Create data frame containing options available for this questions
how =averages[31:57,]
##Remove the "how" header for the response option, and order the variables by decreasing values for gra
how$Response = gsub("How.",'',how$Response)
how = how[(order(-how$Percentage)),]
#Turn Proportion into Percentage
how$Percentage=(how$Percentage*100)
#Round percentages to one decimal point
how$Percentage=round(how$Percentage,1)

p4=ggdotchart(how, y = "Percentage", x = "Response",
          color = "Suicide.Thoughts",      # Color by groups
          palette = c("I prefer not to say" = "bisque3",
                              "No." = "cadetblue4", "Yes." = "coral4"), # Custom color palette
          sorting = "ascending",  # Sort value in descending order
          rotate = TRUE,  # Rotate vertically
          #position=position_dodge(0.2),
          dot.size = 5,     # Large dot size'
          label = round(how$Percentage,1), repel=T, # Add dot labels
          label.rectangle=T,
          font.label = list(color = "Suicide.Thoughts", size = 6, face="bold", vjust=-1.5),
          add="segments",
          ggtheme = theme_pubr()) +
  ylab("Percentage") +
  ggtitle("") +
    theme(plot.title = element_text(hjust = 0.5, size=14, face="bold")) +
   theme(axis.title.y=element_text(face="bold"),
          strip.text=element_text(face="bold", size=12),
          legend.title =element_text(size=10),
        axis.title.x =element_text(face="bold")) +
    theme_cleveland()

p4
```

Figure 3: If you had thoughts of suicide, what would you allow others to do to help you?

```
#Create data frame containing options available for this questions
allow =averages[58:84,]
##Remove the "allow" header for the response option, and order the variables by decreasing values for g
allow$Response = gsub("Allow.",'',allow$Response)
allow = allow[(order(-allow$Percentage)),]
#Turn Proportion into Percentage
allow$Percentage=(allow$Percentage*100)
#Round percentages to one decimal point
allow$Percentage=round(allow$Percentage,1)

p5=ggdotchart(allow, y = "Percentage", x = "Response",
        color = "Suicide.Thoughts",      # Color by groups
        palette = c("I prefer not to say" = "bisque3",
                        "No." = "cadetblue4", "Yes." = "coral4"), # Custom color palette
        sorting = "ascending",  # Sort value in descending order
        rotate = TRUE,  # Rotate vertically
        #position=position_dodge(0.2),
```

```
        dot.size = 5,    # Large dot size'
        label = round(allow$Percentage,1), repel=T, # Add dot labels
        label.rectangle=T,
        font.label = list(color = "Suicide.Thoughts", size = 6, face="bold", vjust=-1.5),
        add="segments",
         ggtheme = theme_pubr()) +
  ylab("Percentage") +
  ggtitle("") +
    theme(plot.title = element_text(hjust = 0.5, size=14, face="bold")) +
   theme(axis.title.y=element_text(face="bold"),
            strip.text=element_text(face="bold", size=12),
            legend.title =element_text(size=10),
        axis.title.x =element_text(face="bold")) +
    theme_cleveland()

p5
```
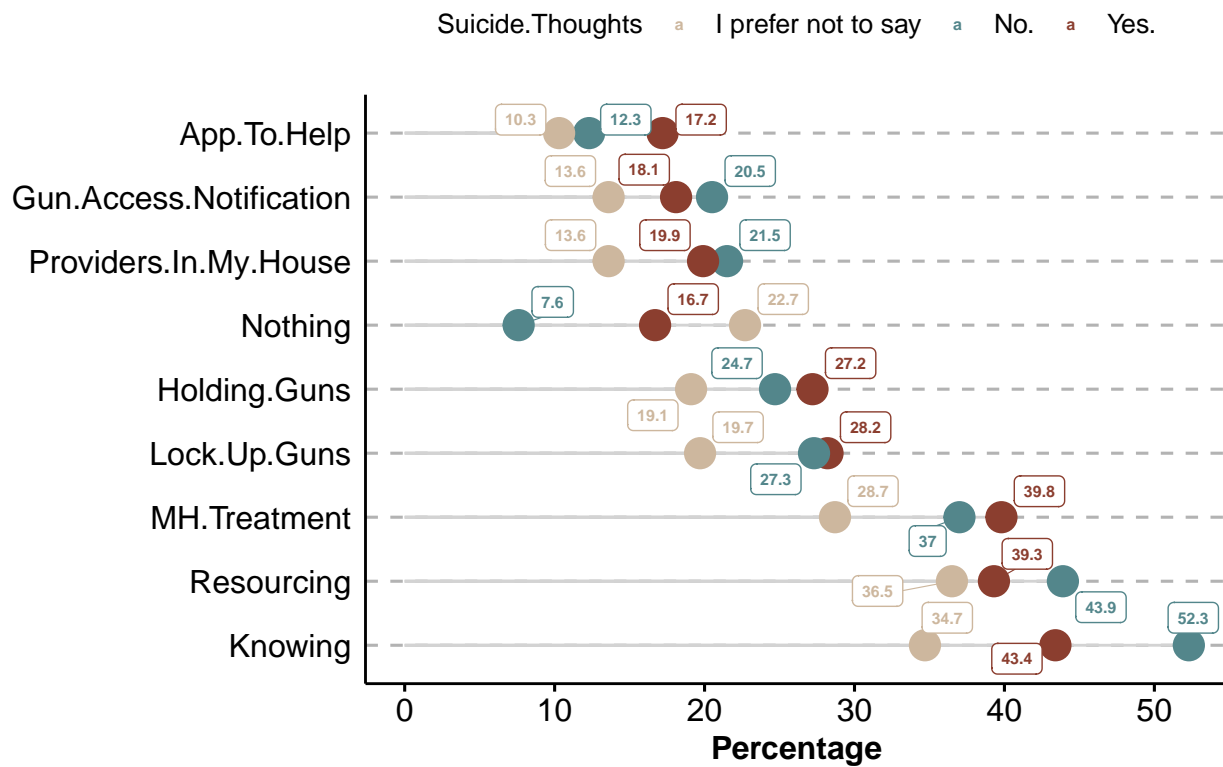


```
#save file as png for publication
ggsave(p5, file="allow.png", height=5, width=6, dpi = 300)
```
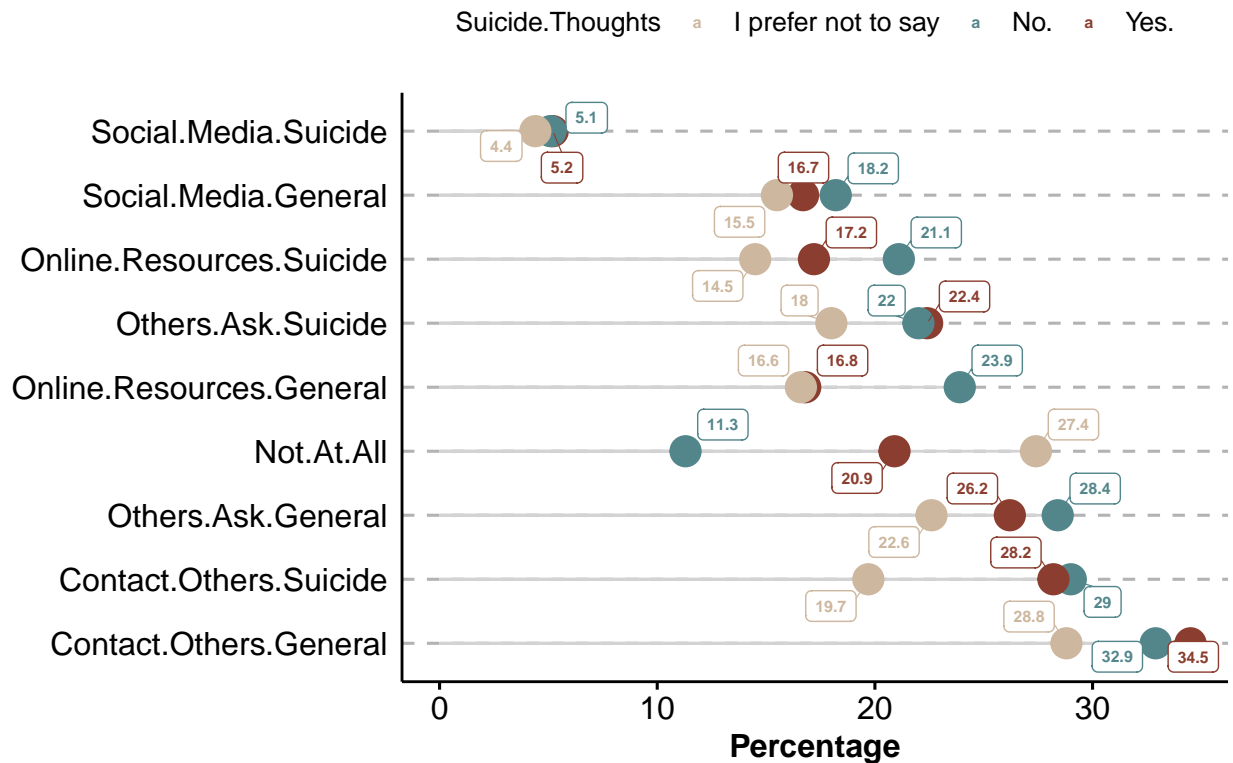
Multivariate Analysis

```
#Allow Nothing
nothing.glm=glm(formula = Allow.Nothing ~ relevel(Suicide.Thoughts, ref="No.") + relevel(age.cat, ref="
summary(nothing.glm)
```

```
##
## Call:
## glm(formula = Allow.Nothing ~ relevel(Suicide.Thoughts, ref = "No.") +
##     relevel(age.cat, ref = "65-91") + relevel(Marital.Status,
##     ref = "Single ") + relevel(Status, ref = "I am Currently Serving") +
##     relevel(Branch, ref = "Marine Corps"), family = "binomial",
##     data = complete.data)
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -0.9574  -0.5559  -0.4054  -0.3781   2.4797
##
## Coefficients:
##                                                                     Estimate
## (Intercept)                                                         -2.12088
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say            1.27338
## relevel(Suicide.Thoughts, ref = "No.")Yes.                           0.88546
## relevel(age.cat, ref = "65-91")18-24                                -0.43169
## relevel(age.cat, ref = "65-91")25-34                                -0.26247
## relevel(age.cat, ref = "65-91")35-44                                -0.24298
## relevel(age.cat, ref = "65-91")45-54                                -0.09581
## relevel(age.cat, ref = "65-91")55-64                                -0.15743
## relevel(Marital.Status, ref = "Single ")Cohabitation               -0.25108
## relevel(Marital.Status, ref = "Single ")Divorced                   -0.08427
## relevel(Marital.Status, ref = "Single ")Married                    -0.16938
## relevel(Marital.Status, ref = "Single ")Separated                   0.22965
## relevel(Marital.Status, ref = "Single ")Widowed                    -0.01557
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran  0.25230
## relevel(Status, ref = "I am Currently Serving")I am a Veteran        0.07550
## relevel(Branch, ref = "Marine Corps")Air Force                     -0.22357
## relevel(Branch, ref = "Marine Corps")Army                          -0.11579
## relevel(Branch, ref = "Marine Corps")Coast Guard                   -0.17614
## relevel(Branch, ref = "Marine Corps")Navy                          -0.12499
##                                                                     Std. Error
## (Intercept)                                                          0.11775
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say            0.04508
## relevel(Suicide.Thoughts, ref = "No.")Yes.                           0.04465
## relevel(age.cat, ref = "65-91")18-24                                 0.13120
## relevel(age.cat, ref = "65-91")25-34                                 0.08539
## relevel(age.cat, ref = "65-91")35-44                                 0.07941
## relevel(age.cat, ref = "65-91")45-54                                 0.07797
## relevel(age.cat, ref = "65-91")55-64                                 0.08502
## relevel(Marital.Status, ref = "Single ")Cohabitation                0.10332
## relevel(Marital.Status, ref = "Single ")Divorced                    0.07404
## relevel(Marital.Status, ref = "Single ")Married                     0.05801
## relevel(Marital.Status, ref = "Single ")Separated                   0.13269
## relevel(Marital.Status, ref = "Single ")Widowed                     0.16493
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran  0.20992
## relevel(Status, ref = "I am Currently Serving")I am a Veteran        0.05365
```

