

poa_safety

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4/9/2022

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5.1)People who experienced or worried about discrimination due to the pandemic [30]

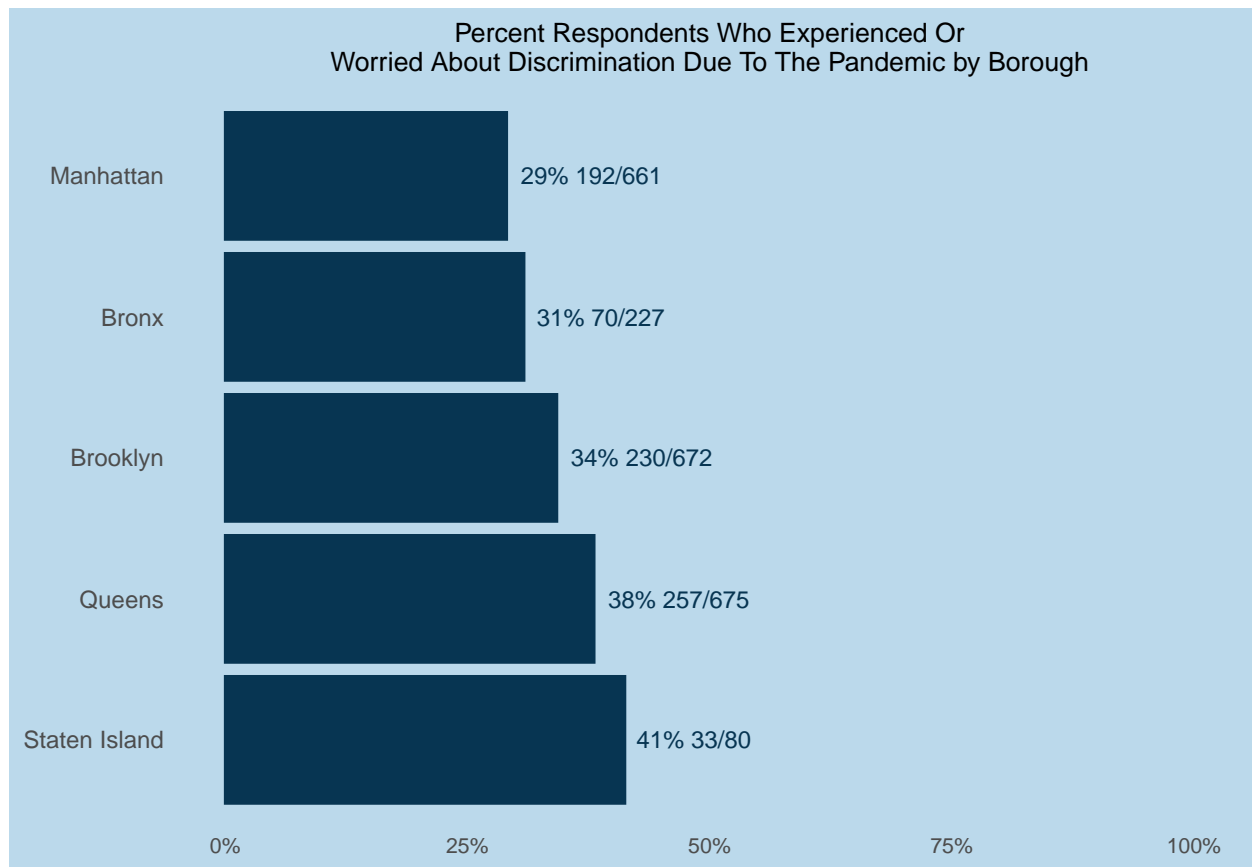
Run distribution over population Run distribution by sub-demographics (a-k) Compare and find gaps (test unequal proportions)

```
mean(wrangled$discrim_bi, na.rm = TRUE)
```

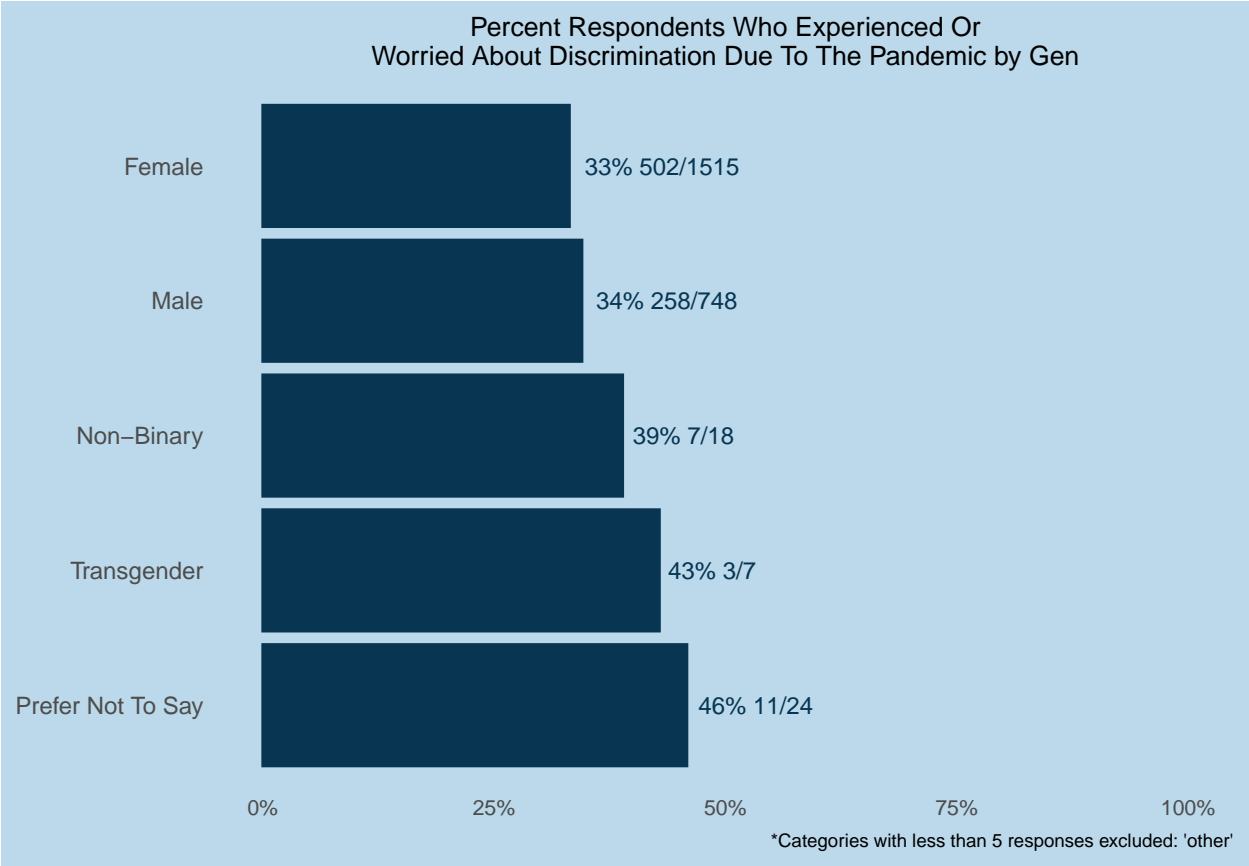
```
## [1] 0.337797
```

```
make_plots(wrangled, demographics, "discrim_bi", title = "Percent Respondents who experienced or\nworried about discrimination due to the pandemic by borough")
```

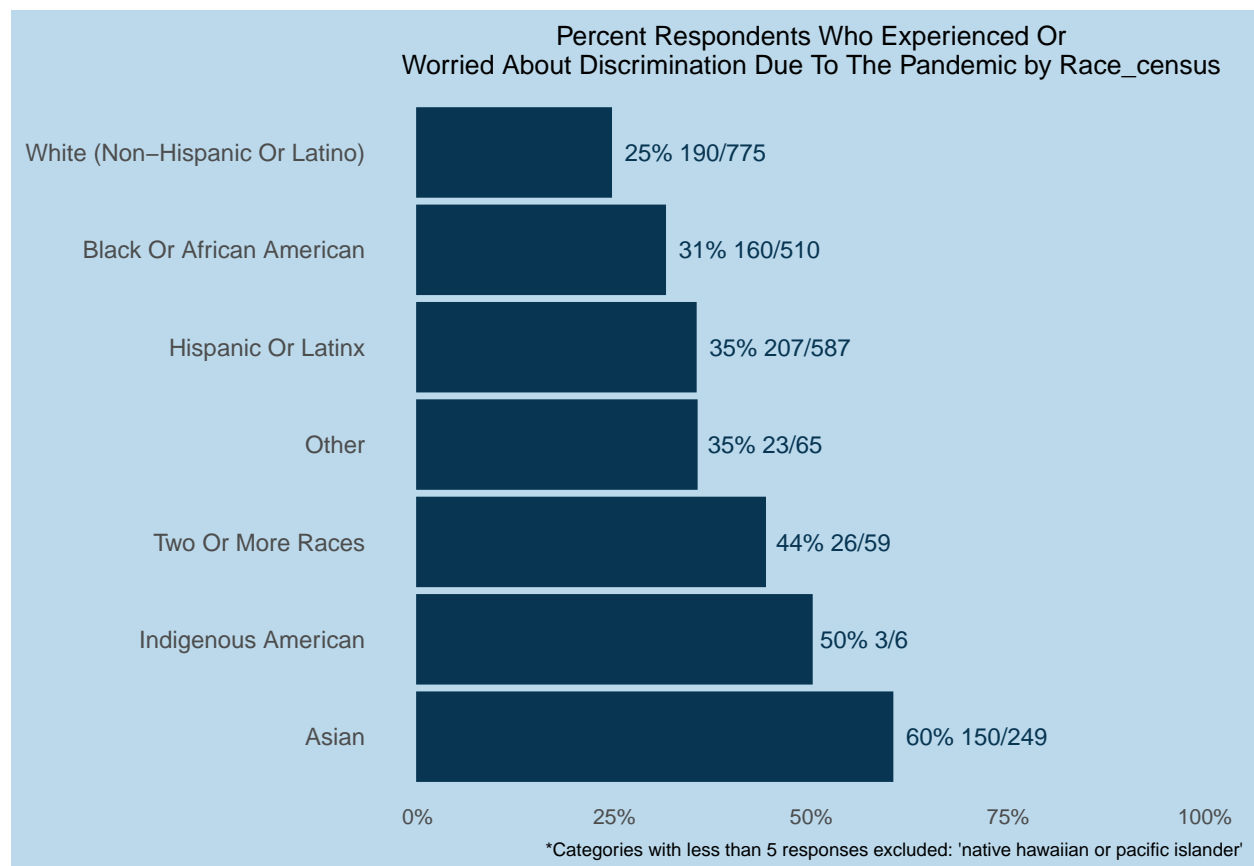
```
## $borough
## $borough$plot
```



```
##
## $borough$p.values
## $borough$p.values$discrim_bi
##      manhattan bronx brooklyn  queens staten island
## manhattan      NA    NA      NA 0.00059          NA
## bronx          NA    NA      NA    NA          NA
## brooklyn       NA    NA      NA    NA          NA
## queens      0.00059    NA      NA    NA          NA
## staten island   NA    NA      NA    NA          NA
##
##
##
## $gen
## $gen$plot
```

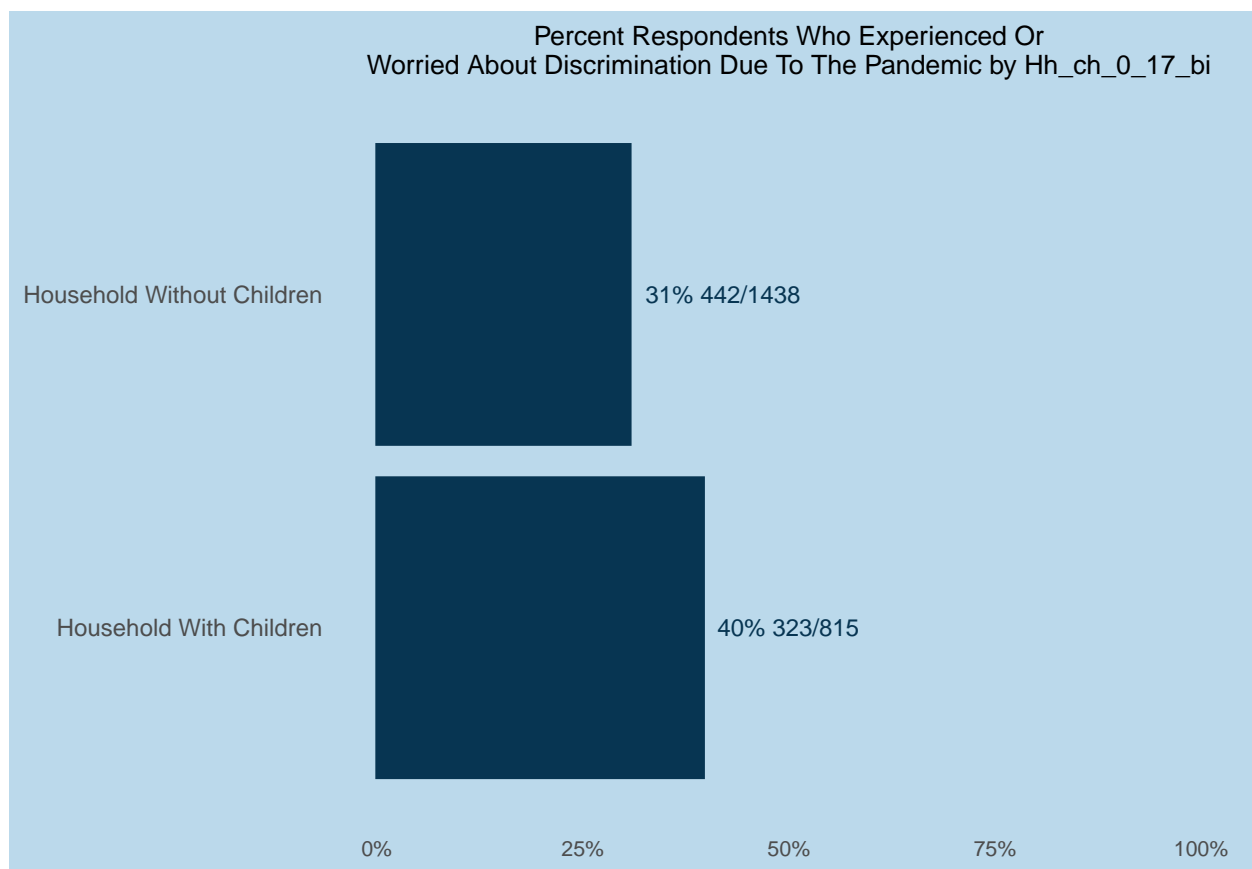


```
##
## $gen$p.values
## $gen$p.values$discrim_bi
##           female male non-binary transgender prefer not to say
## female           NA  NA         NA           NA           NA
## male             NA  NA         NA           NA           NA
## non-binary       NA  NA         NA           NA           NA
## transgender      NA  NA         NA           NA           NA
## prefer not to say NA  NA         NA           NA           NA
##
##
##
## $race_census
## $race_census$plot
```

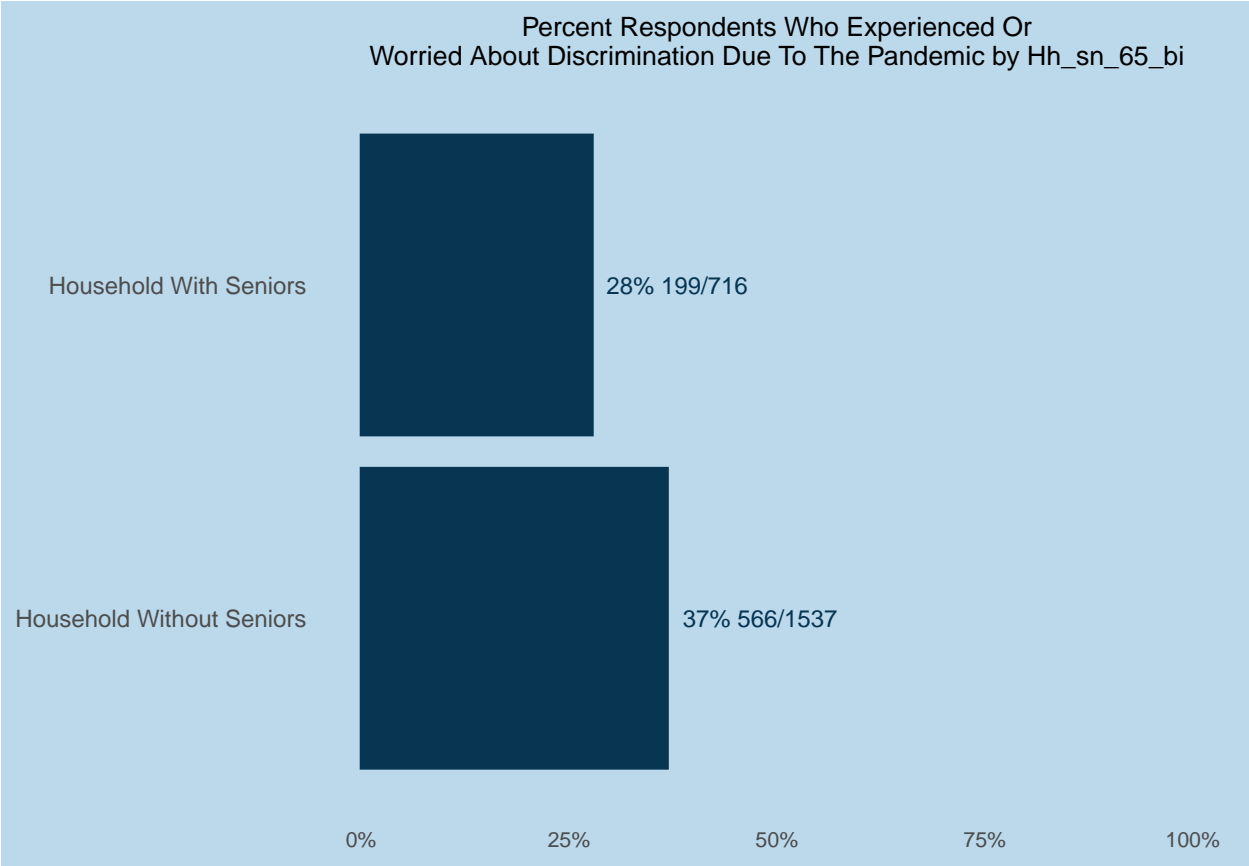


```
##
## $race_census$p.values
## $race_census$p.values$discrim_bi
##               white (non-hispanic or latino)
## white (non-hispanic or latino)              NA
## black or african american                   8.4e-03
## hispanic or latinx                         2.0e-05
## other                                       NA
## two or more races                         1.6e-03
## Indigenous American                       NA
## asian                                     4.8e-25
##               black or african american hispanic or latinx
## white (non-hispanic or latino)           8.4e-03          2.0e-05
## black or african american                NA              NA
## hispanic or latinx                      NA              NA
## other                                    NA              NA
## two or more races                       NA              NA
## Indigenous American                     NA              NA
## asian                                  5.6e-14          4.1e-11
##               other two or more races Indigenous American
## white (non-hispanic or latino)          NA          0.0016          NA
## black or african american                NA              NA          NA
## hispanic or latinx                      NA              NA          NA
## other                                    NA              NA          NA
## two or more races                       NA              NA          NA
## Indigenous American                     NA              NA          NA
```

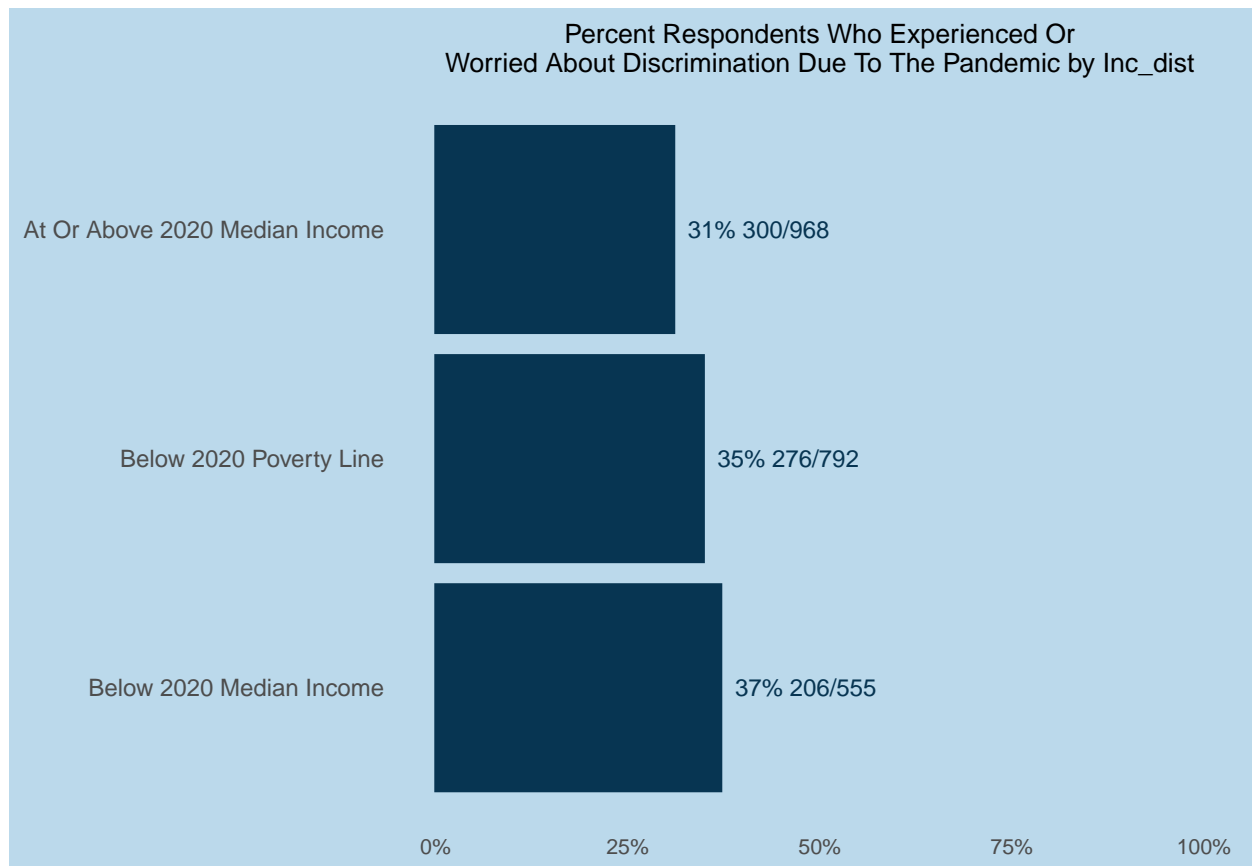
```
## asian 0.00057 NA NA
##
## white (non-hispanic or latino) 4.8e-25
## black or african american 5.6e-14
## hispanic or latinx 4.1e-11
## other 5.7e-04
## two or more races NA
## Indigenous American NA
## asian NA
##
##
## $hh_ch_0_17_bi
## $hh_ch_0_17_bi$plot
```



```
##
## $hh_ch_0_17_bi$p.values
## $hh_ch_0_17_bi$p.values$discrim_bi
## household without children household with children
## household without children NA 2.3e-05
## household with children 2.3e-05 NA
##
##
## $hh_sn_65_bi
## $hh_sn_65_bi$plot
```



```
##
## $hh_sn_65_bi$p.values
## $hh_sn_65_bi$p.values$discrim_bi
##           household with seniors household without seniors
## household with seniors              NA              3.1e-05
## household without seniors          3.1e-05              NA
##
##
##
## $inc_dist
## $inc_dist$plot
```



```
##
## $inc_dist$p.values
## $inc_dist$p.values$discrim_bi
##
## at or above 2020 median income
## at or above 2020 median income NA
## below 2020 poverty line NA
## below 2020 median income NA
##
## below 2020 poverty line below 2020 median income
## at or above 2020 median income NA NA
## below 2020 poverty line NA NA
## below 2020 median income NA NA
```

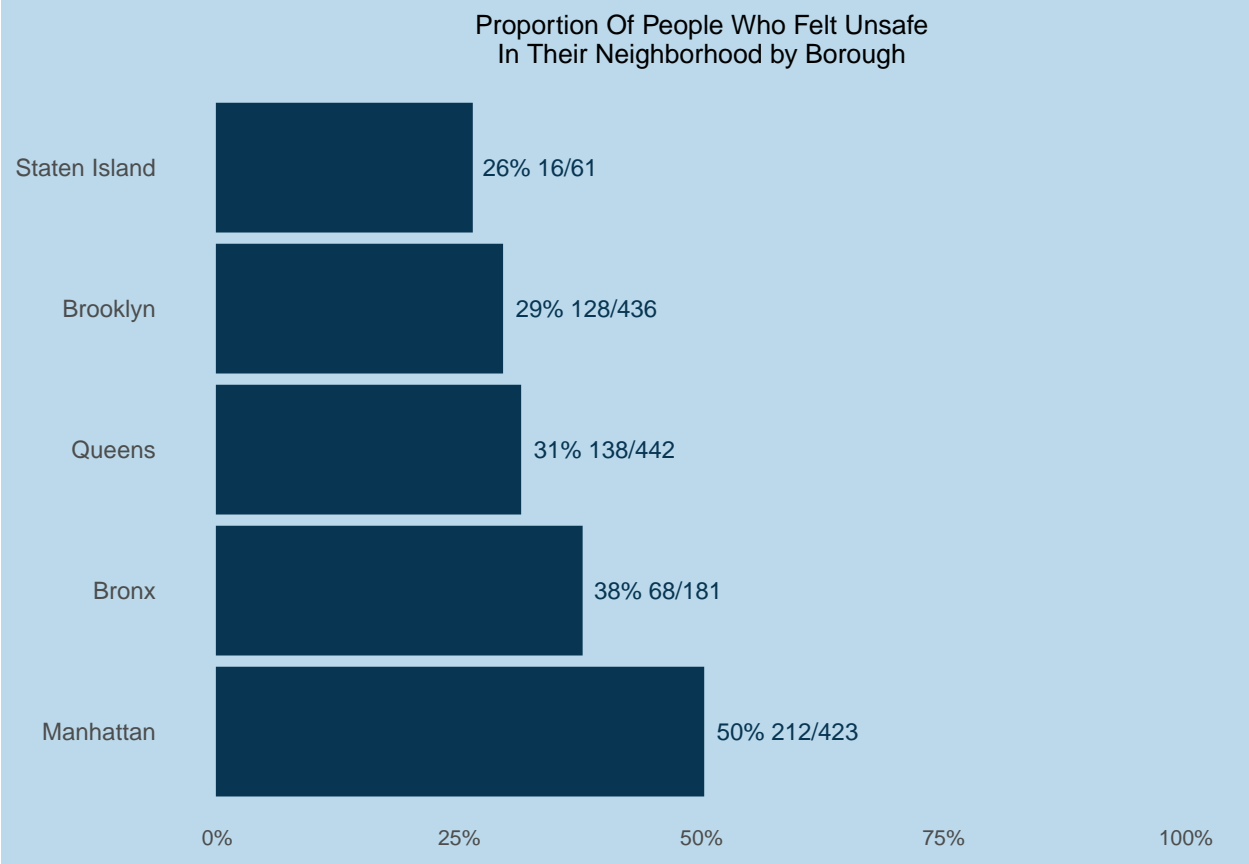
5.2) People who felt unsafe in their neighborhood in the past six months [17] Run distribution over population
Run distribution by sub-demographics (a-m) Compare and find gaps (test unequal proportions)

```
mean(wrangled$diff_neigh)
```

