

poa_health_8-13

Arielle Herman

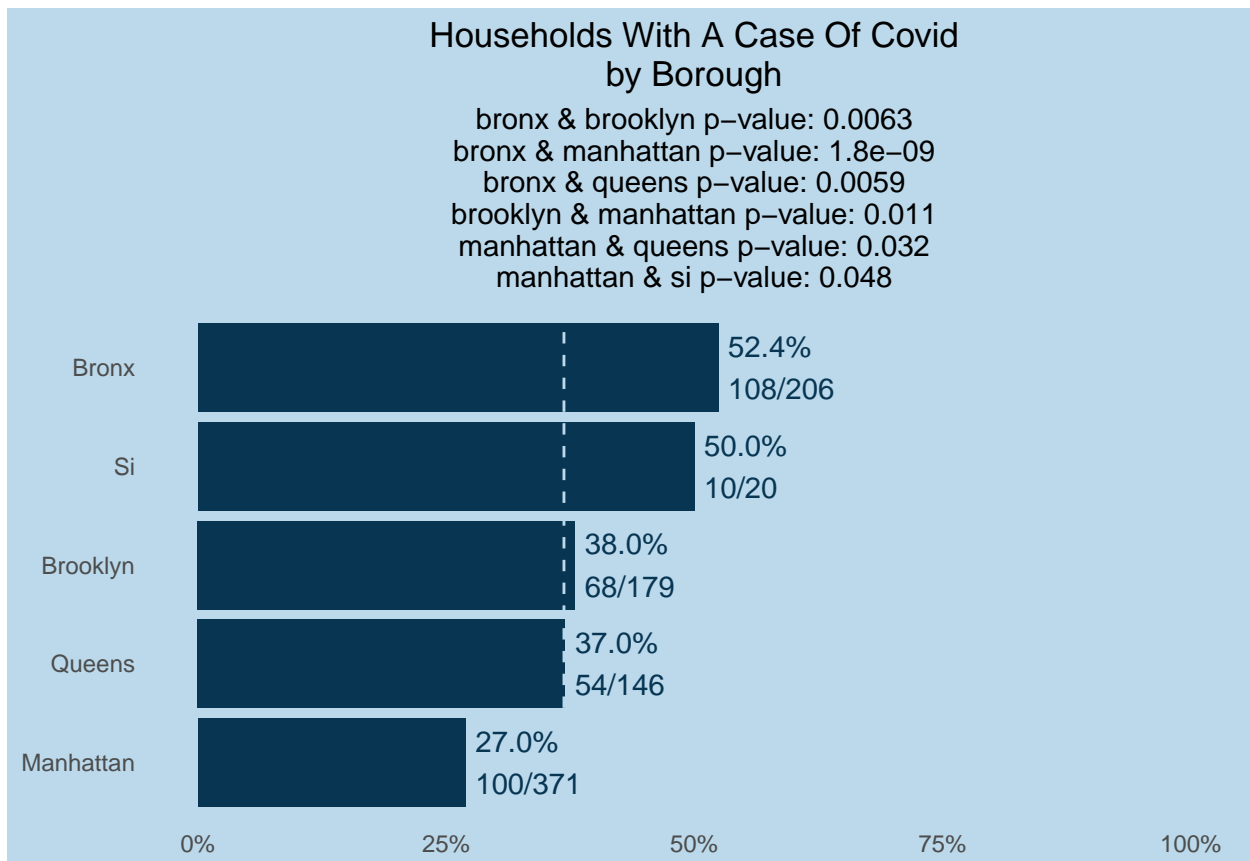
3/29/2022

4.1)Households with a case of COVID-19 [31]

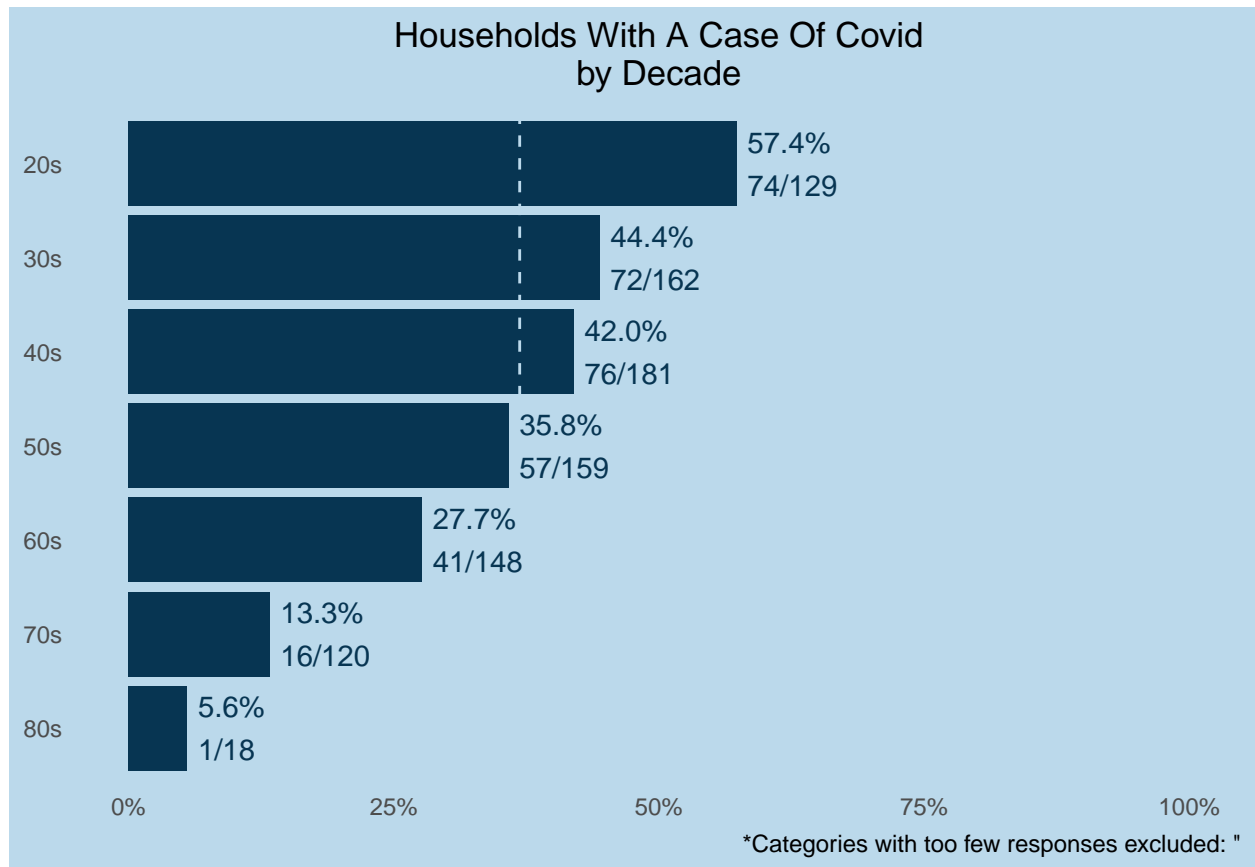
Run distribution over population Run distribution by sub-demographics (a-k) Compare and find gaps (test unequal proportions)

```
plots <- make_plots(wrangled,
  by_vars = demographics, hyp_var = "posi_all", title = "Households with a case of COVID")
plots$decade <- plots$decade + labs(subtitle = NULL)
plots$race_census <- plots$race_census + labs(subtitle = NULL)
plots$sch_level_cat <- plots$sch_level_cat + labs(subtitle = NULL)
plots[c(-5, -13)]
```