```
## relevel(Branch, ref = "Marine Corps")Air Force                                        0.06557
## relevel(Branch, ref = "Marine Corps")Army                                             0.05599
## relevel(Branch, ref = "Marine Corps")Coast Guard                                      0.14670
## relevel(Branch, ref = "Marine Corps")Navy                                             0.06392
##                                                                                   z value
## (Intercept)                                                                        -18.012
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                           28.246
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                          19.830
## relevel(age.cat, ref = "65-91")18-24                                                -3.290
## relevel(age.cat, ref = "65-91")25-34                                                -3.074
## relevel(age.cat, ref = "65-91")35-44                                                -3.060
## relevel(age.cat, ref = "65-91")45-54                                                -1.229
## relevel(age.cat, ref = "65-91")55-64                                                -1.852
## relevel(Marital.Status, ref = "Single ")Cohabitation                                -2.430
## relevel(Marital.Status, ref = "Single ")Divorced                                    -1.138
## relevel(Marital.Status, ref = "Single ")Married                                      -2.920
## relevel(Marital.Status, ref = "Single ")Separated                                     1.731
## relevel(Marital.Status, ref = "Single ")Widowed                                      -0.094
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran        1.202
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                         1.407
## relevel(Branch, ref = "Marine Corps")Air Force                                       -3.409
## relevel(Branch, ref = "Marine Corps")Army                                            -2.068
## relevel(Branch, ref = "Marine Corps")Coast Guard                                     -1.201
## relevel(Branch, ref = "Marine Corps")Navy                                            -1.955
##                                                                                   Pr(>|z|)
## (Intercept)                                                                        < 2e-16
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                          < 2e-16
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                         < 2e-16
## relevel(age.cat, ref = "65-91")18-24                                               0.001001
## relevel(age.cat, ref = "65-91")25-34                                               0.002113
## relevel(age.cat, ref = "65-91")35-44                                               0.002216
## relevel(age.cat, ref = "65-91")45-54                                               0.219167
## relevel(age.cat, ref = "65-91")55-64                                               0.064067
## relevel(Marital.Status, ref = "Single ")Cohabitation                               0.015087
## relevel(Marital.Status, ref = "Single ")Divorced                                   0.255020
## relevel(Marital.Status, ref = "Single ")Married                                     0.003503
## relevel(Marital.Status, ref = "Single ")Separated                                   0.083496
## relevel(Marital.Status, ref = "Single ")Widowed                                     0.924779
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.229402
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                       0.159359
## relevel(Branch, ref = "Marine Corps")Air Force                                      0.000651
## relevel(Branch, ref = "Marine Corps")Army                                           0.038642
## relevel(Branch, ref = "Marine Corps")Coast Guard                                    0.229895
## relevel(Branch, ref = "Marine Corps")Navy                                           0.050542
##
## (Intercept)                                                                        ***
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                          ***
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                         ***
## relevel(age.cat, ref = "65-91")18-24                                               **
## relevel(age.cat, ref = "65-91")25-34                                               **
## relevel(age.cat, ref = "65-91")35-44                                               **
## relevel(age.cat, ref = "65-91")45-54
## relevel(age.cat, ref = "65-91")55-64                                               .
## relevel(Marital.Status, ref = "Single ")Cohabitation                               *
```

```
## relevel(Marital.Status, ref = "Single ")Divorced
## relevel(Marital.Status, ref = "Single ")Married                                **
## relevel(Marital.Status, ref = "Single ")Separated                              .
## relevel(Marital.Status, ref = "Single ")Widowed
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran
## relevel(Status, ref = "I am Currently Serving")I am a Veteran
## relevel(Branch, ref = "Marine Corps")Air Force                                ***
## relevel(Branch, ref = "Marine Corps")Army                                     *
## relevel(Branch, ref = "Marine Corps")Coast Guard
## relevel(Branch, ref = "Marine Corps")Navy                                     .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 22160  on 31179  degrees of freedom
## Residual deviance: 21165  on 31161  degrees of freedom
## AIC: 21203
##
## Number of Fisher Scoring iterations: 5
```

```
nothing.glm.OR=data.frame(exp(cbind(OR = coef(nothing.glm), confint(nothing.glm))))
```

```
## Waiting for profiling to be done...
```

```
nothing.glm.OR
```

```
##                                                                          OR
## (Intercept)                                                       0.1199263
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say         3.5729117
## relevel(Suicide.Thoughts, ref = "No.")Yes.                        2.4240997
## relevel(age.cat, ref = "65-91")18-24                              0.6494128
## relevel(age.cat, ref = "65-91")25-34                              0.7691492
## relevel(age.cat, ref = "65-91")35-44                              0.7842911
## relevel(age.cat, ref = "65-91")45-54                              0.9086390
## relevel(age.cat, ref = "65-91")55-64                              0.8543373
## relevel(Marital.Status, ref = "Single ")Cohabitation             0.7779565
## relevel(Marital.Status, ref = "Single ")Divorced                 0.9191798
## relevel(Marital.Status, ref = "Single ")Married                  0.8441855
## relevel(Marital.Status, ref = "Single ")Separated                1.2581598
## relevel(Marital.Status, ref = "Single ")Widowed                  0.9845485
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 1.2869846
## relevel(Status, ref = "I am Currently Serving")I am a Veteran     1.0784243
## relevel(Branch, ref = "Marine Corps")Air Force                   0.7996585
## relevel(Branch, ref = "Marine Corps")Army                        0.8906648
## relevel(Branch, ref = "Marine Corps")Coast Guard                 0.8385032
## relevel(Branch, ref = "Marine Corps")Navy                        0.8825046
##                                                                       X2.5..
## (Intercept)                                                       0.09507851
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say         3.27020997
## relevel(Suicide.Thoughts, ref = "No.")Yes.                        2.22051866
## relevel(age.cat, ref = "65-91")18-24                              0.50087255
## relevel(age.cat, ref = "65-91")25-34                              0.65136711
```

```
## relevel(age.cat, ref = "65-91")35-44                                     0.67226242
## relevel(age.cat, ref = "65-91")45-54                                     0.78111947
## relevel(age.cat, ref = "65-91")55-64                                     0.72396762
## relevel(Marital.Status, ref = "Single ")Cohabitation                     0.63371295
## relevel(Marital.Status, ref = "Single ")Divorced                         0.79502043
## relevel(Marital.Status, ref = "Single ")Married                          0.75413808
## relevel(Marital.Status, ref = "Single ")Separated                        0.96540266
## relevel(Marital.Status, ref = "Single ")Widowed                          0.70567375
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.83850155
## relevel(Status, ref = "I am Currently Serving")I am a Veteran            0.97141086
## relevel(Branch, ref = "Marine Corps")Air Force                           0.70336279
## relevel(Branch, ref = "Marine Corps")Army                                0.79866058
## relevel(Branch, ref = "Marine Corps")Coast Guard                         0.62379153
## relevel(Branch, ref = "Marine Corps")Navy                                0.77881853
##                                                                              X97.5..
## (Intercept)                                                               0.1508550
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                 3.9023835
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                2.6453261
## relevel(age.cat, ref = "65-91")18-24                                      0.8379953
## relevel(age.cat, ref = "65-91")25-34                                      0.9104216
## relevel(age.cat, ref = "65-91")35-44                                      0.9178670
## relevel(age.cat, ref = "65-91")45-54                                      1.0604936
## relevel(age.cat, ref = "65-91")55-64                                      1.0104424
## relevel(Marital.Status, ref = "Single ")Cohabitation                      0.9503594
## relevel(Marital.Status, ref = "Single ")Divorced                          1.0628009
## relevel(Marital.Status, ref = "Single ")Married                           0.9467418
## relevel(Marital.Status, ref = "Single ")Separated                         1.6249370
## relevel(Marital.Status, ref = "Single ")Widowed                           1.3487034
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 1.9144623
## relevel(Status, ref = "I am Currently Serving")I am a Veteran             1.1988207
## relevel(Branch, ref = "Marine Corps")Air Force                            0.9095723
## relevel(Branch, ref = "Marine Corps")Army                                 0.9947144
## relevel(Branch, ref = "Marine Corps")Coast Guard                          1.1096525
## relevel(Branch, ref = "Marine Corps")Navy                                 1.0006456
```

#2=Allow.Knowing
```
knowing.glm=glm(formula = Allow.Knowing ~ relevel(Suicide.Thoughts, ref="No.") + relevel(age.cat, ref="
summary(knowing.glm)
```

```
##
## Call:
## glm(formula = Allow.Knowing ~ relevel(Suicide.Thoughts, ref = "No.") +
##     relevel(age.cat, ref = "65-91") + relevel(Marital.Status,
##     ref = "Single ") + relevel(Status, ref = "I am Currently Serving") +
##     relevel(Branch, ref = "Marine Corps"), family = "binomial",
##     data = complete.data)
##
## Deviance Residuals:
##    Min      1Q  Median      3Q     Max
## -1.3485  -1.1665  -0.8768   1.1602   1.7648
##
## Coefficients:
##                                                                            Estimate
## (Intercept)                                                               -0.296025
```

```
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                            -0.746167
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                          -0.377374
## relevel(age.cat, ref = "65-91")18-24                                                 0.458017
## relevel(age.cat, ref = "65-91")25-34                                                 0.466570
## relevel(age.cat, ref = "65-91")35-44                                                 0.414676
## relevel(age.cat, ref = "65-91")45-54                                                 0.251308
## relevel(age.cat, ref = "65-91")55-64                                                 0.185009
## relevel(Marital.Status, ref = "Single ")Cohabitation                                 0.039326
## relevel(Marital.Status, ref = "Single ")Divorced                                    -0.001229
## relevel(Marital.Status, ref = "Single ")Married                                      0.077042
## relevel(Marital.Status, ref = "Single ")Separated                                   -0.029640
## relevel(Marital.Status, ref = "Single ")Widowed                                     -0.195674
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran -0.405219
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                        -0.041449
## relevel(Branch, ref = "Marine Corps")Air Force                                       0.063701
## relevel(Branch, ref = "Marine Corps")Army                                            0.049771
## relevel(Branch, ref = "Marine Corps")Coast Guard                                     0.146094
## relevel(Branch, ref = "Marine Corps")Navy                                            0.097526
##                                                                                    Std. Error
## (Intercept)                                                                          0.075863
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                            0.034940
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                           0.030416
## relevel(age.cat, ref = "65-91")18-24                                                 0.078674
## relevel(age.cat, ref = "65-91")25-34                                                 0.054622
## relevel(age.cat, ref = "65-91")35-44                                                 0.050761
## relevel(age.cat, ref = "65-91")45-54                                                 0.050033
## relevel(age.cat, ref = "65-91")55-64                                                 0.053817
## relevel(Marital.Status, ref = "Single ")Cohabitation                                 0.065502
## relevel(Marital.Status, ref = "Single ")Divorced                                     0.049617
## relevel(Marital.Status, ref = "Single ")Married                                      0.038288
## relevel(Marital.Status, ref = "Single ")Separated                                    0.099736
## relevel(Marital.Status, ref = "Single ")Widowed                                      0.110979
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran  0.155486
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                         0.032429
## relevel(Branch, ref = "Marine Corps")Air Force                                       0.042016
## relevel(Branch, ref = "Marine Corps")Army                                            0.037401
## relevel(Branch, ref = "Marine Corps")Coast Guard                                     0.089463
## relevel(Branch, ref = "Marine Corps")Navy                                            0.041961
##                                                                                       z value
## (Intercept)                                                                            -3.902
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                             -21.356
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                            -12.407
## relevel(age.cat, ref = "65-91")18-24                                                    5.822
## relevel(age.cat, ref = "65-91")25-34                                                    8.542
## relevel(age.cat, ref = "65-91")35-44                                                    8.169
## relevel(age.cat, ref = "65-91")45-54                                                    5.023
## relevel(age.cat, ref = "65-91")55-64                                                    3.438
## relevel(Marital.Status, ref = "Single ")Cohabitation                                    0.600
## relevel(Marital.Status, ref = "Single ")Divorced                                      -0.025
## relevel(Marital.Status, ref = "Single ")Married                                         2.012
## relevel(Marital.Status, ref = "Single ")Separated                                     -0.297
## relevel(Marital.Status, ref = "Single ")Widowed                                       -1.763
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran   -2.606
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                          -1.278
```

```
## relevel(Branch, ref = "Marine Corps")Air Force                                              1.516
## relevel(Branch, ref = "Marine Corps")Army                                                   1.331
## relevel(Branch, ref = "Marine Corps")Coast Guard                                            1.633
## relevel(Branch, ref = "Marine Corps")Navy                                                   2.324
##                                                                                         Pr(>|z|)
## (Intercept)                                                                             9.54e-05
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                                < 2e-16
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                               < 2e-16
## relevel(age.cat, ref = "65-91")18-24                                                    5.82e-09
## relevel(age.cat, ref = "65-91")25-34                                                     < 2e-16
## relevel(age.cat, ref = "65-91")35-44                                                    3.10e-16
## relevel(age.cat, ref = "65-91")45-54                                                    5.09e-07
## relevel(age.cat, ref = "65-91")55-64                                                    0.000587
## relevel(Marital.Status, ref = "Single ")Cohabitation                                    0.548256
## relevel(Marital.Status, ref = "Single ")Divorced                                        0.980235
## relevel(Marital.Status, ref = "Single ")Married                                         0.044204
## relevel(Marital.Status, ref = "Single ")Separated                                       0.766322
## relevel(Marital.Status, ref = "Single ")Widowed                                         0.077874
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.009157
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                            0.201194
## relevel(Branch, ref = "Marine Corps")Air Force                                          0.129486
## relevel(Branch, ref = "Marine Corps")Army                                               0.183275
## relevel(Branch, ref = "Marine Corps")Coast Guard                                        0.102467
## relevel(Branch, ref = "Marine Corps")Navy                                               0.020114
##
## (Intercept)                                                                             ***
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                               ***
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                              ***
## relevel(age.cat, ref = "65-91")18-24                                                    ***
## relevel(age.cat, ref = "65-91")25-34                                                    ***
## relevel(age.cat, ref = "65-91")35-44                                                    ***
## relevel(age.cat, ref = "65-91")45-54                                                    ***
## relevel(age.cat, ref = "65-91")55-64                                                    ***
## relevel(Marital.Status, ref = "Single ")Cohabitation
## relevel(Marital.Status, ref = "Single ")Divorced
## relevel(Marital.Status, ref = "Single ")Married                                         *
## relevel(Marital.Status, ref = "Single ")Separated
## relevel(Marital.Status, ref = "Single ")Widowed                                         .
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran **
## relevel(Status, ref = "I am Currently Serving")I am a Veteran
## relevel(Branch, ref = "Marine Corps")Air Force
## relevel(Branch, ref = "Marine Corps")Army
## relevel(Branch, ref = "Marine Corps")Coast Guard
## relevel(Branch, ref = "Marine Corps")Navy                                               *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 43181  on 31179  degrees of freedom
## Residual deviance: 42490  on 31161  degrees of freedom
## AIC: 42528
##
## Number of Fisher Scoring iterations: 4
```