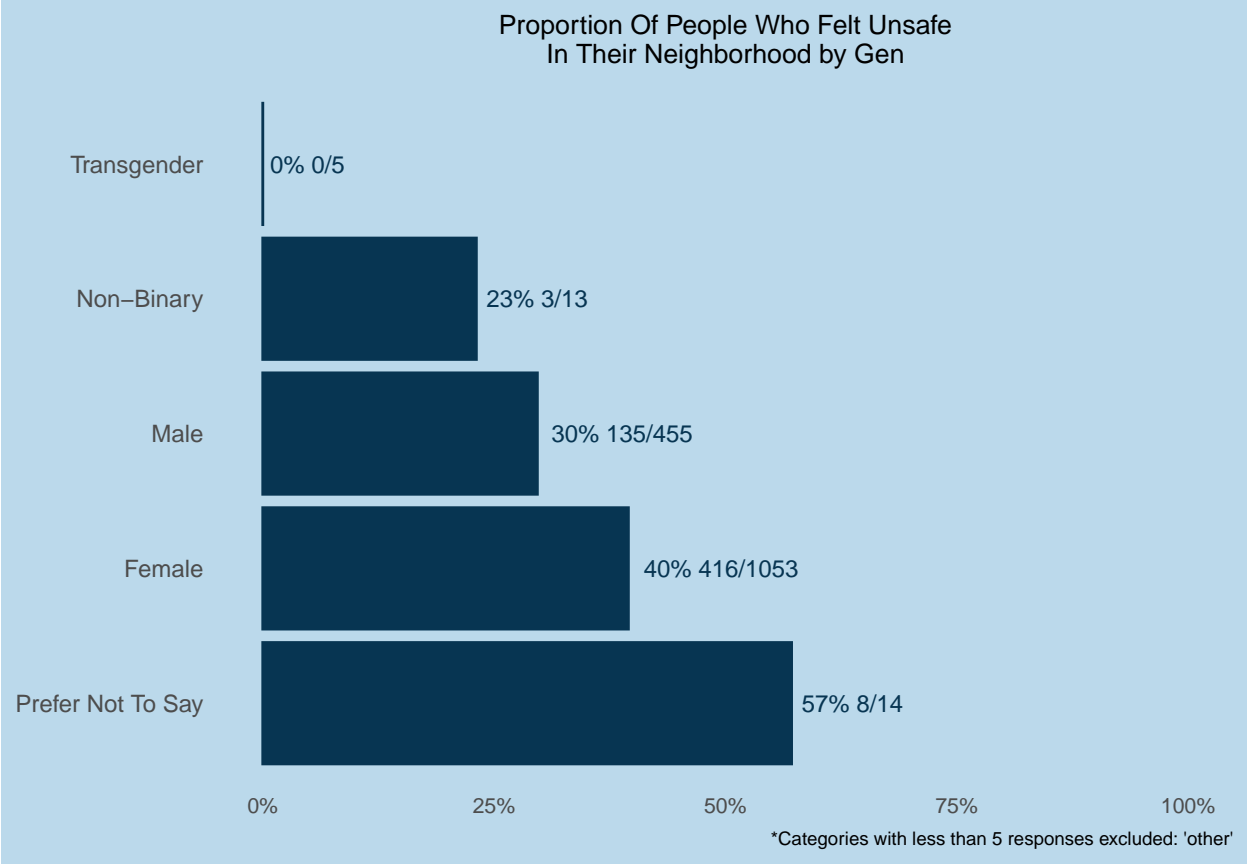
```
## [1] NA
```

```
make_plots(wrangled, demographics, "diff_neigh", title = "Proportion of People who felt unsafe\nin their neighborhood")
```

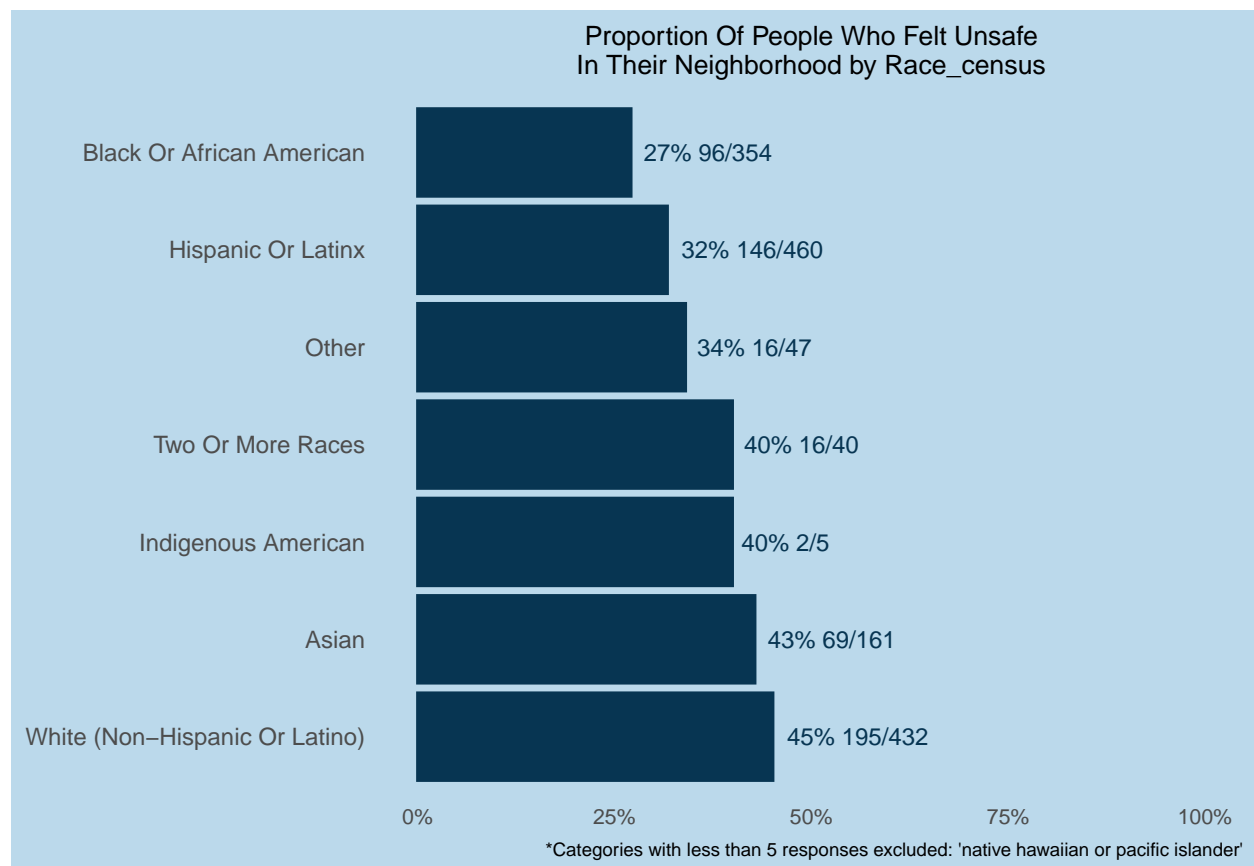
```
## $borough
## $borough$plot
```



```
##
## $borough$p.values
## $borough$p.values$diff_neigh
##          staten island brooklyn  queens   bronx manhattan
## staten island          NA        NA      NA      NA  7.9e-04
## brooklyn              NA        NA      NA      NA  7.7e-10
## queens                NA        NA      NA      NA  2.3e-08
## bronx                 NA        NA      NA      NA  6.1e-03
## manhattan             0.00079  7.7e-10  2.3e-08  0.0061      NA
##
##
##
## $gen
## $gen$plot
```

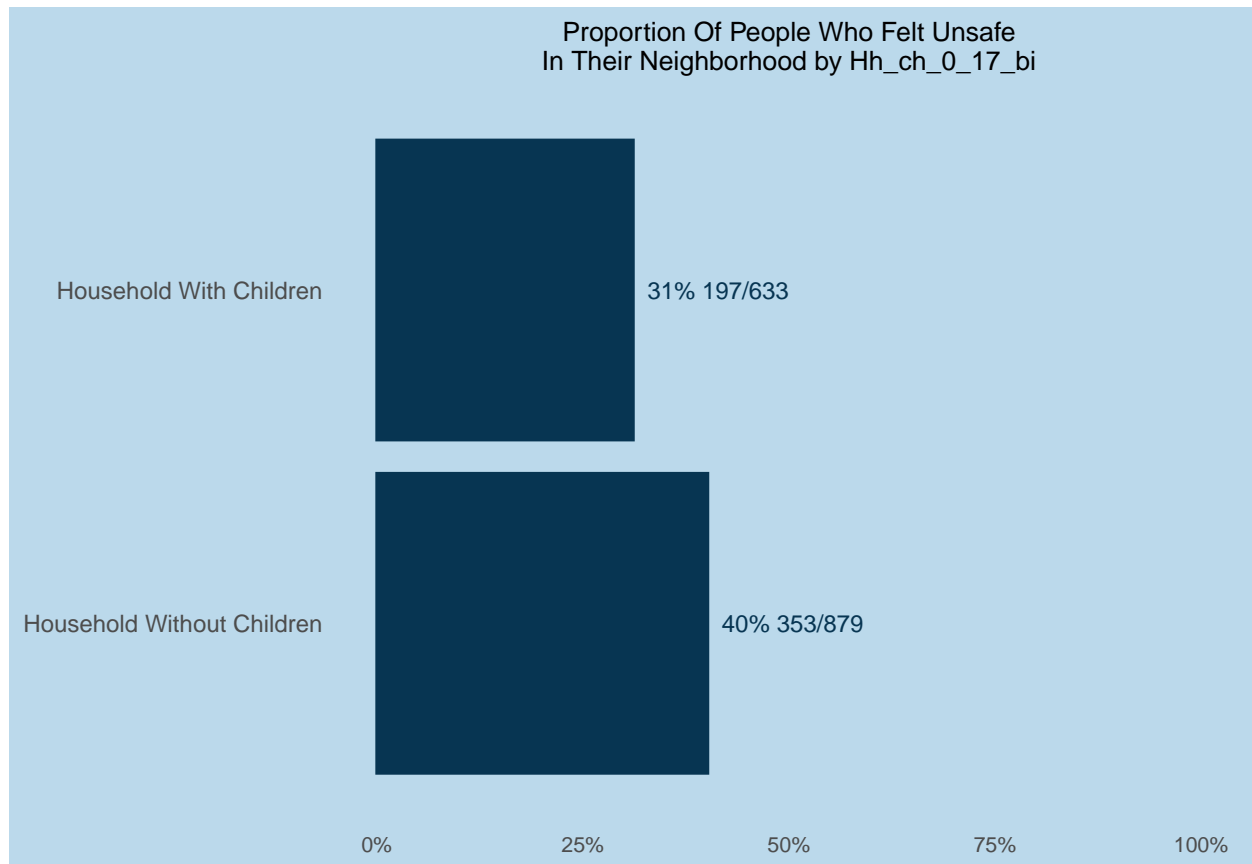



```
##
## $gen$p.values
## $gen$p.values$diff_neigh
##      transgender non-binary      male  female prefer not to say
## transgender      NA      NA      NA      NA      NA
## non-binary      NA      NA      NA      NA      NA
## male      NA      NA      NA 0.00034      NA
## female      NA      NA 0.00034      NA      NA
## prefer not to say      NA      NA      NA      NA      NA
##
##
##
## $race_census
## $race_census$plot
```

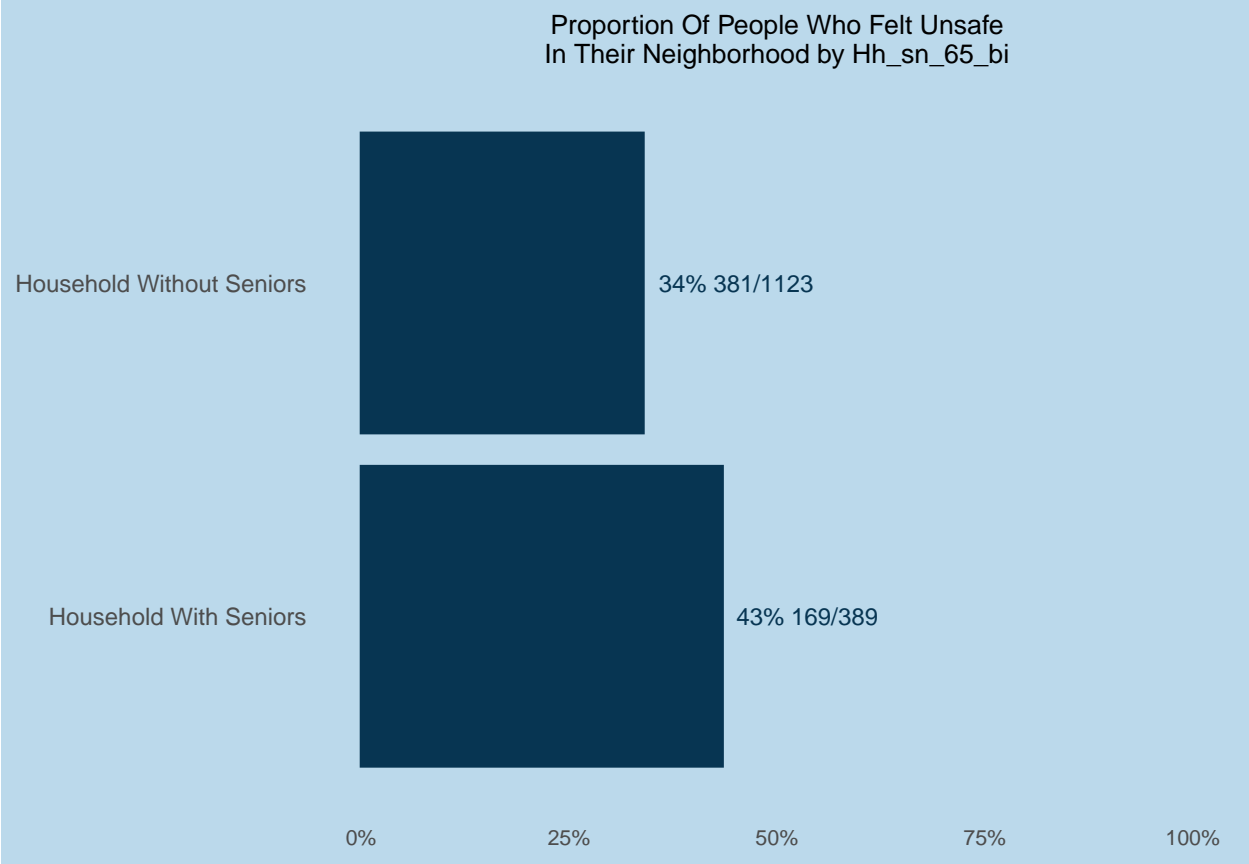


```
##
## $race_census$p.values
## $race_census$p.values$diff_neigh
##           black or african american hispanic or latinx
## black or african american           NA                NA
## hispanic or latinx                 NA                NA
## other                             NA                NA
## Indigenous American                NA                NA
## two or more races                  NA                NA
## asian                             5.7e-04           NA
## white (non-hispanic or latino)     2.9e-07           5.2e-05
##           other Indigenous American two or more races
## black or african american         NA                NA
## hispanic or latinx                NA                NA
## other                             NA                NA
## Indigenous American                NA                NA
## two or more races                  NA                NA
## asian                             NA                NA
## white (non-hispanic or latino)     NA                NA
##           asian white (non-hispanic or latino)
## black or african american         0.00057           2.9e-07
## hispanic or latinx                 NA                5.2e-05
## other                             NA                NA
## Indigenous American                NA                NA
## two or more races                  NA                NA
## asian                             NA                NA
```

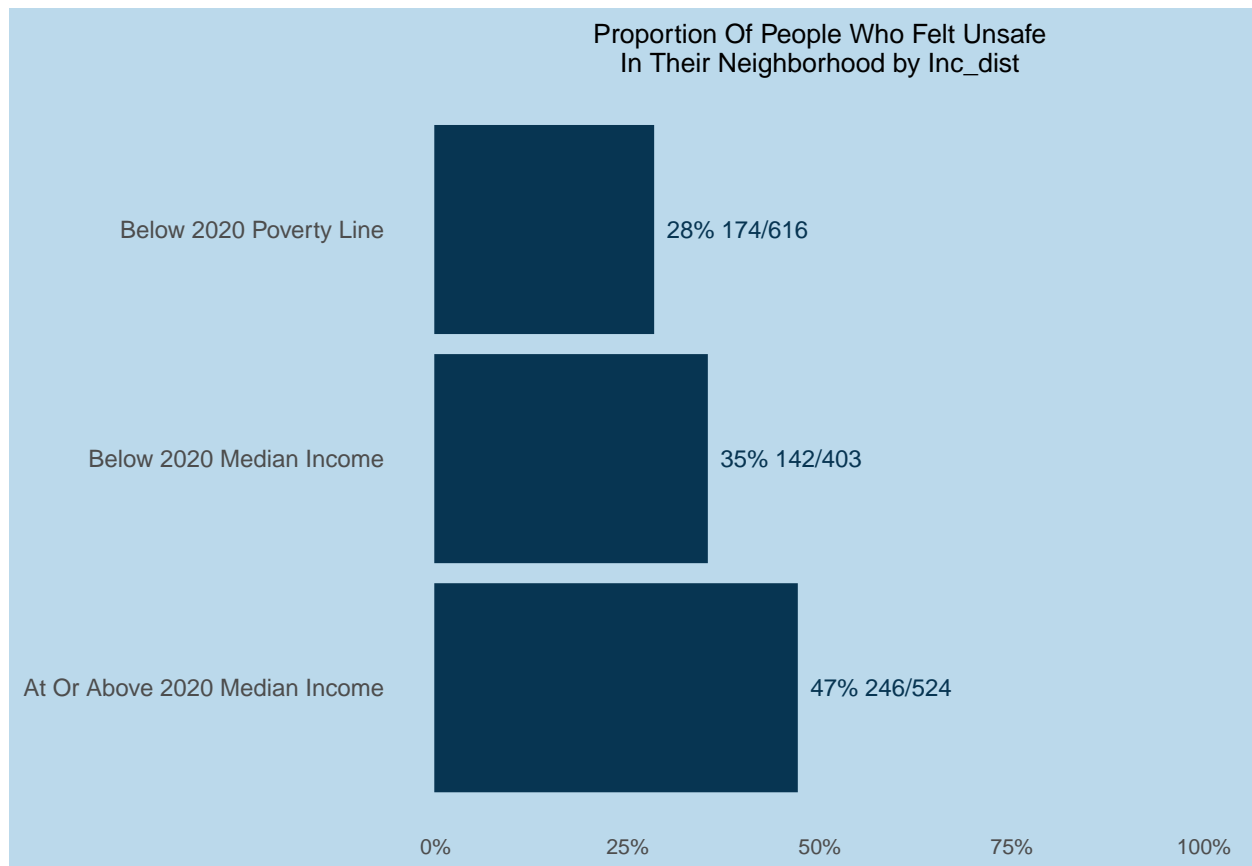
```
## white (non-hispanic or latino)      NA      NA
##
##
##
## $hh_ch_0_17_bi
## $hh_ch_0_17_bi$plot
```



```
##
## $hh_ch_0_17_bi$p.values
## $hh_ch_0_17_bi$p.values$diff_neigh
##           household with children household without children
## household with children              NA              0.00039
## household without children          0.00039              NA
##
##
##
## $hh_sn_65_bi
## $hh_sn_65_bi$plot
```



```
##  
## $hh_sn_65_bi$p.values  
## $hh_sn_65_bi$p.values$diff_neigh  
##  
## household without seniors household with seniors  
## household without seniors NA 0.00096  
## household with seniors 0.00096 NA  
##  
##  
##  
## $inc_dist  
## $inc_dist$plot
```



```
##
## $inc_dist$p.values
## $inc_dist$p.values$diff_neigh
##
##          below 2020 poverty line below 2020 median income
## below 2020 poverty line          NA                      NA
## below 2020 median income          NA                      NA
## at or above 2020 median income    1e-10                  0.00044
##
##          at or above 2020 median income
## below 2020 poverty line          1.0e-10
## below 2020 median income          4.4e-04
## at or above 2020 median income          NA
```

5.3) Respondents who have a low income (below median income) are more likely to experience violence [12 & 13]

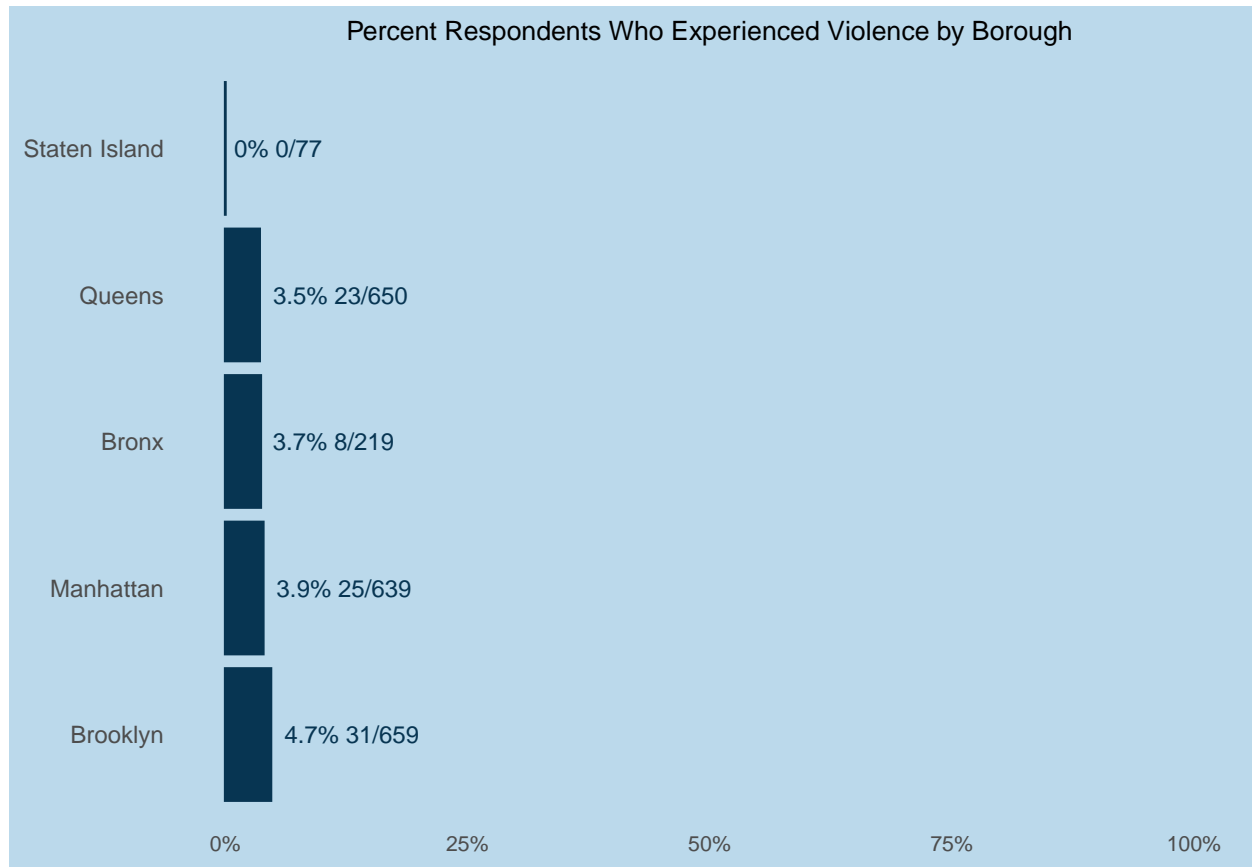
Find proportion who faced discrimination or violence[34] Find subset who are below median income[13]
Compare and contrast with group who are above median income within the larger proportion

```
mean(wrangled$diff_neigh, na.rm = TRUE)
```

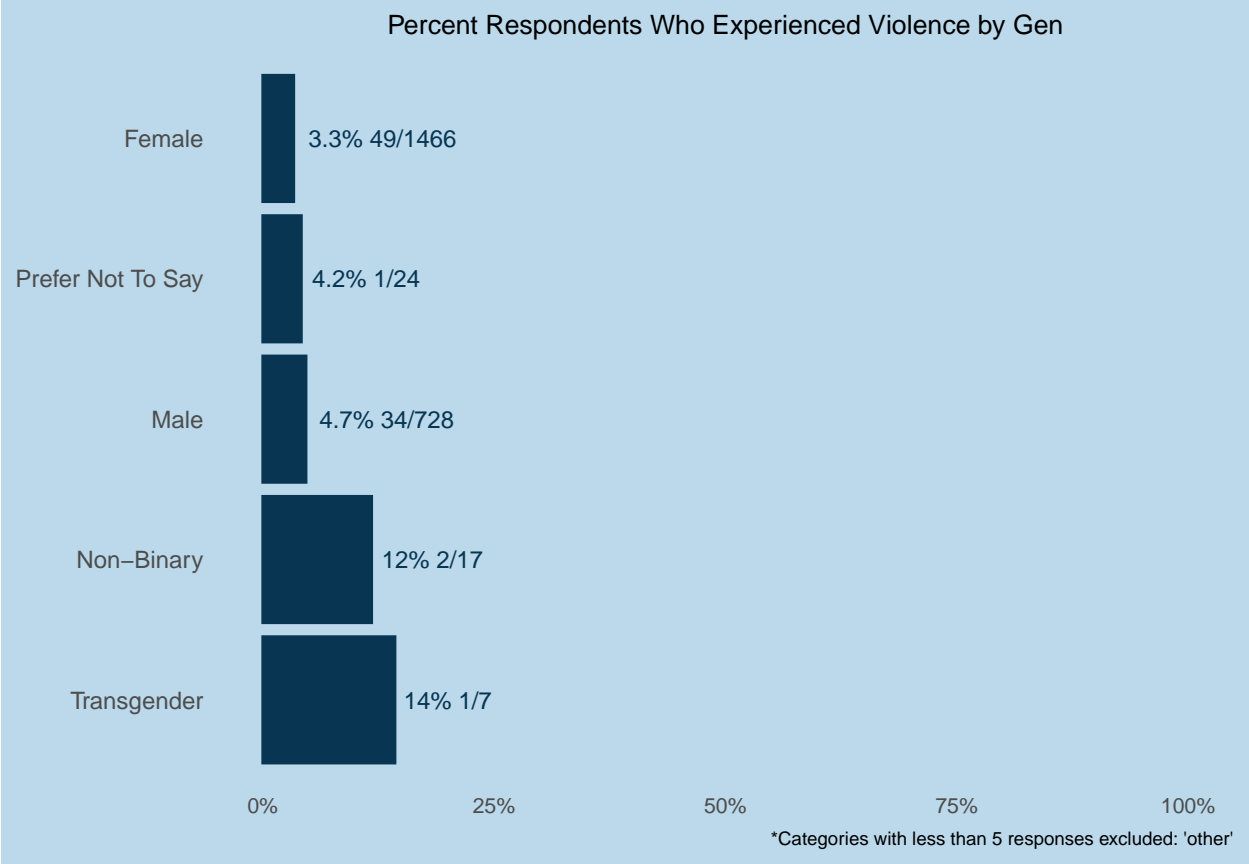
```
## [1] 0.3642255
```

```
make_plots(wrangled, demographics, "exp_vi", title = "Percent Respondents Who experienced violence", sh
```

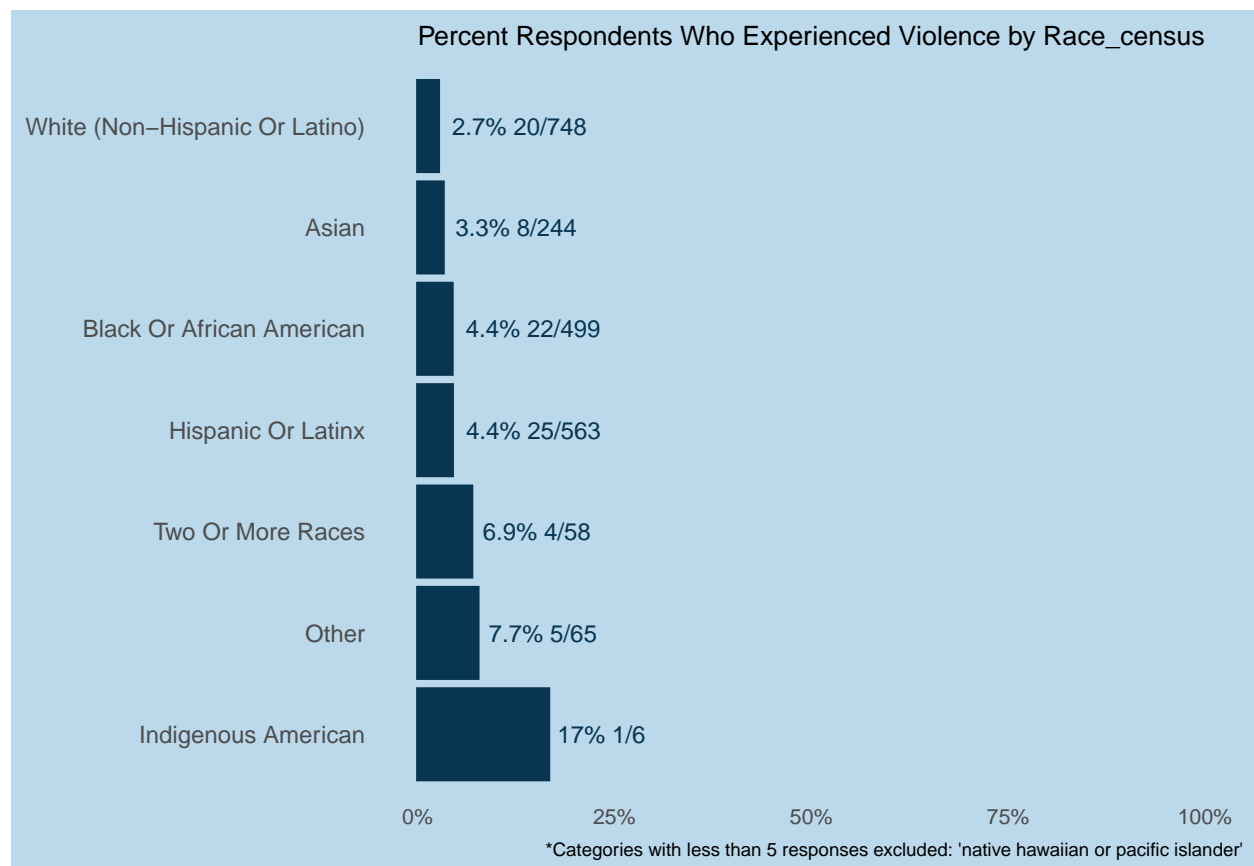
```
## $borough
## $borough$plot
```



```
##
## $borough$p.values
## $borough$p.values$exp_vi
##      staten island queens bronx manhattan brooklyn
## staten island      NA      NA      NA      NA      NA
## queens              NA      NA      NA      NA      NA
## bronx               NA      NA      NA      NA      NA
## manhattan           NA      NA      NA      NA      NA
## brooklyn            NA      NA      NA      NA      NA
##
##
##
## $gen
## $gen$plot
```