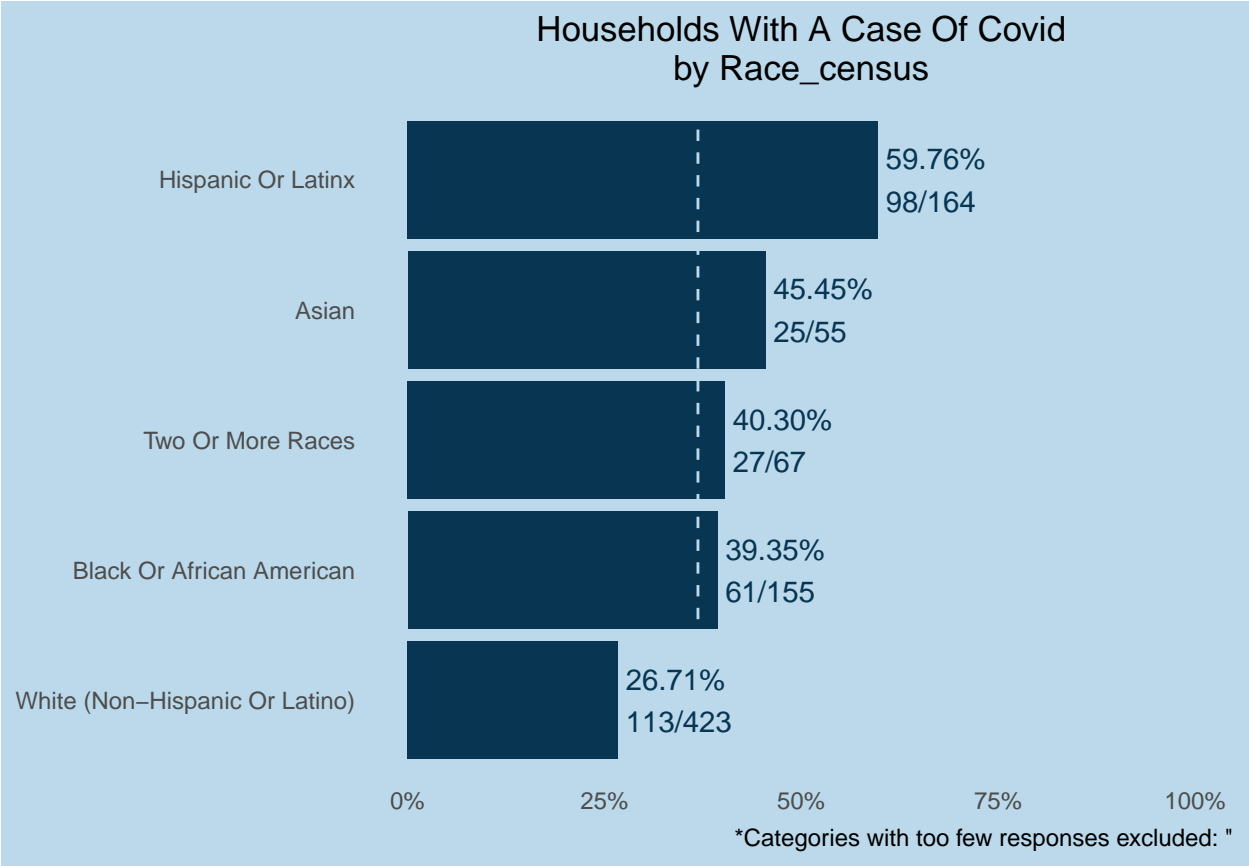
\$borough



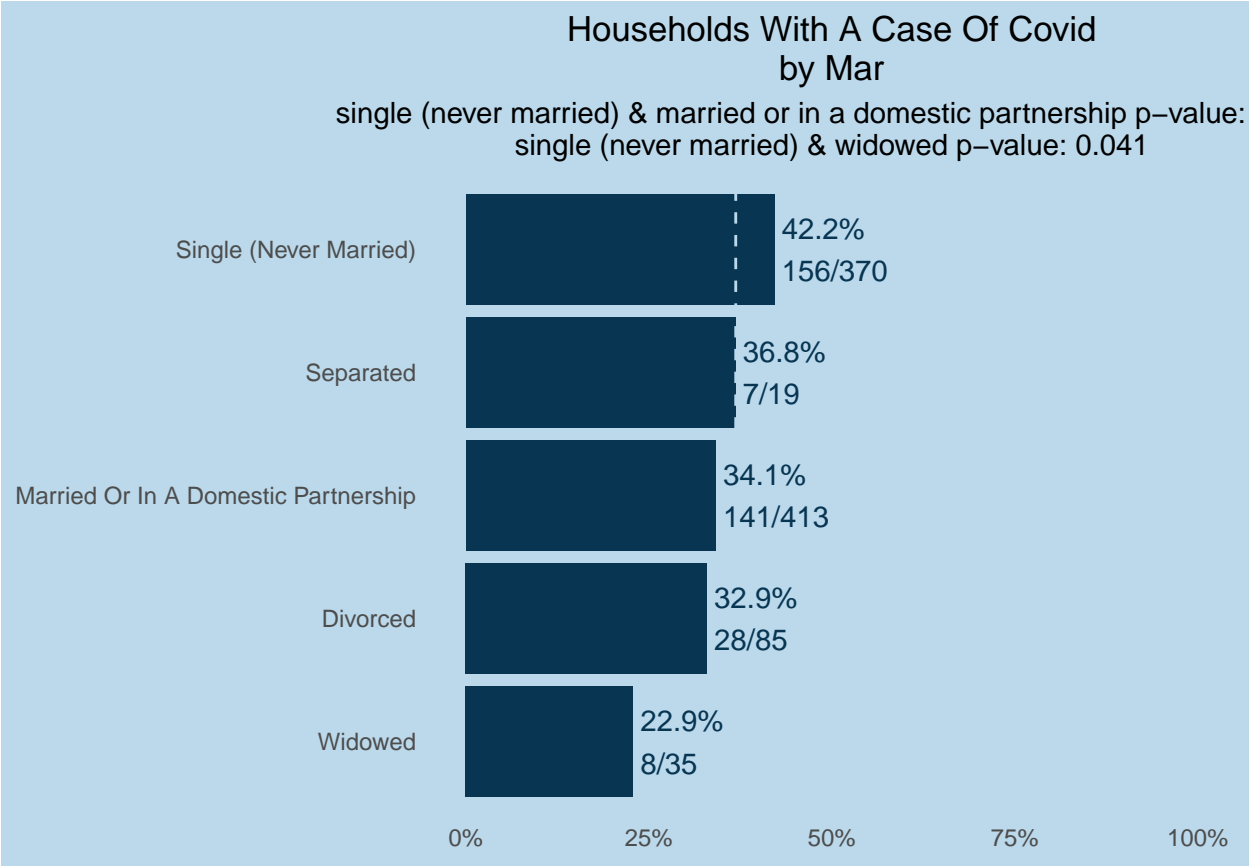
```
##
## $decade
```



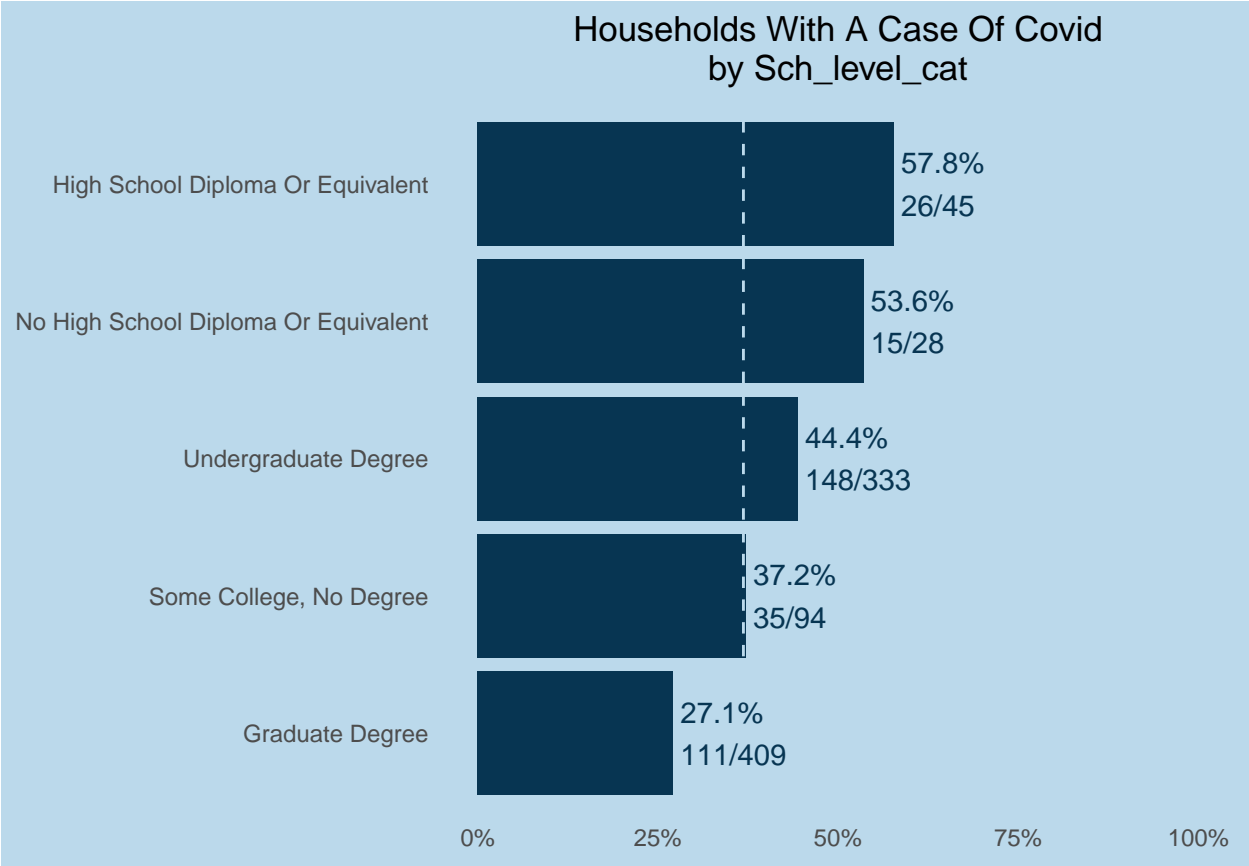
```
##
## $gen
## NULL
##
## $race_census
```