```
knowing.glm.OR=data.frame(exp(cbind(OR = coef(knowing.glm), confint(knowing.glm))))
```

```
## Waiting for profiling to be done...
```

```
knowing.glm.OR
```

```
##                                                                              OR
## (Intercept)                                                           0.7437687
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say             0.4741806
## relevel(Suicide.Thoughts, ref = "No.")Yes.                            0.6856598
## relevel(age.cat, ref = "65-91")18-24                                  1.5809356
## relevel(age.cat, ref = "65-91")25-34                                  1.5945149
## relevel(age.cat, ref = "65-91")35-44                                  1.5138803
## relevel(age.cat, ref = "65-91")45-54                                  1.2857058
## relevel(age.cat, ref = "65-91")55-64                                  1.2032294
## relevel(Marital.Status, ref = "Single ")Cohabitation                  1.0401096
## relevel(Marital.Status, ref = "Single ")Divorced                      0.9987715
## relevel(Marital.Status, ref = "Single ")Married                       1.0800871
## relevel(Marital.Status, ref = "Single ")Separated                     0.9707946
## relevel(Marital.Status, ref = "Single ")Widowed                       0.8222803
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.6668309
## relevel(Status, ref = "I am Currently Serving")I am a Veteran         0.9593983
## relevel(Branch, ref = "Marine Corps")Air Force                        1.0657740
## relevel(Branch, ref = "Marine Corps")Army                             1.0510302
## relevel(Branch, ref = "Marine Corps")Coast Guard                      1.1573046
## relevel(Branch, ref = "Marine Corps")Navy                             1.1024401
##                                                                           X2.5..
## (Intercept)                                                           0.6409422
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say             0.4427195
## relevel(Suicide.Thoughts, ref = "No.")Yes.                            0.6459463
## relevel(age.cat, ref = "65-91")18-24                                  1.3551675
## relevel(age.cat, ref = "65-91")25-34                                  1.4328282
## relevel(age.cat, ref = "65-91")35-44                                  1.3707231
## relevel(age.cat, ref = "65-91")45-54                                  1.1657807
## relevel(age.cat, ref = "65-91")55-64                                  1.0828993
## relevel(Marital.Status, ref = "Single ")Cohabitation                  0.9147375
## relevel(Marital.Status, ref = "Single ")Divorced                      0.9062100
## relevel(Marital.Status, ref = "Single ")Married                       1.0020296
## relevel(Marital.Status, ref = "Single ")Separated                     0.7979468
## relevel(Marital.Status, ref = "Single ")Widowed                       0.6606510
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.4896806
## relevel(Status, ref = "I am Currently Serving")I am a Veteran         0.9003145
## relevel(Branch, ref = "Marine Corps")Air Force                        0.9815440
## relevel(Branch, ref = "Marine Corps")Army                             0.9767719
## relevel(Branch, ref = "Marine Corps")Coast Guard                      0.9712521
## relevel(Branch, ref = "Marine Corps")Navy                             1.0154249
##                                                                          X97.5..
## (Intercept)                                                           0.8629257
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say             0.5077086
## relevel(Suicide.Thoughts, ref = "No.")Yes.                            0.7277433
## relevel(age.cat, ref = "65-91")18-24                                  1.8447612
## relevel(age.cat, ref = "65-91")25-34                                  1.7749659
```

```
## relevel(age.cat, ref = "65-91")35-44                                          1.6725273
## relevel(age.cat, ref = "65-91")45-54                                          1.4184095
## relevel(age.cat, ref = "65-91")55-64                                          1.3372537
## relevel(Marital.Status, ref = "Single ")Cohabitation                          1.1825571
## relevel(Marital.Status, ref = "Single ")Divorced                              1.1007828
## relevel(Marital.Status, ref = "Single ")Married                               1.1643055
## relevel(Marital.Status, ref = "Single ")Separated                             1.1799134
## relevel(Marital.Status, ref = "Single ")Widowed                               1.0210051
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.9016782
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                  1.0223584
## relevel(Branch, ref = "Marine Corps")Air Force                                 1.1572847
## relevel(Branch, ref = "Marine Corps")Army                                      1.1310140
## relevel(Branch, ref = "Marine Corps")Coast Guard                               1.3794015
## relevel(Branch, ref = "Marine Corps")Navy                                      1.1969753
```

#3=Allow.Resourcing
```
resourcing.glm=glm(formula = Allow.Resourcing ~ relevel(Suicide.Thoughts, ref="No.") + relevel(age.cat,
summary(resourcing.glm)
```

```
##
## Call:
## glm(formula = Allow.Resourcing ~ relevel(Suicide.Thoughts, ref = "No.") +
##     relevel(age.cat, ref = "65-91") + relevel(Marital.Status,
##     ref = "Single ") + relevel(Status, ref = "I am Currently Serving") +
##     relevel(Branch, ref = "Marine Corps"), family = "binomial",
##     data = complete.data)
##
## Deviance Residuals:
##     Min      1Q  Median      3Q     Max
## -1.2370  -1.0511  -0.9615   1.2926   1.5123
##
## Coefficients:
##                                                                       Estimate
## (Intercept)                                                           -0.06906
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say             -0.28367
## relevel(Suicide.Thoughts, ref = "No.")Yes.                            -0.16183
## relevel(age.cat, ref = "65-91")18-24                                  -0.15943
## relevel(age.cat, ref = "65-91")25-34                                  -0.20588
## relevel(age.cat, ref = "65-91")35-44                                  -0.10206
## relevel(age.cat, ref = "65-91")45-54                                  -0.07889
## relevel(age.cat, ref = "65-91")55-64                                   0.04367
## relevel(Marital.Status, ref = "Single ")Cohabitation                 -0.05792
## relevel(Marital.Status, ref = "Single ")Divorced                     -0.02493
## relevel(Marital.Status, ref = "Single ")Married                      -0.09756
## relevel(Marital.Status, ref = "Single ")Separated                     0.01798
## relevel(Marital.Status, ref = "Single ")Widowed                      -0.01650
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran -0.06276
## relevel(Status, ref = "I am Currently Serving")I am a Veteran        -0.06022
## relevel(Branch, ref = "Marine Corps")Air Force                        0.12817
## relevel(Branch, ref = "Marine Corps")Army                            -0.04088
## relevel(Branch, ref = "Marine Corps")Coast Guard                      0.18936
## relevel(Branch, ref = "Marine Corps")Navy                             0.05574
##                                                                      Std. Error
## (Intercept)                                                            0.07576
```

```
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                              0.03460
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                            0.03075
## relevel(age.cat, ref = "65-91")18-24                                                  0.07868
## relevel(age.cat, ref = "65-91")25-34                                                  0.05441
## relevel(age.cat, ref = "65-91")35-44                                                  0.05034
## relevel(age.cat, ref = "65-91")45-54                                                  0.04959
## relevel(age.cat, ref = "65-91")55-64                                                  0.05329
## relevel(Marital.Status, ref = "Single ")Cohabitation                                 0.06579
## relevel(Marital.Status, ref = "Single ")Divorced                                     0.04965
## relevel(Marital.Status, ref = "Single ")Married                                      0.03837
## relevel(Marital.Status, ref = "Single ")Separated                                    0.09945
## relevel(Marital.Status, ref = "Single ")Widowed                                      0.10878
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran        0.15231
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                         0.03263
## relevel(Branch, ref = "Marine Corps")Air Force                                       0.04211
## relevel(Branch, ref = "Marine Corps")Army                                            0.03764
## relevel(Branch, ref = "Marine Corps")Coast Guard                                     0.08900
## relevel(Branch, ref = "Marine Corps")Navy                                            0.04213
##                                                                                       z value
## (Intercept)                                                                            -0.911
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                             -8.200
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                            -5.263
## relevel(age.cat, ref = "65-91")18-24                                                  -2.026
## relevel(age.cat, ref = "65-91")25-34                                                  -3.784
## relevel(age.cat, ref = "65-91")35-44                                                  -2.027
## relevel(age.cat, ref = "65-91")45-54                                                  -1.591
## relevel(age.cat, ref = "65-91")55-64                                                   0.819
## relevel(Marital.Status, ref = "Single ")Cohabitation                                 -0.880
## relevel(Marital.Status, ref = "Single ")Divorced                                     -0.502
## relevel(Marital.Status, ref = "Single ")Married                                      -2.543
## relevel(Marital.Status, ref = "Single ")Separated                                     0.181
## relevel(Marital.Status, ref = "Single ")Widowed                                      -0.152
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran        -0.412
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                         -1.846
## relevel(Branch, ref = "Marine Corps")Air Force                                         3.044
## relevel(Branch, ref = "Marine Corps")Army                                             -1.086
## relevel(Branch, ref = "Marine Corps")Coast Guard                                       2.128
## relevel(Branch, ref = "Marine Corps")Navy                                              1.323
##                                                                                       Pr(>|z|)
## (Intercept)                                                                           0.362042
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                             2.41e-16
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                            1.42e-07
## relevel(age.cat, ref = "65-91")18-24                                                  0.042728
## relevel(age.cat, ref = "65-91")25-34                                                  0.000154
## relevel(age.cat, ref = "65-91")35-44                                                  0.042612
## relevel(age.cat, ref = "65-91")45-54                                                  0.111652
## relevel(age.cat, ref = "65-91")55-64                                                  0.412536
## relevel(Marital.Status, ref = "Single ")Cohabitation                                 0.378677
## relevel(Marital.Status, ref = "Single ")Divorced                                     0.615619
## relevel(Marital.Status, ref = "Single ")Married                                      0.011002
## relevel(Marital.Status, ref = "Single ")Separated                                    0.856539
## relevel(Marital.Status, ref = "Single ")Widowed                                      0.879432
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.680294
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                         0.064913
```

```
## relevel(Branch, ref = "Marine Corps")Air Force                                    0.002334
## relevel(Branch, ref = "Marine Corps")Army                                         0.277454
## relevel(Branch, ref = "Marine Corps")Coast Guard                                  0.033373
## relevel(Branch, ref = "Marine Corps")Navy                                         0.185793
##
## (Intercept)
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                    ***
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                   ***
## relevel(age.cat, ref = "65-91")18-24                                         *
## relevel(age.cat, ref = "65-91")25-34                                         ***
## relevel(age.cat, ref = "65-91")35-44                                         *
## relevel(age.cat, ref = "65-91")45-54
## relevel(age.cat, ref = "65-91")55-64
## relevel(Marital.Status, ref = "Single ")Cohabitation
## relevel(Marital.Status, ref = "Single ")Divorced
## relevel(Marital.Status, ref = "Single ")Married                              *
## relevel(Marital.Status, ref = "Single ")Separated
## relevel(Marital.Status, ref = "Single ")Widowed
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                 .
## relevel(Branch, ref = "Marine Corps")Air Force                               **
## relevel(Branch, ref = "Marine Corps")Army
## relevel(Branch, ref = "Marine Corps")Coast Guard                             *
## relevel(Branch, ref = "Marine Corps")Navy
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 42416  on 31179  degrees of freedom
## Residual deviance: 42223  on 31161  degrees of freedom
## AIC: 42261
##
## Number of Fisher Scoring iterations: 4

resourcing.glm.OR=data.frame(exp(cbind(OR = coef(resourcing.glm), confint(resourcing.glm))))


## Waiting for profiling to be done...

resourcing.glm.OR


##                                                                              OR
## (Intercept)                                                           0.9332730
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say             0.7530146
## relevel(Suicide.Thoughts, ref = "No.")Yes.                            0.8505892
## relevel(age.cat, ref = "65-91")18-24                                  0.8526281
## relevel(age.cat, ref = "65-91")25-34                                  0.8139269
## relevel(age.cat, ref = "65-91")35-44                                  0.9029726
## relevel(age.cat, ref = "65-91")45-54                                  0.9241374
## relevel(age.cat, ref = "65-91")55-64                                  1.0446337
## relevel(Marital.Status, ref = "Single ")Cohabitation                 0.9437292
## relevel(Marital.Status, ref = "Single ")Divorced                     0.9753785
## relevel(Marital.Status, ref = "Single ")Married                      0.9070449
```