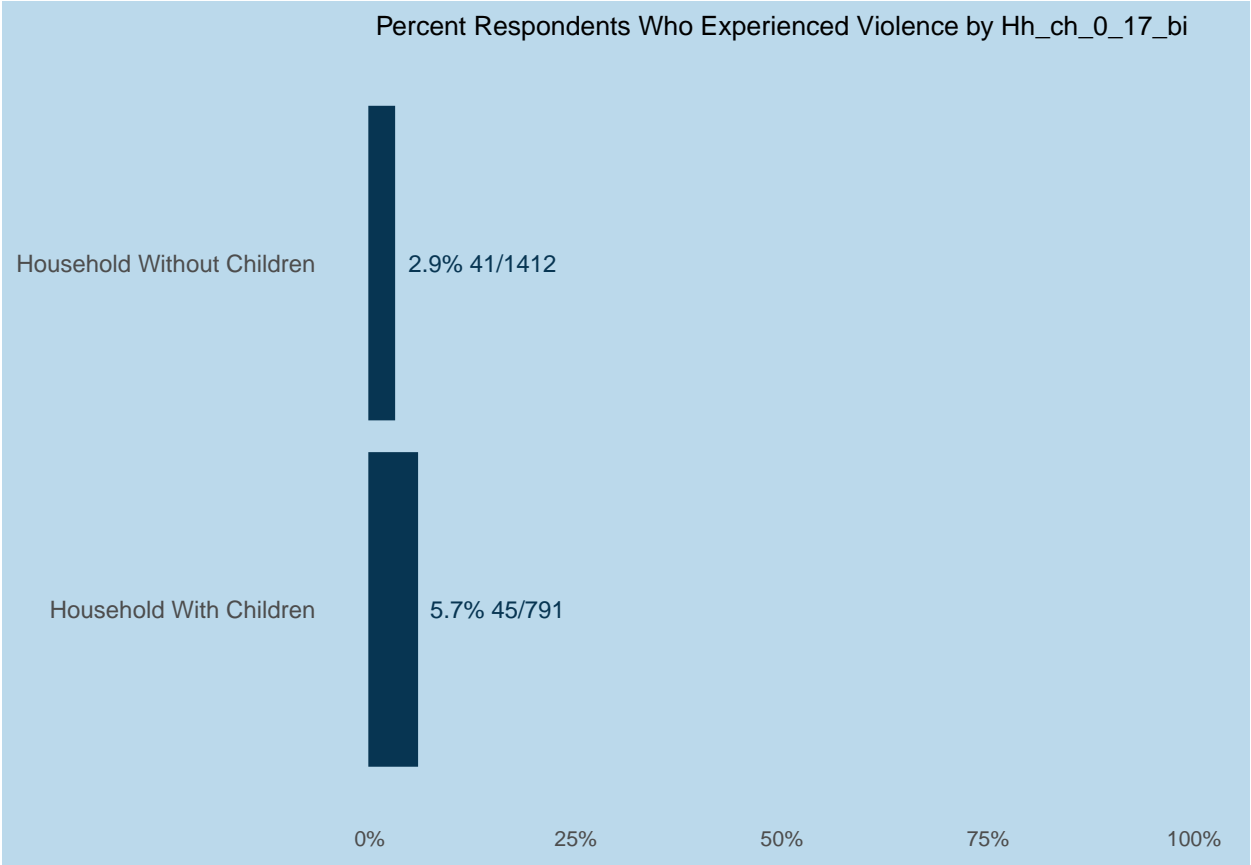
```
##
## $gen$p.values
## $gen$p.values$exp_vi
##
##      female prefer not to say male non-binary transgender
## female      NA              NA  NA      NA      NA
## prefer not to say  NA              NA  NA      NA      NA
## male              NA              NA  NA      NA      NA
## non-binary         NA              NA  NA      NA      NA
## transgender        NA              NA  NA      NA      NA
##
##
##
## $race_census
## $race_census$plot
```



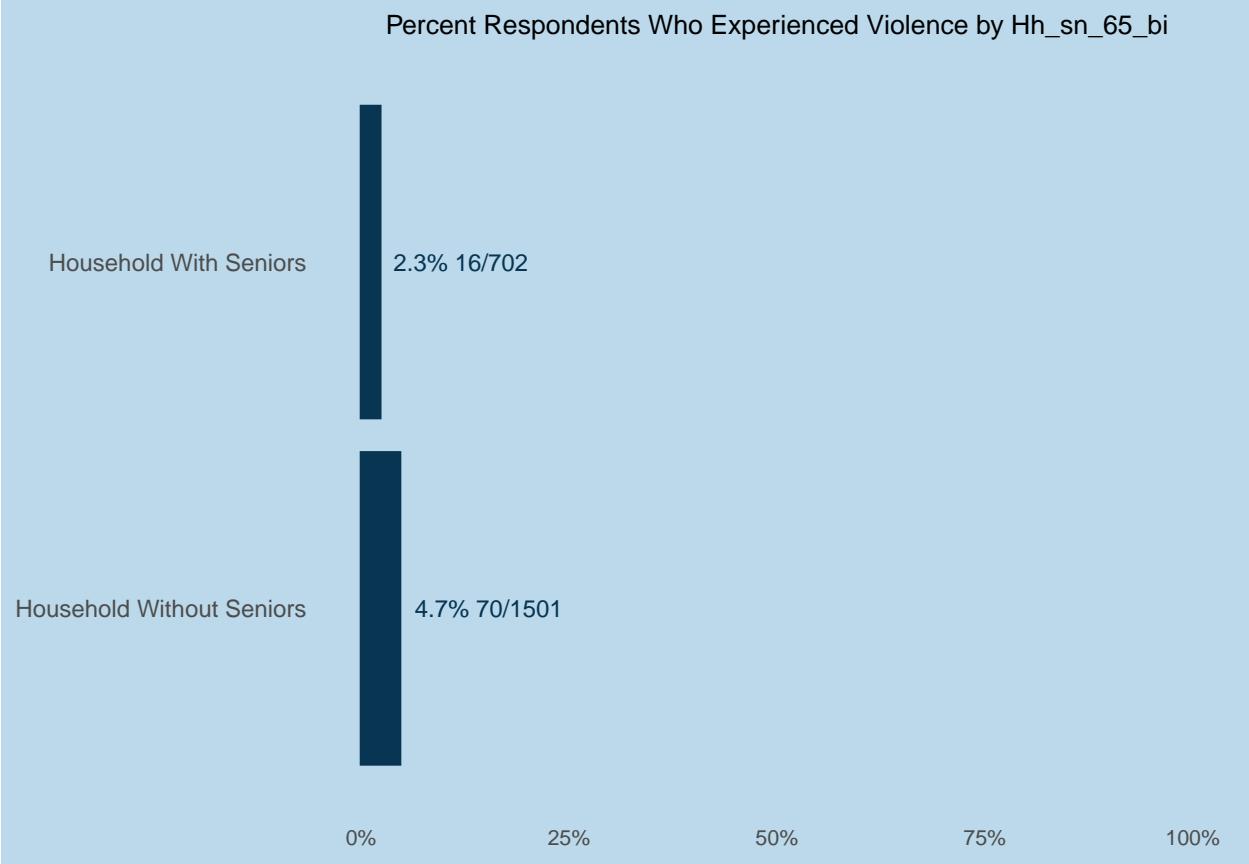
```
##
## $race_census$p.values
## $race_census$p.values$exp_vi
##
## white (non-hispanic or latino) asian
## white (non-hispanic or latino) NA NA
## asian NA NA
## black or african american NA NA
## hispanic or latinx NA NA
## two or more races NA NA
## other NA NA
## Indigenous American NA NA
##
## black or african american hispanic or latinx
## white (non-hispanic or latino) NA NA
## asian NA NA
## black or african american NA NA
## hispanic or latinx NA NA
## two or more races NA NA
## other NA NA
## Indigenous American NA NA
##
## two or more races other Indigenous American
## white (non-hispanic or latino) NA NA NA
## asian NA NA NA
## black or african american NA NA NA
## hispanic or latinx NA NA NA
## two or more races NA NA NA
## other NA NA NA
```



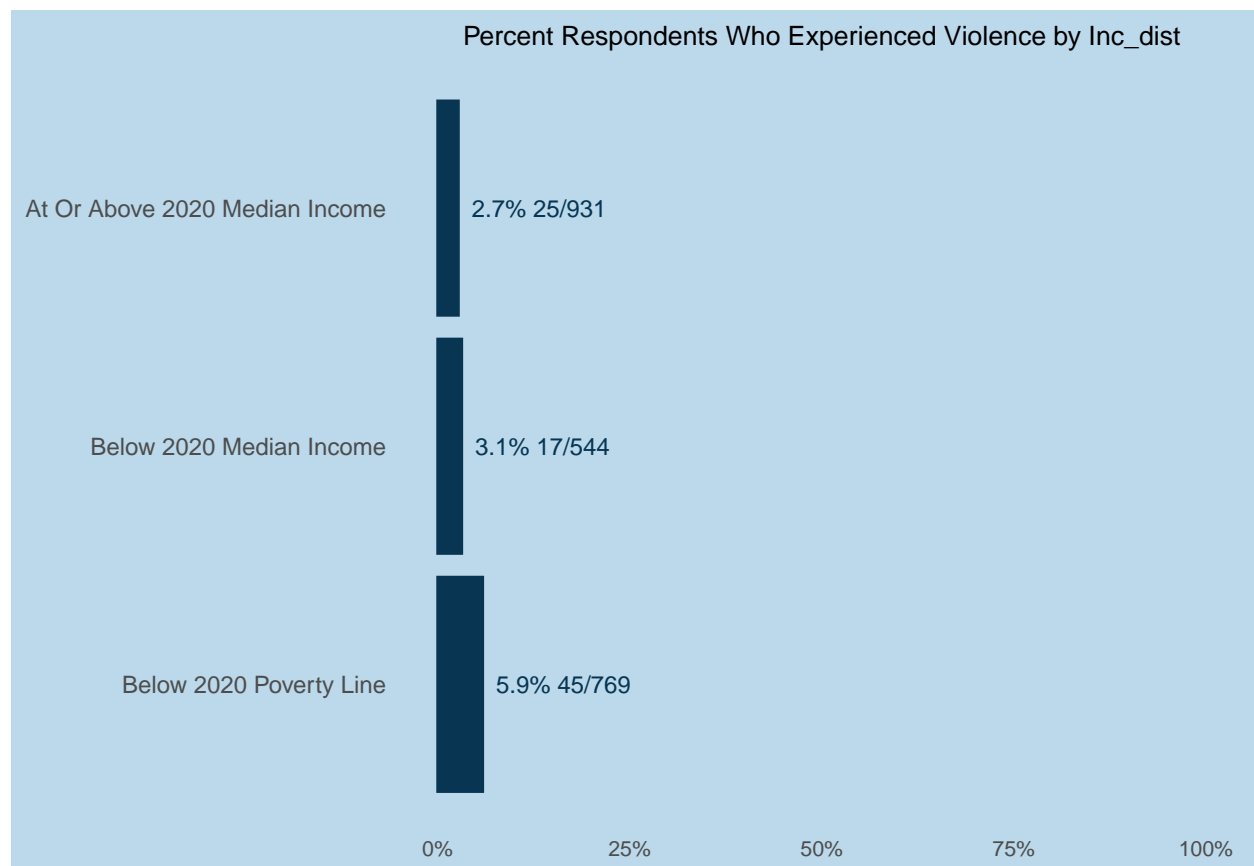
```
## Indigenous American      NA      NA      NA
##
##
##
## $hh_ch_0_17_bi
## $hh_ch_0_17_bi$plot
```



```
##
## $hh_ch_0_17_bi$p.values
## $hh_ch_0_17_bi$p.values$exp_vi
##           household without children household with children
## household without children           NA           0.0018
## household with children           0.0018           NA
##
##
##
## $hh_sn_65_bi
## $hh_sn_65_bi$plot
```



```
##
## $hh_sn_65_bi$p.values
## $hh_sn_65_bi$p.values$exp_vi
##           household with seniors household without seniors
## household with seniors           NA           0.01
## household without seniors       0.01           NA
##
##
##
## $inc_dist
## $inc_dist$plot
```



```
##
## $inc_dist$p.values
## $inc_dist$p.values$exp_vi
##
## at or above 2020 median income
## at or above 2020 median income NA
## below 2020 median income NA
## below 2020 poverty line 0.0016
##
## below 2020 median income below 2020 poverty line
## at or above 2020 median income NA 0.0016
## below 2020 median income NA NA
## below 2020 poverty line NA NA
```

```
cat("Plots for borough, gen, race_census, hh_sn_65_bi do not show at least one statistically significant")
```

```
## Plots for borough, gen, race_census, hh_sn_65_bi do not show at least one statistically significant
```

5.4) Respondents who are homemakers are more likely to experience verbal abuse and physical violence since the pandemic started [14, 15, 34, 35]

Find proportion of respondents who faced discrimination or violence when homemakers before [14] compared to after [15] the pandemic Compare proportion of respondents who experienced violence and were home-

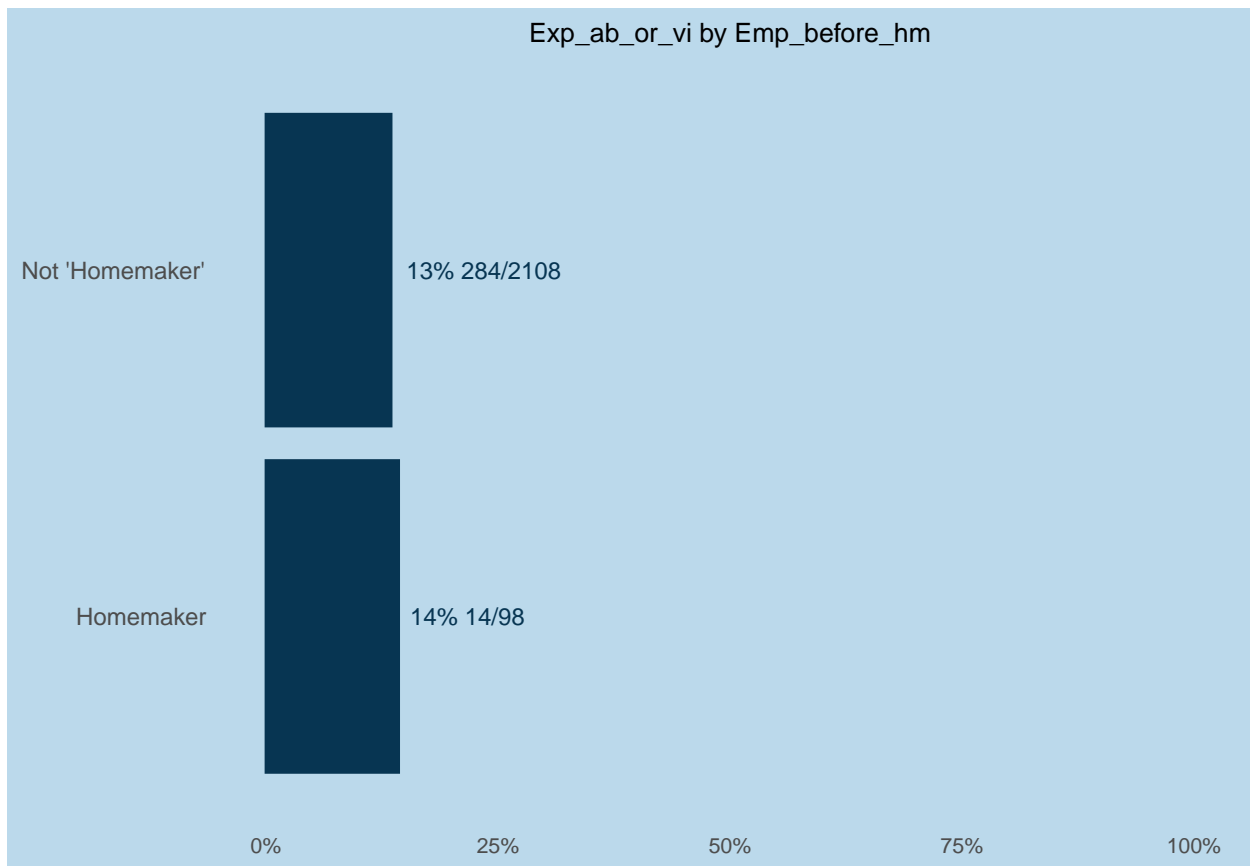
makers before but not after, with those who were homemakers after but not before Compare homemakers to nonhomemakers Run on subdemographics (a-m)

```
wrangled %>% count(emp_before_hm, emp_after_hm)
```

```
## # A tibble: 5 x 3
##       emp_before_hm      emp_after_hm      n
##       <int+lbl>         <int+lbl> <int>
## 1  0 [not 'homemaker']  0 [not 'homemaker'] 2125
## 2  0 [not 'homemaker']  1 [homemaker]      27
## 3  1 [homemaker]        0 [not 'homemaker']  27
## 4  1 [homemaker]        1 [homemaker]      75
## 5 NA                   NA                   61
```

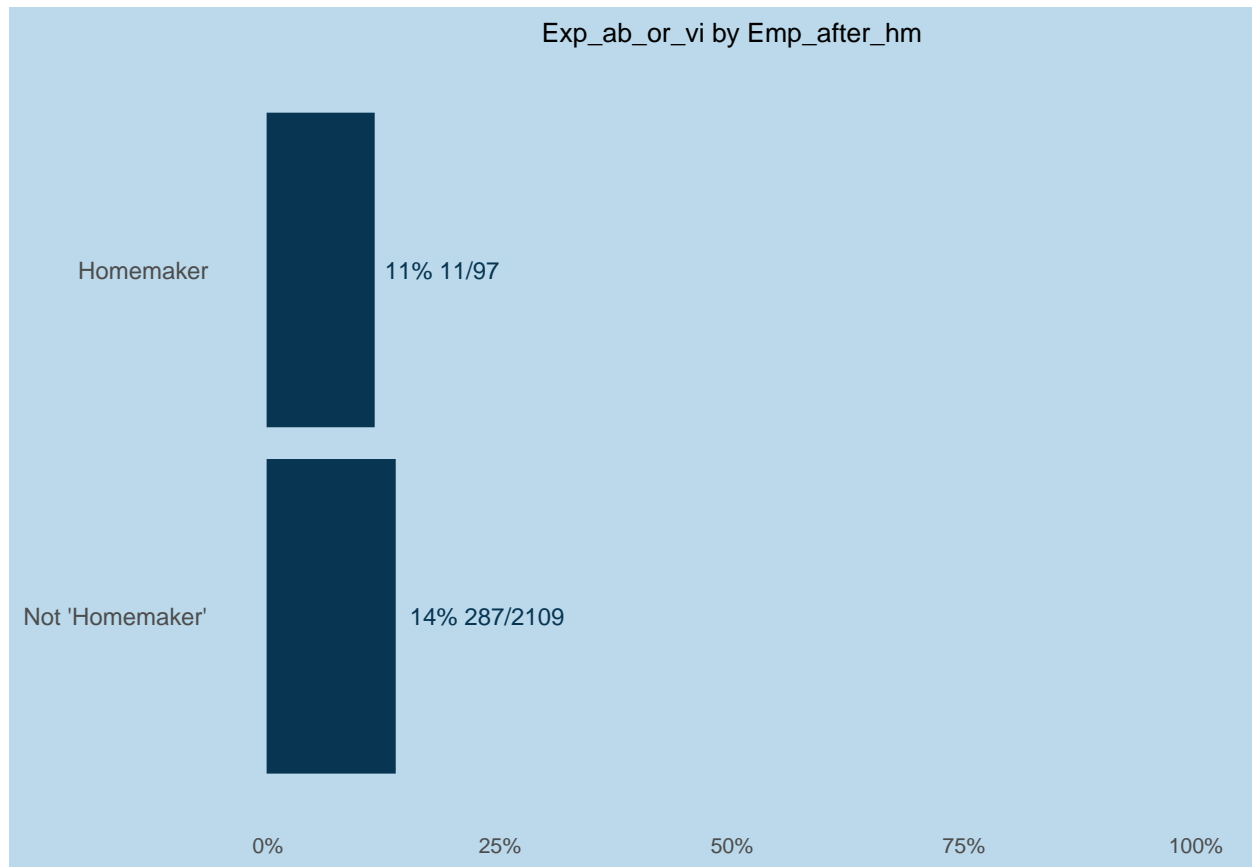
```
make_plots(wrangled %>% mutate(emp_hm = emp_before_hm == 1 & emp_after_hm == 1),
           c("emp_before_hm", "emp_after_hm", "emp_hm"), "exp_ab_or_vi", title = "exp_ab_or_vi", show =
```

```
## $emp_before_hm
## $emp_before_hm$plot
```

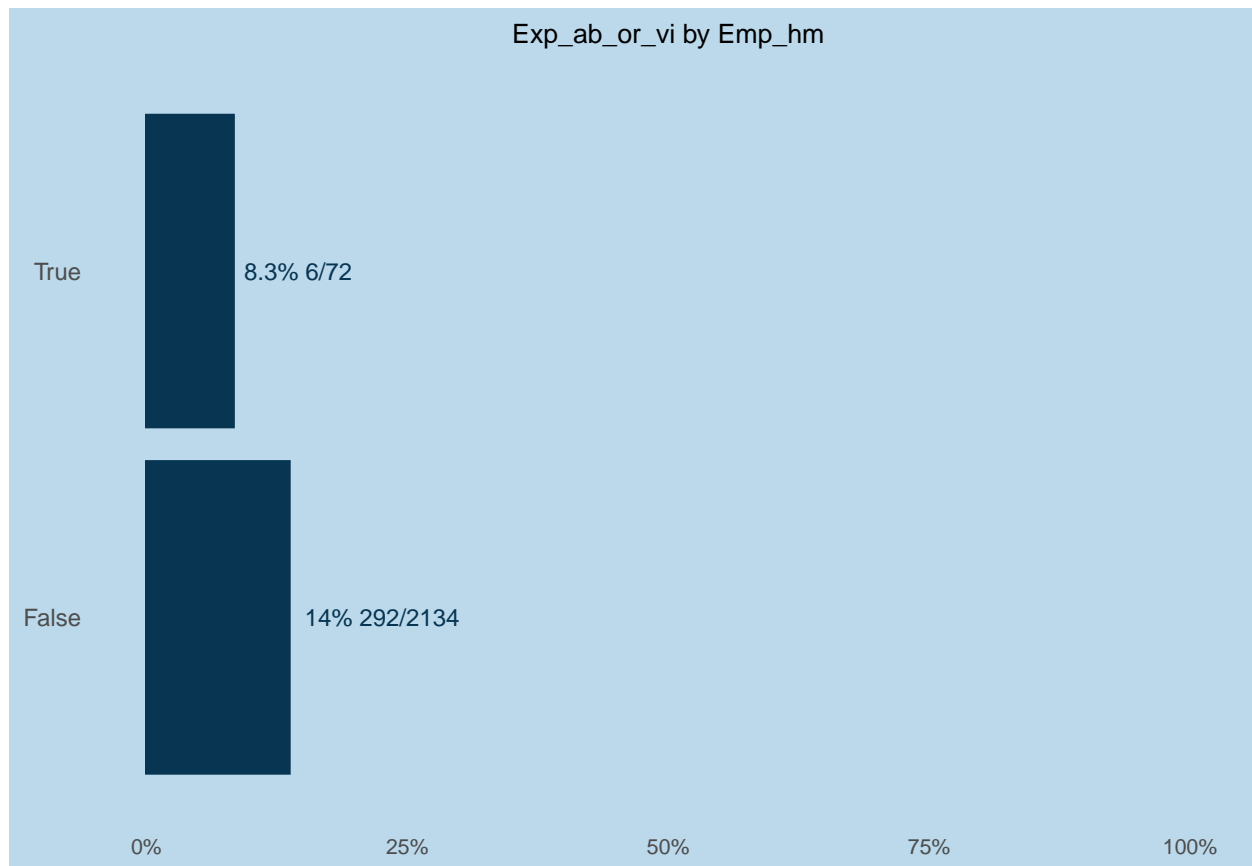


```
##
## $emp_before_hm$p.values
## $emp_before_hm$p.values$exp_ab_or_vi
##       not 'homemaker' homemaker
```

```
## not 'homemaker'      NA      NA
## homemaker            NA      NA
##
##
##
## $emp_after_hm
## $emp_after_hm$plot
```



```
##
## $emp_after_hm$p.values
## $emp_after_hm$p.values$exp_ab_or_vi
##      homemaker not 'homemaker'
## homemaker      NA      NA
## not 'homemaker' NA      NA
##
##
##
## $emp_hm
## $emp_hm$plot
```



```
##
## $emp_hm$p.values
## $emp_hm$p.values$exp_ab_or_vi
##      TRUE FALSE
## TRUE    NA    NA
## FALSE    NA    NA
```

```
cat("Plots are not showing statistically significant results")
```

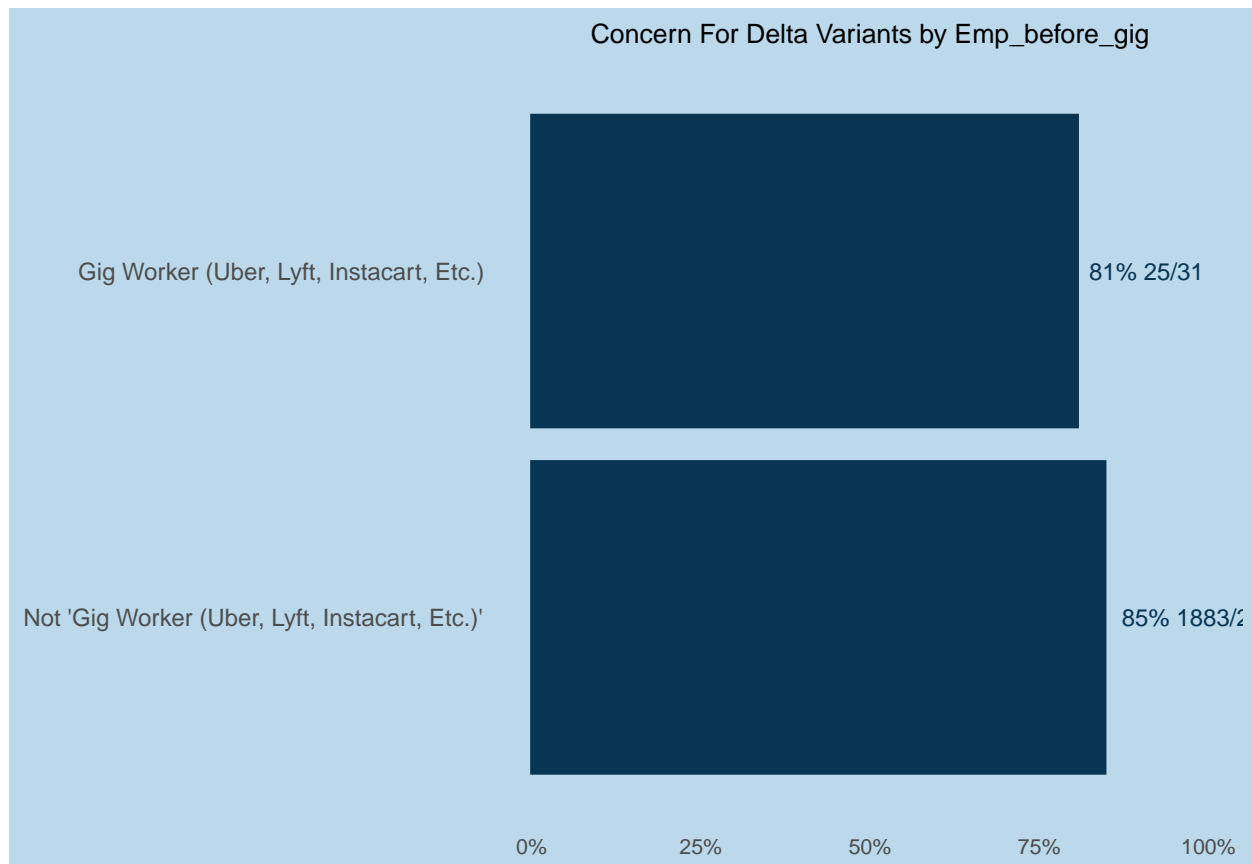
```
## Plots are not showing statistically significant results
```