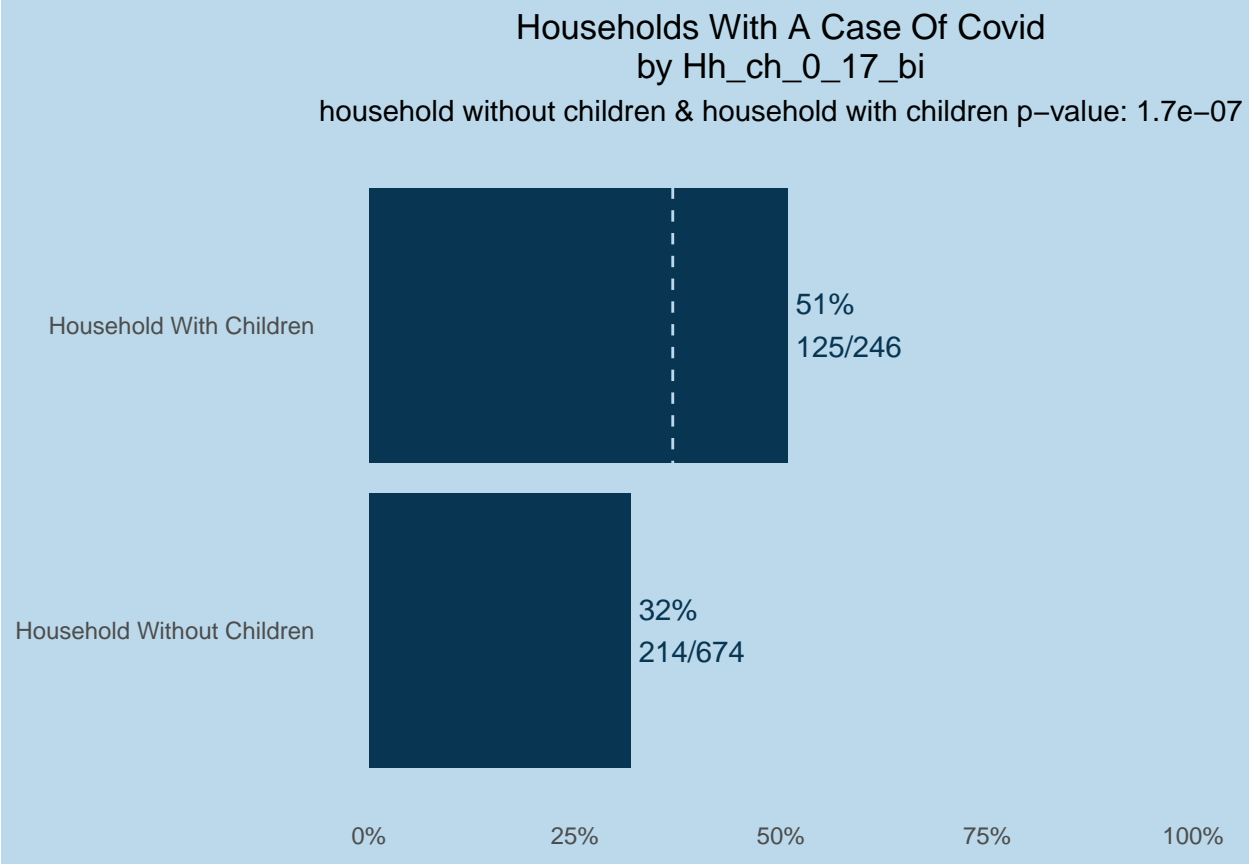
\$mar



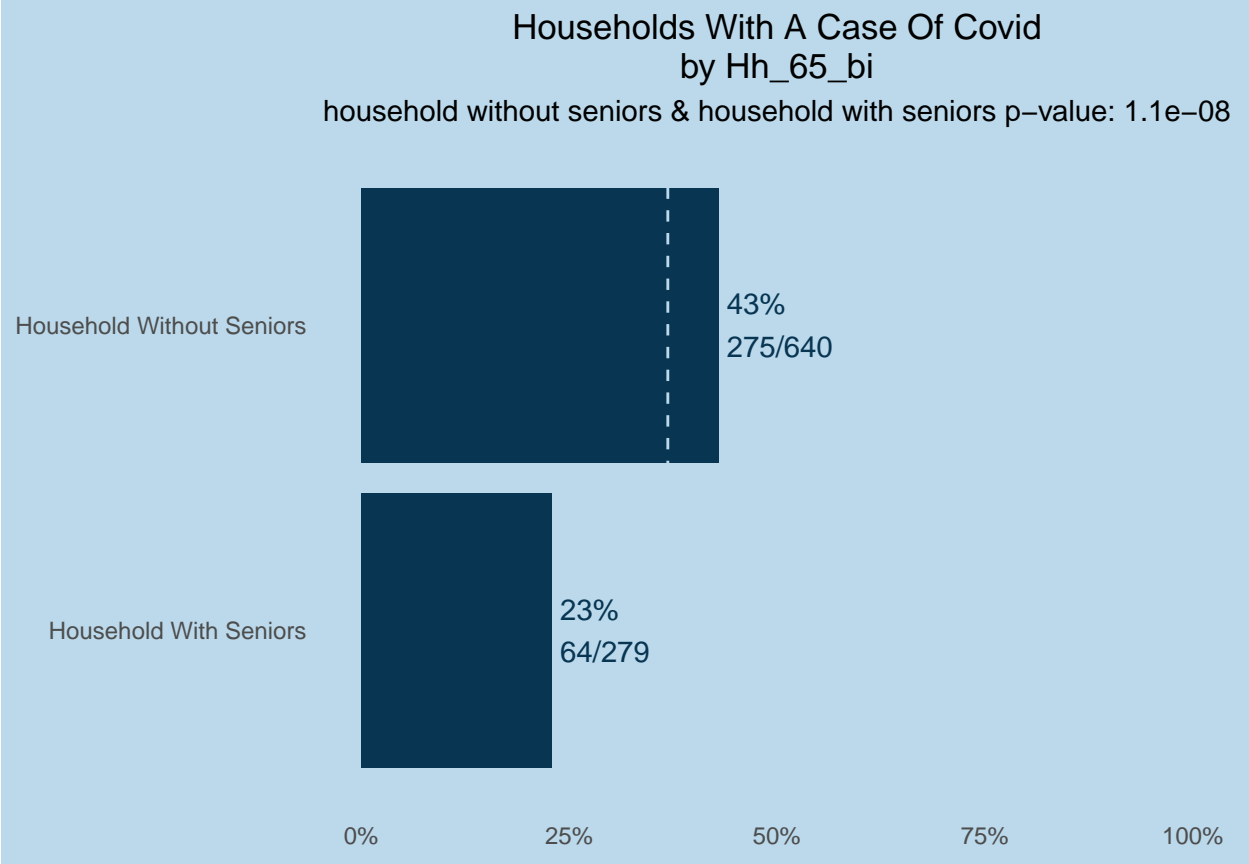
```
##  
## $sch_level_cat
```



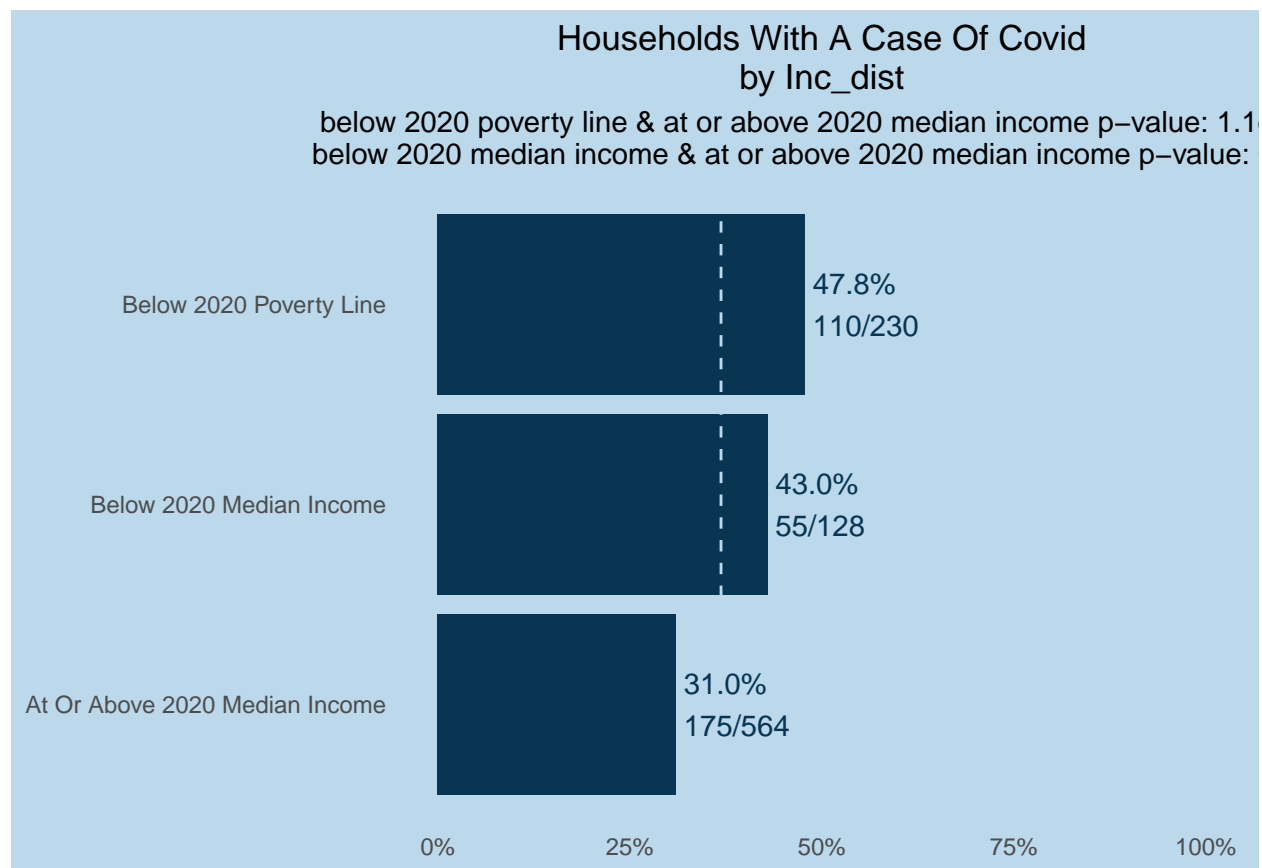