```
## relevel(Marital.Status, ref = "Single ")Separated                                          1.0181405
## relevel(Marital.Status, ref = "Single ")Widowed                                            0.9836344
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.9391679
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                       0.9415539
## relevel(Branch, ref = "Marine Corps")Air Force                                              1.1367515
## relevel(Branch, ref = "Marine Corps")Army                                                   0.9599418
## relevel(Branch, ref = "Marine Corps")Coast Guard                                            1.2084800
## relevel(Branch, ref = "Marine Corps")Navy                                                   1.0573238
##                                                                                              X2.5..
## (Intercept)                                                                                  0.8044109
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                                    0.7035500
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                                   0.8007833
## relevel(age.cat, ref = "65-91")18-24                                                         0.7306534
## relevel(age.cat, ref = "65-91")25-34                                                         0.7316382
## relevel(age.cat, ref = "65-91")35-44                                                         0.8182091
## relevel(age.cat, ref = "65-91")45-54                                                         0.8386141
## relevel(age.cat, ref = "65-91")55-64                                                         0.9410995
## relevel(Marital.Status, ref = "Single ")Cohabitation                                        0.8293719
## relevel(Marital.Status, ref = "Single ")Divorced                                            0.8849228
## relevel(Marital.Status, ref = "Single ")Married                                             0.8413953
## relevel(Marital.Status, ref = "Single ")Separated                                           0.8372031
## relevel(Marital.Status, ref = "Single ")Widowed                                             0.7942127
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.6944727
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                       0.8832617
## relevel(Branch, ref = "Marine Corps")Air Force                                              1.0467666
## relevel(Branch, ref = "Marine Corps")Army                                                   0.8917451
## relevel(Branch, ref = "Marine Corps")Coast Guard                                            1.0146967
## relevel(Branch, ref = "Marine Corps")Navy                                                   0.9735784
##                                                                                              X97.5..
## (Intercept)                                                                                  1.0825908
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                                    0.8057393
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                                   0.9033669
## relevel(age.cat, ref = "65-91")18-24                                                         0.9946472
## relevel(age.cat, ref = "65-91")25-34                                                         0.9055838
## relevel(age.cat, ref = "65-91")35-44                                                         0.9967147
## relevel(age.cat, ref = "65-91")45-54                                                         1.0185897
## relevel(age.cat, ref = "65-91")55-64                                                         1.1597398
## relevel(Marital.Status, ref = "Single ")Cohabitation                                        1.0734043
## relevel(Marital.Status, ref = "Single ")Divorced                                            1.0750790
## relevel(Marital.Status, ref = "Single ")Married                                             0.9779755
## relevel(Marital.Status, ref = "Single ")Separated                                           1.2365640
## relevel(Marital.Status, ref = "Single ")Widowed                                             1.2168656
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 1.2629051
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                       1.0037716
## relevel(Branch, ref = "Marine Corps")Air Force                                              1.2346245
## relevel(Branch, ref = "Marine Corps")Army                                                   1.0335425
## relevel(Branch, ref = "Marine Corps")Coast Guard                                            1.4385230
## relevel(Branch, ref = "Marine Corps")Navy                                                   1.1484006
```

#4=Allow.MH.Treatment
```
MH.glm=glm(formula = Allow.MH.Treatment ~ relevel(Suicide.Thoughts, ref="No.") + relevel(age.cat, ref="(
summary(MH.glm)
```

```
##
```

```
## Call:
## glm(formula = Allow.MH.Treatment ~ relevel(Suicide.Thoughts,
##     ref = "No.") + relevel(age.cat, ref = "65-91") + relevel(Marital.Status,
##     ref = "Single ") + relevel(Status, ref = "I am Currently Serving") +
##     relevel(Branch, ref = "Marine Corps"), family = "binomial",
##     data = complete.data)
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -1.1520  -0.9720  -0.8962   1.3708   1.7271
##
## Coefficients:
##                                                                       Estimate
## (Intercept)                                                           -0.28132
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say             -0.35211
## relevel(Suicide.Thoughts, ref = "No.")Yes.                             0.14589
## relevel(age.cat, ref = "65-91")18-24                                  -0.33227
## relevel(age.cat, ref = "65-91")25-34                                  -0.28677
## relevel(age.cat, ref = "65-91")35-44                                  -0.20015
## relevel(age.cat, ref = "65-91")45-54                                  -0.21882
## relevel(age.cat, ref = "65-91")55-64                                  -0.04922
## relevel(Marital.Status, ref = "Single ")Cohabitation                  -0.02841
## relevel(Marital.Status, ref = "Single ")Divorced                      -0.04799
## relevel(Marital.Status, ref = "Single ")Married                       -0.12535
## relevel(Marital.Status, ref = "Single ")Separated                     -0.10055
## relevel(Marital.Status, ref = "Single ")Widowed                       -0.13813
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran -0.19086
## relevel(Status, ref = "I am Currently Serving")I am a Veteran         -0.11387
## relevel(Branch, ref = "Marine Corps")Air Force                         0.17243
## relevel(Branch, ref = "Marine Corps")Army                             0.10249
## relevel(Branch, ref = "Marine Corps")Coast Guard                       0.18165
## relevel(Branch, ref = "Marine Corps")Navy                             0.16497
##                                                                      Std. Error
## (Intercept)                                                            0.07757
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say              0.03658
## relevel(Suicide.Thoughts, ref = "No.")Yes.                             0.03092
## relevel(age.cat, ref = "65-91")18-24                                   0.08075
## relevel(age.cat, ref = "65-91")25-34                                   0.05543
## relevel(age.cat, ref = "65-91")35-44                                   0.05120
## relevel(age.cat, ref = "65-91")45-54                                   0.05047
## relevel(age.cat, ref = "65-91")55-64                                   0.05413
## relevel(Marital.Status, ref = "Single ")Cohabitation                  0.06711
## relevel(Marital.Status, ref = "Single ")Divorced                      0.05076
## relevel(Marital.Status, ref = "Single ")Married                       0.03924
## relevel(Marital.Status, ref = "Single ")Separated                     0.10244
## relevel(Marital.Status, ref = "Single ")Widowed                       0.11184
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran   0.15836
## relevel(Status, ref = "I am Currently Serving")I am a Veteran          0.03340
## relevel(Branch, ref = "Marine Corps")Air Force                         0.04372
## relevel(Branch, ref = "Marine Corps")Army                              0.03918
## relevel(Branch, ref = "Marine Corps")Coast Guard                       0.09170
## relevel(Branch, ref = "Marine Corps")Navy                              0.04369
##                                                                        z value
## (Intercept)                                                            -3.627
```

```
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                            -9.625
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                            4.718
## relevel(age.cat, ref = "65-91")18-24                                                 -4.115
## relevel(age.cat, ref = "65-91")25-34                                                 -5.173
## relevel(age.cat, ref = "65-91")35-44                                                 -3.909
## relevel(age.cat, ref = "65-91")45-54                                                 -4.335
## relevel(age.cat, ref = "65-91")55-64                                                 -0.909
## relevel(Marital.Status, ref = "Single ")Cohabitation                                 -0.423
## relevel(Marital.Status, ref = "Single ")Divorced                                     -0.946
## relevel(Marital.Status, ref = "Single ")Married                                      -3.194
## relevel(Marital.Status, ref = "Single ")Separated                                    -0.981
## relevel(Marital.Status, ref = "Single ")Widowed                                      -1.235
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran -1.205
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                  -3.410
## relevel(Branch, ref = "Marine Corps")Air Force                                        3.944
## relevel(Branch, ref = "Marine Corps")Army                                             2.616
## relevel(Branch, ref = "Marine Corps")Coast Guard                                      1.981
## relevel(Branch, ref = "Marine Corps")Navy                                             3.776
##                                                                               Pr(>|z|)
## (Intercept)                                                                   0.000287
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                      < 2e-16
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                    2.39e-06
## relevel(age.cat, ref = "65-91")18-24                                          3.88e-05
## relevel(age.cat, ref = "65-91")25-34                                          2.30e-07
## relevel(age.cat, ref = "65-91")35-44                                          9.25e-05
## relevel(age.cat, ref = "65-91")45-54                                          1.45e-05
## relevel(age.cat, ref = "65-91")55-64                                          0.363215
## relevel(Marital.Status, ref = "Single ")Cohabitation                          0.672023
## relevel(Marital.Status, ref = "Single ")Divorced                              0.344376
## relevel(Marital.Status, ref = "Single ")Married                               0.001402
## relevel(Marital.Status, ref = "Single ")Separated                             0.326359
## relevel(Marital.Status, ref = "Single ")Widowed                               0.216803
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.228120
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                  0.000650
## relevel(Branch, ref = "Marine Corps")Air Force                                8.00e-05
## relevel(Branch, ref = "Marine Corps")Army                                     0.008897
## relevel(Branch, ref = "Marine Corps")Coast Guard                              0.047590
## relevel(Branch, ref = "Marine Corps")Navy                                     0.000160
##
## (Intercept)                                                                   ***
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                     ***
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                    ***
## relevel(age.cat, ref = "65-91")18-24                                          ***
## relevel(age.cat, ref = "65-91")25-34                                          ***
## relevel(age.cat, ref = "65-91")35-44                                          ***
## relevel(age.cat, ref = "65-91")45-54                                          ***
## relevel(age.cat, ref = "65-91")55-64
## relevel(Marital.Status, ref = "Single ")Cohabitation
## relevel(Marital.Status, ref = "Single ")Divorced
## relevel(Marital.Status, ref = "Single ")Married                               **
## relevel(Marital.Status, ref = "Single ")Separated
## relevel(Marital.Status, ref = "Single ")Widowed
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                  ***
```

```
## relevel(Branch, ref = "Marine Corps")Air Force                                  ***
## relevel(Branch, ref = "Marine Corps")Army                                       **
## relevel(Branch, ref = "Marine Corps")Coast Guard                                *
## relevel(Branch, ref = "Marine Corps")Navy                                       ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##      Null deviance: 40869  on 31179  degrees of freedom
## Residual deviance: 40632  on 31161  degrees of freedom
## AIC: 40670
##
## Number of Fisher Scoring iterations: 4
```

```
MH.glm.OR=data.frame(exp(cbind(OR = coef(MH.glm), confint(MH.glm))))
```

```
## Waiting for profiling to be done...
```

```
MH.glm.OR
```

```
##                                                                             OR
## (Intercept)                                                          0.7547881
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say            0.7031996
## relevel(Suicide.Thoughts, ref = "No.")Yes.                           1.1570641
## relevel(age.cat, ref = "65-91")18-24                                 0.7172918
## relevel(age.cat, ref = "65-91")25-34                                 0.7506811
## relevel(age.cat, ref = "65-91")35-44                                 0.8186063
## relevel(age.cat, ref = "65-91")45-54                                 0.8034661
## relevel(age.cat, ref = "65-91")55-64                                 0.9519759
## relevel(Marital.Status, ref = "Single ")Cohabitation                0.9719879
## relevel(Marital.Status, ref = "Single ")Divorced                    0.9531408
## relevel(Marital.Status, ref = "Single ")Married                     0.8821905
## relevel(Marital.Status, ref = "Single ")Separated                   0.9043441
## relevel(Marital.Status, ref = "Single ")Widowed                     0.8709811
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.8262510
## relevel(Status, ref = "I am Currently Serving")I am a Veteran        0.8923720
## relevel(Branch, ref = "Marine Corps")Air Force                       1.1881897
## relevel(Branch, ref = "Marine Corps")Army                            1.1079214
## relevel(Branch, ref = "Marine Corps")Coast Guard                     1.1992001
## relevel(Branch, ref = "Marine Corps")Navy                            1.1793614
##                                                                          X2.5..
## (Intercept)                                                          0.6482147
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say            0.6543796
## relevel(Suicide.Thoughts, ref = "No.")Yes.                           1.0889514
## relevel(age.cat, ref = "65-91")18-24                                 0.6120884
## relevel(age.cat, ref = "65-91")25-34                                 0.6734657
## relevel(age.cat, ref = "65-91")35-44                                 0.7405674
## relevel(age.cat, ref = "65-91")45-54                                 0.7279068
## relevel(age.cat, ref = "65-91")55-64                                 0.8562562
## relevel(Marital.Status, ref = "Single ")Cohabitation                0.8519082
## relevel(Marital.Status, ref = "Single ")Divorced                    0.8628782
## relevel(Marital.Status, ref = "Single ")Married                     0.8169996
```

```
## relevel(Marital.Status, ref = "Single ")Separated                            0.7387388
## relevel(Marital.Status, ref = "Single ")Widowed                              0.6983766
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.6025041
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                 0.8358834
## relevel(Branch, ref = "Marine Corps")Air Force                               1.0907541
## relevel(Branch, ref = "Marine Corps")Army                                    1.0262231
## relevel(Branch, ref = "Marine Corps")Coast Guard                             1.0009826
## relevel(Branch, ref = "Marine Corps")Navy                                    1.0826978
##                                                                                X97.5..
## (Intercept)                                                                  0.8785775
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                    0.7552924
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                   1.2292922
## relevel(age.cat, ref = "65-91")18-24                                         0.8400503
## relevel(age.cat, ref = "65-91")25-34                                         0.8369328
## relevel(age.cat, ref = "65-91")35-44                                         0.9051724
## relevel(age.cat, ref = "65-91")45-54                                         0.8871743
## relevel(age.cat, ref = "65-91")55-64                                         1.0586639
## relevel(Marital.Status, ref = "Single ")Cohabitation                         1.1082964
## relevel(Marital.Status, ref = "Single ")Divorced                             1.0528384
## relevel(Marital.Status, ref = "Single ")Married                              0.9528634
## relevel(Marital.Status, ref = "Single ")Separated                            1.1040568
## relevel(Marital.Status, ref = "Single ")Widowed                              1.0829844
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 1.1221171
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                 0.9528033
## relevel(Branch, ref = "Marine Corps")Air Force                               1.2946545
## relevel(Branch, ref = "Marine Corps")Army                                    1.1965790
## relevel(Branch, ref = "Marine Corps")Coast Guard                             1.4341662
## relevel(Branch, ref = "Marine Corps")Navy                                    1.2849723
```

```
#5=Allow.Providers.In.My.House
prov.glm=glm(formula = Allow.Providers.In.My.House ~ relevel(Suicide.Thoughts, ref="No.") + relevel(age
summary(prov.glm)
```

```
##
## Call:
## glm(formula = Allow.Providers.In.My.House ~ relevel(Suicide.Thoughts,
##     ref = "No.") + relevel(age.cat, ref = "65-91") + relevel(Marital.Status,
##     ref = "Single ") + relevel(Status, ref = "I am Currently Serving") +
##     relevel(Branch, ref = "Marine Corps"), family = "binomial",
##     data = complete.data)
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -0.8319  -0.6994  -0.6671  -0.5281   2.1523
##
## Coefficients:
##                                                                     Estimate
## (Intercept)                                                        -1.160e+00
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say          -5.515e-01
## relevel(Suicide.Thoughts, ref = "No.")Yes.                         -9.246e-02
## relevel(age.cat, ref = "65-91")18-24                               -2.292e-01
## relevel(age.cat, ref = "65-91")25-34                               -7.739e-02
## relevel(age.cat, ref = "65-91")35-44                               -6.460e-02
## relevel(age.cat, ref = "65-91")45-54                               -1.061e-01
```