5.5) Respondents in the gig economy are more worried about delta variants [41]

1. Find proportion of respondents who were in the gig economy and those who are not [15]
2. Find subset who are worried about delta variants [26a]
 - a. Compare proportion who are gig economy with those who are not

```
make_plots(wrangled, "emp_before_gig", "vrnts_con", title = "Concern for Delta Variants", show = TRUE)
```

```
## $emp_before_gig
## $emp_before_gig$plot
```



```
##
## $emp_before_gig$p.values
## $emp_before_gig$p.values$vrnts_con
##
## gig worker (uber, lyft, instacart, etc.)
## gig worker (uber, lyft, instacart, etc.)
## not 'gig worker (uber, lyft, instacart, etc.)'
##
## gig worker (uber, lyft, instacart, etc.)
## not 'gig worker (uber, lyft, instacart, etc.)'
```

```
cat("Plots are not showing statistically significant results")
```

```
## Plots are not showing statistically significant results
```

5.6 - 5.7

5.6) Respondents who felt unsafe in their neighborhoods were dissatisfied with other community services [32]

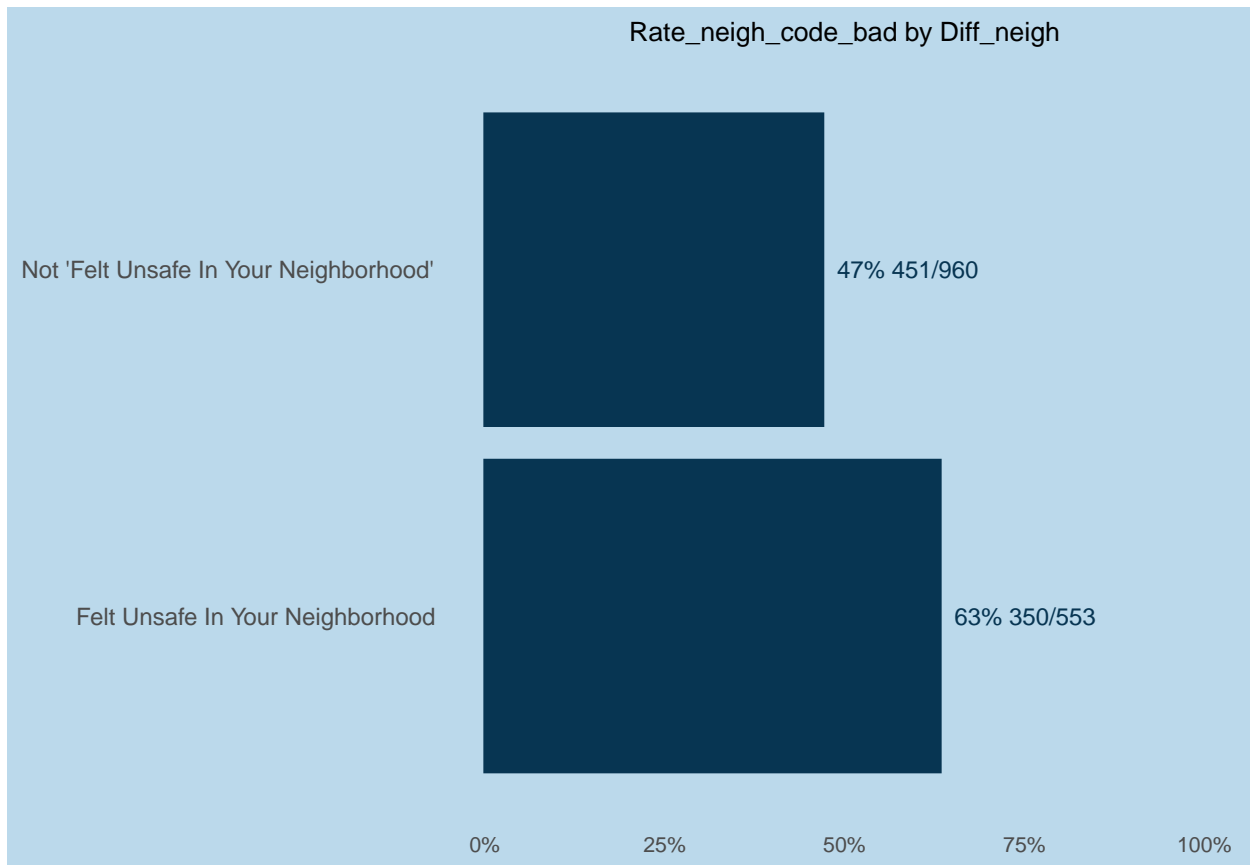
Find proportion of respondents who felt unsafe in their neighborhood [17] Run binary distribution of who did and did not feel unsafe over the following categories from question 32: Emergency medical services Maintenance of parks and recreational facilities Police responsiveness to calls or complaints Prevents of local crime / safety Group respondents by whether or not they were dissatisfied with one of the above four listed neighborhood services Compare those who did and did not feel unsafe

5.7) Respondents who are dissatisfied with housing code enforcement are more likely to feel unsafe in their neighborhood[32, 17]

Find proportion who felt unsafe in neighborhood Find subset who are dissatisfied with housing code enforcement Compare proportion who did and did not feel unsafe depending on dissatisfaction with housing code enforcement

```
rate_neigh <- select(wrangled, starts_with("rate_neigh") & (ends_with("good") | ends_with("bad"))) %>%  
lapply(rate_neigh, function(item) {  
  make_plots(wrangled, "diff_neigh", item,  
             title = item, show = TRUE)  
})
```

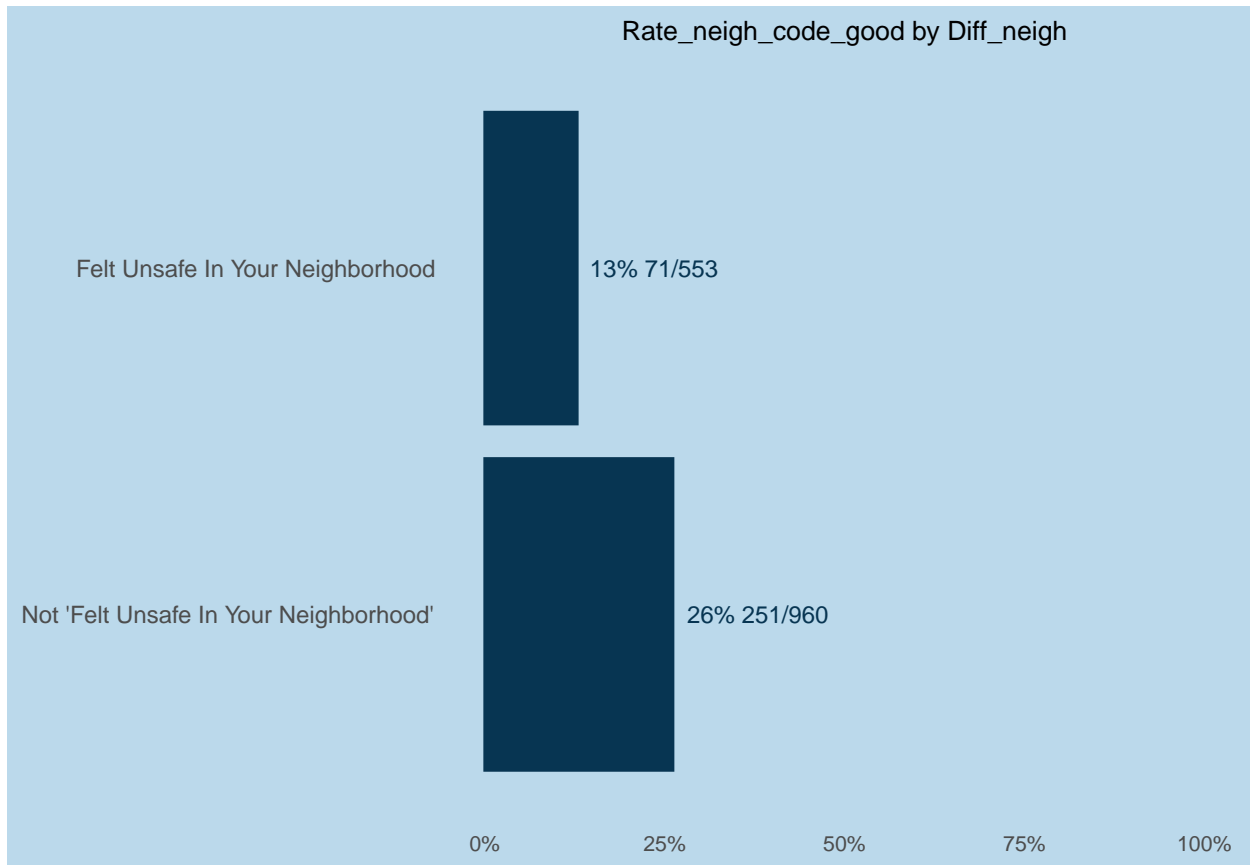
```
## [[1]]  
## [[1]]$diff_neigh  
## [[1]]$diff_neigh$plot
```



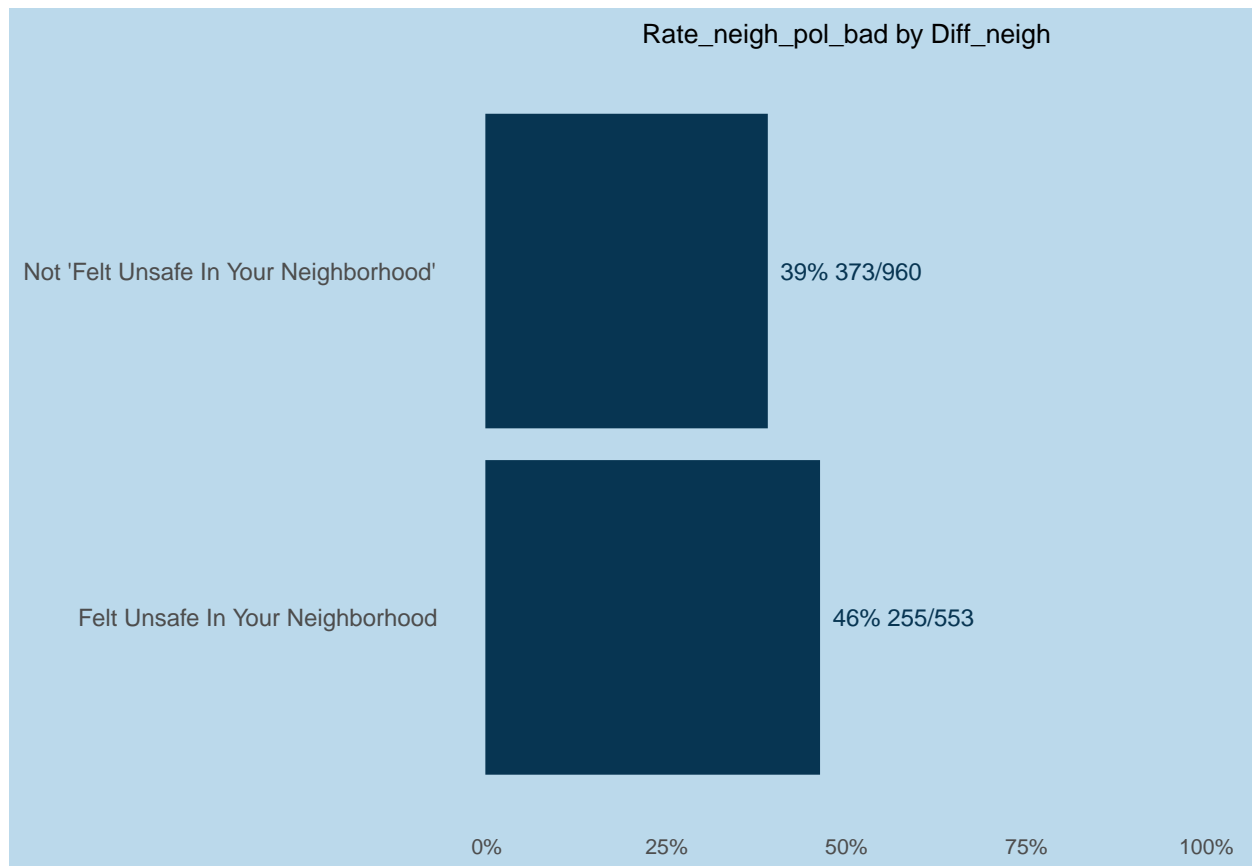
```
##  
## [[1]]$diff_neigh$p.values  
## [[1]]$diff_neigh$p.values$rate_neigh_code_bad  
## not 'felt unsafe in your neighborhood' NA  
## not 'felt unsafe in your neighborhood' 1.3e-09  
## felt unsafe in your neighborhood  
## felt unsafe in your neighborhood
```



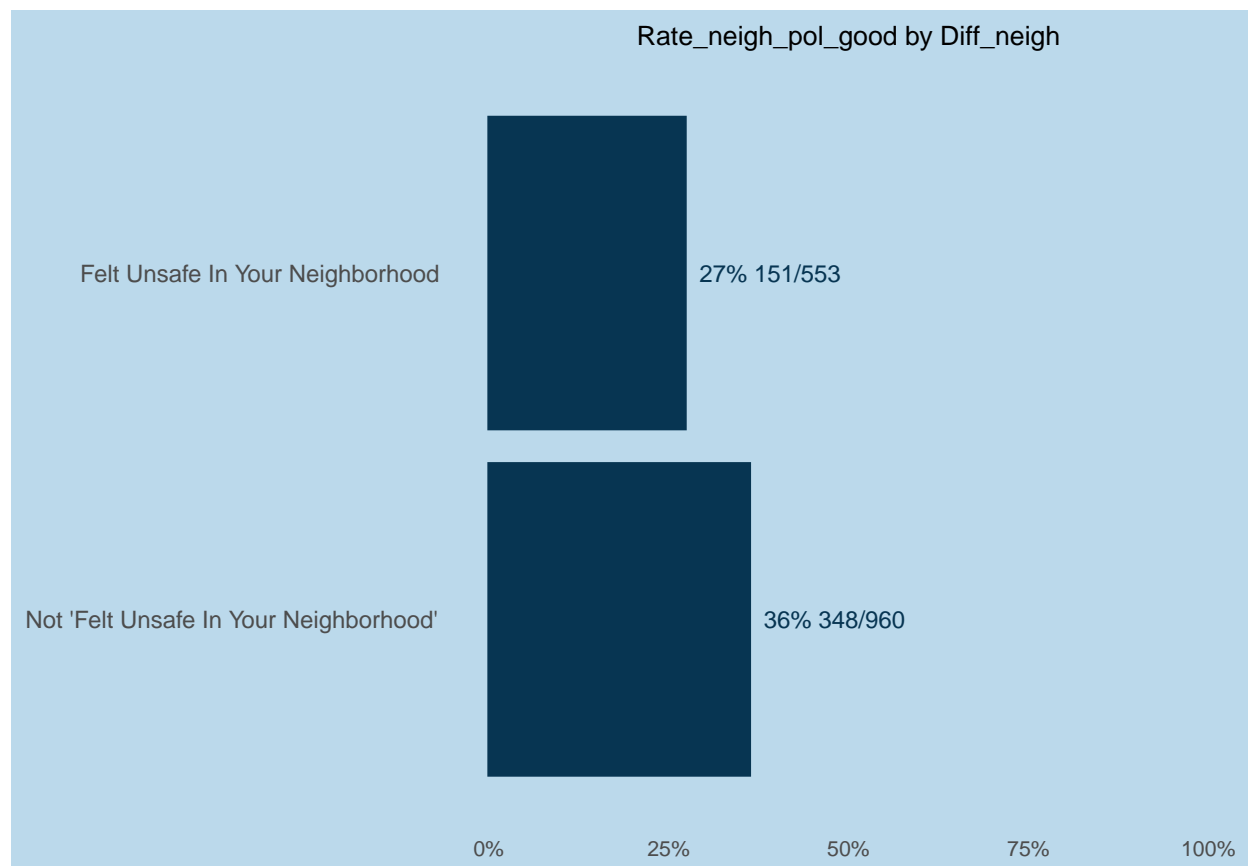
```
## not 'felt unsafe in your neighborhood' 1.3e-09
## felt unsafe in your neighborhood      NA
##
##
##
## [[2]]
## [[2]]$diff_neigh
## [[2]]$diff_neigh$plot
```



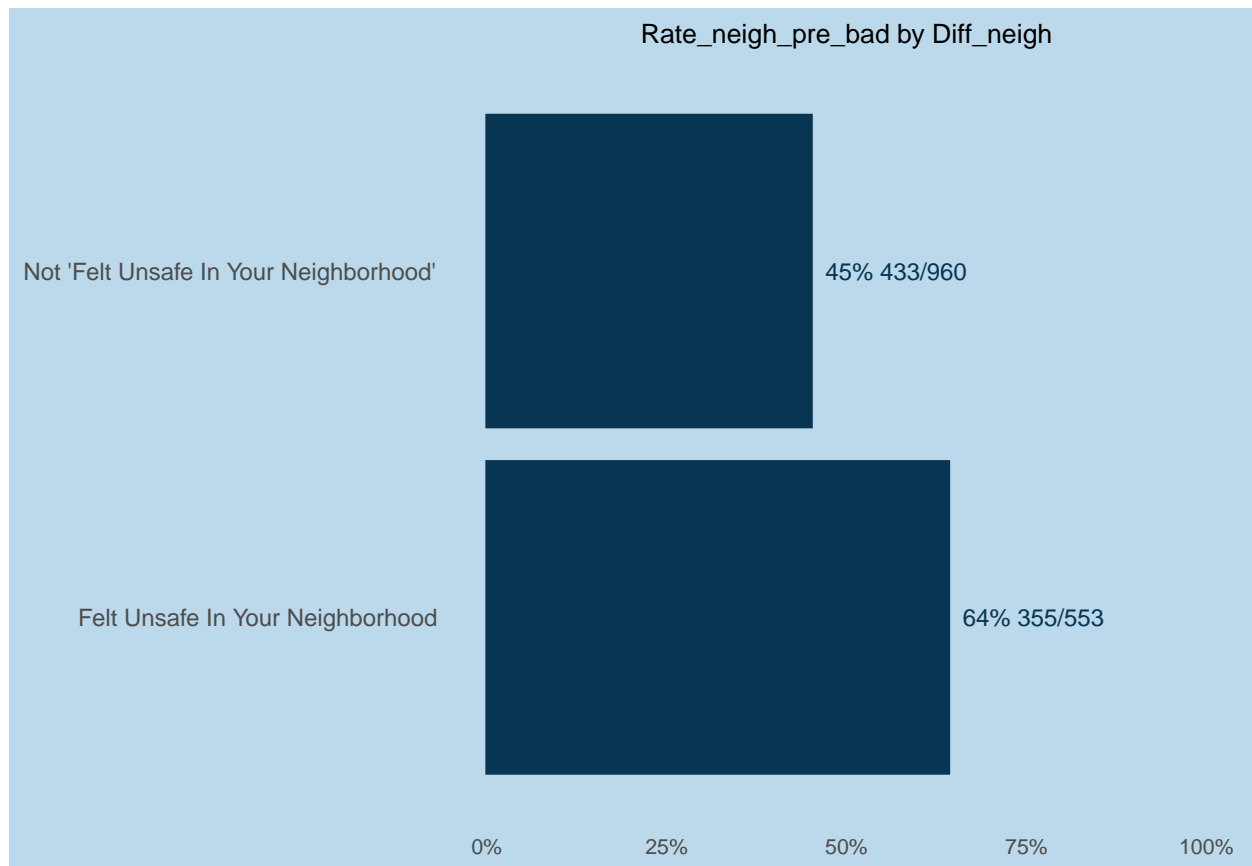
```
##
## [[2]]$diff_neigh$p.values
## [[2]]$diff_neigh$p.values$rate_neigh_code_good
## felt unsafe in your neighborhood      NA
## not 'felt unsafe in your neighborhood' 1.7e-09
## not 'felt unsafe in your neighborhood' 1.7e-09
## not 'felt unsafe in your neighborhood' NA
##
##
##
## [[3]]
## [[3]]$diff_neigh
## [[3]]$diff_neigh$plot
```



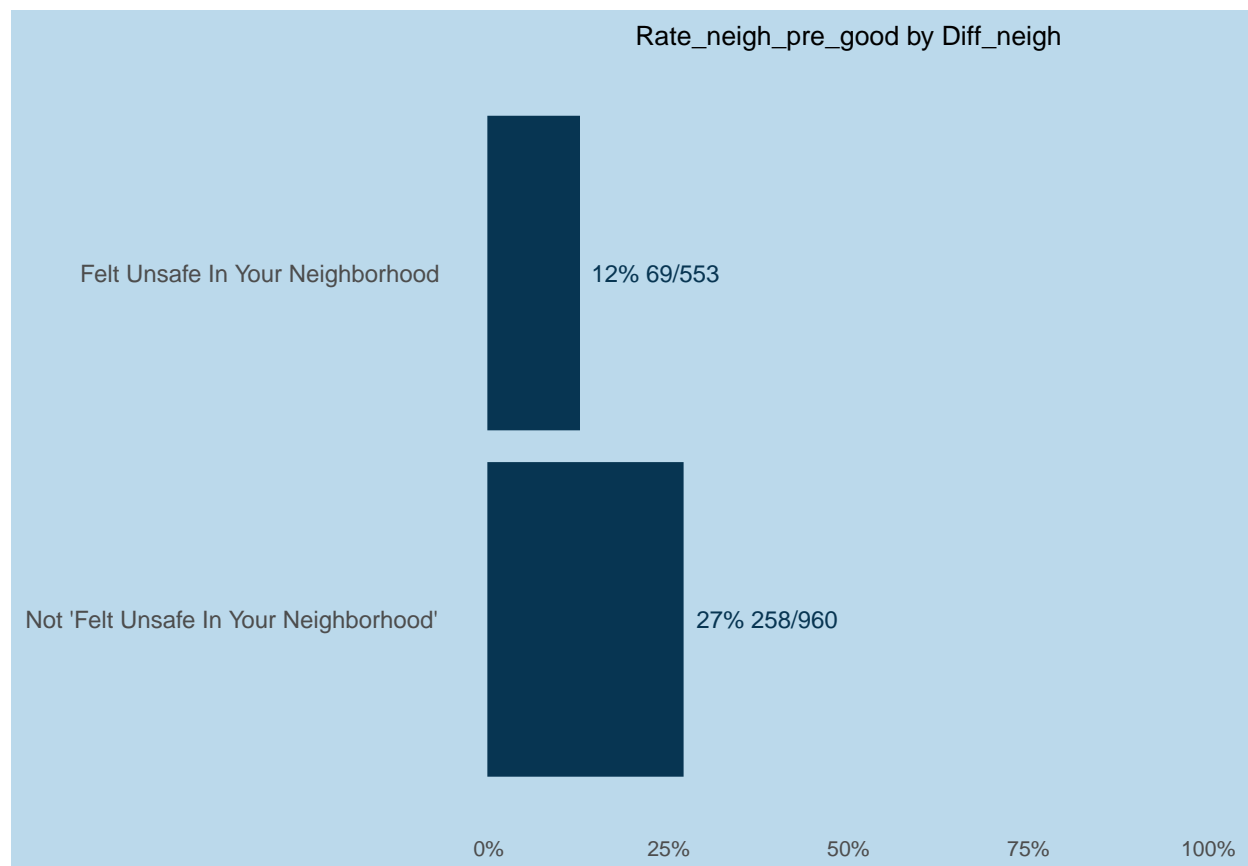
```
##
## [[3]]$diff_neigh$p.values
## [[3]]$diff_neigh$p.values$rate_neigh_pol_bad
## not 'felt unsafe in your neighborhood' NA
## not 'felt unsafe in your neighborhood' 0.0068
## felt unsafe in your neighborhood 0.0068
## not 'felt unsafe in your neighborhood' NA
## felt unsafe in your neighborhood NA
##
##
##
##
## [[4]]
## [[4]]$diff_neigh
## [[4]]$diff_neigh$plot
```



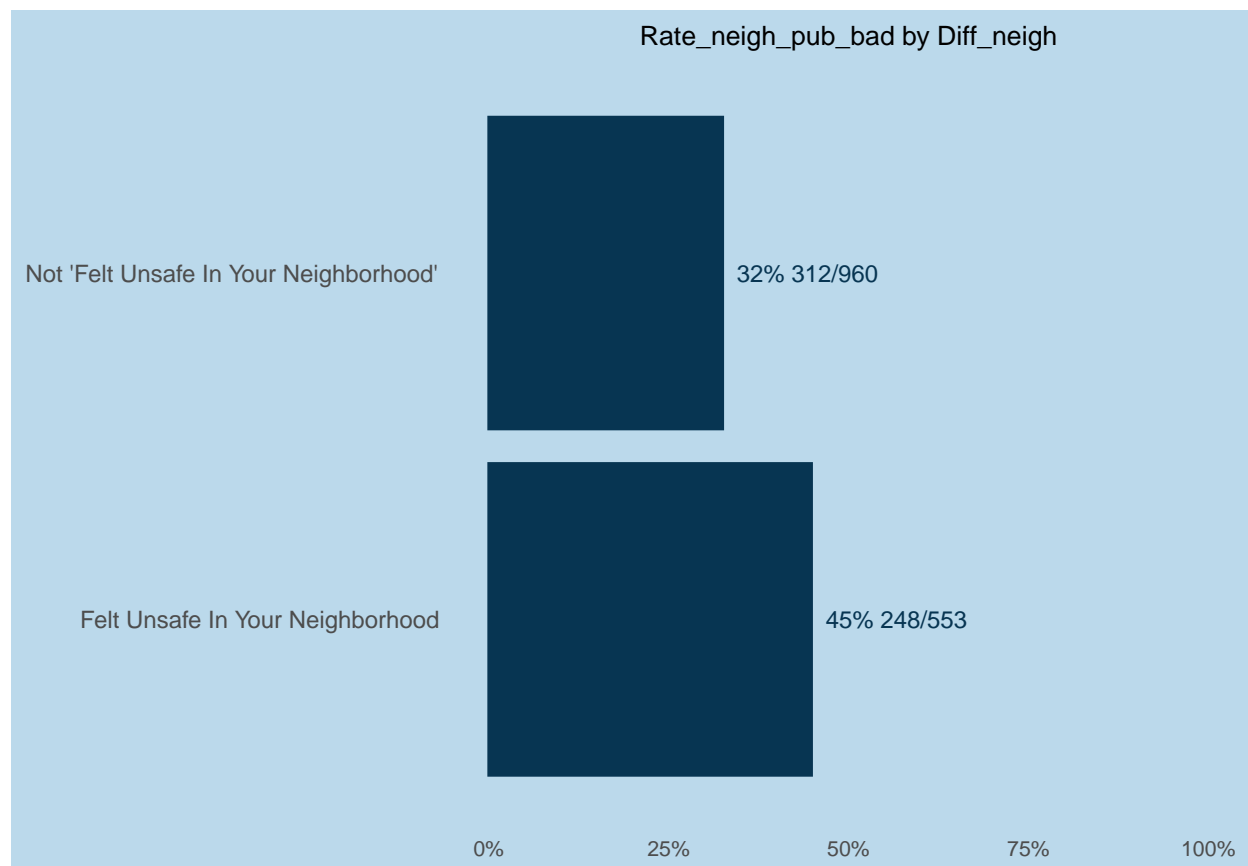
```
##
## [[4]]$diff_neigh$p.values
## [[4]]$diff_neigh$p.values$rate_neigh_pol_good
## felt unsafe in your neighborhood NA
## felt unsafe in your neighborhood 0.00045
## not 'felt unsafe in your neighborhood' 0.00045
## not 'felt unsafe in your neighborhood' NA
##
##
##
## [[5]]
## [[5]]$diff_neigh
## [[5]]$diff_neigh$plot
```