\$hh_ch_0_17_bi



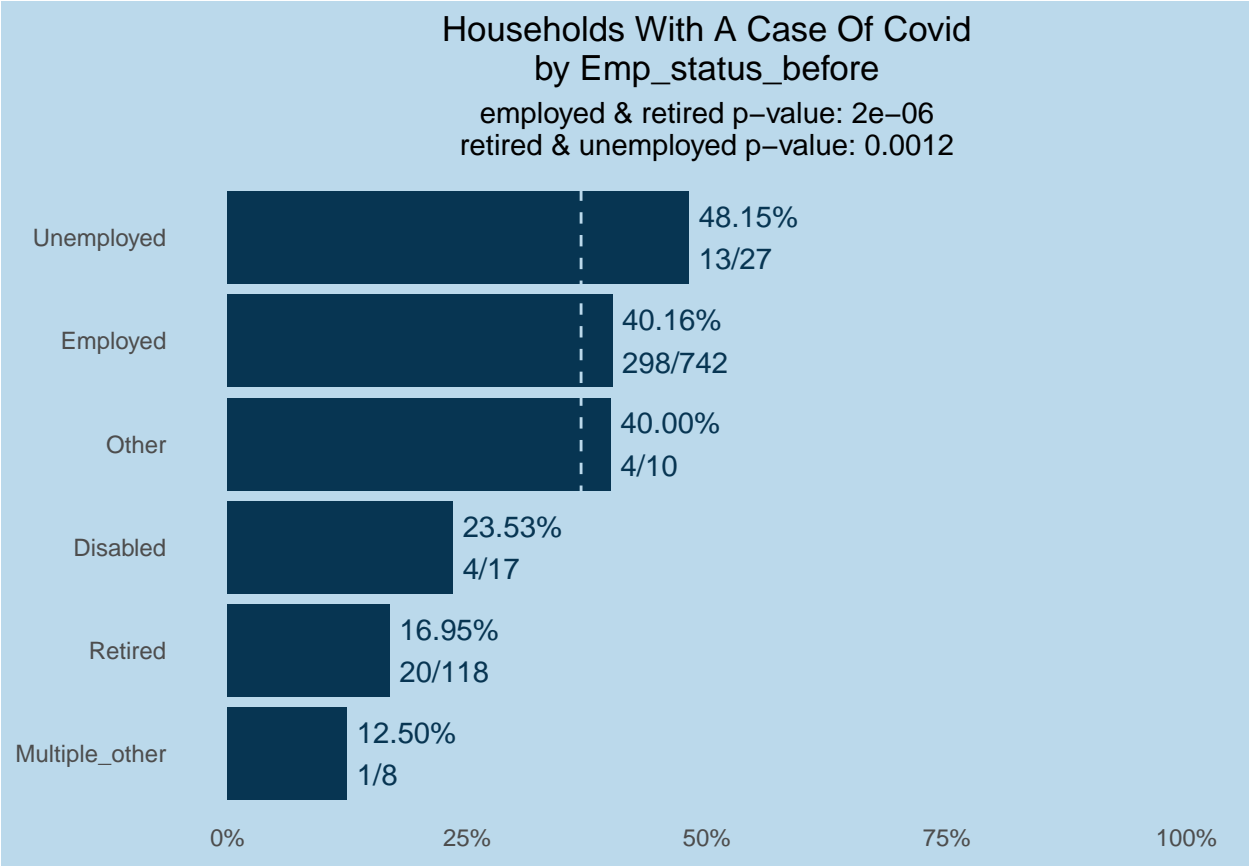
\$hh_65_bi



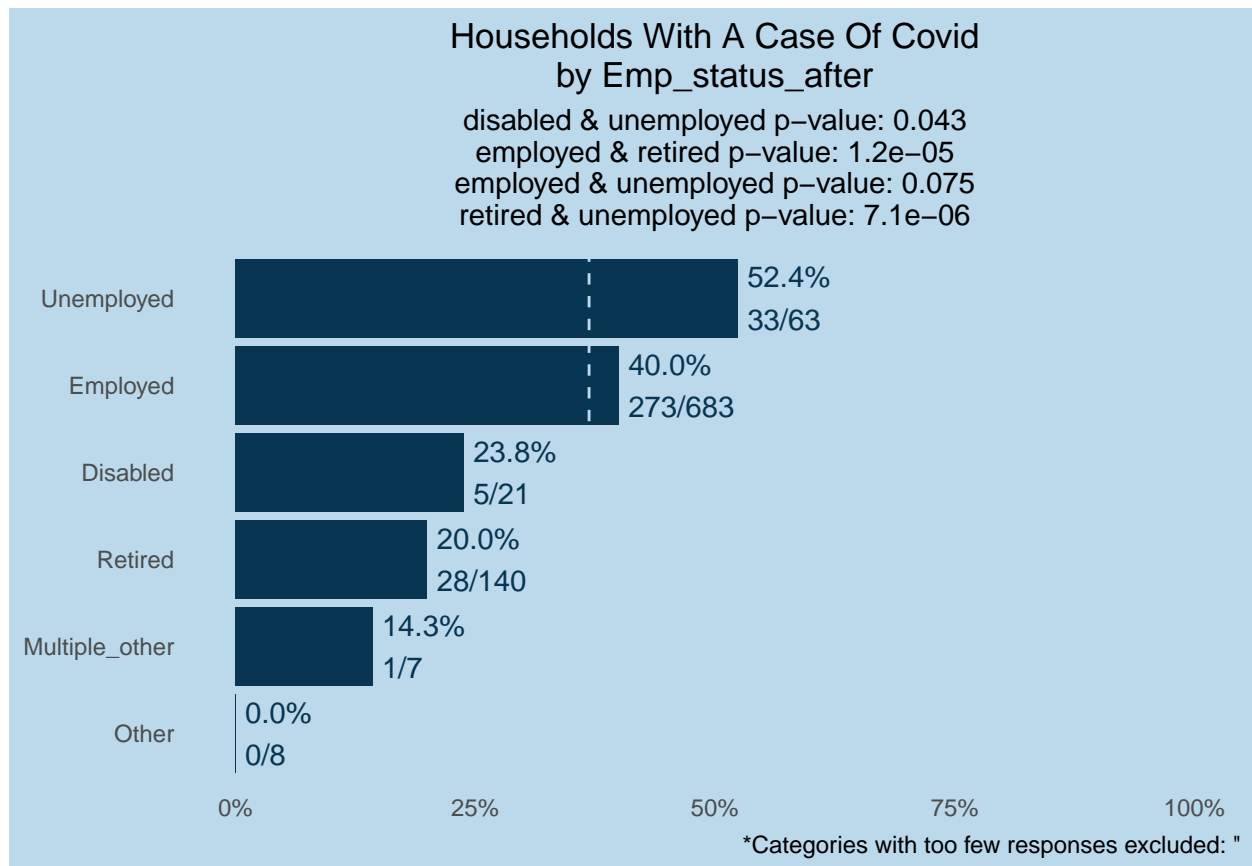
```
##  
## $inc_dist
```



```
##  
## $emp_status_before
```