```
## relevel(age.cat, ref = "65-91")55-64                                        -1.700e-02
## relevel(Marital.Status, ref = "Single ")Cohabitation                         1.167e-06
## relevel(Marital.Status, ref = "Single ")Divorced                             2.742e-02
## relevel(Marital.Status, ref = "Single ")Married                             -9.374e-02
## relevel(Marital.Status, ref = "Single ")Separated                           -6.484e-03
## relevel(Marital.Status, ref = "Single ")Widowed                             -2.350e-02
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran -3.699e-01
## relevel(Status, ref = "I am Currently Serving")I am a Veteran               -1.781e-01
## relevel(Branch, ref = "Marine Corps")Air Force                               1.646e-01
## relevel(Branch, ref = "Marine Corps")Army                                    1.483e-01
## relevel(Branch, ref = "Marine Corps")Coast Guard                             2.663e-01
## relevel(Branch, ref = "Marine Corps")Navy                                    1.793e-01
##                                                                              Std. Error
## (Intercept)                                                                  9.330e-02
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                    4.749e-02
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                   3.753e-02
## relevel(age.cat, ref = "65-91")18-24                                         9.704e-02
## relevel(age.cat, ref = "65-91")25-34                                         6.640e-02
## relevel(age.cat, ref = "65-91")35-44                                         6.151e-02
## relevel(age.cat, ref = "65-91")45-54                                         6.071e-02
## relevel(age.cat, ref = "65-91")55-64                                         6.501e-02
## relevel(Marital.Status, ref = "Single ")Cohabitation                         8.025e-02
## relevel(Marital.Status, ref = "Single ")Divorced                             6.045e-02
## relevel(Marital.Status, ref = "Single ")Married                              4.696e-02
## relevel(Marital.Status, ref = "Single ")Separated                            1.223e-01
## relevel(Marital.Status, ref = "Single ")Widowed                              1.324e-01
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 2.033e-01
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                3.920e-02
## relevel(Branch, ref = "Marine Corps")Air Force                               5.348e-02
## relevel(Branch, ref = "Marine Corps")Army                                    4.825e-02
## relevel(Branch, ref = "Marine Corps")Coast Guard                             1.071e-01
## relevel(Branch, ref = "Marine Corps")Navy                                    5.346e-02
##                                                                              z value
## (Intercept)                                                                  -12.430
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                    -11.613
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                    -2.464
## relevel(age.cat, ref = "65-91")18-24                                          -2.362
## relevel(age.cat, ref = "65-91")25-34                                          -1.166
## relevel(age.cat, ref = "65-91")35-44                                          -1.050
## relevel(age.cat, ref = "65-91")45-54                                          -1.748
## relevel(age.cat, ref = "65-91")55-64                                          -0.262
## relevel(Marital.Status, ref = "Single ")Cohabitation                          0.000
## relevel(Marital.Status, ref = "Single ")Divorced                              0.454
## relevel(Marital.Status, ref = "Single ")Married                              -1.996
## relevel(Marital.Status, ref = "Single ")Separated                            -0.053
## relevel(Marital.Status, ref = "Single ")Widowed                              -0.178
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran -1.819
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                 -4.544
## relevel(Branch, ref = "Marine Corps")Air Force                                 3.078
## relevel(Branch, ref = "Marine Corps")Army                                      3.073
## relevel(Branch, ref = "Marine Corps")Coast Guard                               2.485
## relevel(Branch, ref = "Marine Corps")Navy                                      3.355
##                                                                              Pr(>|z|)
## (Intercept)                                                                  < 2e-16
```

```
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                              < 2e-16
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                          0.013751
## relevel(age.cat, ref = "65-91")18-24                                                0.018185
## relevel(age.cat, ref = "65-91")25-34                                                0.243790
## relevel(age.cat, ref = "65-91")35-44                                                0.293626
## relevel(age.cat, ref = "65-91")45-54                                                0.080503
## relevel(age.cat, ref = "65-91")55-64                                                0.793667
## relevel(Marital.Status, ref = "Single ")Cohabitation                               0.999988
## relevel(Marital.Status, ref = "Single ")Divorced                                   0.650181
## relevel(Marital.Status, ref = "Single ")Married                                     0.045897
## relevel(Marital.Status, ref = "Single ")Separated                                   0.957713
## relevel(Marital.Status, ref = "Single ")Widowed                                     0.859106
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.068879
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                       5.52e-06
## relevel(Branch, ref = "Marine Corps")Air Force                                      0.002087
## relevel(Branch, ref = "Marine Corps")Army                                           0.002121
## relevel(Branch, ref = "Marine Corps")Coast Guard                                    0.012951
## relevel(Branch, ref = "Marine Corps")Navy                                           0.000794
##
## (Intercept)                                                                         ***
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                           ***
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                          *
## relevel(age.cat, ref = "65-91")18-24                                                *
## relevel(age.cat, ref = "65-91")25-34
## relevel(age.cat, ref = "65-91")35-44
## relevel(age.cat, ref = "65-91")45-54                                                .
## relevel(age.cat, ref = "65-91")55-64
## relevel(Marital.Status, ref = "Single ")Cohabitation
## relevel(Marital.Status, ref = "Single ")Divorced
## relevel(Marital.Status, ref = "Single ")Married                                     *
## relevel(Marital.Status, ref = "Single ")Separated
## relevel(Marital.Status, ref = "Single ")Widowed
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran .
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                       ***
## relevel(Branch, ref = "Marine Corps")Air Force                                      **
## relevel(Branch, ref = "Marine Corps")Army                                           **
## relevel(Branch, ref = "Marine Corps")Coast Guard                                    *
## relevel(Branch, ref = "Marine Corps")Navy                                           ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 31291  on 31179  degrees of freedom
## Residual deviance: 31079  on 31161  degrees of freedom
## AIC: 31117
##
## Number of Fisher Scoring iterations: 4
```

```
prov.glm.OR=data.frame(exp(cbind(OR = coef(prov.glm), confint(prov.glm))))
```

```
## Waiting for profiling to be done...
```

prov.glm.OR

```
##                                                                            OR
## (Intercept)                                                         0.3135629
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say           0.5760744
## relevel(Suicide.Thoughts, ref = "No.")Yes.                          0.9116857
## relevel(age.cat, ref = "65-91")18-24                                0.7951818
## relevel(age.cat, ref = "65-91")25-34                                0.9255308
## relevel(age.cat, ref = "65-91")35-44                                0.9374458
## relevel(age.cat, ref = "65-91")45-54                                0.8993298
## relevel(age.cat, ref = "65-91")55-64                                0.9831393
## relevel(Marital.Status, ref = "Single ")Cohabitation               1.0000012
## relevel(Marital.Status, ref = "Single ")Divorced                   1.0277962
## relevel(Marital.Status, ref = "Single ")Married                    0.9105204
## relevel(Marital.Status, ref = "Single ")Separated                  0.9935365
## relevel(Marital.Status, ref = "Single ")Widowed                    0.9767697
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.6907891
## relevel(Status, ref = "I am Currently Serving")I am a Veteran      0.8368216
## relevel(Branch, ref = "Marine Corps")Air Force                     1.1789224
## relevel(Branch, ref = "Marine Corps")Army                          1.1598156
## relevel(Branch, ref = "Marine Corps")Coast Guard                   1.3050694
## relevel(Branch, ref = "Marine Corps")Navy                          1.1964252
##                                                                         X2.5..
## (Intercept)                                                         0.2609779
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say           0.5244619
## relevel(Suicide.Thoughts, ref = "No.")Yes.                          0.8467782
## relevel(age.cat, ref = "65-91")18-24                                0.6569002
## relevel(age.cat, ref = "65-91")25-34                                0.8130372
## relevel(age.cat, ref = "65-91")35-44                                0.8315789
## relevel(age.cat, ref = "65-91")45-54                                0.7990318
## relevel(age.cat, ref = "65-91")55-64                                0.8659778
## relevel(Marital.Status, ref = "Single ")Cohabitation               0.8535305
## relevel(Marital.Status, ref = "Single ")Divorced                   0.9129660
## relevel(Marital.Status, ref = "Single ")Married                    0.8308898
## relevel(Marital.Status, ref = "Single ")Separated                  0.7783362
## relevel(Marital.Status, ref = "Single ")Widowed                    0.7497064
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.4554282
## relevel(Status, ref = "I am Currently Serving")I am a Veteran      0.7750842
## relevel(Branch, ref = "Marine Corps")Air Force                     1.0619871
## relevel(Branch, ref = "Marine Corps")Army                          1.0557566
## relevel(Branch, ref = "Marine Corps")Coast Guard                   1.0550239
## relevel(Branch, ref = "Marine Corps")Navy                          1.0778067
##                                                                        X97.5..
## (Intercept)                                                         0.3762307
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say           0.6317947
## relevel(Suicide.Thoughts, ref = "No.")Yes.                          0.9809886
## relevel(age.cat, ref = "65-91")18-24                                0.9610362
## relevel(age.cat, ref = "65-91")25-34                                1.0547781
## relevel(age.cat, ref = "65-91")35-44                                1.0583661
## relevel(age.cat, ref = "65-91")45-54                                1.0137610
## relevel(age.cat, ref = "65-91")55-64                                1.1173977
## relevel(Marital.Status, ref = "Single ")Cohabitation               1.1691866
## relevel(Marital.Status, ref = "Single ")Divorced                   1.1571425
```

```
## relevel(Marital.Status, ref = "Single ")Married                                0.9988287
## relevel(Marital.Status, ref = "Single ")Separated                              1.2576707
## relevel(Marital.Status, ref = "Single ")Widowed                                1.2605568
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 1.0134624
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                   0.9038464
## relevel(Branch, ref = "Marine Corps")Air Force                                 1.3097377
## relevel(Branch, ref = "Marine Corps")Army                                      1.2756087
## relevel(Branch, ref = "Marine Corps")Coast Guard                               1.6061255
## relevel(Branch, ref = "Marine Corps")Navy                                      1.3291055
```

#6=Allow.App.To.Help
```
app.glm=glm(formula = Allow.App.To.Help ~ relevel(Suicide.Thoughts, ref="No.") + relevel(age.cat, ref="
summary(app.glm)
```

```
##
## Call:
## glm(formula = Allow.App.To.Help ~ relevel(Suicide.Thoughts, ref = "No.") +
##     relevel(age.cat, ref = "65-91") + relevel(Marital.Status,
##     ref = "Single ") + relevel(Status, ref = "I am Currently Serving") +
##     relevel(Branch, ref = "Marine Corps"), family = "binomial",
##     data = complete.data)
##
## Deviance Residuals:
##     Min      1Q   Median      3Q      Max
## -0.7747  -0.5584  -0.5034  -0.4484   2.3933
##
## Coefficients:
##                                                                     Estimate
## (Intercept)                                                        -2.380509
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say          -0.249312
## relevel(Suicide.Thoughts, ref = "No.")Yes.                          0.339485
## relevel(age.cat, ref = "65-91")18-24                                0.647820
## relevel(age.cat, ref = "65-91")25-34                                0.675144
## relevel(age.cat, ref = "65-91")35-44                                0.634541
## relevel(age.cat, ref = "65-91")45-54                                0.422752
## relevel(age.cat, ref = "65-91")55-64                                0.382094
## relevel(Marital.Status, ref = "Single ")Cohabitation                0.148084
## relevel(Marital.Status, ref = "Single ")Divorced                    0.038521
## relevel(Marital.Status, ref = "Single ")Married                    -0.161283
## relevel(Marital.Status, ref = "Single ")Separated                  -0.002781
## relevel(Marital.Status, ref = "Single ")Widowed                     0.103713
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran -0.291850
## relevel(Status, ref = "I am Currently Serving")I am a Veteran       -0.131336
## relevel(Branch, ref = "Marine Corps")Air Force                      0.164034
## relevel(Branch, ref = "Marine Corps")Army                           0.117193
## relevel(Branch, ref = "Marine Corps")Coast Guard                    0.277311
## relevel(Branch, ref = "Marine Corps")Navy                           0.131272
##                                                                    Std. Error
## (Intercept)                                                          0.121080
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say            0.054468
## relevel(Suicide.Thoughts, ref = "No.")Yes.                           0.041496
## relevel(age.cat, ref = "65-91")18-24                                 0.121266
## relevel(age.cat, ref = "65-91")25-34                                 0.093203
## relevel(age.cat, ref = "65-91")35-44                                 0.089002
```