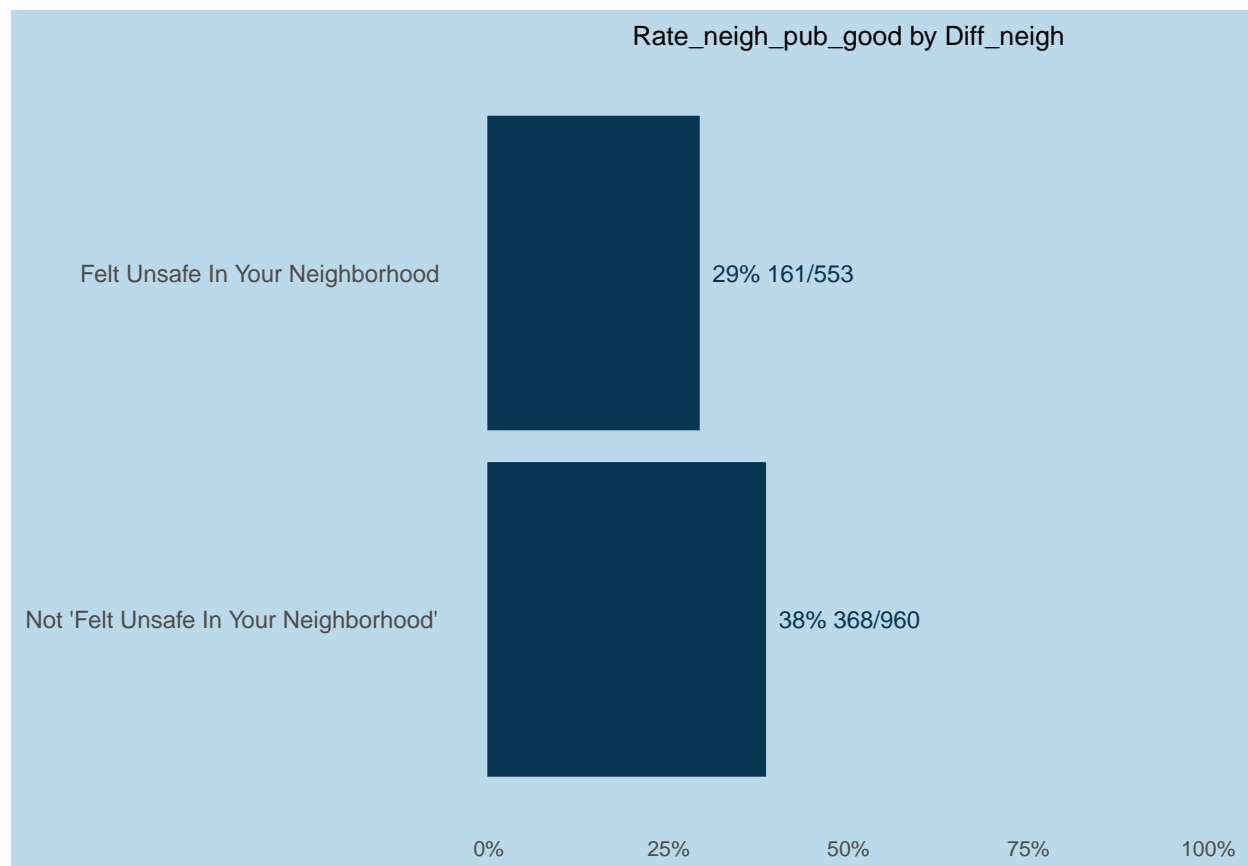
```
##
## [[5]]$diff_neigh$p.values
## [[5]]$diff_neigh$p.values$rate_neigh_pre_bad
##                                     not 'felt unsafe in your neighborhood'
## not 'felt unsafe in your neighborhood'                                     NA
## felt unsafe in your neighborhood                                         1.2e-12
##                                     felt unsafe in your neighborhood
## not 'felt unsafe in your neighborhood'                                   1.2e-12
## felt unsafe in your neighborhood                                         NA
##
##
##
##
## [[6]]
## [[6]]$diff_neigh
## [[6]]$diff_neigh$plot
```



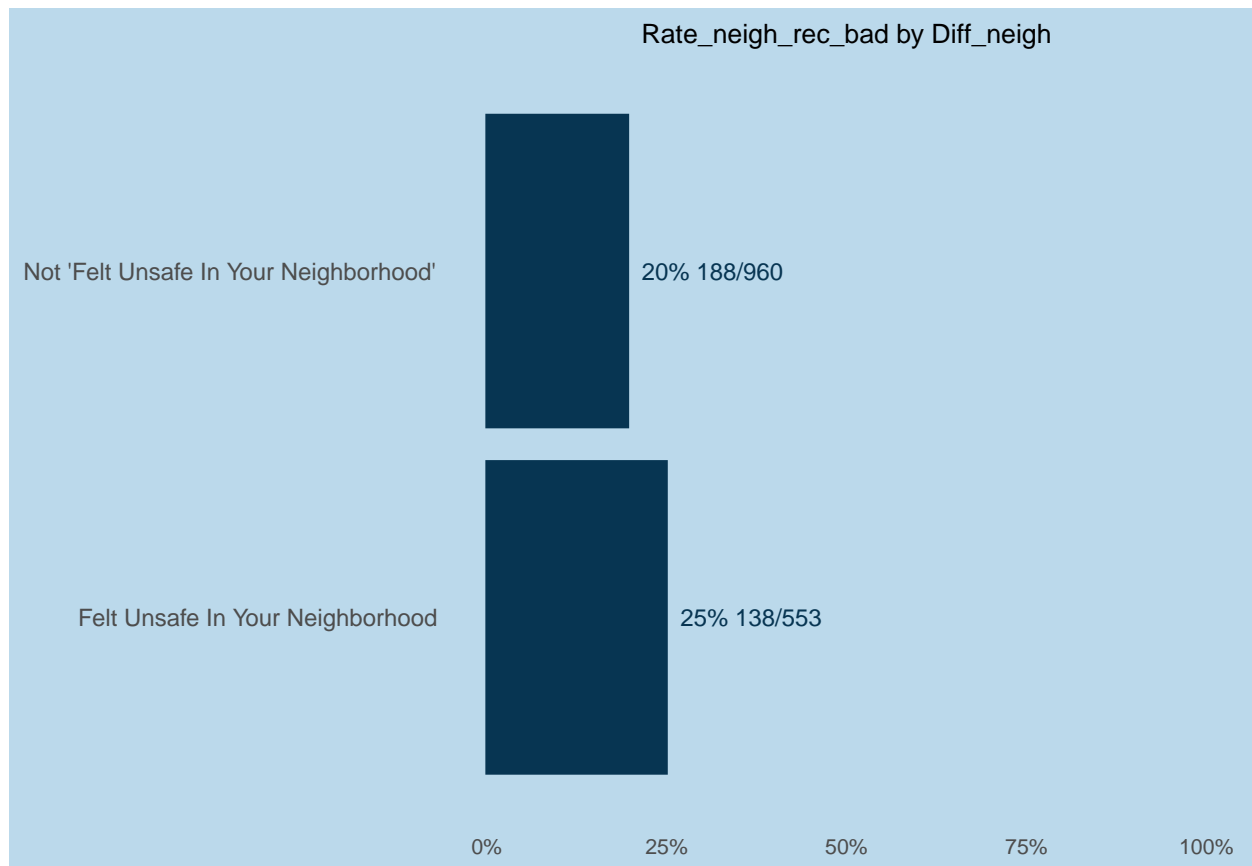
```
##
## [[6]]$diff_neigh$p.values
## [[6]]$diff_neigh$p.values$rate_neigh_pre_good
## felt unsafe in your neighborhood NA
## felt unsafe in your neighborhood NA
## not 'felt unsafe in your neighborhood' 8.7e-11
## not 'felt unsafe in your neighborhood' 8.7e-11
## not 'felt unsafe in your neighborhood' NA
##
##
##
##
## [[7]]
## [[7]]$diff_neigh
## [[7]]$diff_neigh$plot
```



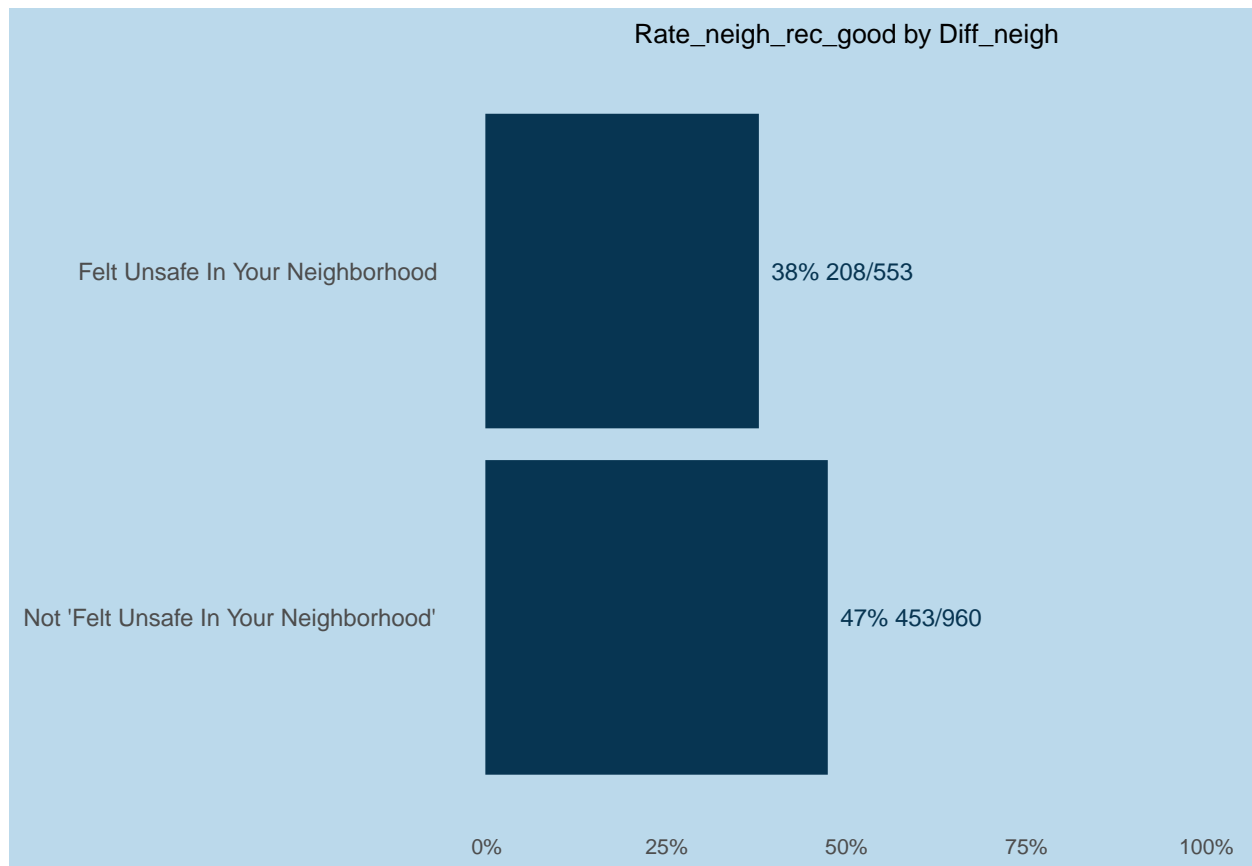
```
##
## [[7]]$diff_neigh$p.values
## [[7]]$diff_neigh$p.values$rate_neigh_pub_bad
##                                     not 'felt unsafe in your neighborhood'
## not 'felt unsafe in your neighborhood'                                     NA
## felt unsafe in your neighborhood                                         2.2e-06
##                                     felt unsafe in your neighborhood
## not 'felt unsafe in your neighborhood'                                   2.2e-06
## felt unsafe in your neighborhood                                         NA
##
##
##
## [[8]]
## [[8]]$diff_neigh
## [[8]]$diff_neigh$plot
```



```
##
## [[8]]$diff_neigh$p.values
## [[8]]$diff_neigh$p.values$rate_neigh_pub_good
## felt unsafe in your neighborhood NA
## felt unsafe in your neighborhood 0.00036
## not 'felt unsafe in your neighborhood' 0.00036
## not 'felt unsafe in your neighborhood' NA
##
##
##
## [[9]]
## [[9]]$diff_neigh
## [[9]]$diff_neigh$plot
```



```
##
## [[9]]$diff_neigh$p.values
## [[9]]$diff_neigh$p.values$rate_neigh_rec_bad
## not 'felt unsafe in your neighborhood'
## not 'felt unsafe in your neighborhood' NA
## felt unsafe in your neighborhood NA
## felt unsafe in your neighborhood
## not 'felt unsafe in your neighborhood' NA
## felt unsafe in your neighborhood NA
##
##
##
##
## [[10]]
## [[10]]$diff_neigh
## [[10]]$diff_neigh$plot
```

```
##
## [[10]]$diff_neigh$p.values
## [[10]]$diff_neigh$p.values$rate_neigh_rec_good
## felt unsafe in your neighborhood NA
## felt unsafe in your neighborhood NA
## not 'felt unsafe in your neighborhood' 0.00037
## not 'felt unsafe in your neighborhood' 0.00037
## felt unsafe in your neighborhood 0.00037
## not 'felt unsafe in your neighborhood' NA
```

```
cat("Plots for rate_neigh_pol_bad and rate_neigh_rec_bad are not showing statistically significant results")
```

```
## Plots for rate_neigh_pol_bad and rate_neigh_rec_bad are not showing statistically significant results
```

5.8, 5.10

5.8) Respondents of certain races are more likely to experience abuse / violence / discrimination [34, 35]

Run binary distribution by race

5.10) Respondents who have a low income (at or below median income) are more likely to experience violence [13, 34]

1. Find proportion who faced abuse or violence [34]
2. Find subset who are below median income [13]

- a. Compare and contrast with group who are above median income within the larger proportion

```
wrangled$inc_be_med
```

```
## <labelled<integer>[2315]>
##      [1] 1 0 0 0 0 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1
##     [25] 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
##    [49] 1 1 1 0 1 1 1 1 1 0 0 1 0 1 1 1 1 1 1 1 0
##    [73] 0 0 1 1 0 1 1 0 1 1 0 0 1 0 1 0 1 0 1 1 0
##    [97] 0 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1
##   [121] 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 NA NA NA NA 1
##   [145] 1 1 NA 1 1 1 0 0 0 1 1 1 1 1 1 0 1 0 0 0 0
##   [169] 1 0 0 1 0 0 1 1 0 0 0 0 1 1 0 1 0 0 1 1 0
##   [193] 0 1 0 1 1 1 0 0 0 0 0 1 1 1 0 1 1 1 0 0 1
##   [217] 1 1 1 1 1 1 1 1 1 0 1 0 0 1 1 1 1 0 0 1 0
##   [241] 0 1 0 1 0 1 0 1 1 0 0 0 1 1 1 1 1 0 1 0 0
##   [265] 0 1 1 0 0 0 0 1 1 1 0 1 0 0 0 1 0 0 0 0 0
##   [289] 0 0 0 1 0 0 0 1 1 0 1 1 1 1 1 0 1 1 0 1 1
##   [313] 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1
##   [337] 1 0 0 1 0 0 1 0 0 0 1 0 1 0 1 0 0 1 1 0 1
##   [361] 0 0 0 1 1 1 1 0 0 1 1 0 1 1 1 0 1 1 0 1 0
##   [385] 0 1 0 1 0 0 1 1 1 0 0 1 0 1 1 1 0 1 1 1 1
##   [409] 1 0 1 1 1 1 1 1 0 1 1 1 0 1 1 0 1 1 NA NA NA 1
##   [433] 1 0 NA 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 0 1
##   [457] 0 1 1 0 1 1 1 1 NA 1 1 1 1 1 0 0 1 1 0 1 NA 1
##   [481] 1 0 0 0 1 1 0 1 1 0 1 1 1 NA 0 1 1 1 1 1 0
##   [505] 1 1 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1 1 0 0 1
##   [529] 1 1 0 0 0 0 1 1 0 0 0 1 0 1 1 0 1 1 0 0 0
##   [553] 0 0 0 1 0 0 0 0 0 0 0 0 0 0 1 0 0 1 0 0 0
##   [577] 1 0 0 0 0 1 0 0 0 0 0 0 1 0 0 1 0 0 1 1 0
##   [601] 0 1 1 0 0 1 1 0 1 1 1 0 0 0 1 1 0 1 1 1 0
##   [625] 1 1 0 0 0 0 0 0 1 1 0 0 0 1 1 0 0 1 0 0 1
##   [649] 1 0 0 0 1 1 1 1 1 1 0 1 1 NA 1 1 0 1 1 1 1
##   [673] 1 1 0 0 0 1 0 0 0 1 1 1 1 0 1 0 1 1 0 0 1
##   [697] 0 0 0 1 0 0 0 0 0 0 0 1 1 1 0 0 0 1 1 0 0
##   [721] 0 1 1 0 0 1 1 1 0 1 0 1 1 0 1 1 1 0 1 1 1
##   [745] 1 1 1 0 1 0 1 0 1 1 1 0 1 1 0 1 0 1 1 1 0
##   [769] 1 1 0 1 1 1 0 0 1 1 1 0 0 1 0 0 1 0 0 1 1
##   [793] 0 1 0 0 0 0 0 0 0 0 0 0 1 1 1 1 0 0 1 1 1
##   [817] 0 0 1 1 1 1 0 1 0 0 0 0 1 1 0 1 0 1 1 0 1
##   [841] 0 1 1 0 1 1 0 1 1 1 1 1 0 0 1 1 1 1 1 0 0
##   [865] 0 0 0 1 1 0 1 1 1 1 0 1 0 0 1 0 1 0 0 0 1
##   [889] 1 0 1 0 1 0 1 0 0 1 1 0 1 1 1 1 1 1 1 0 1
##   [913] 1 0 1 0 0 0 1 1 0 0 1 1 1 1 1 1 1 1 0 1 0
##   [937] 1 0 1 1 1 0 0 1 1 1 0 1 1 1 0 1 1 1 1 1 1
##   [961] 1 0 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 0 1 1 0
##   [985] 0 1 0 0 0 0 0 0 1 0 0 0 1 1 0 1 0 1 0 0 0
```

```

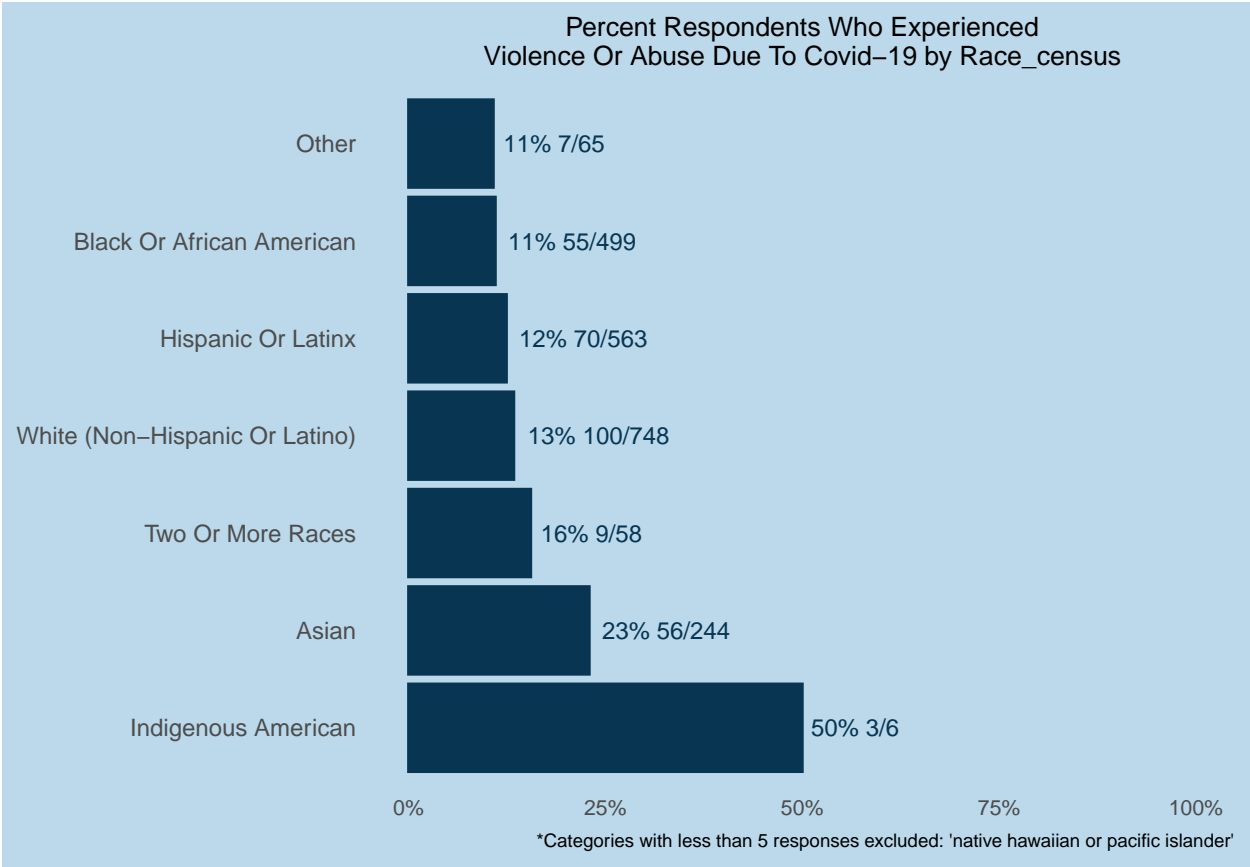
## [1009] 1 0 0 1 0 1 0 1 1 1 1 1 NA 1 1 0 1 0 1 0 0 0 0 1 1
## [1033] 1 0 0 0 0 1 0 0 1 1 1 1 1 1 0 1 0 0 1 1 1 1 0 1 0
## [1057] 0 0 1 1 0 0 0 0 1 1 1 0 1 1 0 0 0 1 0 0 0 0 1 1
## [1081] 0 1 0 1 0 1 1 0 0 0 1 1 1 0 1 0 1 0 1 0 1 0 1 1
## [1105] 0 1 0 0 0 1 0 1 1 1 1 0 1 0 0 1 0 1 1 1 0 0 0 0
## [1129] 0 1 0 1 0 0 0 0 1 1 1 1 1 0 1 1 0 1 0 1 1 0 1 0
## [1153] 0 1 1 1 NA 1 0 0 1 1 1 1 0 1 0 0 NA 1 1 0 1 1 1 1
## [1177] 0 0 0 1 0 1 0 0 0 1 0 1 1 0 0 0 1 1 1 1 1 1 1
## [1201] 0 0 0 0 1 0 0 1 1 1 1 1 1 1 1 0 0 0 NA 0 0 0 0 0
## [1225] 0 0 0 1 0 0 0 1 1 0 0 0 0 1 NA 1 0 0 1 0 0 1 0 1
## [1249] 1 1 0 1 0 0 1 NA 1 1 1 1 0 1 0 0 0 0 1 1 0 0 0 1
## [1273] 1 0 0 1 0 0 1 1 1 0 1 1 1 0 1 1 0 1 0 0 1 0 1 1
## [1297] 0 0 1 0 1 NA NA 1 1 0 1 1 NA 0 1 1 0 0 1 0 1 0 NA 1
## [1321] 1 0 1 1 0 0 1 0 0 0 0 1 0 1 0 1 0 0 1 0 0 1 0 0
## [1345] 1 1 1 0 0 0 1 0 1 1 0 NA 0 0 0 0 0 0 1 1 0 1 1 1
## [1369] 0 1 1 1 1 0 0 0 0 0 0 0 0 1 1 1 1 0 NA 0 1 0 0 0
## [1393] NA 0 1 1 1 0 0 0 1 0 1 NA 0 0 1 0 1 1 1 0 1 1 1 1
## [1417] NA 0 NA 0 1 0 1 1 0 0 1 0 1 1 1 1 0 1 1 1 1 1 1
## [1441] NA 1 1 1 1 1 1 0 0 0 0 1 1 NA 0 1 1 NA 0 0 1 1 0 1
## [1465] 1 0 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 0 1 1 0 1 1
## [1489] 0 1 1 NA 1 NA 1 1 0 0 0 0 NA NA 0 NA 1 NA 1 NA NA 1 0 0
## [1513] NA NA 1 0 1 1 NA NA NA 1 1 NA 1 0 0 0 0 0 0 1 1 1 1
## [1537] 1 0 1 0 0 1 1 1 0 0 0 1 NA 1 0 0 1 1 0 1 1 0 0 1
## [1561] 0 1 0 1 1 1 0 1 0 0 0 1 0 0 1 0 1 0 0 1 1 1 0 0
## [1585] 1 1 1 1 1 0 0 0 0 1 1 0 0 1 0 0 0 1 1 0 1 0 0 1
## [1609] 1 1 0 1 1 1 0 1 1 1 0 1 1 1 1 1 0 1 1 0 0 1 0 1
## [1633] 1 0 1 0 0 1 0 1 1 0 0 1 1 1 0 0 1 1 1 0 0 1 0 0
## [1657] 1 1 1 1 1 0 1 0 0 1 1 1 1 1 1 0 1 1 0 1 1 1 0
## [1681] 1 0 1 1 0 1 1 0 1 1 0 1 1 1 0 1 0 1 1 1 0 1 1 0
## [1705] 0 1 1 1 1 1 0 1 1 1 1 1 1 0 0 1 0 0 0 1 1 1 0 1
## [1729] 1 1 1 1 1 1 1 0 1 0 0 1 1 0 0 1 0 0 0 1 0 1 1 0
## [1753] 1 0 1 1 0 0 0 0 0 0 0 1 1 1 1 0 0 1 0 0 0 1 0 0 1
## [1777] 1 0 1 1 1 1 1 0 0 0 0 0 0 1 0 0 1 1 0 1 0 1 0 1
## [1801] 0 1 0 0 0 0 0 0 0 1 1 0 1 1 0 1 1 1 0 1 1 1 0 1
## [1825] 1 1 0 0 1 0 1 1 1 1 0 1 0 0 0 0 1 1 0 1 1 1 1 0
## [1849] 0 0 1 0 1 1 0 1 1 0 1 0 0 0 1 0 1 0 1 1 1 1 0 0
## [1873] 1 0 1 0 0 0 1 0 1 0 1 0 1 0 0 1 0 0 0 0 0 0 0 1
## [1897] 0 0 1 1 0 0 1 1 0 1 0 0 0 0 0 1 0 0 1 0 1 1 0 0
## [1921] 1 0 0 0 1 1 0 0 0 0 0 0 0 0 0 1 1 1 0 0 1 0 1 1
## [1945] 0 1 1 0 0 0 0 1 1 1 0 0 0 1 0 1 1 0 0 0 0 0 1 1
## [1969] 1 0 1 0 0 0 0 1 1 1 0 1 1 1 0 1 1 0 1 1 0 0 1 1
## [1993] 1 1 1 0 0 1 1 1 0 1 0 0 1 1 1 0 1 0 1 0 0 1 1 1
## [2017] 0 0 0 1 1 0 1 1 1 1 1 0 1 1 0 1 0 1 1 0 1 1 1 1
## [2041] 1 0 1 0 0 0 1 0 1 1 0 1 0 1 1 1 0 0 0 1 0 1 0 1
## [2065] 0 0 0 0 1 1 1 1 1 1 0 1 1 0 0 1 1 0 1 0 0 1 0 1
## [2089] 0 1 1 1 0 1 0 1 1 1 1 1 1 0 0 1 1 1 0 0 1 0 0 0
## [2113] 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0 1
## [2137] 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
## [2161] 1 0 1 0 0 1 1 0 1 0 0 1 1 0 0 0 0 0 0 0 0 0 0 NA
## [2185] 0 0 1 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 NA 0 1
## [2209] NA NA 1 1 0 1 0 0 0 NA NA 1 1 1 0 1 1 NA NA NA 0 1 NA 1
## [2233] 0 0 0 1 NA NA 0 NA 0 0 0 NA 1 1 0 1 1 1 1 1 1 1 0 0
## [2257] 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
## [2281] 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