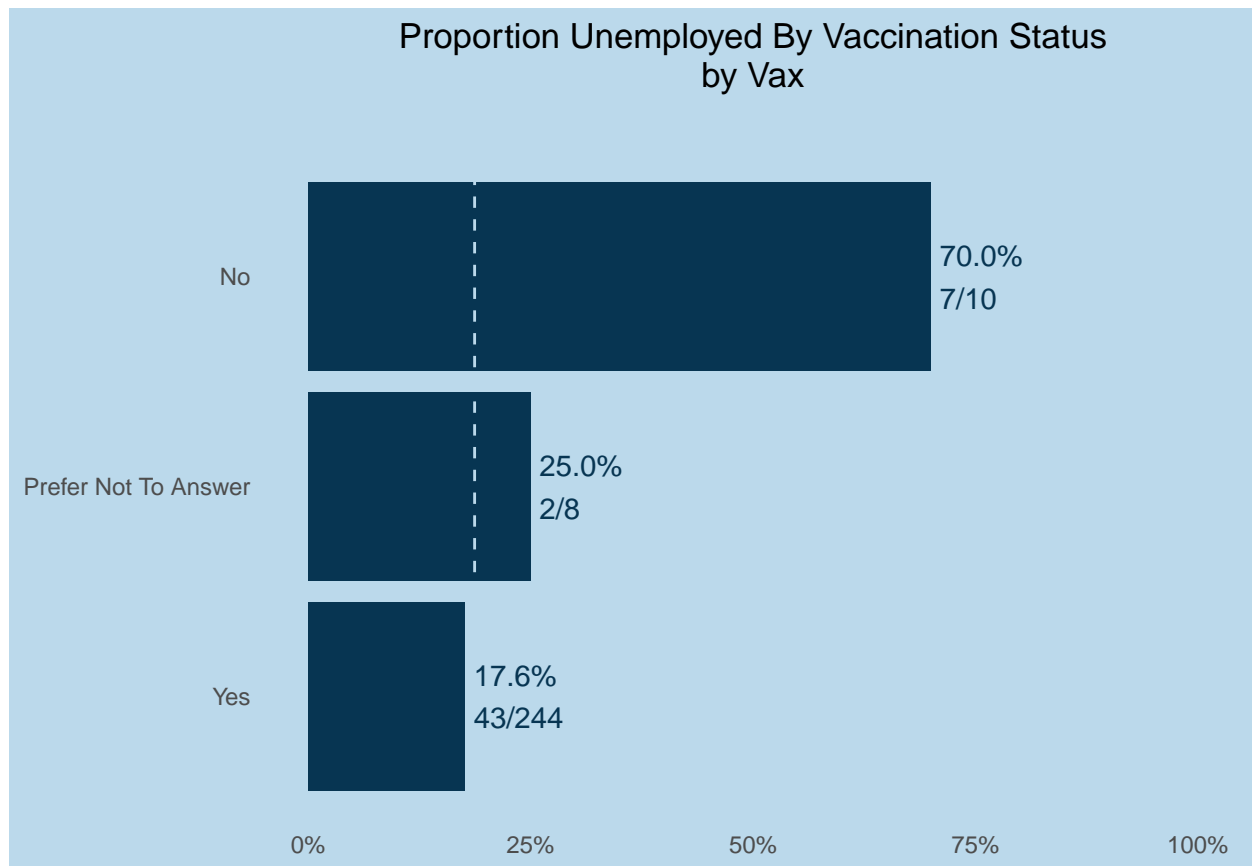
```
##  
## $emp_status_after
```



how many unemployed only after and didn't get vaccinated?

```
make_plots(wrangled %>% filter(emp_change == 1), "vax", "emp_after_un", show = "yes", title = "Proporti
```

```
## $vax
```

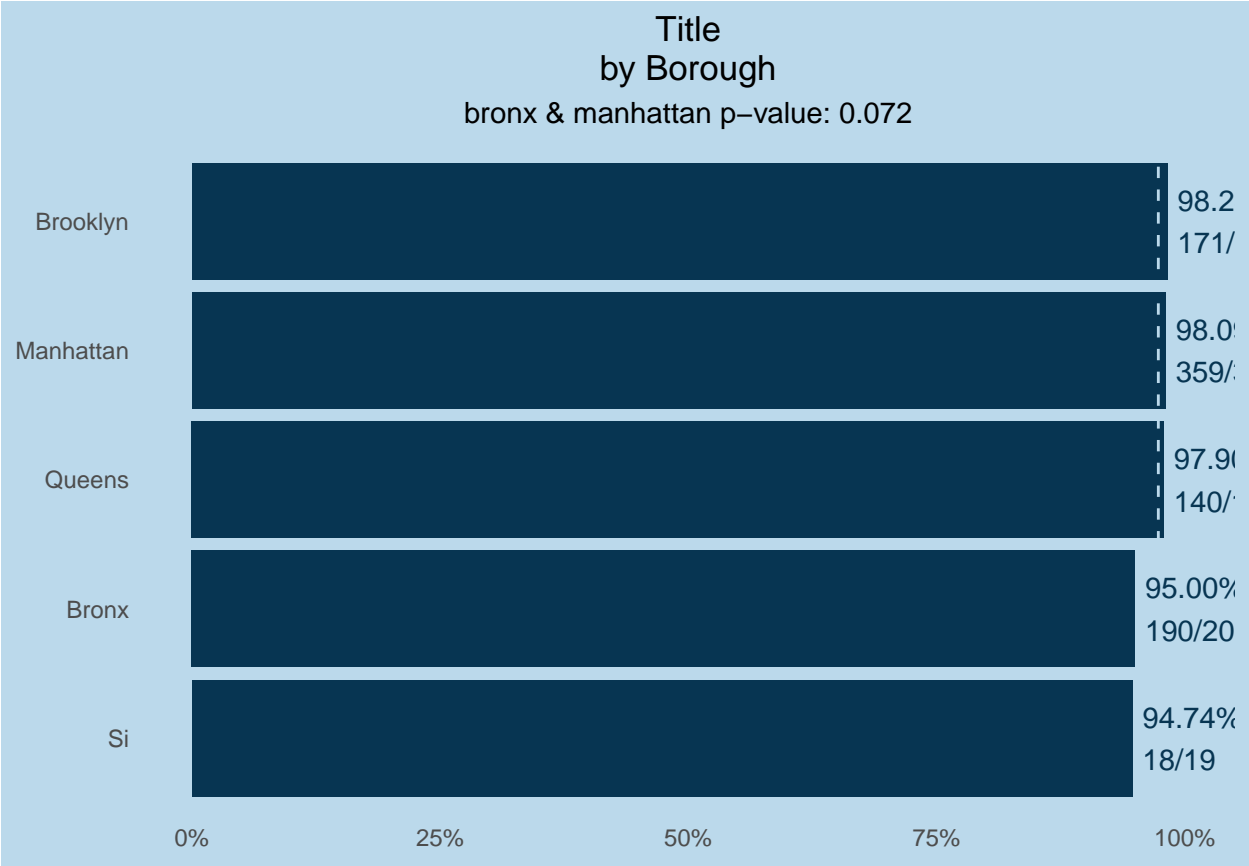


Individuals with a case of COVID-19 Run distribution over population Run distribution by sub-demographics (a-k) Compare and find gaps (test unequal proportions)

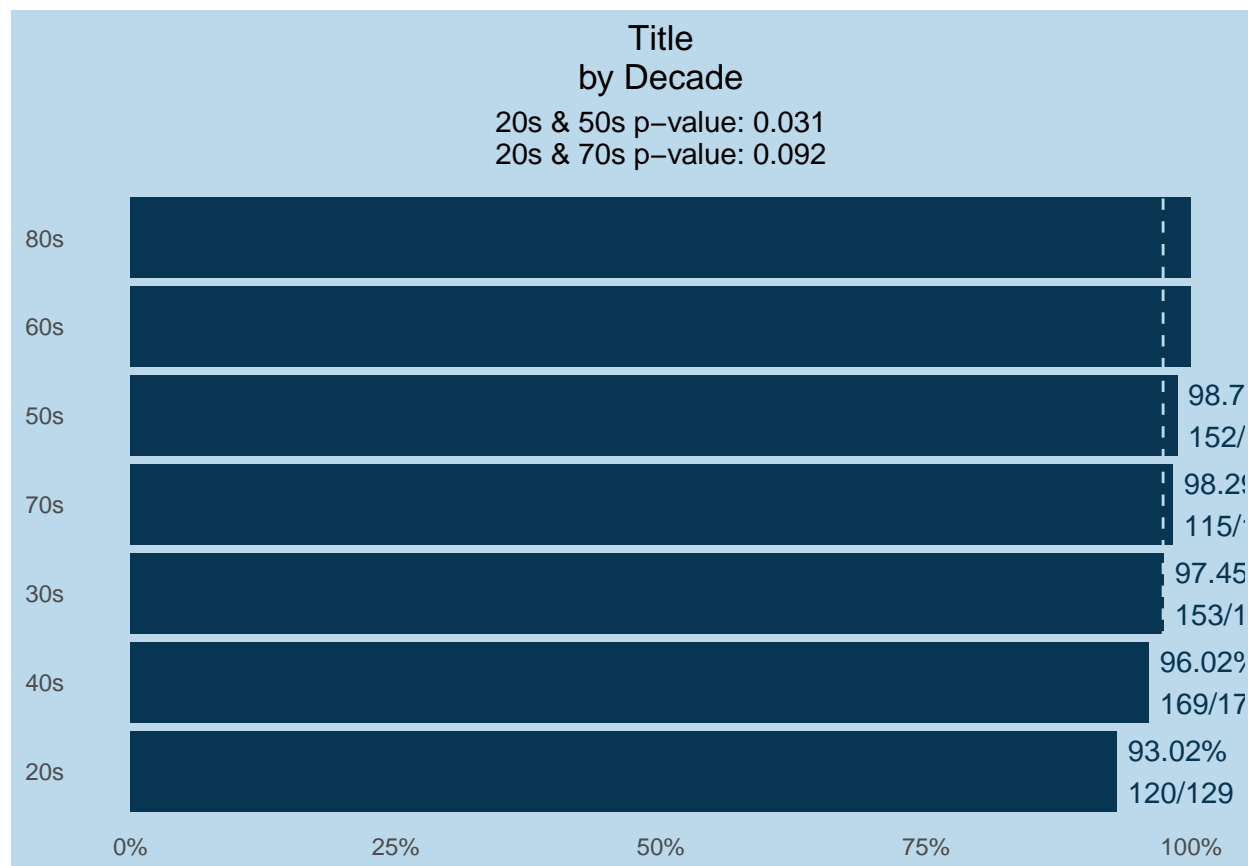
4.2) People who have been vaccinated against COVID-19 [32] Run distribution over population Run distribution by sub-demographics (a-k) Compare and find gaps (test unequal proportions)

```
make_plots(wrangled, by_vars = demographics, hyp_var = "vax_bi")
```

```
## $borough
```