```
## relevel(age.cat, ref = "65-91")45-54                                       0.089080
## relevel(age.cat, ref = "65-91")55-64                                       0.094650
## relevel(Marital.Status, ref = "Single ")Cohabitation                       0.088821
## relevel(Marital.Status, ref = "Single ")Divorced                           0.069358
## relevel(Marital.Status, ref = "Single ")Married                            0.054074
## relevel(Marital.Status, ref = "Single ")Separated                          0.137998
## relevel(Marital.Status, ref = "Single ")Widowed                            0.160750
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.241954
## relevel(Status, ref = "I am Currently Serving")I am a Veteran              0.045733
## relevel(Branch, ref = "Marine Corps")Air Force                             0.063613
## relevel(Branch, ref = "Marine Corps")Army                                  0.057054
## relevel(Branch, ref = "Marine Corps")Coast Guard                           0.125212
## relevel(Branch, ref = "Marine Corps")Navy                                  0.063844
##                                                                            z value
## (Intercept)                                                                -19.661
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                   -4.577
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                   8.181
## relevel(age.cat, ref = "65-91")18-24                                         5.342
## relevel(age.cat, ref = "65-91")25-34                                         7.244
## relevel(age.cat, ref = "65-91")35-44                                         7.129
## relevel(age.cat, ref = "65-91")45-54                                         4.746
## relevel(age.cat, ref = "65-91")55-64                                         4.037
## relevel(Marital.Status, ref = "Single ")Cohabitation                         1.667
## relevel(Marital.Status, ref = "Single ")Divorced                             0.555
## relevel(Marital.Status, ref = "Single ")Married                             -2.983
## relevel(Marital.Status, ref = "Single ")Separated                           -0.020
## relevel(Marital.Status, ref = "Single ")Widowed                              0.645
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran -1.206
## relevel(Status, ref = "I am Currently Serving")I am a Veteran               -2.872
## relevel(Branch, ref = "Marine Corps")Air Force                               2.579
## relevel(Branch, ref = "Marine Corps")Army                                    2.054
## relevel(Branch, ref = "Marine Corps")Coast Guard                             2.215
## relevel(Branch, ref = "Marine Corps")Navy                                    2.056
##                                                                            Pr(>|z|)
## (Intercept)                                                                < 2e-16
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                  4.71e-06
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                 2.81e-16
## relevel(age.cat, ref = "65-91")18-24                                       9.19e-08
## relevel(age.cat, ref = "65-91")25-34                                       4.36e-13
## relevel(age.cat, ref = "65-91")35-44                                       1.01e-12
## relevel(age.cat, ref = "65-91")45-54                                       2.08e-06
## relevel(age.cat, ref = "65-91")55-64                                       5.42e-05
## relevel(Marital.Status, ref = "Single ")Cohabitation                       0.09547
## relevel(Marital.Status, ref = "Single ")Divorced                           0.57863
## relevel(Marital.Status, ref = "Single ")Married                            0.00286
## relevel(Marital.Status, ref = "Single ")Separated                          0.98392
## relevel(Marital.Status, ref = "Single ")Widowed                            0.51881
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.22773
## relevel(Status, ref = "I am Currently Serving")I am a Veteran               0.00408
## relevel(Branch, ref = "Marine Corps")Air Force                             0.00992
## relevel(Branch, ref = "Marine Corps")Army                                  0.03997
## relevel(Branch, ref = "Marine Corps")Coast Guard                           0.02678
## relevel(Branch, ref = "Marine Corps")Navy                                  0.03977
##
```

```
## (Intercept)                                                                        ***
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                           ***
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                          ***
## relevel(age.cat, ref = "65-91")18-24                                                ***
## relevel(age.cat, ref = "65-91")25-34                                                ***
## relevel(age.cat, ref = "65-91")35-44                                                ***
## relevel(age.cat, ref = "65-91")45-54                                                ***
## relevel(age.cat, ref = "65-91")55-64                                                ***
## relevel(Marital.Status, ref = "Single ")Cohabitation                               .
## relevel(Marital.Status, ref = "Single ")Divorced
## relevel(Marital.Status, ref = "Single ")Married                                     **
## relevel(Marital.Status, ref = "Single ")Separated
## relevel(Marital.Status, ref = "Single ")Widowed
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                        **
## relevel(Branch, ref = "Marine Corps")Air Force                                       **
## relevel(Branch, ref = "Marine Corps")Army                                            *
## relevel(Branch, ref = "Marine Corps")Coast Guard                                     *
## relevel(Branch, ref = "Marine Corps")Navy                                            *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 24010  on 31179  degrees of freedom
## Residual deviance: 23713  on 31161  degrees of freedom
## AIC: 23751
##
## Number of Fisher Scoring iterations: 5
```

```
app.glm.OR=data.frame(exp(cbind(OR = coef(app.glm), confint(app.glm))))
```

```
## Waiting for profiling to be done...
```

```
app.glm.OR
```

```
##                                                                                OR
## (Intercept)                                                            0.09250349
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say              0.77933655
## relevel(Suicide.Thoughts, ref = "No.")Yes.                             1.40422378
## relevel(age.cat, ref = "65-91")18-24                                   1.91137004
## relevel(age.cat, ref = "65-91")25-34                                   1.96431570
## relevel(age.cat, ref = "65-91")35-44                                   1.88615527
## relevel(age.cat, ref = "65-91")45-54                                   1.52615581
## relevel(age.cat, ref = "65-91")55-64                                   1.46535008
## relevel(Marital.Status, ref = "Single ")Cohabitation                   1.15961029
## relevel(Marital.Status, ref = "Single ")Divorced                       1.03927219
## relevel(Marital.Status, ref = "Single ")Married                        0.85105088
## relevel(Marital.Status, ref = "Single ")Separated                      0.99722261
## relevel(Marital.Status, ref = "Single ")Widowed                        1.10928254
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.74688089
## relevel(Status, ref = "I am Currently Serving")I am a Veteran          0.87692320
## relevel(Branch, ref = "Marine Corps")Air Force                         1.17825455
```

```
## relevel(Branch, ref = "Marine Corps")Army                                    1.12433675
## relevel(Branch, ref = "Marine Corps")Coast Guard                             1.31957732
## relevel(Branch, ref = "Marine Corps")Navy                                    1.14027742
##                                                                                   X2.5..
## (Intercept)                                                                    0.07280369
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                     0.69969347
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                    1.29413570
## relevel(age.cat, ref = "65-91")18-24                                          1.50759639
## relevel(age.cat, ref = "65-91")25-34                                          1.64055352
## relevel(age.cat, ref = "65-91")35-44                                          1.58881664
## relevel(age.cat, ref = "65-91")45-54                                          1.28533010
## relevel(age.cat, ref = "65-91")55-64                                          1.22004171
## relevel(Marital.Status, ref = "Single ")Cohabitation                          0.97299023
## relevel(Marital.Status, ref = "Single ")Divorced                              0.90717209
## relevel(Marital.Status, ref = "Single ")Married                               0.76607089
## relevel(Marital.Status, ref = "Single ")Separated                             0.75593241
## relevel(Marital.Status, ref = "Single ")Widowed                               0.80158011
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.45128207
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                  0.80201776
## relevel(Branch, ref = "Marine Corps")Air Force                                1.04073704
## relevel(Branch, ref = "Marine Corps")Army                                     1.00630618
## relevel(Branch, ref = "Marine Corps")Coast Guard                              1.02764313
## relevel(Branch, ref = "Marine Corps")Navy                                     1.00670446
##                                                                                   X97.5..
## (Intercept)                                                                    0.1170383
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                     0.8662738
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                    1.5227521
## relevel(age.cat, ref = "65-91")18-24                                          2.4257252
## relevel(age.cat, ref = "65-91")25-34                                          2.3645567
## relevel(age.cat, ref = "65-91")35-44                                          2.2525959
## relevel(age.cat, ref = "65-91")45-54                                          1.8228803
## relevel(age.cat, ref = "65-91")55-64                                          1.7685106
## relevel(Marital.Status, ref = "Single ")Cohabitation                          1.3784153
## relevel(Marital.Status, ref = "Single ")Divorced                              1.1906670
## relevel(Marital.Status, ref = "Single ")Married                               0.9469811
## relevel(Marital.Status, ref = "Single ")Separated                             1.2993563
## relevel(Marital.Status, ref = "Single ")Widowed                               1.5070901
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 1.1709120
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                  0.9595050
## relevel(Branch, ref = "Marine Corps")Air Force                                1.3355486
## relevel(Branch, ref = "Marine Corps")Army                                     1.2585767
## relevel(Branch, ref = "Marine Corps")Coast Guard                              1.6796571
## relevel(Branch, ref = "Marine Corps")Navy                                     1.2930483
```

#7=Allow.Lock.Up.Guns
```
lockguns.glm=glm(formula = Allow.Lock.Up.Guns ~ relevel(Suicide.Thoughts, ref="No.") + relevel(age.cat,
summary(lockguns.glm)
```

```
##
## Call:
## glm(formula = Allow.Lock.Up.Guns ~ relevel(Suicide.Thoughts,
##     ref = "No.") + relevel(age.cat, ref = "65-91") + relevel(Marital.Status,
##     ref = "Single ") + relevel(Status, ref = "I am Currently Serving") +
##     relevel(Branch, ref = "Marine Corps"), family = "binomial",
```

```
##      data = complete.data)
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -1.0346  -0.8304  -0.7163   1.4059   2.1757
##
## Coefficients:
##                                                                          Estimate
## (Intercept)                                                              -1.41041
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                -0.46738
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                0.01315
## relevel(age.cat, ref = "65-91")18-24                                      0.77653
## relevel(age.cat, ref = "65-91")25-34                                      0.68232
## relevel(age.cat, ref = "65-91")35-44                                      0.53530
## relevel(age.cat, ref = "65-91")45-54                                      0.28736
## relevel(age.cat, ref = "65-91")55-64                                      0.13797
## relevel(Marital.Status, ref = "Single ")Cohabitation                      0.21509
## relevel(Marital.Status, ref = "Single ")Divorced                          0.10071
## relevel(Marital.Status, ref = "Single ")Married                           0.18668
## relevel(Marital.Status, ref = "Single ")Separated                         0.23661
## relevel(Marital.Status, ref = "Single ")Widowed                          -0.16961
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran -0.59589
## relevel(Status, ref = "I am Currently Serving")I am a Veteran             -0.17757
## relevel(Branch, ref = "Marine Corps")Air Force                            0.03377
## relevel(Branch, ref = "Marine Corps")Army                                 0.01875
## relevel(Branch, ref = "Marine Corps")Coast Guard                          0.07326
## relevel(Branch, ref = "Marine Corps")Navy                                -0.02158
##                                                                          Std. Error
## (Intercept)                                                                0.08874
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                  0.04147
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                 0.03374
## relevel(age.cat, ref = "65-91")18-24                                       0.08829
## relevel(age.cat, ref = "65-91")25-34                                       0.06546
## relevel(age.cat, ref = "65-91")35-44                                       0.06198
## relevel(age.cat, ref = "65-91")45-54                                       0.06181
## relevel(age.cat, ref = "65-91")55-64                                       0.06680
## relevel(Marital.Status, ref = "Single ")Cohabitation                       0.07324
## relevel(Marital.Status, ref = "Single ")Divorced                           0.05689
## relevel(Marital.Status, ref = "Single ")Married                            0.04367
## relevel(Marital.Status, ref = "Single ")Separated                          0.11035
## relevel(Marital.Status, ref = "Single ")Widowed                            0.14124
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran   0.19143
## relevel(Status, ref = "I am Currently Serving")I am a Veteran               0.03505
## relevel(Branch, ref = "Marine Corps")Air Force                             0.04751
## relevel(Branch, ref = "Marine Corps")Army                                  0.04231
## relevel(Branch, ref = "Marine Corps")Coast Guard                           0.09814
## relevel(Branch, ref = "Marine Corps")Navy                                  0.04779
##                                                                          z value
## (Intercept)                                                              -15.893
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                -11.269
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                 0.390
## relevel(age.cat, ref = "65-91")18-24                                       8.796
## relevel(age.cat, ref = "65-91")25-34                                      10.424
## relevel(age.cat, ref = "65-91")35-44                                       8.637
```