```

```
## [2305]  0  1  1  1  1  1  1  1  1  1  1
##
## Labels:
## value                                label
##      1      at or below median income level before and after
##      0 above median income either before or after the start
```

```
make_plots(wrangled, c("race_census", "inc_be_med_before", "inc_be_med"), "exp_ab_or_vi", title = "Percent Respondents Who Experienced Violence Or Abuse Due To Covid-19 by Race_census")
```

```
## $race_census
## $race_census$plot
```

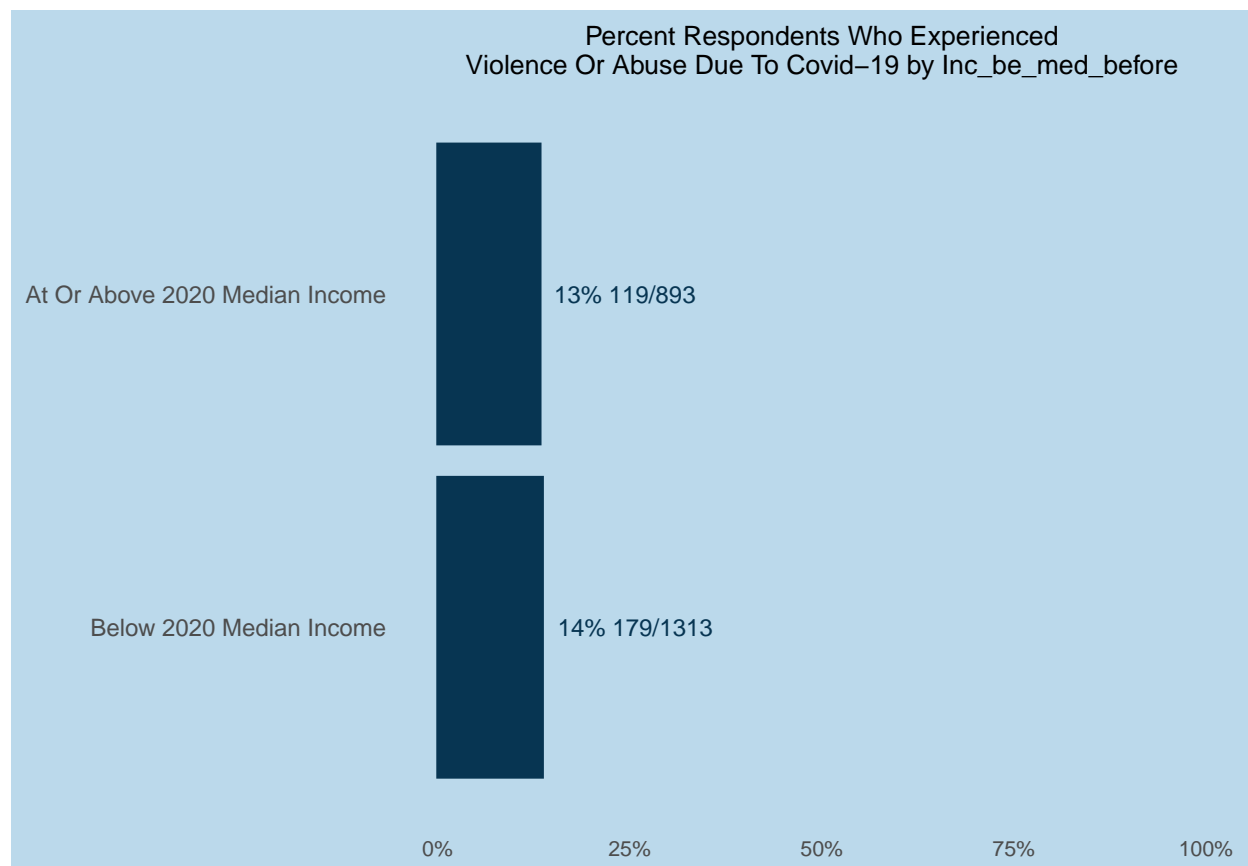


```
##
## $race_census$p.values
## $race_census$p.values$exp_ab_or_vi
##              other black or african american
## other              NA                      NA
## black or african american      NA                      NA
## hispanic or latinx              NA                      NA
## white (non-hispanic or latino)  NA                      NA
## two or more races              NA                      NA
## asian              NA                      3e-05
## Indigenous American      NA                      NA
##              hispanic or latinx
```

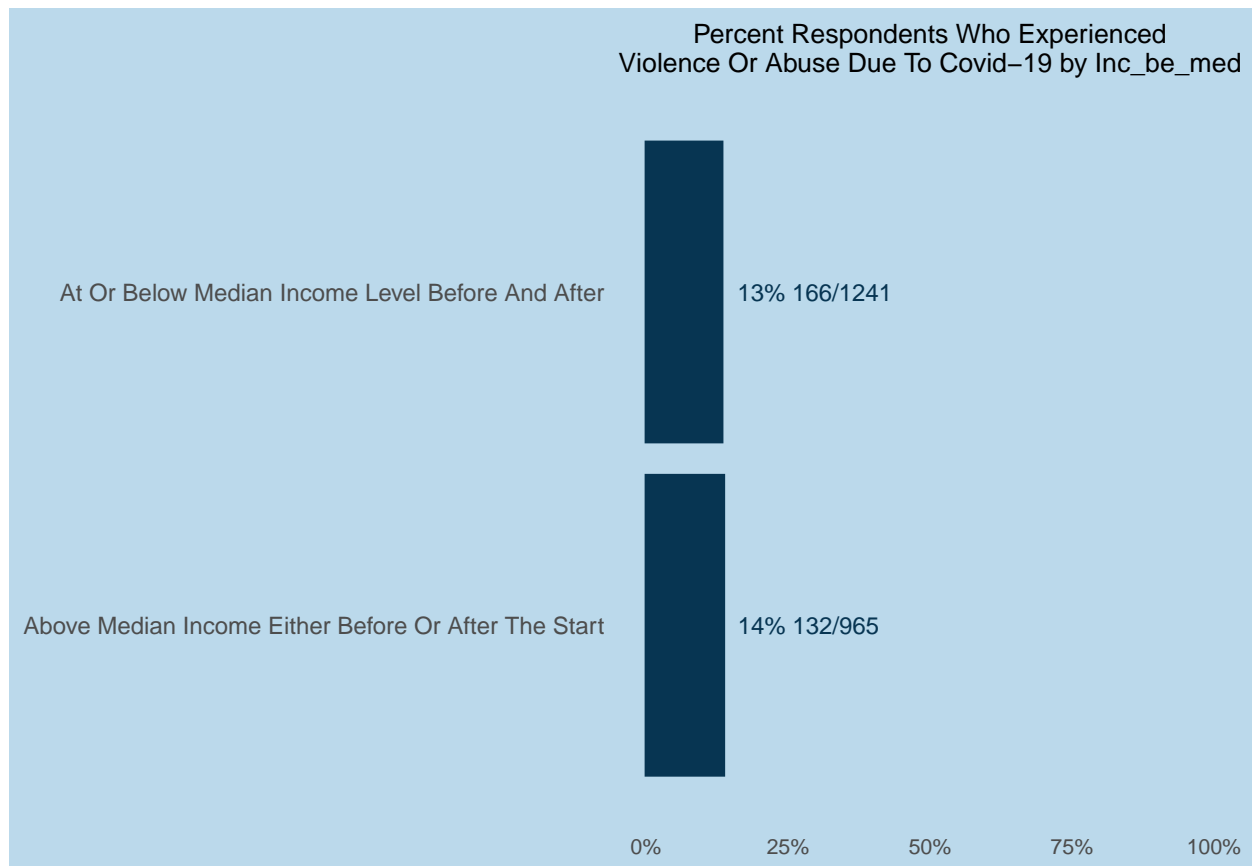
```

## other NA
## black or african american NA
## hispanic or latinx NA
## white (non-hispanic or latino) NA
## two or more races NA
## asian 0.00024
## Indigenous American NA
## white (non-hispanic or latino) two or more races
## other NA NA
## black or african american NA NA
## hispanic or latinx NA NA
## white (non-hispanic or latino) NA NA
## two or more races NA NA
## asian 0.00052 NA
## Indigenous American NA NA
## asian Indigenous American
## other NA NA
## black or african american 0.00003 NA
## hispanic or latinx 0.00024 NA
## white (non-hispanic or latino) 0.00052 NA
## two or more races NA NA
## asian NA NA
## Indigenous American NA NA
##
##
## $inc_be_med_before
## $inc_be_med_before$plot

```



```
##
## $inc_be_med_before$p.values
## $inc_be_med_before$p.values$exp_ab_or_vi
##               at or above 2020 median income
## at or above 2020 median income                NA
## below 2020 median income                      NA
##               below 2020 median income
## at or above 2020 median income                NA
## below 2020 median income                      NA
##
##
##
## $inc_be_med
## $inc_be_med$plot
```



```
##
## $inc_be_med$p.values
## $inc_be_med$p.values$exp_ab_or_vi
##
## at or below median income level before and after
## above median income either before or after the start
##
## at or below median income level before and after
## above median income either before or after the start
```

```
cat("Plots for inc_be_med and inc_be_med_before are not showing statistically significant results")
```

```
## Plots for inc_be_med and inc_be_med_before are not showing statistically significant results
```

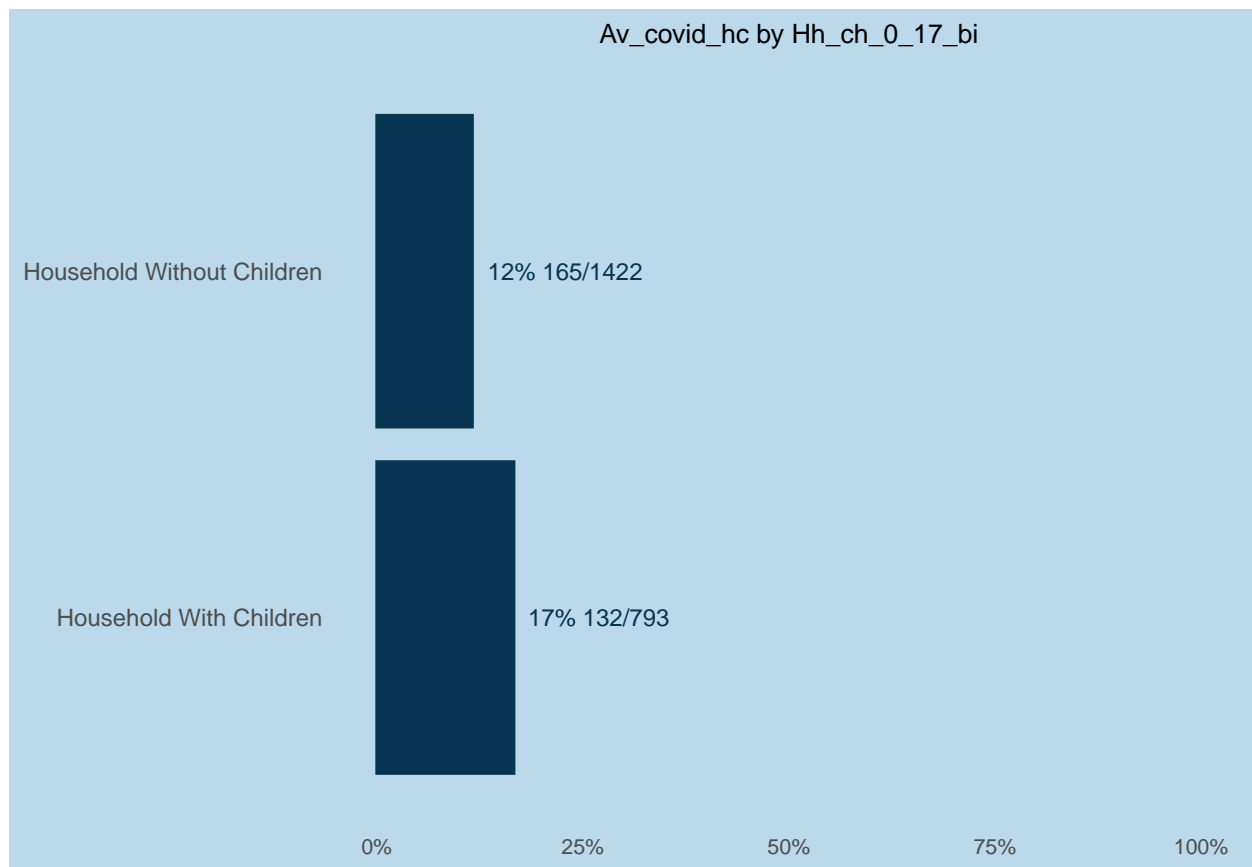
5.9) Distribution over each activity/place which has been avoided due to safety concern

1. Run sub demographic distribution over each activity/place which has been avoided
2. Run over responses over each population

```
av_covid <- wrangled %>% select(starts_with("av_covid_") & !ends_with("text")) %>% colnames()
```

```
lapply(av_covid, function(av) {
  make_plots(wrangled, demographics, av, title = av)
})
```

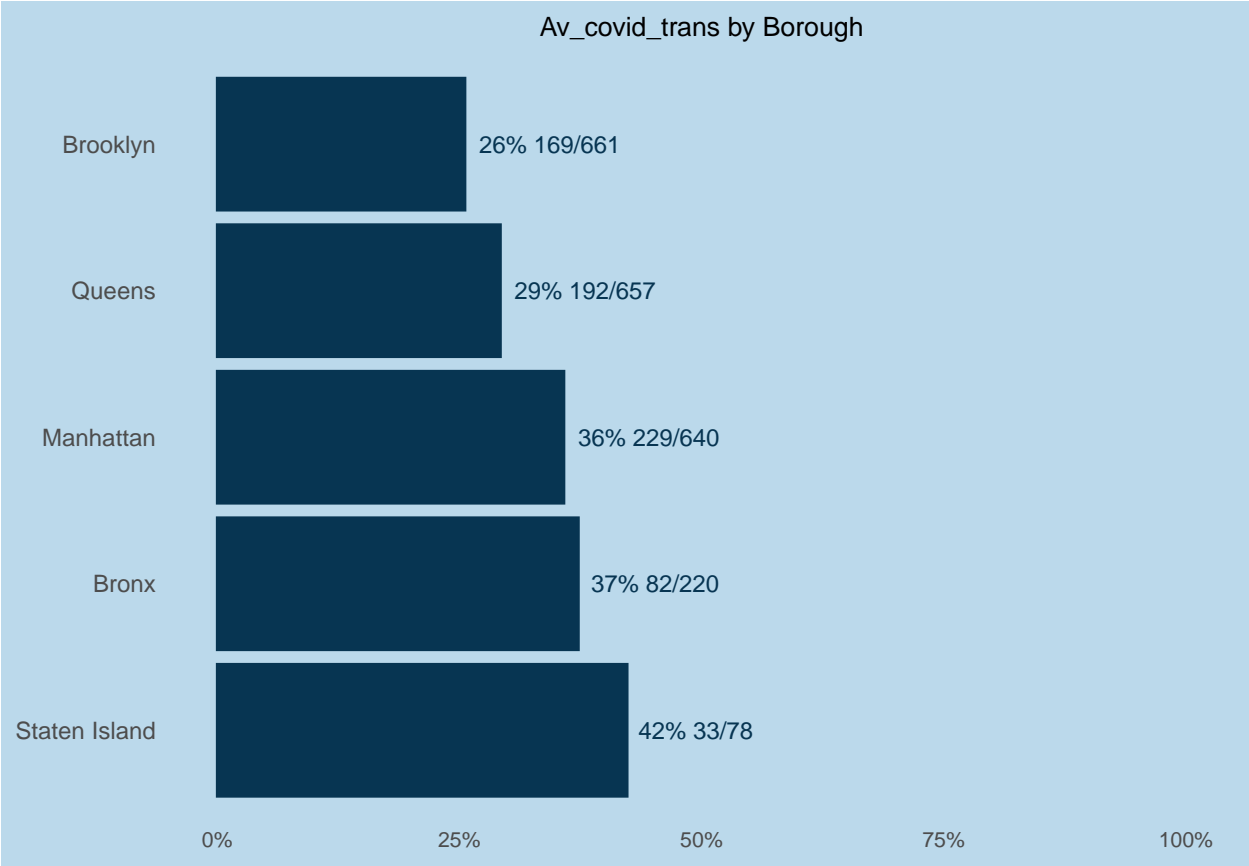
```
## [[1]]
## [[1]]$borough
## NULL
##
## [[1]]$gen
## NULL
##
## [[1]]$race_census
## NULL
##
## [[1]]$hh_ch_0_17_bi
## [[1]]$hh_ch_0_17_bi$plot
```



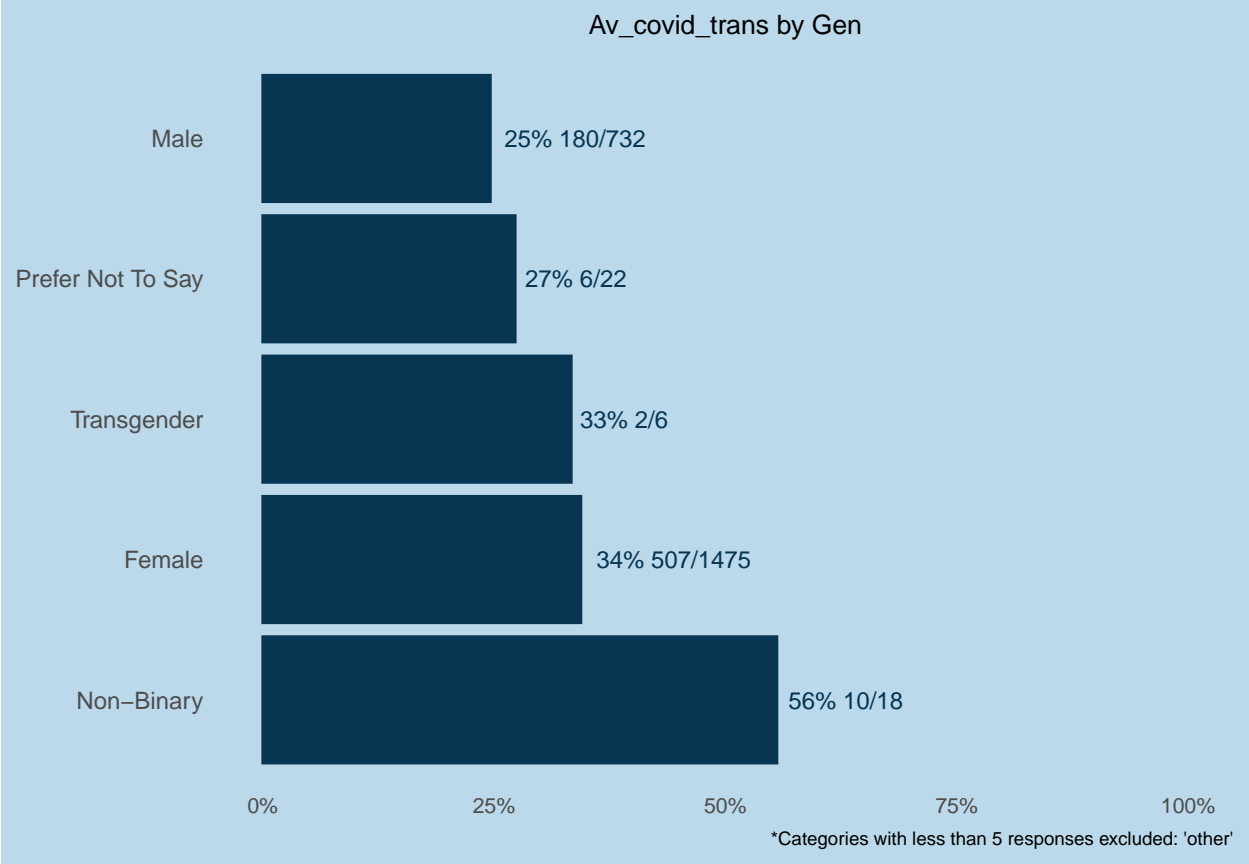
```
##
## [[1]]$hh_ch_0_17_bi$p.values
## [[1]]$hh_ch_0_17_bi$p.values$av_covid_hc
## household without children household with children
## household without children NA 0.0011
## household with children 0.0011 NA
##
```



```
##
##
## [[1]]$hh_sn_65_bi
## NULL
##
## [[1]]$inc_dist
## NULL
##
##
## [[2]]
## [[2]]$borough
## NULL
##
## [[2]]$gen
## NULL
##
## [[2]]$race_census
## NULL
##
## [[2]]$hh_ch_0_17_bi
## NULL
##
## [[2]]$hh_sn_65_bi
## NULL
##
## [[2]]$inc_dist
## NULL
##
##
## [[3]]
## [[3]]$borough
## [[3]]$borough$plot
```

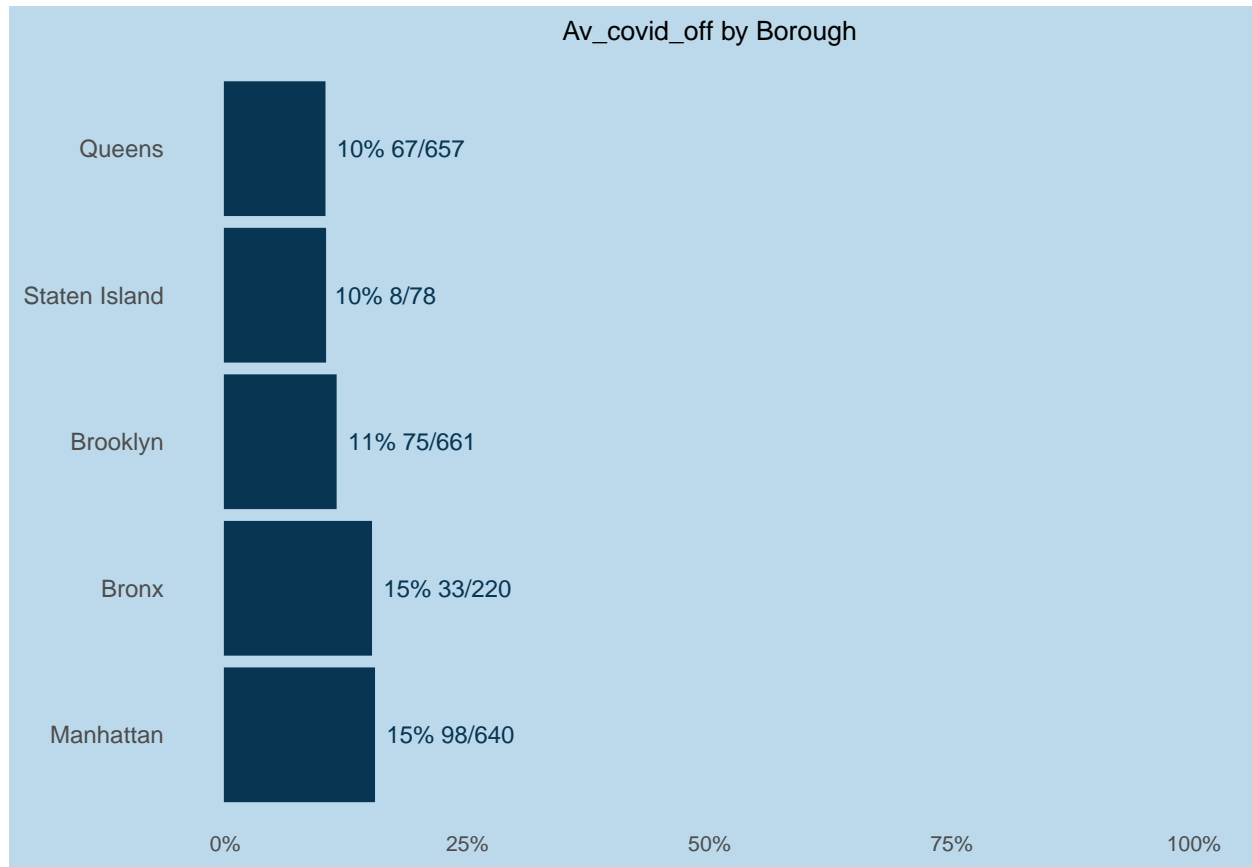


```
##
## [[3]]$borough$p.values
## [[3]]$borough$p.values$av_covid_trans
##               brooklyn queens manhattan  bronx staten island
## brooklyn           NA      NA   8.3e-05 0.0012           0.0027
## queens             NA      NA           NA      NA           NA
## manhattan          8.3e-05   NA           NA      NA           NA
## bronx              1.2e-03   NA           NA      NA           NA
## staten island      2.7e-03   NA           NA      NA           NA
##
##
##
## [[3]]$gen
## [[3]]$gen$plot
```



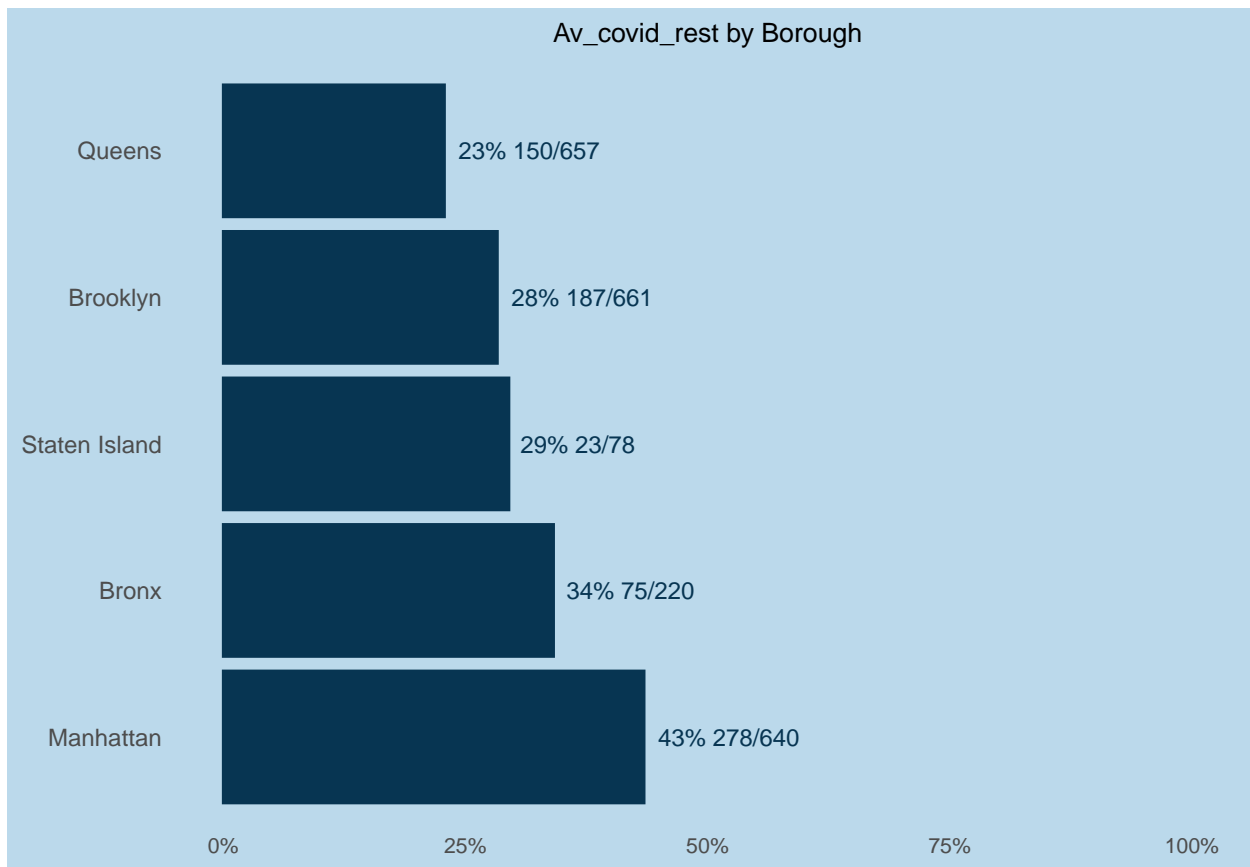
```
##
## [[3]]$gen$p.values
## [[3]]$gen$p.values$av_covid_trans
##           male prefer not to say transgender  female non-binary
## male           NA                NA          NA 3.8e-06        NA
## prefer not to say  NA                NA          NA      NA        NA
## transgender        NA                NA          NA      NA        NA
## female           3.8e-06              NA          NA      NA        NA
## non-binary         NA                NA          NA      NA        NA
##
##
##
## [[3]]$race_census
## NULL
##
## [[3]]$hh_ch_0_17_bi
## NULL
##
## [[3]]$hh_sn_65_bi
## NULL
##
## [[3]]$inc_dist
## NULL
##
##
## [[4]]
```

```
## [[4]]$borough
## [[4]]$borough$plot
```