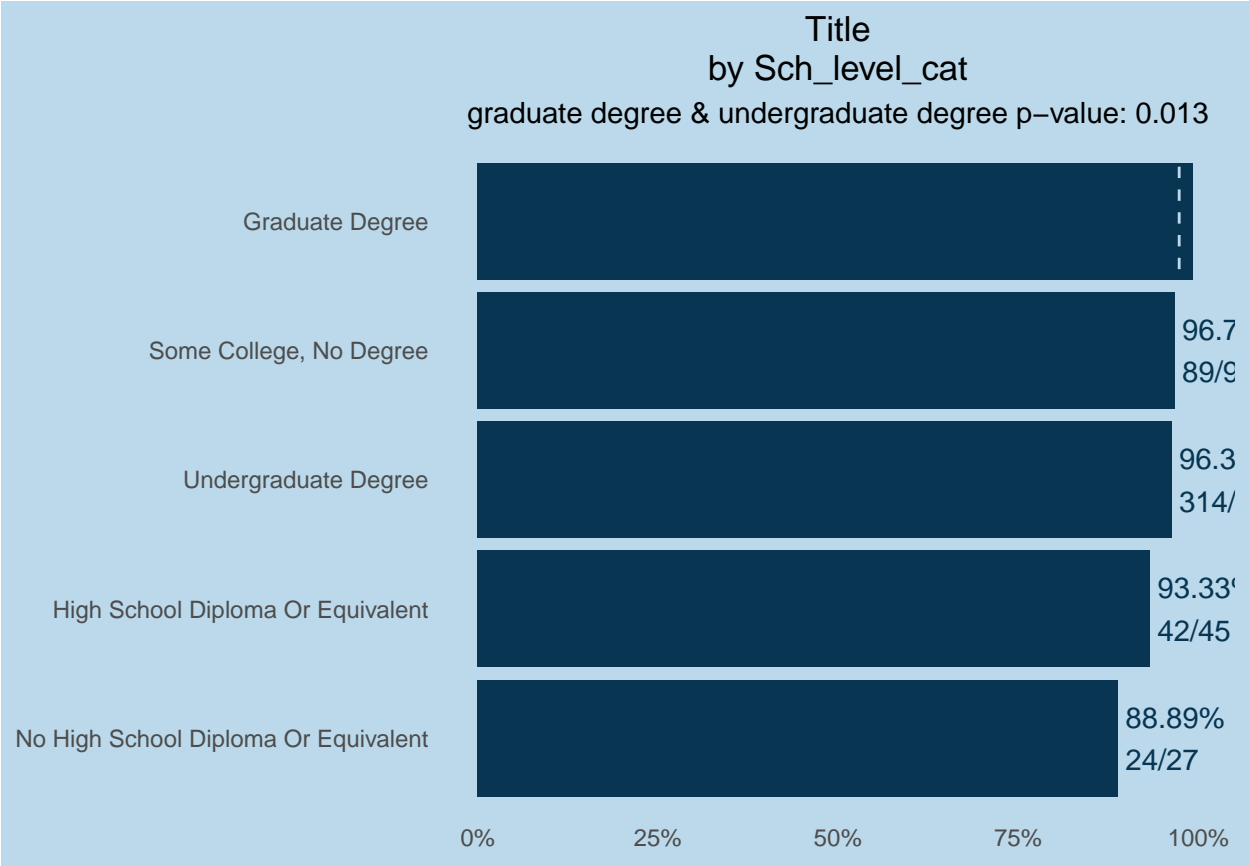


```
##  
## $decade  
  
## Warning: Removed 2 rows containing missing values (geom_text).
```

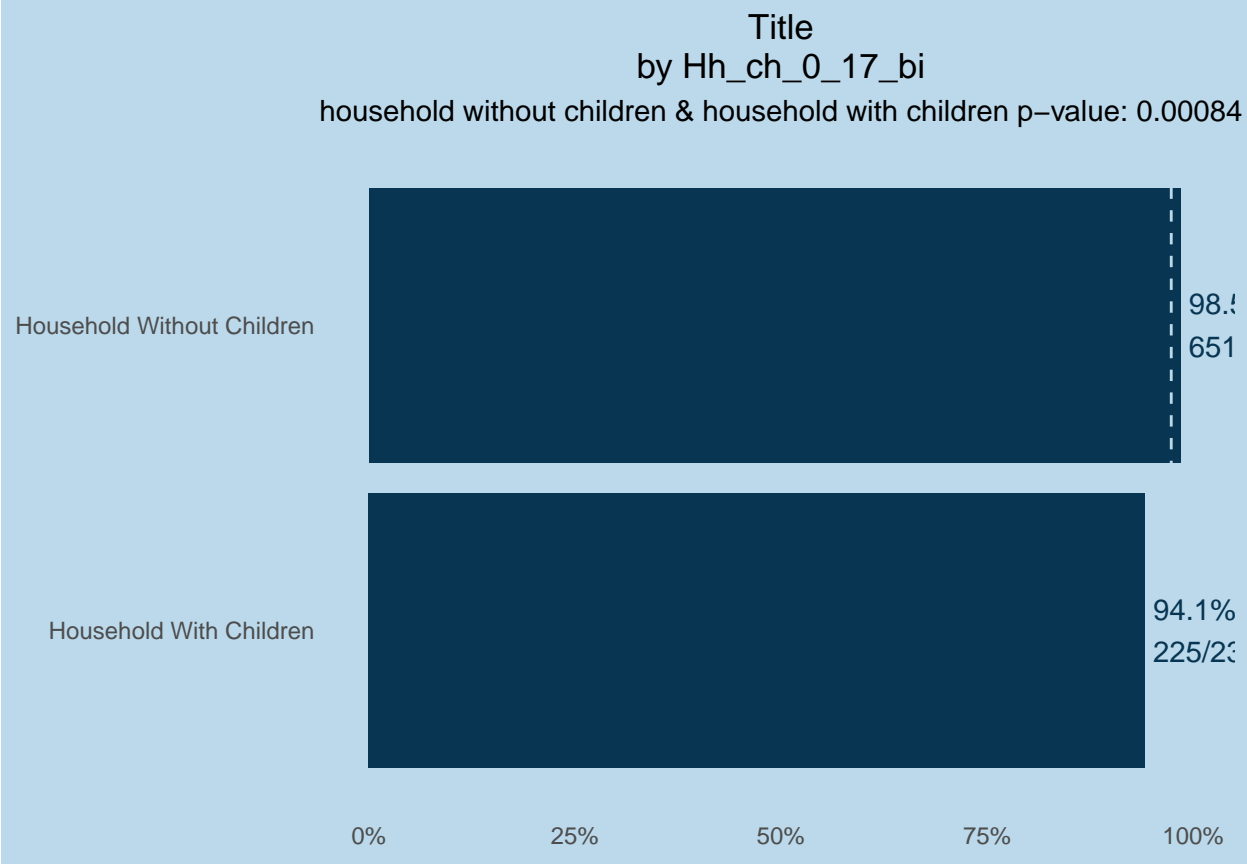


```
##
## $gen
## NULL
##
## $race_census
## NULL
##
## $not_eng
## NULL
##
## $mar
## NULL
##
## $sch_level_cat
```

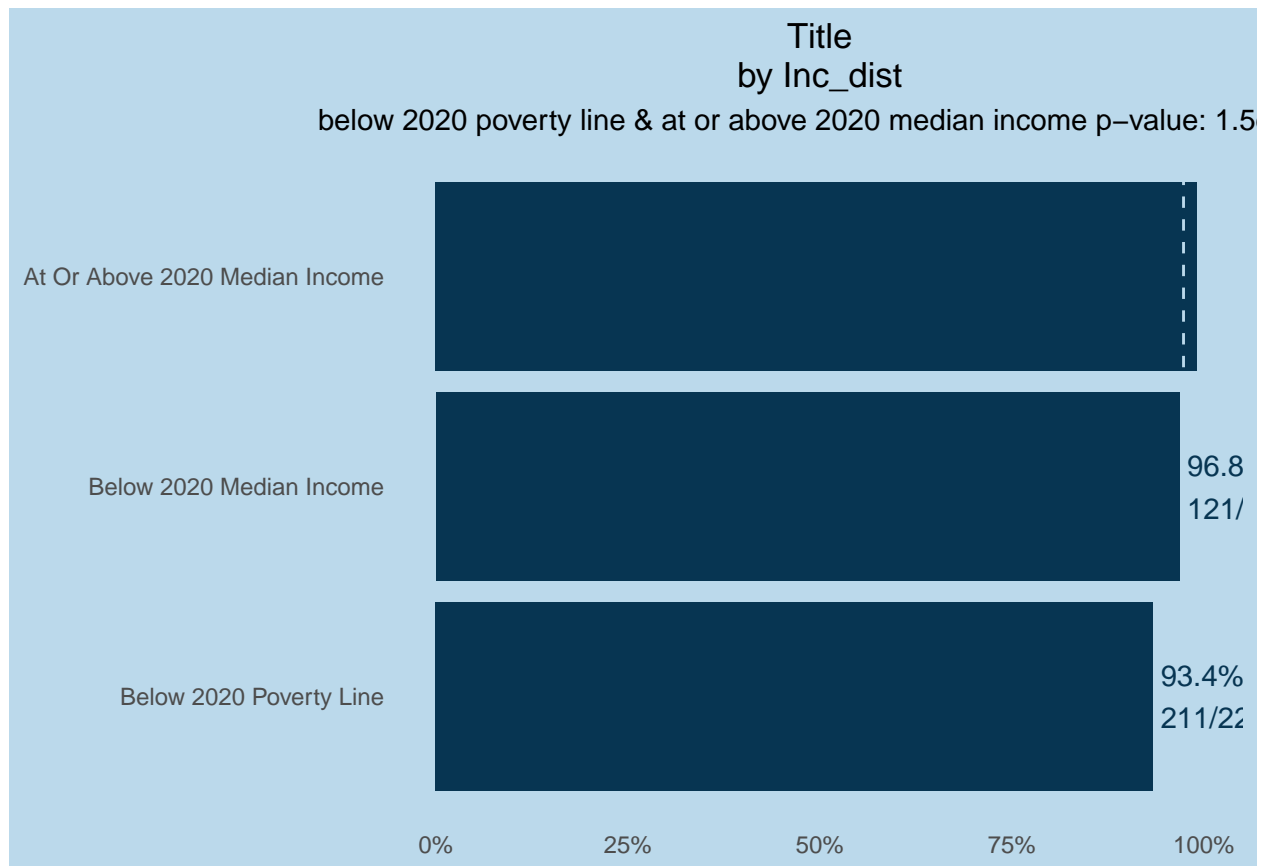
```
## Warning: Removed 1 rows containing missing values (geom_text).
```