```
## relevel(age.cat, ref = "65-91")45-54                                         4.649
## relevel(age.cat, ref = "65-91")55-64                                         2.065
## relevel(Marital.Status, ref = "Single ")Cohabitation                         2.937
## relevel(Marital.Status, ref = "Single ")Divorced                             1.770
## relevel(Marital.Status, ref = "Single ")Married                              4.275
## relevel(Marital.Status, ref = "Single ")Separated                            2.144
## relevel(Marital.Status, ref = "Single ")Widowed                             -1.201
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran  -3.113
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                -5.067
## relevel(Branch, ref = "Marine Corps")Air Force                               0.711
## relevel(Branch, ref = "Marine Corps")Army                                    0.443
## relevel(Branch, ref = "Marine Corps")Coast Guard                             0.746
## relevel(Branch, ref = "Marine Corps")Navy                                   -0.451
##                                                                             Pr(>|z|)
## (Intercept)                                                                 < 2e-16
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                   < 2e-16
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                  0.69666
## relevel(age.cat, ref = "65-91")18-24                                        < 2e-16
## relevel(age.cat, ref = "65-91")25-34                                        < 2e-16
## relevel(age.cat, ref = "65-91")35-44                                        < 2e-16
## relevel(age.cat, ref = "65-91")45-54                                        3.34e-06
## relevel(age.cat, ref = "65-91")55-64                                        0.03889
## relevel(Marital.Status, ref = "Single ")Cohabitation                        0.00331
## relevel(Marital.Status, ref = "Single ")Divorced                            0.07671
## relevel(Marital.Status, ref = "Single ")Married                             1.91e-05
## relevel(Marital.Status, ref = "Single ")Separated                           0.03201
## relevel(Marital.Status, ref = "Single ")Widowed                             0.22979
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran  0.00185
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                4.05e-07
## relevel(Branch, ref = "Marine Corps")Air Force                              0.47727
## relevel(Branch, ref = "Marine Corps")Army                                   0.65769
## relevel(Branch, ref = "Marine Corps")Coast Guard                            0.45540
## relevel(Branch, ref = "Marine Corps")Navy                                   0.65166
##
## (Intercept)                                                                 ***
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                   ***
## relevel(Suicide.Thoughts, ref = "No.")Yes.
## relevel(age.cat, ref = "65-91")18-24                                        ***
## relevel(age.cat, ref = "65-91")25-34                                        ***
## relevel(age.cat, ref = "65-91")35-44                                        ***
## relevel(age.cat, ref = "65-91")45-54                                        ***
## relevel(age.cat, ref = "65-91")55-64                                        *
## relevel(Marital.Status, ref = "Single ")Cohabitation                        **
## relevel(Marital.Status, ref = "Single ")Divorced                            .
## relevel(Marital.Status, ref = "Single ")Married                             ***
## relevel(Marital.Status, ref = "Single ")Separated                           *
## relevel(Marital.Status, ref = "Single ")Widowed
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran **
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                ***
## relevel(Branch, ref = "Marine Corps")Air Force
## relevel(Branch, ref = "Marine Corps")Army
## relevel(Branch, ref = "Marine Corps")Coast Guard
## relevel(Branch, ref = "Marine Corps")Navy
## ---
```

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##      Null deviance: 36009  on 31179  degrees of freedom
## Residual deviance: 35460  on 31161  degrees of freedom
## AIC: 35498
##
## Number of Fisher Scoring iterations: 4
```

```
lockguns.glm.OR=data.frame(exp(cbind(OR = coef(lockguns.glm), confint(lockguns.glm))))
```

```
## Waiting for profiling to be done...
```

```
lockguns.glm.OR
```

```
##                                                                                    OR
## (Intercept)                                                                 0.2440432
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                   0.6266403
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                  1.0132414
## relevel(age.cat, ref = "65-91")18-24                                        2.1739239
## relevel(age.cat, ref = "65-91")25-34                                        1.9784550
## relevel(age.cat, ref = "65-91")35-44                                        1.7079591
## relevel(age.cat, ref = "65-91")45-54                                        1.3329027
## relevel(age.cat, ref = "65-91")55-64                                        1.1479373
## relevel(Marital.Status, ref = "Single ")Cohabitation                       1.2399795
## relevel(Marital.Status, ref = "Single ")Divorced                           1.1059519
## relevel(Marital.Status, ref = "Single ")Married                            1.2052428
## relevel(Marital.Status, ref = "Single ")Separated                          1.2669518
## relevel(Marital.Status, ref = "Single ")Widowed                            0.8439905
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.5510704
## relevel(Status, ref = "I am Currently Serving")I am a Veteran               0.8373034
## relevel(Branch, ref = "Marine Corps")Air Force                             1.0343425
## relevel(Branch, ref = "Marine Corps")Army                                  1.0189264
## relevel(Branch, ref = "Marine Corps")Coast Guard                           1.0760063
## relevel(Branch, ref = "Marine Corps")Navy                                  0.9786559
##                                                                                X2.5..
## (Intercept)                                                                 0.2049353
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                   0.5774465
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                  0.9482388
## relevel(age.cat, ref = "65-91")18-24                                        1.8288000
## relevel(age.cat, ref = "65-91")25-34                                        1.7416943
## relevel(age.cat, ref = "65-91")35-44                                        1.5140369
## relevel(age.cat, ref = "65-91")45-54                                        1.1819360
## relevel(age.cat, ref = "65-91")55-64                                        1.0077637
## relevel(Marital.Status, ref = "Single ")Cohabitation                       1.0735417
## relevel(Marital.Status, ref = "Single ")Divorced                           0.9892632
## relevel(Marital.Status, ref = "Single ")Married                            1.1068130
## relevel(Marital.Status, ref = "Single ")Separated                          1.0179788
## relevel(Marital.Status, ref = "Single ")Widowed                            0.6354383
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.3731460
## relevel(Status, ref = "I am Currently Serving")I am a Veteran               0.7818075
## relevel(Branch, ref = "Marine Corps")Air Force                             0.9425373
```

```
## relevel(Branch, ref = "Marine Corps")Army                                        0.9381113
## relevel(Branch, ref = "Marine Corps")Coast Guard                                  0.8861823
## relevel(Branch, ref = "Marine Corps")Navy                                         0.8912899
##                                                                                      X97.5..
## (Intercept)                                                                       0.2902054
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                         0.6793988
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                        1.0823477
## relevel(age.cat, ref = "65-91")18-24                                              2.5851721
## relevel(age.cat, ref = "65-91")25-34                                              2.2512748
## relevel(age.cat, ref = "65-91")35-44                                              1.9305044
## relevel(age.cat, ref = "65-91")45-54                                              1.5060802
## relevel(age.cat, ref = "65-91")55-64                                              1.3094913
## relevel(Marital.Status, ref = "Single ")Cohabitation                             1.4306222
## relevel(Marital.Status, ref = "Single ")Divorced                                 1.2364496
## relevel(Marital.Status, ref = "Single ")Married                                  1.3134922
## relevel(Marital.Status, ref = "Single ")Separated                                1.5693656
## relevel(Marital.Status, ref = "Single ")Widowed                                  1.1062979
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.7920693
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                     0.8969459
## relevel(Branch, ref = "Marine Corps")Air Force                                    1.1354982
## relevel(Branch, ref = "Marine Corps")Army                                         1.1073768
## relevel(Branch, ref = "Marine Corps")Coast Guard                                  1.3022076
## relevel(Branch, ref = "Marine Corps")Navy                                         1.0749380
```

`#8=Allow.Gun.Access.Notification`
```
gunnot.glm=glm(formula = Allow.Gun.Access.Notification ~ relevel(Suicide.Thoughts, ref="No.") + relevel
summary(gunnot.glm)
```

```
##
## Call:
## glm(formula = Allow.Gun.Access.Notification ~ relevel(Suicide.Thoughts,
##      ref = "No.") + relevel(age.cat, ref = "65-91") + relevel(Marital.Status,
##      ref = "Single ") + relevel(Status, ref = "I am Currently Serving") +
##      relevel(Branch, ref = "Marine Corps"), family = "binomial",
##      data = complete.data)
##
## Deviance Residuals:
##     Min      1Q   Median       3Q      Max
## -0.9041  -0.6960  -0.6021  -0.4971   2.3111
##
## Coefficients:
##                                                                      Estimate
## (Intercept)                                                          -2.01104
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say            -0.54248
## relevel(Suicide.Thoughts, ref = "No.")Yes.                           -0.20053
## relevel(age.cat, ref = "65-91")18-24                                  1.06532
## relevel(age.cat, ref = "65-91")25-34                                  0.89613
## relevel(age.cat, ref = "65-91")35-44                                  0.76187
## relevel(age.cat, ref = "65-91")45-54                                  0.46764
## relevel(age.cat, ref = "65-91")55-64                                  0.28496
## relevel(Marital.Status, ref = "Single ")Cohabitation                 0.10379
## relevel(Marital.Status, ref = "Single ")Divorced                     0.05518
## relevel(Marital.Status, ref = "Single ")Married                      0.12559
## relevel(Marital.Status, ref = "Single ")Separated                    0.13300
```

```
## relevel(Marital.Status, ref = "Single ")Widowed                                      -0.11051
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran -0.38053
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                  -0.17091
## relevel(Branch, ref = "Marine Corps")Air Force                                  0.08501
## relevel(Branch, ref = "Marine Corps")Army                                       0.10277
## relevel(Branch, ref = "Marine Corps")Coast Guard                                0.13660
## relevel(Branch, ref = "Marine Corps")Navy                                       0.09854
##                                                                              Std. Error
## (Intercept)                                                                     0.10340
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                       0.04774
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                      0.03895
## relevel(age.cat, ref = "65-91")18-24                                            0.10049
## relevel(age.cat, ref = "65-91")25-34                                            0.07841
## relevel(age.cat, ref = "65-91")35-44                                            0.07494
## relevel(age.cat, ref = "65-91")45-54                                            0.07505
## relevel(age.cat, ref = "65-91")55-64                                            0.08079
## relevel(Marital.Status, ref = "Single ")Cohabitation                            0.08248
## relevel(Marital.Status, ref = "Single ")Divorced                                0.06369
## relevel(Marital.Status, ref = "Single ")Married                                 0.04835
## relevel(Marital.Status, ref = "Single ")Separated                               0.12537
## relevel(Marital.Status, ref = "Single ")Widowed                                 0.16018
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran   0.20959
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                    0.03855
## relevel(Branch, ref = "Marine Corps")Air Force                                   0.05426
## relevel(Branch, ref = "Marine Corps")Army                                        0.04841
## relevel(Branch, ref = "Marine Corps")Coast Guard                                 0.10934
## relevel(Branch, ref = "Marine Corps")Navy                                        0.05435
##                                                                                 z value
## (Intercept)                                                                     -19.450
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                       -11.362
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                       -5.149
## relevel(age.cat, ref = "65-91")18-24                                             10.601
## relevel(age.cat, ref = "65-91")25-34                                             11.429
## relevel(age.cat, ref = "65-91")35-44                                             10.166
## relevel(age.cat, ref = "65-91")45-54                                              6.231
## relevel(age.cat, ref = "65-91")55-64                                              3.527
## relevel(Marital.Status, ref = "Single ")Cohabitation                             1.258
## relevel(Marital.Status, ref = "Single ")Divorced                                 0.866
## relevel(Marital.Status, ref = "Single ")Married                                  2.598
## relevel(Marital.Status, ref = "Single ")Separated                                1.061
## relevel(Marital.Status, ref = "Single ")Widowed                                 -0.690
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran   -1.816
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                    -4.433
## relevel(Branch, ref = "Marine Corps")Air Force                                    1.567
## relevel(Branch, ref = "Marine Corps")Army                                         2.123
## relevel(Branch, ref = "Marine Corps")Coast Guard                                  1.249
## relevel(Branch, ref = "Marine Corps")Navy                                         1.813
##                                                                                Pr(>|z|)
## (Intercept)                                                                    < 2e-16
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                      < 2e-16
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                     2.62e-07
## relevel(age.cat, ref = "65-91")18-24                                           < 2e-16
## relevel(age.cat, ref = "65-91")25-34                                           < 2e-16
## relevel(age.cat, ref = "65-91")35-44                                           < 2e-16
```

```
## relevel(age.cat, ref = "65-91")45-54                                        4.64e-10
## relevel(age.cat, ref = "65-91")55-64                                         0.00042
## relevel(Marital.Status, ref = "Single ")Cohabitation                         0.20825
## relevel(Marital.Status, ref = "Single ")Divorced                             0.38632
## relevel(Marital.Status, ref = "Single ")Married                              0.00938
## relevel(Marital.Status, ref = "Single ")Separated                            0.28872
## relevel(Marital.Status, ref = "Single ")Widowed                              0.49026
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran  0.06943
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                 9.27e-06
## relevel(Branch, ref = "Marine Corps")Air Force                               0.11717
## relevel(Branch, ref = "Marine Corps")Army                                    0.03377
## relevel(Branch, ref = "Marine Corps")Coast Guard                             0.21153
## relevel(Branch, ref = "Marine Corps")Navy                                    0.06982
##
## (Intercept)                                                                  ***
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                    ***
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                   ***
## relevel(age.cat, ref = "65-91")18-24                                         ***
## relevel(age.cat, ref = "65-91")25-34                                         ***
## relevel(age.cat, ref = "65-91")35-44                                         ***
## relevel(age.cat, ref = "65-91")45-54                                         ***
## relevel(age.cat, ref = "65-91")55-64                                         ***
## relevel(Marital.Status, ref = "Single ")Cohabitation
## relevel(Marital.Status, ref = "Single ")Divorced
## relevel(Marital.Status, ref = "Single ")Married                              **
## relevel(Marital.Status, ref = "Single ")Separated
## relevel(Marital.Status, ref = "Single ")Widowed
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran .
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                 ***
## relevel(Branch, ref = "Marine Corps")Air Force
## relevel(Branch, ref = "Marine Corps")Army                                    *
## relevel(Branch, ref = "Marine Corps")Coast Guard
## relevel(Branch, ref = "Marine Corps")Navy                                    .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 30370  on 31179  degrees of freedom
## Residual deviance: 29808  on 31161  degrees of freedom
## AIC: 29846
##
## Number of Fisher Scoring iterations: 4
```

```
gunnot.glm.OR=data.frame(exp(cbind(OR = coef(gunnot.glm), confint(gunnot.glm))))
```

```
## Waiting for profiling to be done...
```

```
gunnot.glm.OR
```

```
##                                                                          OR
## (Intercept)                                                       0.1338489
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say         0.5813020
```

```
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                      0.8182985
## relevel(age.cat, ref = "65-91")18-24                                             2.9017608
## relevel(age.cat, ref = "65-91")25-34                                             2.4501030
## relevel(age.cat, ref = "65-91")35-44                                             2.1422708
## relevel(age.cat, ref = "65-91")45-54                                             1.5962259
## relevel(age.cat, ref = "65-91")55-64                                             1.3297101
## relevel(Marital.Status, ref = "Single ")Cohabitation                            1.1093696
## relevel(Marital.Status, ref = "Single ")Divorced                                1.0567272
## relevel(Marital.Status, ref = "Single ")Married                                 1.1338222
## relevel(Marital.Status, ref = "Single ")Separated                               1.1422548
## relevel(Marital.Status, ref = "Single ")Widowed                                 0.8953812
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran   0.6835002
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                    0.8429013
## relevel(Branch, ref = "Marine Corps")Air Force                                   1.0887291
## relevel(Branch, ref = "Marine Corps")Army                                        1.1082365
## relevel(Branch, ref = "Marine Corps")Coast Guard                                 1.1463724
## relevel(Branch, ref = "Marine Corps")Navy                                        1.1035630
##                                                                                      X2.5..
## (Intercept)                                                                       0.1091452
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                        0.5289658
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                       0.7578938
## relevel(age.cat, ref = "65-91")18-24                                             2.3843950
## relevel(age.cat, ref = "65-91")25-34                                             2.1046035
## relevel(age.cat, ref = "65-91")35-44                                             1.8530773
## relevel(age.cat, ref = "65-91")45-54                                             1.3804041
## relevel(age.cat, ref = "65-91")55-64                                             1.1365792
## relevel(Marital.Status, ref = "Single ")Cohabitation                            0.9427027
## relevel(Marital.Status, ref = "Single ")Divorced                                0.9326685
## relevel(Marital.Status, ref = "Single ")Married                                 1.0319255
## relevel(Marital.Status, ref = "Single ")Separated                               0.8892205
## relevel(Marital.Status, ref = "Single ")Widowed                                 0.6473970
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran   0.4444467
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                    0.7817076
## relevel(Branch, ref = "Marine Corps")Air Force                                   0.9792103
## relevel(Branch, ref = "Marine Corps")Army                                        1.0084661
## relevel(Branch, ref = "Marine Corps")Coast Guard                                 0.9225747
## relevel(Branch, ref = "Marine Corps")Navy                                        0.9923640
##                                                                                     X97.5..
## (Intercept)                                                                       0.1637027
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                        0.6378526
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                       0.8829108
## relevel(age.cat, ref = "65-91")18-24                                             3.5359926
## relevel(age.cat, ref = "65-91")25-34                                             2.8622162
## relevel(age.cat, ref = "65-91")35-44                                             2.4861612
## relevel(age.cat, ref = "65-91")45-54                                             1.8528181
## relevel(age.cat, ref = "65-91")55-64                                             1.5602222
## relevel(Marital.Status, ref = "Single ")Cohabitation                            1.3026770
## relevel(Marital.Status, ref = "Single ")Divorced                                1.1972163
## relevel(Marital.Status, ref = "Single ")Married                                 1.2472801
## relevel(Marital.Status, ref = "Single ")Separated                               1.4543047
## relevel(Marital.Status, ref = "Single ")Widowed                                 1.2145355
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran   1.0138468
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                    0.9092291
## relevel(Branch, ref = "Marine Corps")Air Force                                   1.2113224
```

```
## relevel(Branch, ref = "Marine Corps")Army                                    1.2192381
## relevel(Branch, ref = "Marine Corps")Coast Guard                             1.4166555
## relevel(Branch, ref = "Marine Corps")Navy                                    1.2280349
```