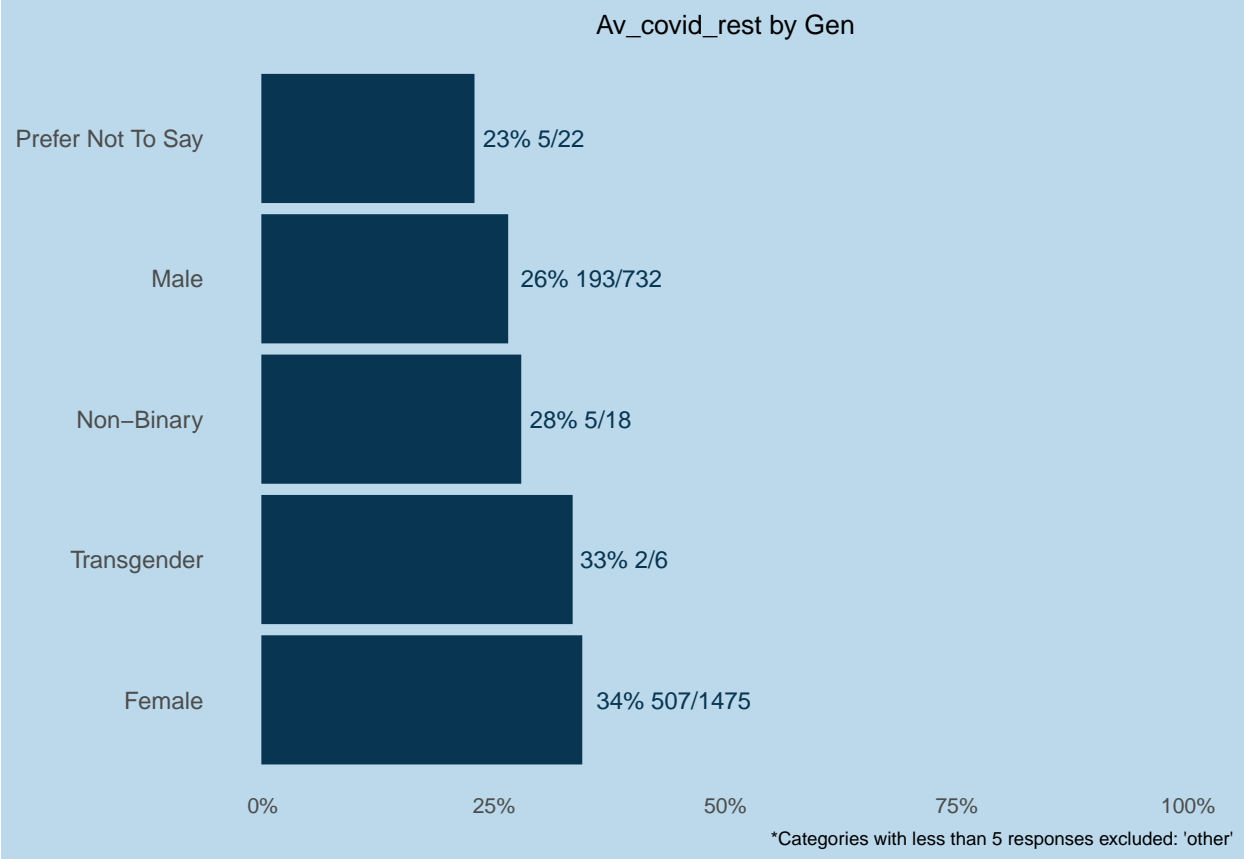


```
##
## [[4]]$borough$p.values
## [[4]]$borough$p.values$av_covid_off
##               queens staten island brooklyn bronx manhattan
## queens              NA              NA      NA      NA      0.0074
## staten island        NA              NA      NA      NA      NA
## brooklyn             NA              NA      NA      NA      NA
## bronx                NA              NA      NA      NA      NA
## manhattan            0.0074          NA      NA      NA      NA
##
##
##
## [[4]]$gen
## NULL
##
## [[4]]$race_census
## NULL
##
## [[4]]$hh_ch_0_17_bi
## NULL
##
## [[4]]$hh_sn_65_bi
```

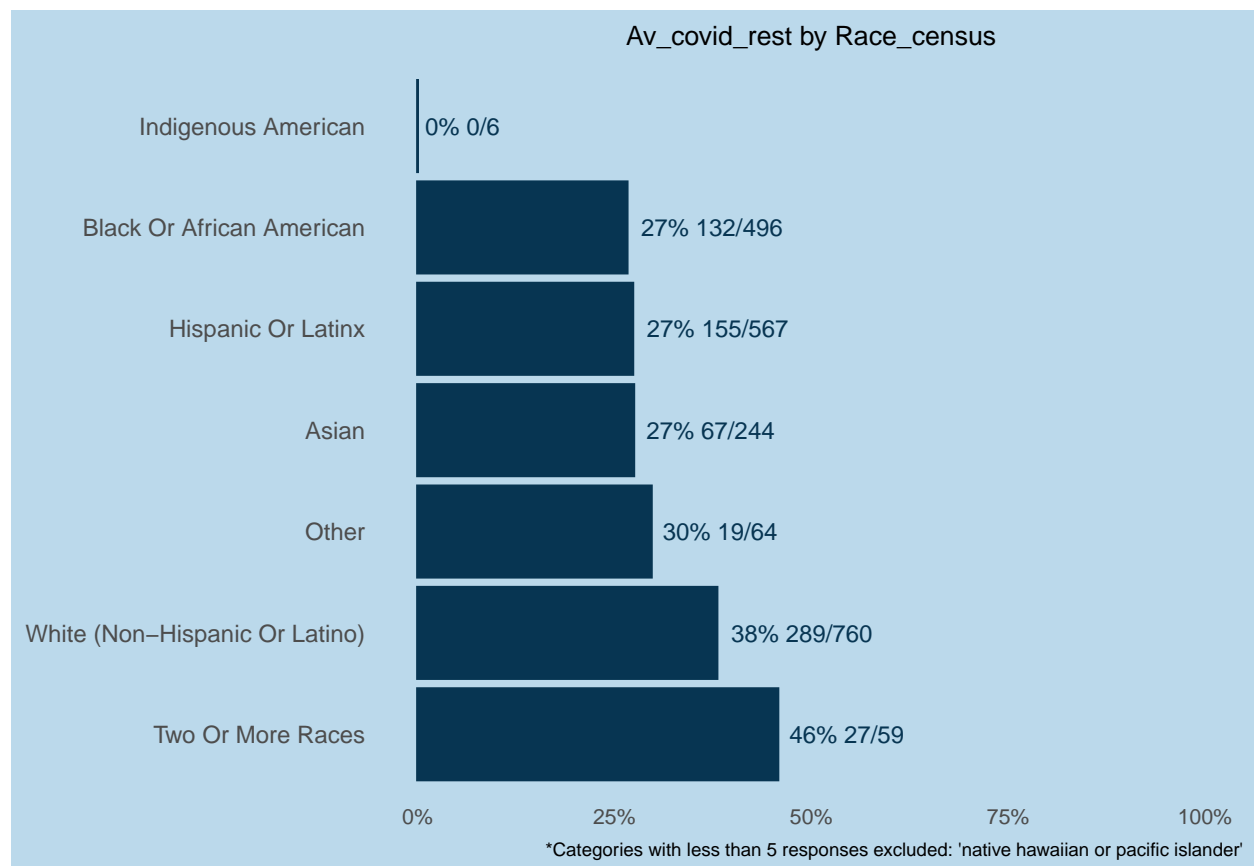
```
## NULL
##
## [[4]]$inc_dist
## NULL
##
##
## [[5]]
## [[5]]$borough
## [[5]]$borough$plot
```



```
##
## [[5]]$borough$p.values
## [[5]]$borough$p.values$av_covid_rest
##
##      queens brooklyn staten island  bronx manhattan
## queens      NA      NA      NA 0.0013  4.8e-15
## brooklyn      NA      NA      NA      NA  1.7e-08
## staten island      NA      NA      NA      NA      NA
## bronx      1.3e-03      NA      NA      NA      NA
## manhattan  4.8e-15  1.7e-08      NA      NA      NA
##
##
##
## [[5]]$gen
## [[5]]$gen$plot
```

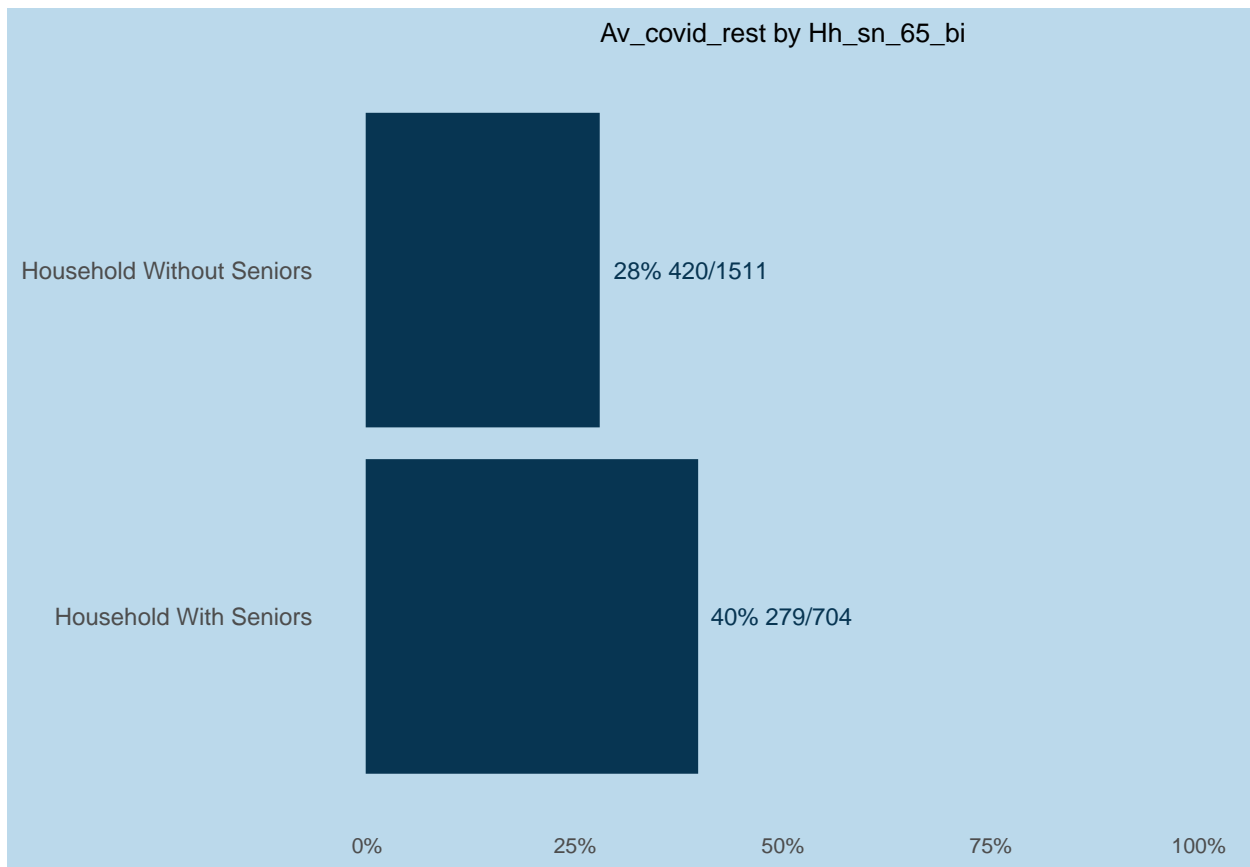


```
##
## [[5]]$gen$p.values
## [[5]]$gen$p.values$av_covid_rest
##               prefer not to say    male non-binary transgender  female
## prefer not to say              NA      NA      NA      NA      NA
## male                          NA      NA      NA      NA 0.00017
## non-binary                    NA      NA      NA      NA      NA
## transgender                    NA      NA      NA      NA      NA
## female                        NA 0.00017      NA      NA      NA
##
##
##
## [[5]]$race_census
## [[5]]$race_census$plot
```

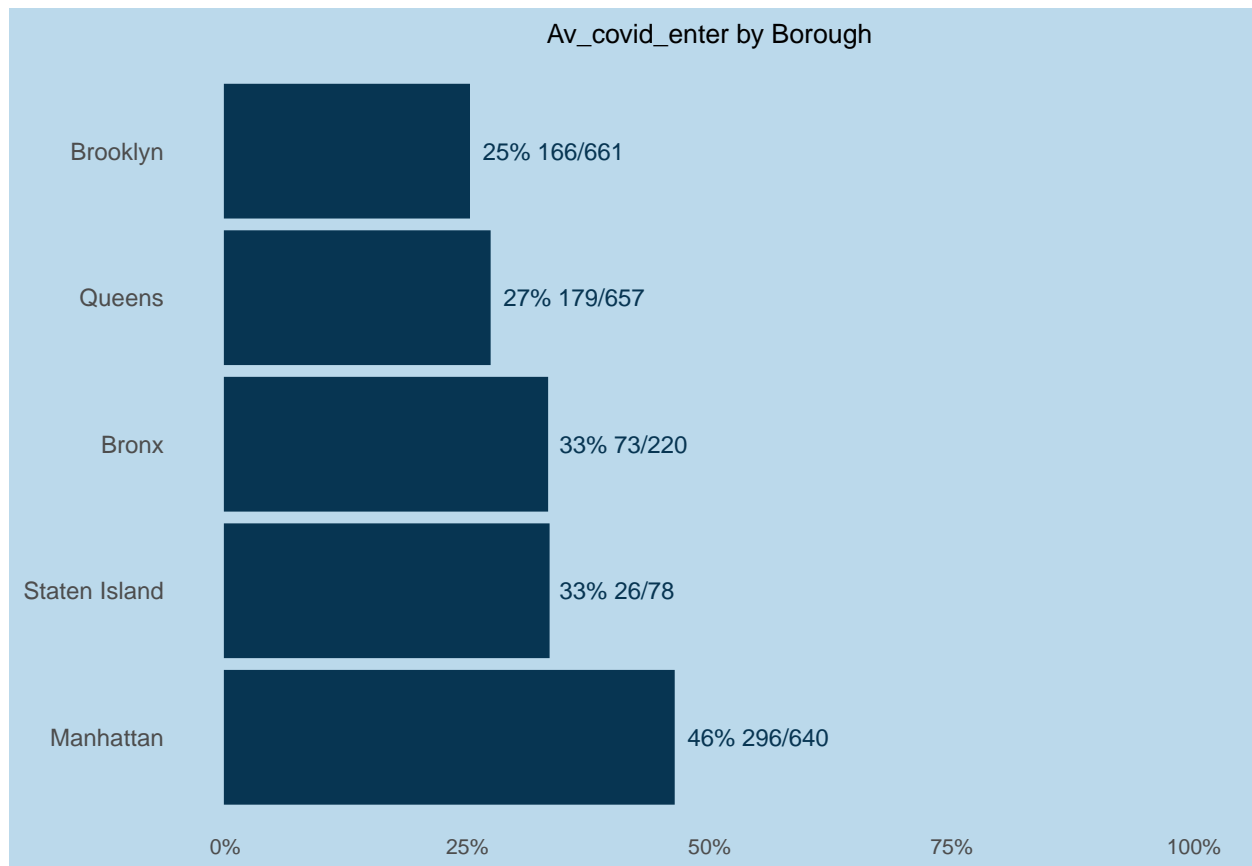


```
##
## [[5]]$race_census$p.values
## [[5]]$race_census$p.values$av_covid_rest
##               Indigenous American black or african american
## Indigenous American                NA                      NA
## black or african american          NA                      NA
## hispanic or latinx                 NA                      NA
## asian                             NA                      NA
## other                             NA                      NA
## white (non-hispanic or latino)     NA                   3.7e-05
## two or more races                  NA                   3.5e-03
##               hispanic or latinx  asian other
## Indigenous American              NA    NA    NA
## black or african american        NA    NA    NA
## hispanic or latinx               NA    NA    NA
## asian                           NA    NA    NA
## other                           NA    NA    NA
## white (non-hispanic or latino)   5.7e-05 0.0034  NA
## two or more races                4.9e-03 0.0100  NA
##               white (non-hispanic or latino) two or more races
## Indigenous American                NA                      NA
## black or african american          3.7e-05                   0.0035
## hispanic or latinx                 5.7e-05                   0.0049
## asian                             3.4e-03                   0.0100
## other                             NA                      NA
## white (non-hispanic or latino)     NA                      NA
```

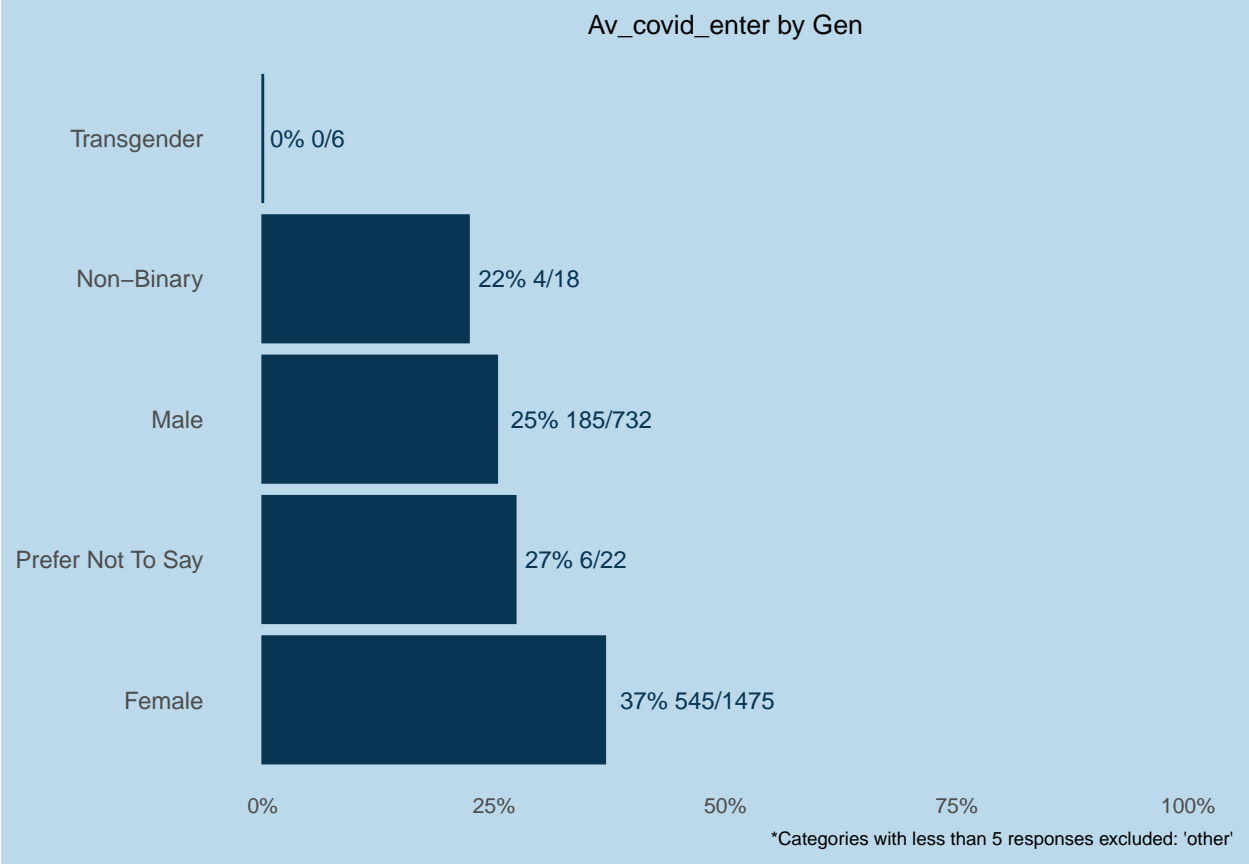
```
## two or more races
##
##
##
## [[5]]$hh_ch_0_17_bi
## NULL
##
## [[5]]$hh_sn_65_bi
## [[5]]$hh_sn_65_bi$plot
```



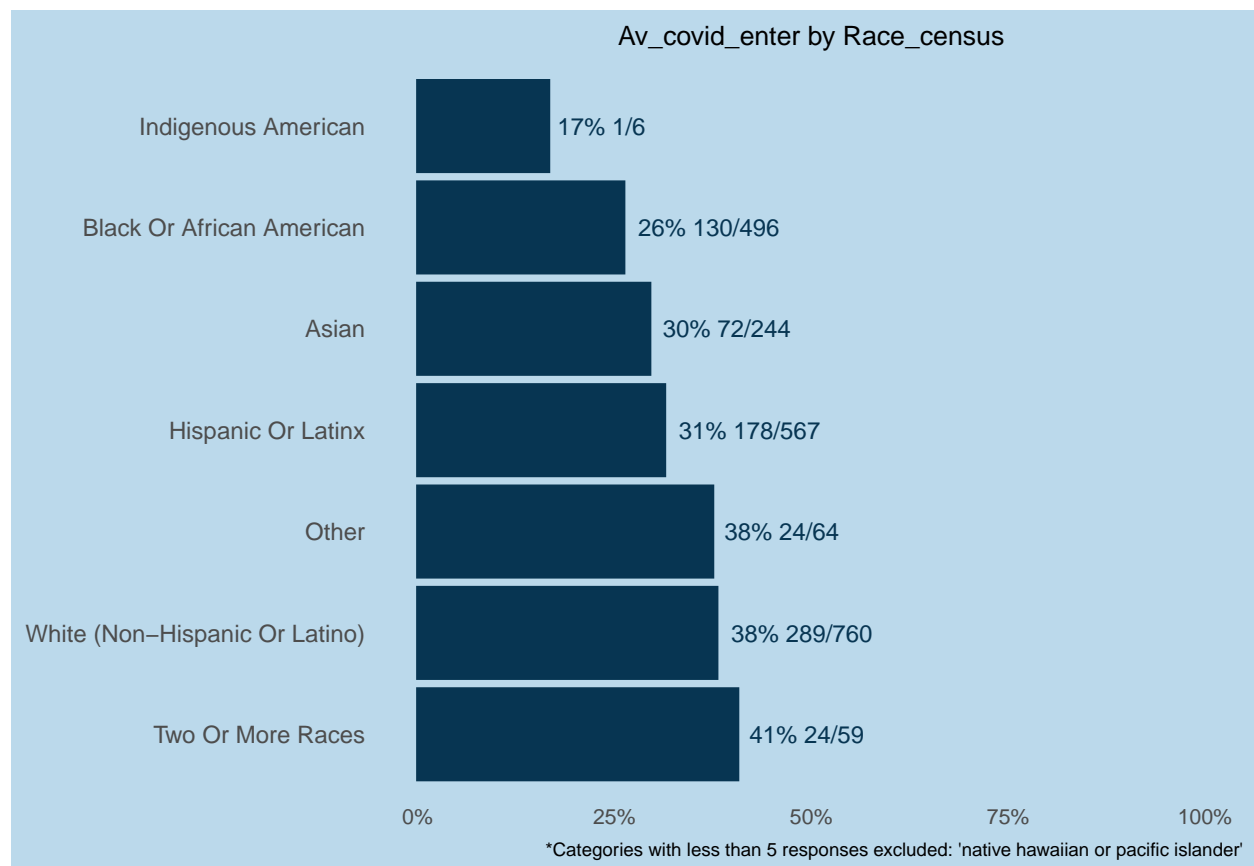
```
##
## [[5]]$hh_sn_65_bi$p.values
## [[5]]$hh_sn_65_bi$p.values$av_covid_rest
## household without seniors household with seniors
## household without seniors NA 3.2e-08
## household with seniors 3.2e-08 NA
##
##
##
## [[5]]$inc_dist
## NULL
##
##
## [[6]]
## [[6]]$borough
## [[6]]$borough$plot
```

```
##
## [[6]]$borough$p.values
## [[6]]$borough$p.values$av_covid_enter
##
##      brooklyn  queens  bronx  staten  island  manhattan
## brooklyn      NA      NA      NA      NA      2.6e-15
## queens        NA      NA      NA      NA      1.9e-12
## bronx          NA      NA      NA      NA      9.7e-04
## staten island  NA      NA      NA      NA      NA
## manhattan      2.6e-15 1.9e-12 0.00097  NA      NA
##
##
##
## [[6]]$gen
## [[6]]$gen$plot
```

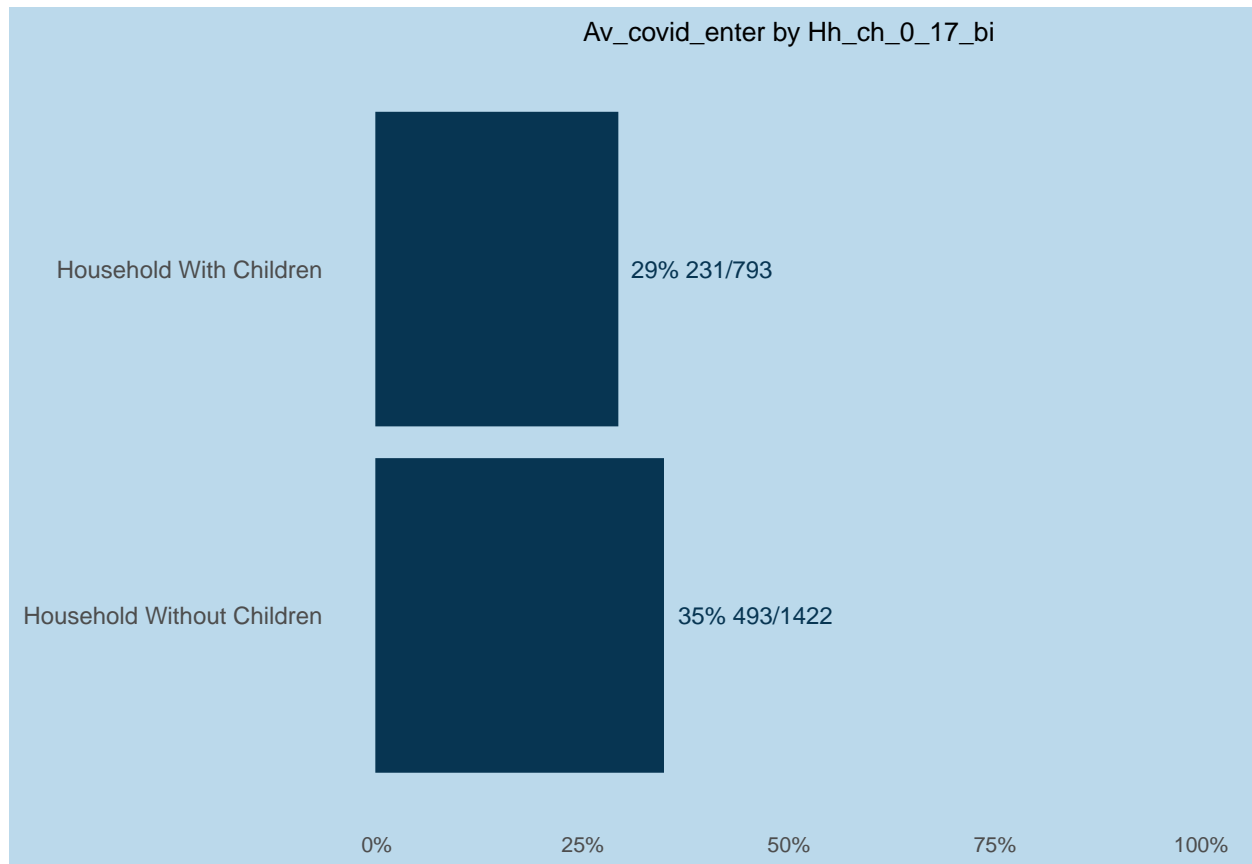


```
##
## [[6]]$gen$p.values
## [[6]]$gen$p.values$av_covid_enter
##               transgender non-binary      male prefer not to say  female
## transgender              NA         NA         NA              NA      NA
## non-binary               NA         NA         NA              NA      NA
## male                     NA         NA         NA              NA  5.3e-08
## prefer not to say        NA         NA         NA              NA      NA
## female                   NA         NA  5.3e-08              NA      NA
##
##
##
## [[6]]$race_census
## [[6]]$race_census$plot
```