\$hh_ch_0_17_bi



```
##  
## $hh_65_bi  
## NULL  
##  
## $inc_dist  
  
## Warning: Removed 1 rows containing missing values (geom_text).
```



```
##
## $emp_status_before
## NULL
##
## $emp_status_after
## NULL
##
## $res_cat
## NULL
```

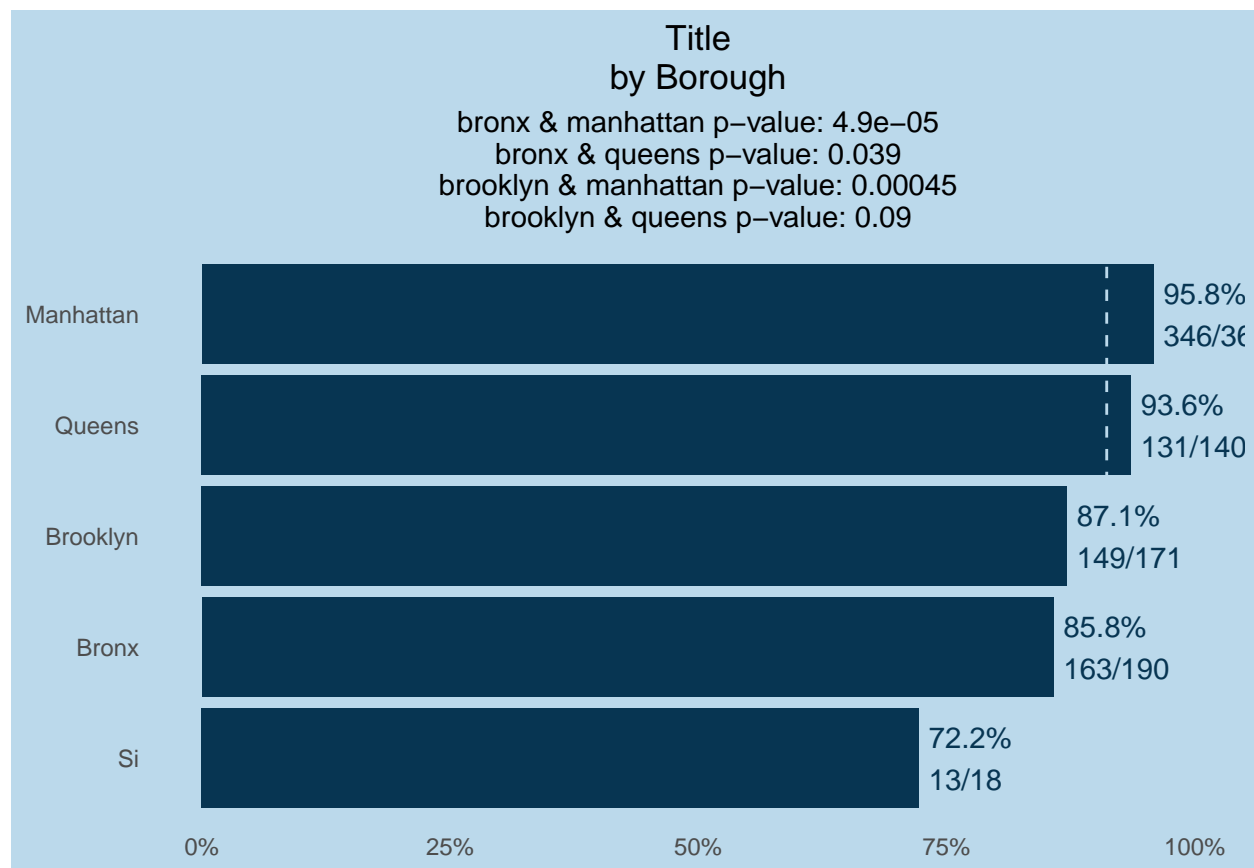
4.3) People who have received a booster vaccine dose [38] Run distribution over population Run distribution by sub-demographics (a-k) Compare and find gaps (test unequal proportions)

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

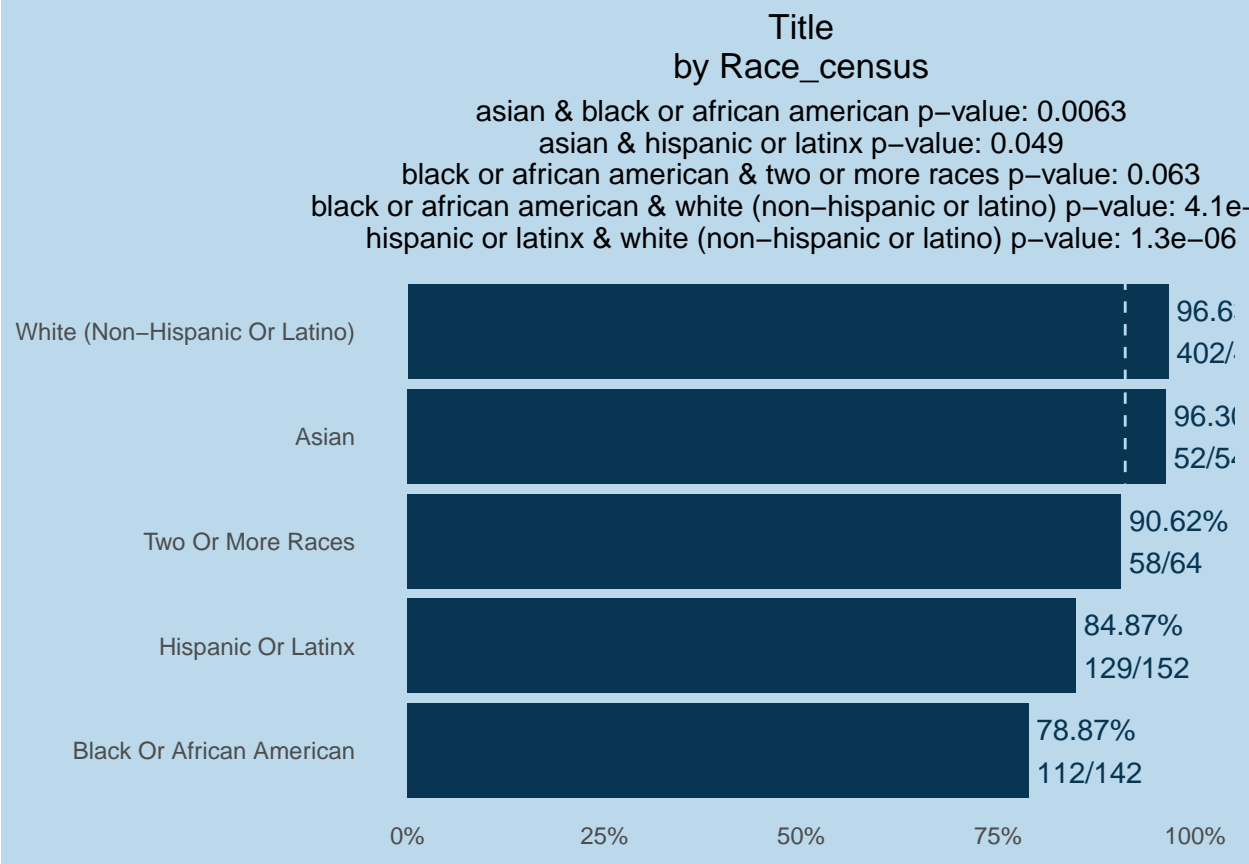
```
## [1] 0.9113636
```

```
make_plots(wrangled, demographics, "boost_bi")[
  c("borough", "race_census", "not_eng", "sch_level_cat", "inc_dist", "emp_status_after", "res_cat")]
```