#9=Allow.Holding.Guns
```
gunhold.glm=glm(formula = Allow.Holding.Guns ~ relevel(Suicide.Thoughts, ref="No.") + relevel(age.cat, r
summary(gunhold.glm)
```

```
##
## Call:
## glm(formula = Allow.Holding.Guns ~ relevel(Suicide.Thoughts,
##     ref = "No.") + relevel(age.cat, ref = "65-91") + relevel(Marital.Status,
##     ref = "Single ") + relevel(Status, ref = "I am Currently Serving") +
##     relevel(Branch, ref = "Marine Corps"), family = "binomial",
##     data = complete.data)
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -0.9895  -0.7887  -0.7063  -0.5420   2.0519
##
## Coefficients:
##                                                                      Estimate
## (Intercept)                                                          -1.59247
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say            -0.36794
## relevel(Suicide.Thoughts, ref = "No.")Yes.                            0.09000
## relevel(age.cat, ref = "65-91")18-24                                  0.65292
## relevel(age.cat, ref = "65-91")25-34                                  0.61302
## relevel(age.cat, ref = "65-91")35-44                                  0.54457
## relevel(age.cat, ref = "65-91")45-54                                  0.34794
## relevel(age.cat, ref = "65-91")55-64                                  0.17304
## relevel(Marital.Status, ref = "Single ")Cohabitation                 0.29643
## relevel(Marital.Status, ref = "Single ")Divorced                     0.13500
## relevel(Marital.Status, ref = "Single ")Married                      0.16336
## relevel(Marital.Status, ref = "Single ")Separated                    0.31549
## relevel(Marital.Status, ref = "Single ")Widowed                      0.08377
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran -0.25254
## relevel(Status, ref = "I am Currently Serving")I am a Veteran        -0.16978
## relevel(Branch, ref = "Marine Corps")Air Force                        0.06854
## relevel(Branch, ref = "Marine Corps")Army                             0.07445
## relevel(Branch, ref = "Marine Corps")Coast Guard                     -0.10329
## relevel(Branch, ref = "Marine Corps")Navy                             0.02939
##                                                                     Std. Error
## (Intercept)                                                            0.09161
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say              0.04203
## relevel(Suicide.Thoughts, ref = "No.")Yes.                             0.03424
## relevel(age.cat, ref = "65-91")18-24                                   0.09161
## relevel(age.cat, ref = "65-91")25-34                                   0.06778
## relevel(age.cat, ref = "65-91")35-44                                   0.06409
## relevel(age.cat, ref = "65-91")45-54                                   0.06385
## relevel(age.cat, ref = "65-91")55-64                                   0.06899
## relevel(Marital.Status, ref = "Single ")Cohabitation                  0.07403
## relevel(Marital.Status, ref = "Single ")Divorced                      0.05807
## relevel(Marital.Status, ref = "Single ")Married                       0.04494
## relevel(Marital.Status, ref = "Single ")Separated                     0.11080
```

```
## relevel(Marital.Status, ref = "Single ")Widowed                                          0.13517
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran   0.17950
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                   0.03599
## relevel(Branch, ref = "Marine Corps")Air Force                                  0.04898
## relevel(Branch, ref = "Marine Corps")Army                                       0.04362
## relevel(Branch, ref = "Marine Corps")Coast Guard                                0.10523
## relevel(Branch, ref = "Marine Corps")Navy                                       0.04919
##                                                                                z value
## (Intercept)                                                                    -17.382
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                       -8.755
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                       2.628
## relevel(age.cat, ref = "65-91")18-24                                            7.128
## relevel(age.cat, ref = "65-91")25-34                                            9.044
## relevel(age.cat, ref = "65-91")35-44                                            8.496
## relevel(age.cat, ref = "65-91")45-54                                            5.450
## relevel(age.cat, ref = "65-91")55-64                                            2.508
## relevel(Marital.Status, ref = "Single ")Cohabitation                            4.004
## relevel(Marital.Status, ref = "Single ")Divorced                                2.325
## relevel(Marital.Status, ref = "Single ")Married                                 3.635
## relevel(Marital.Status, ref = "Single ")Separated                               2.847
## relevel(Marital.Status, ref = "Single ")Widowed                                 0.620
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran  -1.407
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                   -4.717
## relevel(Branch, ref = "Marine Corps")Air Force                                  1.399
## relevel(Branch, ref = "Marine Corps")Army                                       1.707
## relevel(Branch, ref = "Marine Corps")Coast Guard                               -0.982
## relevel(Branch, ref = "Marine Corps")Navy                                       0.598
##                                                                                Pr(>|z|)
## (Intercept)                                                                    < 2e-16
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                      < 2e-16
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                     0.008580
## relevel(age.cat, ref = "65-91")18-24                                           1.02e-12
## relevel(age.cat, ref = "65-91")25-34                                           < 2e-16
## relevel(age.cat, ref = "65-91")35-44                                           < 2e-16
## relevel(age.cat, ref = "65-91")45-54                                           5.05e-08
## relevel(age.cat, ref = "65-91")55-64                                           0.012141
## relevel(Marital.Status, ref = "Single ")Cohabitation                          6.22e-05
## relevel(Marital.Status, ref = "Single ")Divorced                              0.020091
## relevel(Marital.Status, ref = "Single ")Married                               0.000278
## relevel(Marital.Status, ref = "Single ")Separated                             0.004407
## relevel(Marital.Status, ref = "Single ")Widowed                               0.535426
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.159463
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                  2.40e-06
## relevel(Branch, ref = "Marine Corps")Air Force                                0.161722
## relevel(Branch, ref = "Marine Corps")Army                                     0.087885
## relevel(Branch, ref = "Marine Corps")Coast Guard                              0.326297
## relevel(Branch, ref = "Marine Corps")Navy                                     0.550152
##
## (Intercept)                                                                    ***
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                      ***
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                     **
## relevel(age.cat, ref = "65-91")18-24                                           ***
## relevel(age.cat, ref = "65-91")25-34                                           ***
## relevel(age.cat, ref = "65-91")35-44                                           ***
```

```
## relevel(age.cat, ref = "65-91")45-54                                   ***
## relevel(age.cat, ref = "65-91")55-64                                   *
## relevel(Marital.Status, ref = "Single ")Cohabitation                   ***
## relevel(Marital.Status, ref = "Single ")Divorced                       *
## relevel(Marital.Status, ref = "Single ")Married                        ***
## relevel(Marital.Status, ref = "Single ")Separated                      **
## relevel(Marital.Status, ref = "Single ")Widowed
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran
## relevel(Status, ref = "I am Currently Serving")I am a Veteran          ***
## relevel(Branch, ref = "Marine Corps")Air Force
## relevel(Branch, ref = "Marine Corps")Army                               .
## relevel(Branch, ref = "Marine Corps")Coast Guard
## relevel(Branch, ref = "Marine Corps")Navy
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 34637  on 31179  degrees of freedom
## Residual deviance: 34255  on 31161  degrees of freedom
## AIC: 34293
##
## Number of Fisher Scoring iterations: 4
```

```
gunhold.glm.OR=data.frame(exp(cbind(OR = coef(gunhold.glm), confint(gunhold.glm))))
```

```
## Waiting for profiling to be done...
```

```
gunhold.glm.OR
```

```
##                                                                          OR
## (Intercept)                                                       0.2034230
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say         0.6921559
## relevel(Suicide.Thoughts, ref = "No.")Yes.                        1.0941751
## relevel(age.cat, ref = "65-91")18-24                              1.9211470
## relevel(age.cat, ref = "65-91")25-34                              1.8459896
## relevel(age.cat, ref = "65-91")35-44                              1.7238683
## relevel(age.cat, ref = "65-91")45-54                              1.4161428
## relevel(age.cat, ref = "65-91")55-64                              1.1889100
## relevel(Marital.Status, ref = "Single ")Cohabitation             1.3450548
## relevel(Marital.Status, ref = "Single ")Divorced                 1.1445377
## relevel(Marital.Status, ref = "Single ")Married                  1.1774598
## relevel(Marital.Status, ref = "Single ")Separated                1.3709294
## relevel(Marital.Status, ref = "Single ")Widowed                  1.0873801
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.7768279
## relevel(Status, ref = "I am Currently Serving")I am a Veteran     0.8438544
## relevel(Branch, ref = "Marine Corps")Air Force                   1.0709412
## relevel(Branch, ref = "Marine Corps")Army                        1.0772867
## relevel(Branch, ref = "Marine Corps")Coast Guard                 0.9018656
## relevel(Branch, ref = "Marine Corps")Navy                        1.0298294
##                                                                       X2.5..
## (Intercept)                                                       0.1698475
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say         0.6371147
```

```
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                         1.0229720
## relevel(age.cat, ref = "65-91")18-24                                               1.6055122
## relevel(age.cat, ref = "65-91")25-34                                               1.6178657
## relevel(age.cat, ref = "65-91")35-44                                               1.5220195
## relevel(age.cat, ref = "65-91")45-54                                               1.2509294
## relevel(age.cat, ref = "65-91")55-64                                               1.0393663
## relevel(Marital.Status, ref = "Single ")Cohabitation                              1.1627287
## relevel(Marital.Status, ref = "Single ")Divorced                                  1.0214385
## relevel(Marital.Status, ref = "Single ")Married                                   1.0786720
## relevel(Marital.Status, ref = "Single ")Separated                                 1.1005304
## relevel(Marital.Status, ref = "Single ")Widowed                                   0.8295840
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 0.5403148
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                      0.7864781
## relevel(Branch, ref = "Marine Corps")Air Force                                     0.9731207
## relevel(Branch, ref = "Marine Corps")Army                                          0.9893692
## relevel(Branch, ref = "Marine Corps")Coast Guard                                   0.7317616
## relevel(Branch, ref = "Marine Corps")Navy                                          0.9353631
##                                                                                         X97.5..
## (Intercept)                                                                         0.2432404
## relevel(Suicide.Thoughts, ref = "No.")I prefer not to say                          0.7512342
## relevel(Suicide.Thoughts, ref = "No.")Yes.                                         1.1699321
## relevel(age.cat, ref = "65-91")18-24                                               2.2992984
## relevel(age.cat, ref = "65-91")25-34                                               2.1103832
## relevel(age.cat, ref = "65-91")35-44                                               1.9568681
## relevel(age.cat, ref = "65-91")45-54                                               1.6067664
## relevel(age.cat, ref = "65-91")55-64                                               1.3622373
## relevel(Marital.Status, ref = "Single ")Cohabitation                              1.5542744
## relevel(Marital.Status, ref = "Single ")Divorced                                  1.2825915
## relevel(Marital.Status, ref = "Single ")Married                                   1.2865008
## relevel(Marital.Status, ref = "Single ")Separated                                 1.6996408
## relevel(Marital.Status, ref = "Single ")Widowed                                   1.4101447
## relevel(Status, ref = "I am Currently Serving")I am a Severely Wounded Veteran 1.0939797
## relevel(Status, ref = "I am Currently Serving")I am a Veteran                      0.9056647
## relevel(Branch, ref = "Marine Corps")Air Force                                     1.1791196
## relevel(Branch, ref = "Marine Corps")Army                                          1.1738856
## relevel(Branch, ref = "Marine Corps")Coast Guard                                   1.1056693
## relevel(Branch, ref = "Marine Corps")Navy                                          1.1343075
```

```r
OR.combined=rbind(nothing.glm.OR, knowing.glm.OR, resourcing.glm.OR, MH.glm.OR, prov.glm.OR, app.glm.OR
OR.combined= OR.combined %>% mutate_if(is.numeric, round, digits=2)
OR.combined$stats <- paste(OR.combined$OR,"(",OR.combined$X2.5..,"-", OR.combined$X97.5.., ")")
write.csv(OR.combined, "OR.combined.csv", row.names=T)
```