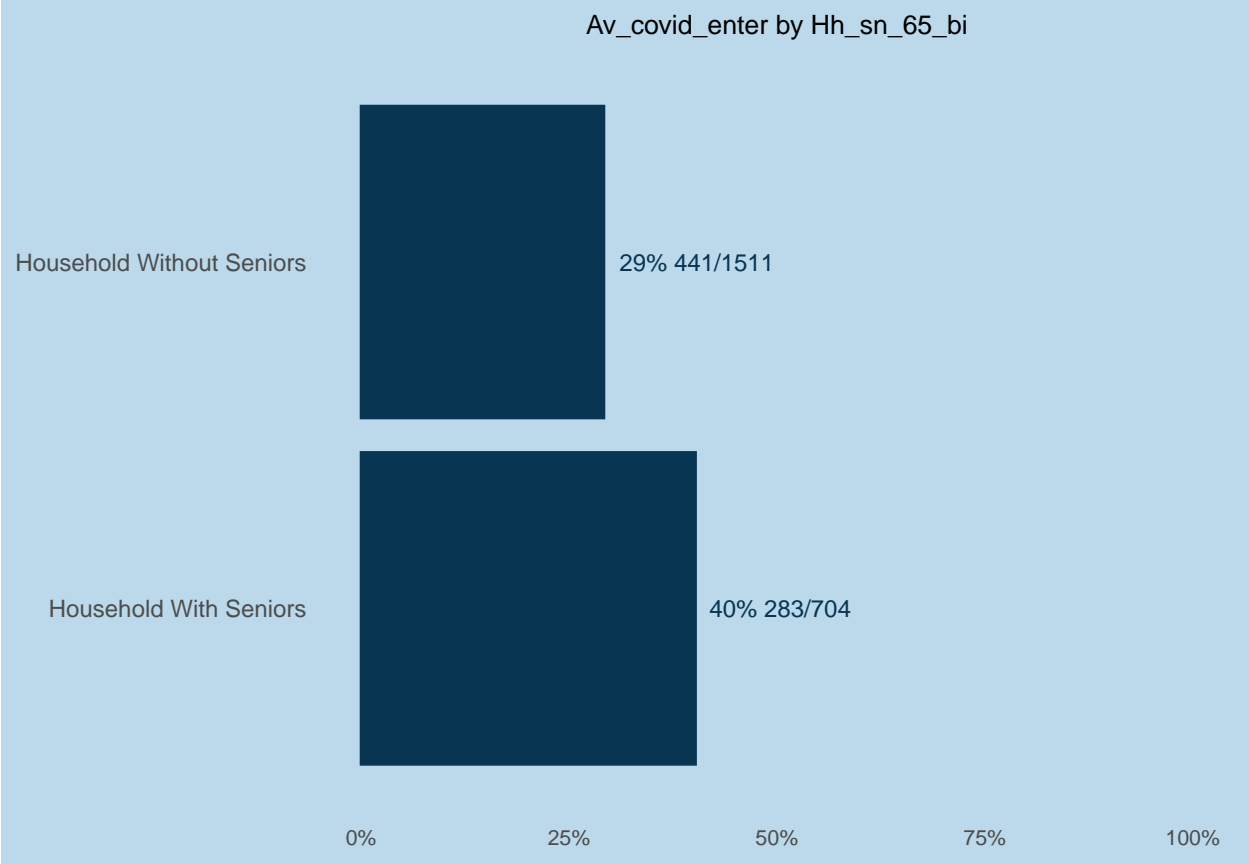


```
##
## [[6]]$race_census$p.values
## [[6]]$race_census$p.values$av_covid_enter
##               Indigenous American black or african american
## Indigenous American                NA                      NA
## black or african american          NA                      NA
## asian                             NA                      NA
## hispanic or latinx                 NA                      NA
## other                             NA                      NA
## white (non-hispanic or latino)     NA                    1.9e-05
## two or more races                  NA                      NA
##               asian hispanic or latinx other
## Indigenous American                NA                NA
## black or african american          NA                NA
## asian                             NA                NA
## hispanic or latinx                 NA                NA
## other                             NA                NA
## white (non-hispanic or latino)     NA                NA
## two or more races                  NA                NA
##               white (non-hispanic or latino) two or more races
## Indigenous American                NA                NA
## black or african american          1.9e-05            NA
## asian                             NA                NA
## hispanic or latinx                 NA                NA
## other                             NA                NA
## white (non-hispanic or latino)     NA                NA
```

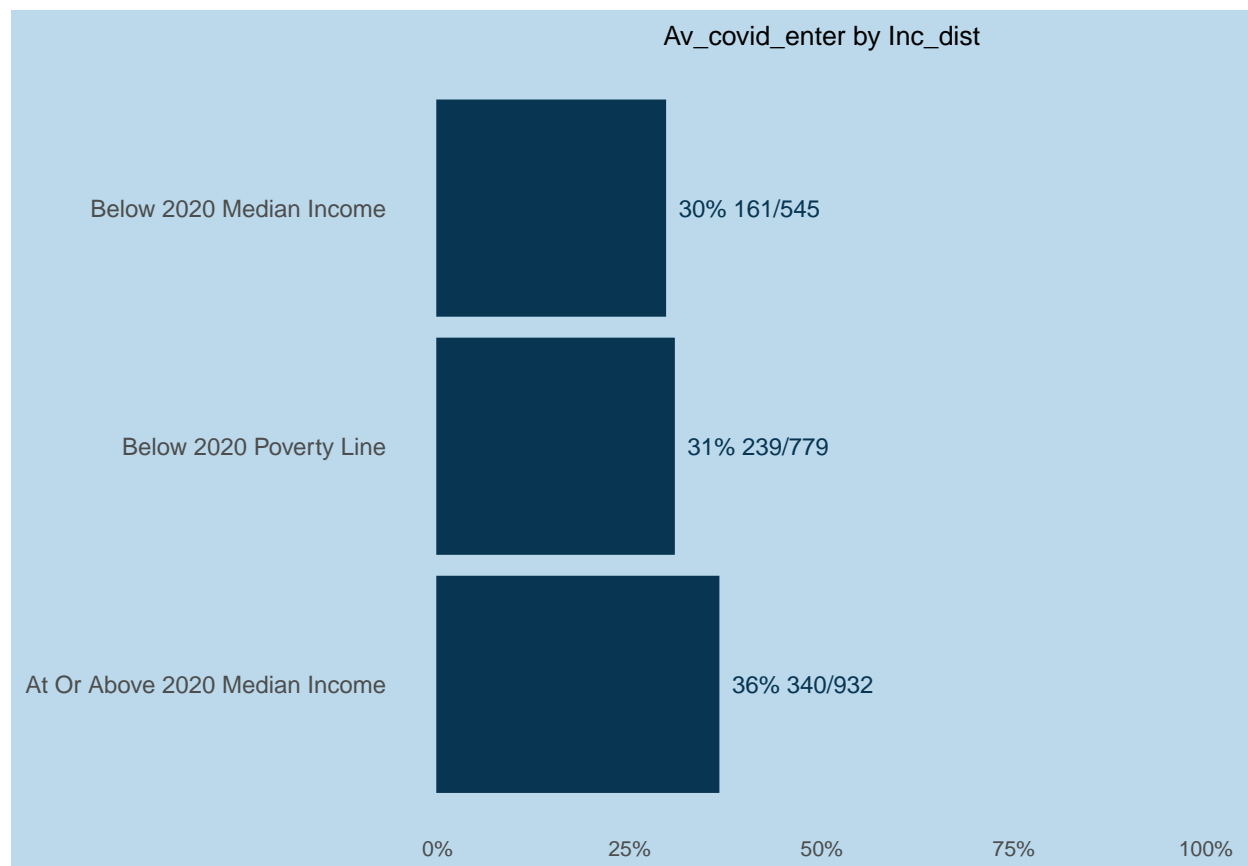
```
## two or more races
##
##
##
## [[6]]$hh_ch_0_17_bi
## [[6]]$hh_ch_0_17_bi$plot
```



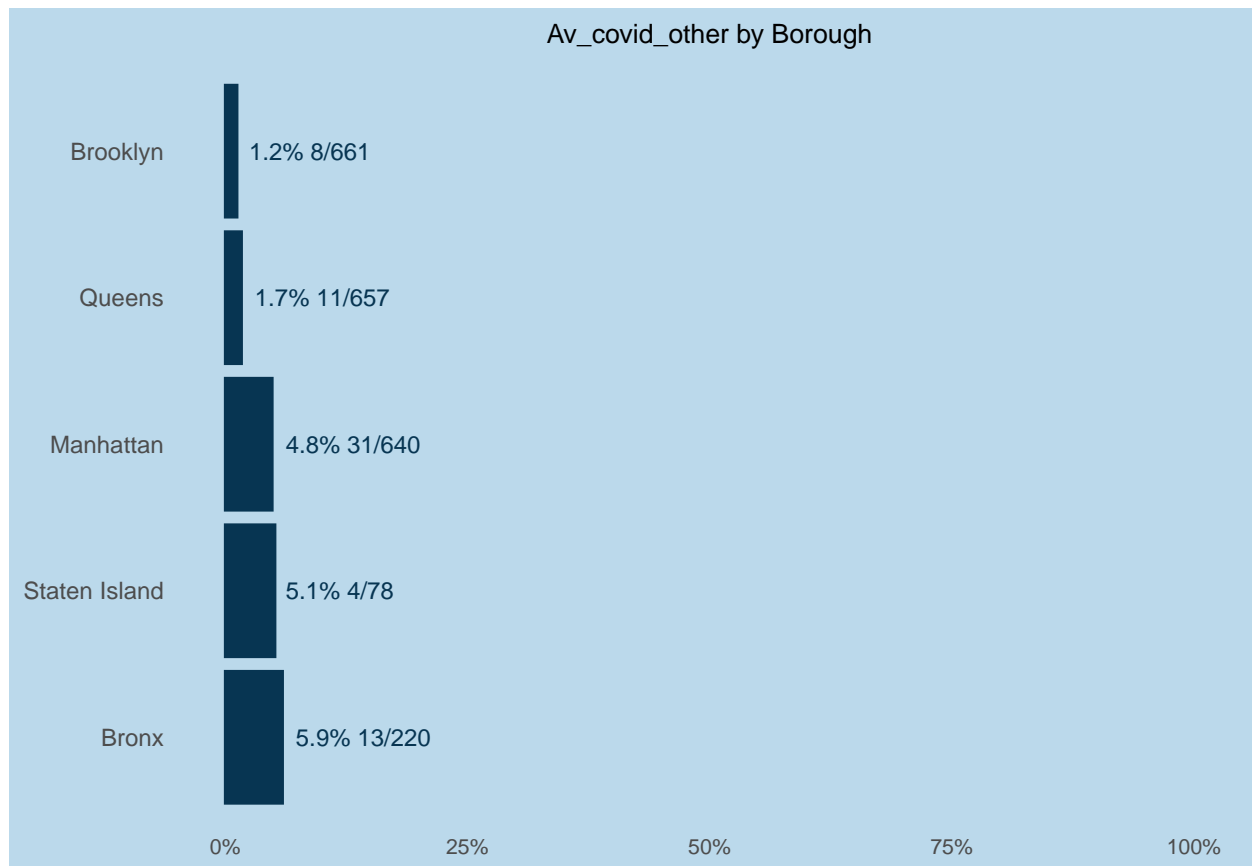
```
##
## [[6]]$hh_ch_0_17_bi$p.values
## [[6]]$hh_ch_0_17_bi$p.values$av_covid_enter
##
## household with children household without children
## household with children NA 0.0089
## household without children 0.0089 NA
##
##
##
## [[6]]$hh_sn_65_bi
## [[6]]$hh_sn_65_bi$plot
```



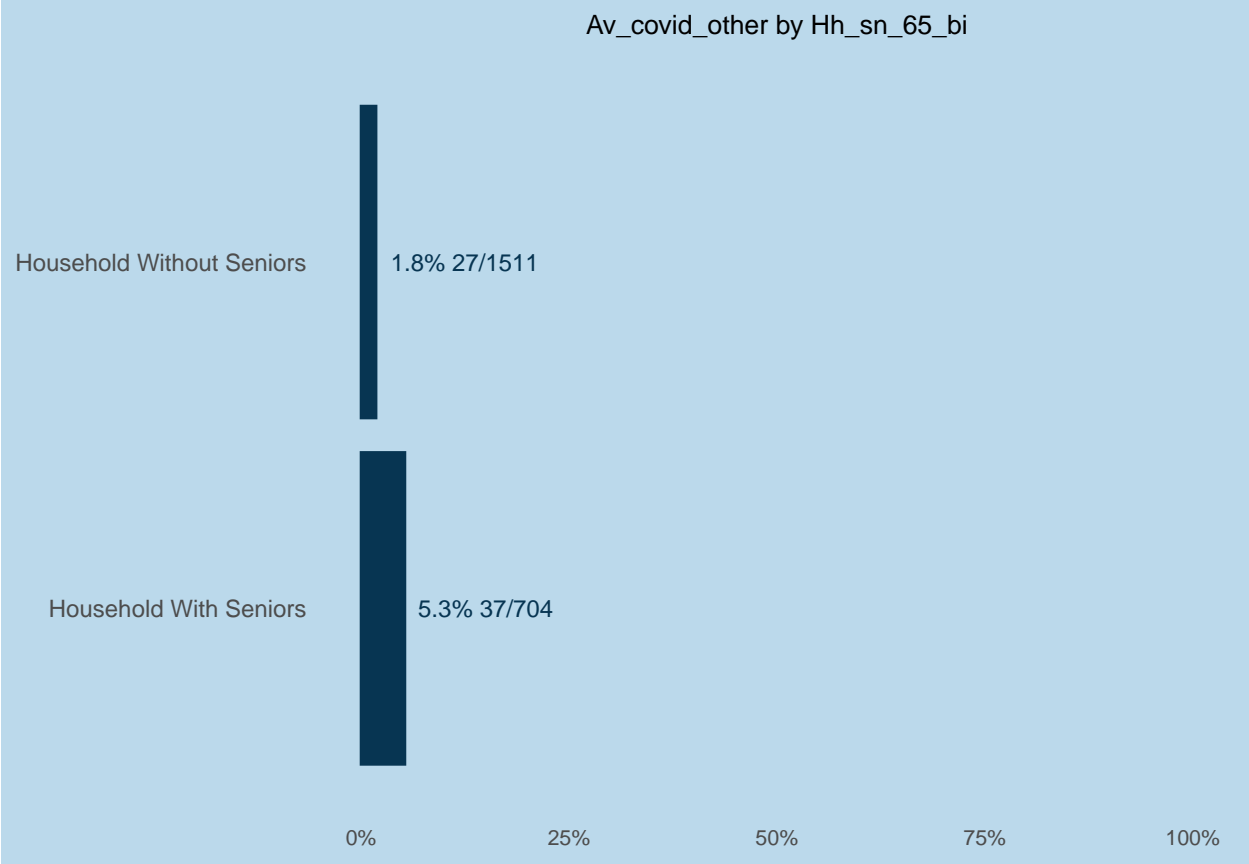
```
##  
## [[6]]$hh_sn_65_bi$p.values  
## [[6]]$hh_sn_65_bi$p.values$av_covid_enter  
## household without seniors household with seniors  
## household without seniors NA 3.5e-07  
## household with seniors 3.5e-07 NA  
##  
##  
##  
## [[6]]$inc_dist  
## [[6]]$inc_dist$plot
```



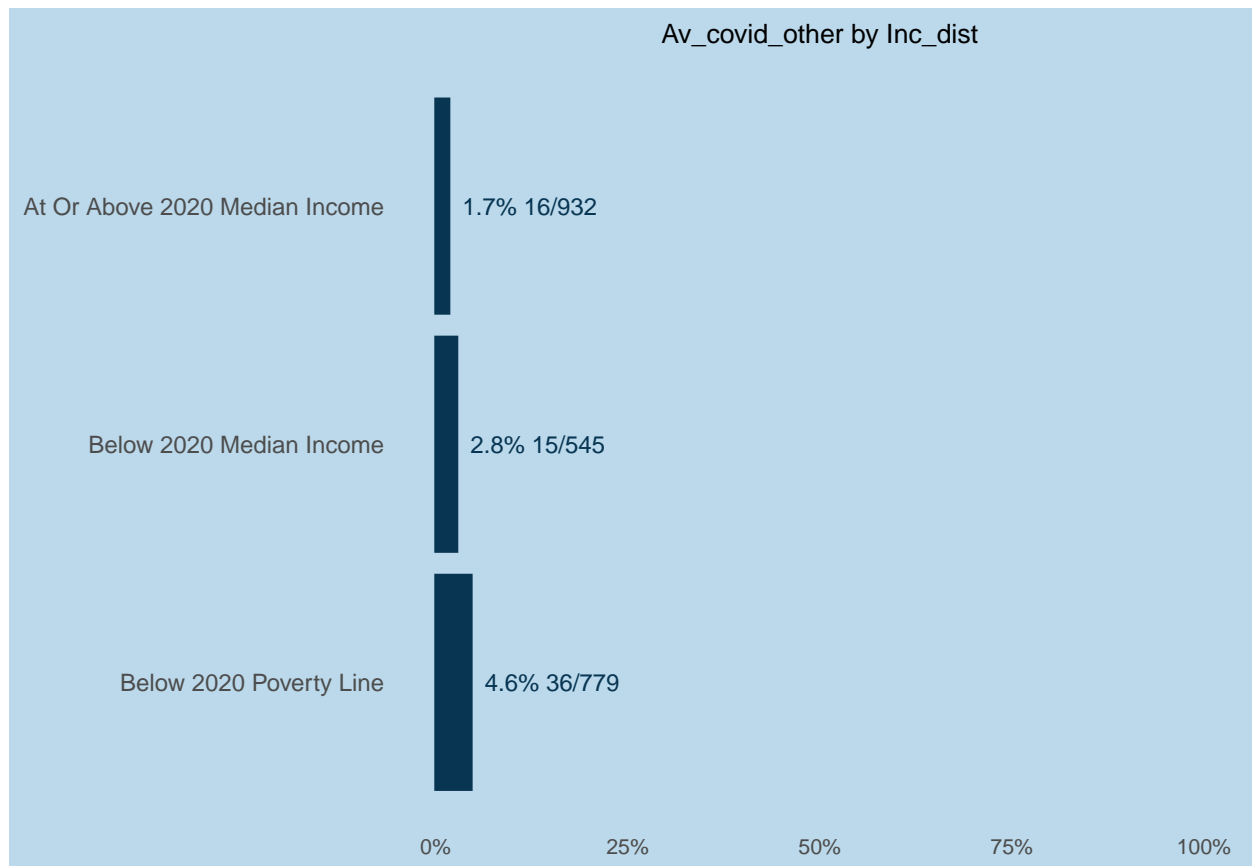
```
##
## [[6]]$inc_dist$p.values
## [[6]]$inc_dist$p.values$av_covid_enter
##
##          below 2020 median income below 2020 poverty line
## below 2020 median income          NA                      NA
## below 2020 poverty line          NA                      NA
## at or above 2020 median income    0.0078                  NA
##
##          at or above 2020 median income
## below 2020 median income          0.0078
## below 2020 poverty line          NA
## at or above 2020 median income    NA
##
##
##
##
## [[7]]
## [[7]]$borough
## [[7]]$borough$plot
```



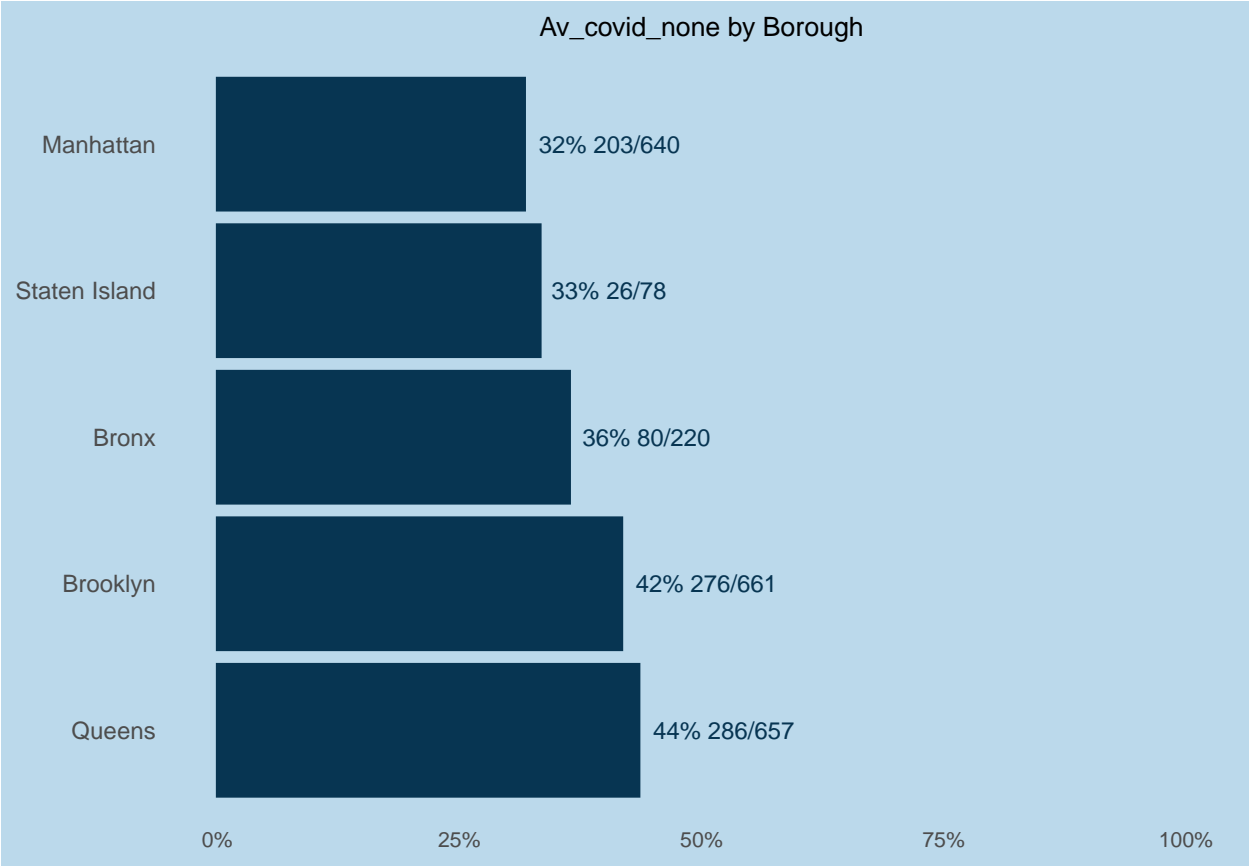
```
##
## [[7]]$borough$p.values
## [[7]]$borough$p.values$av_covid_other
##          brooklyn queens manhattan staten island  bronx
## brooklyn          NA      NA    0.00023          NA 0.00021
## queens            NA      NA    0.00220          NA 0.00200
## manhattan    0.00023 0.0022          NA          NA      NA
## staten island      NA      NA          NA          NA      NA
## bronx          0.00021 0.0020          NA          NA      NA
##
##
##
## [[7]]$gen
## NULL
##
## [[7]]$race_census
## NULL
##
## [[7]]$hh_ch_0_17_bi
## NULL
##
## [[7]]$hh_sn_65_bi
## [[7]]$hh_sn_65_bi$plot
```



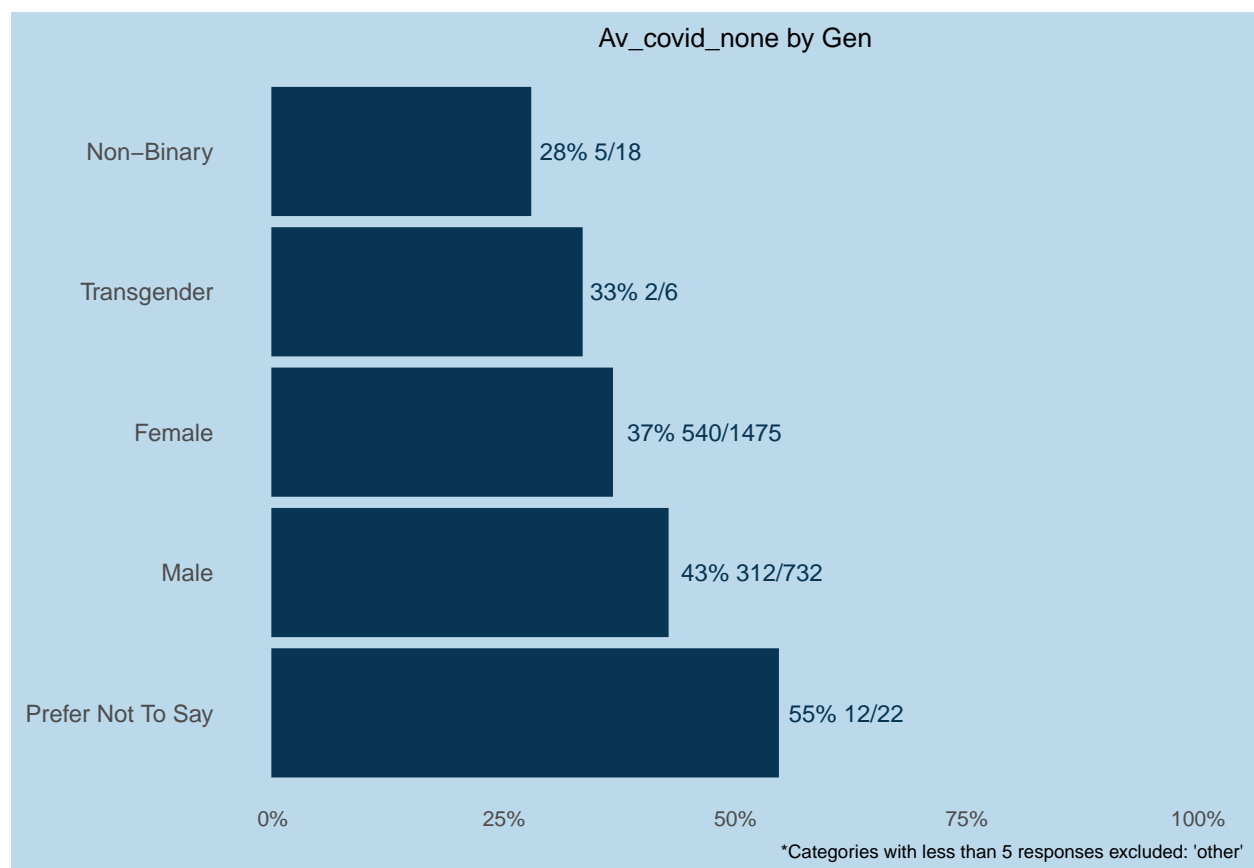
```
##
## [[7]]$hh_sn_65_bi$p.values
## [[7]]$hh_sn_65_bi$p.values$av_covid_other
##           household without seniors household with seniors
## household without seniors           NA           1.1e-05
## household with seniors           1.1e-05           NA
##
##
##
## [[7]]$inc_dist
## [[7]]$inc_dist$plot
```

```
##
## [[7]]$inc_dist$p.values
## [[7]]$inc_dist$p.values$av_covid_other
##                               at or above 2020 median income
## at or above 2020 median income                               NA
## below 2020 median income                                     NA
## below 2020 poverty line                                     0.00083
##                               below 2020 median income below 2020 poverty line
## at or above 2020 median income                               NA               0.00083
## below 2020 median income                                     NA               NA
## below 2020 poverty line                                     NA               NA
##
##
##
## [[8]]
## [[8]]$borough
## [[8]]$borough$plot
```



```
##
## [[8]]$borough$p.values
## [[8]]$borough$p.values$av_covid_none
##      manhattan staten island bronx brooklyn queens
## manhattan      NA          NA   NA  0.00022 1.5e-05
## staten island    NA          NA   NA      NA      NA
## bronx            NA          NA   NA      NA      NA
## brooklyn         2.2e-04      NA   NA      NA      NA
## queens           1.5e-05      NA   NA      NA      NA
##
##
##
## [[8]]$gen
## [[8]]$gen$plot
```



```
##
## [[8]]$gen$p.values
## [[8]]$gen$p.values$av_covid_none
##               non-binary transgender female   male prefer not to say
## non-binary           NA           NA     NA     NA           NA
## transgender          NA           NA     NA     NA           NA
## female               NA           NA     NA 0.0072           NA
## male                 NA           NA 0.0072     NA           NA
## prefer not to say    NA           NA     NA     NA           NA
##
##
##
## [[8]]$race_census
## NULL
##
## [[8]]$hh_ch_0_17_bi
## NULL
##
## [[8]]$hh_sn_65_bi
## NULL
##
## [[8]]$inc_dist
## NULL
```

```
cat("Plots without statistically significant results are omitted, when marked with NULL above")
```

```
## Plots without statistically significant results are omitted, when marked with NULL above
```