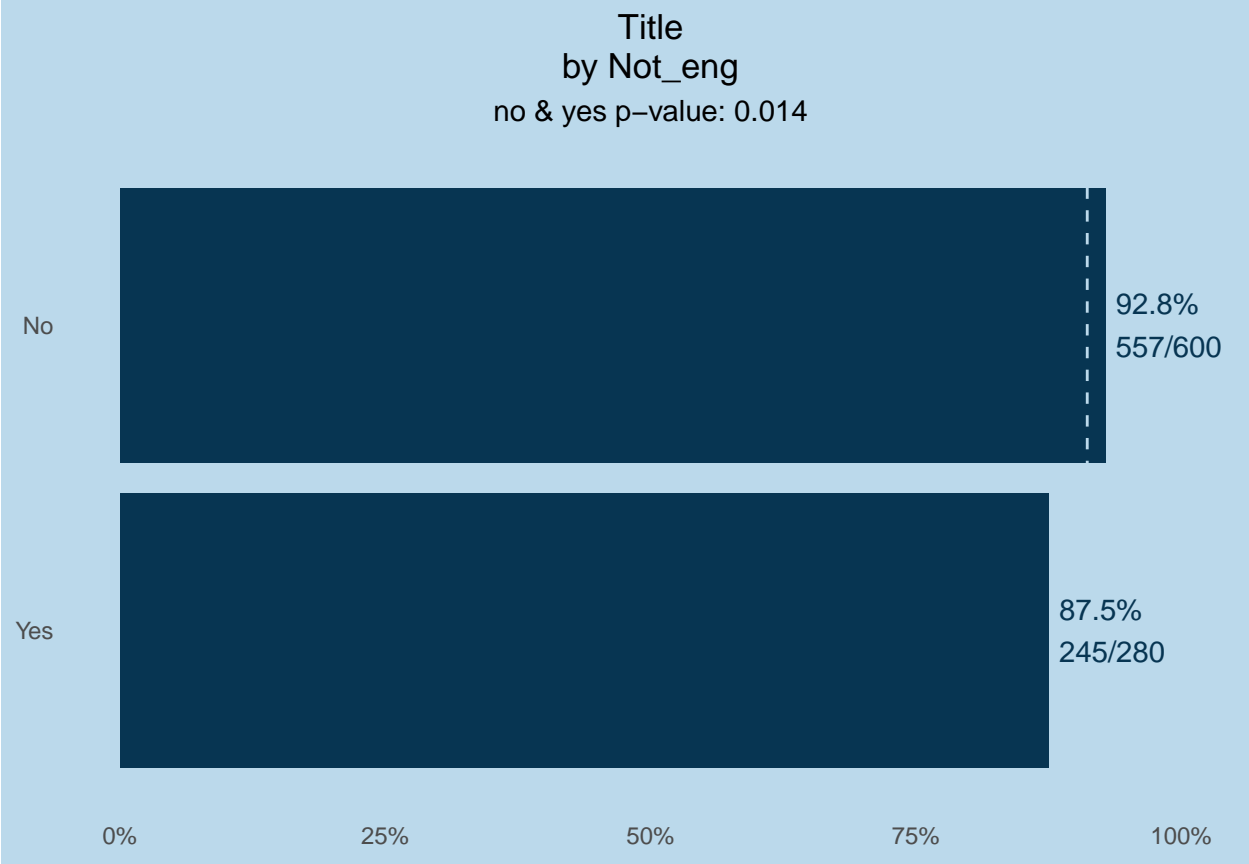
```
## $borough
```

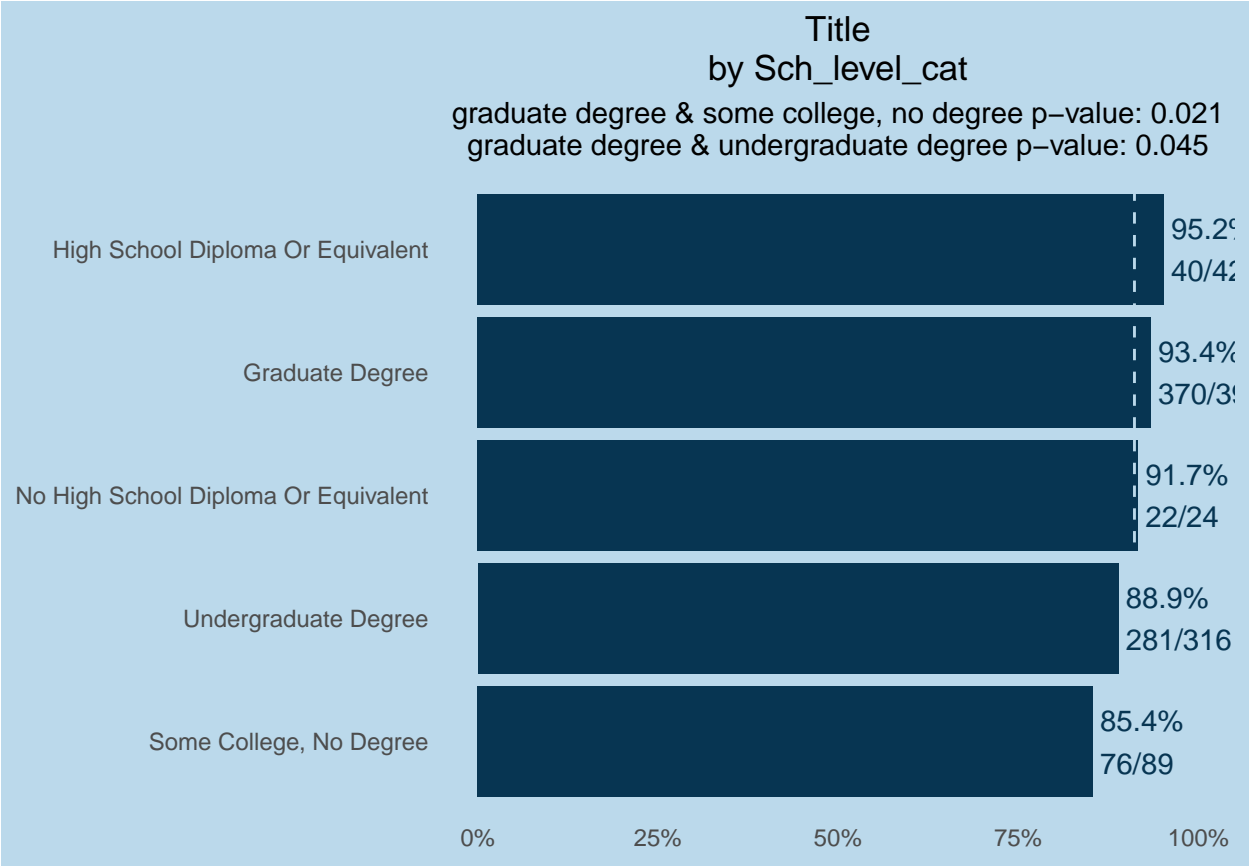
```
##
## $race_census
```



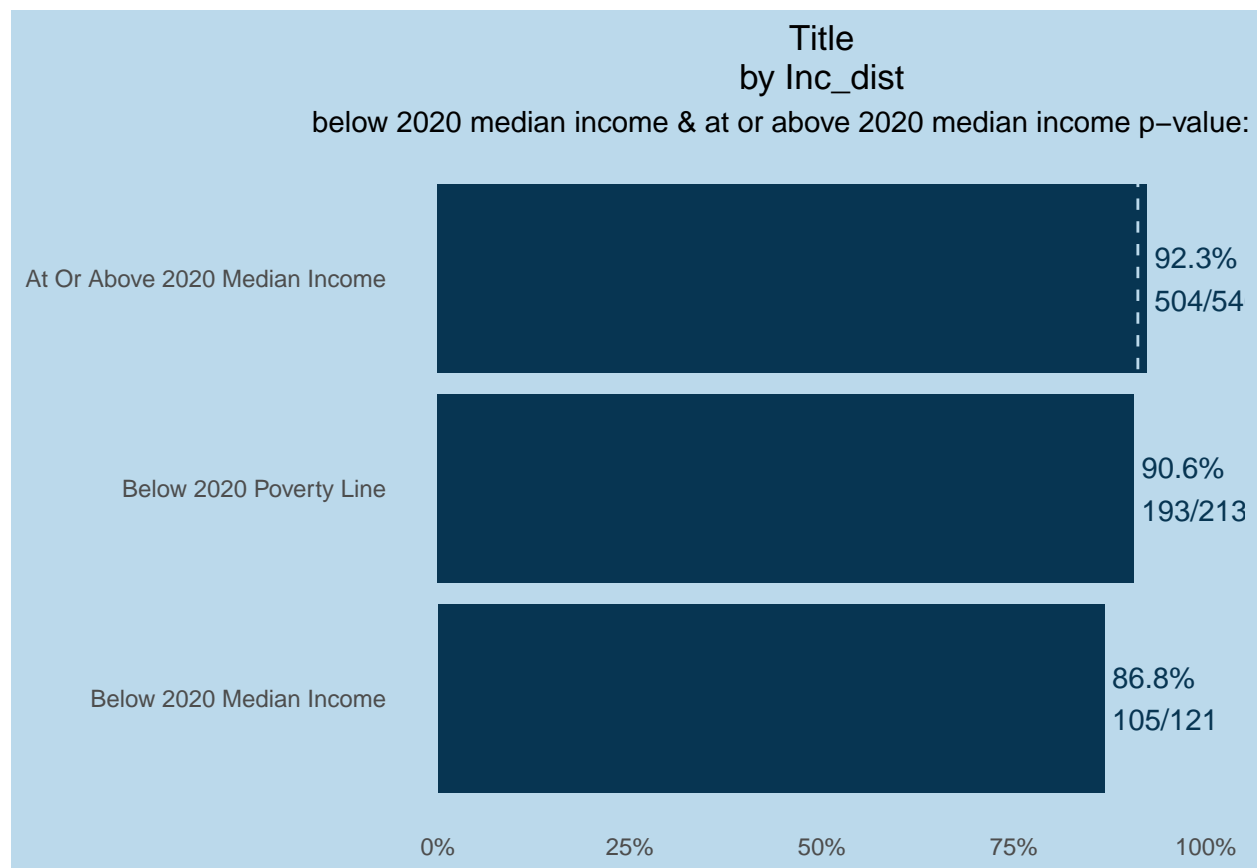
\$not_eng



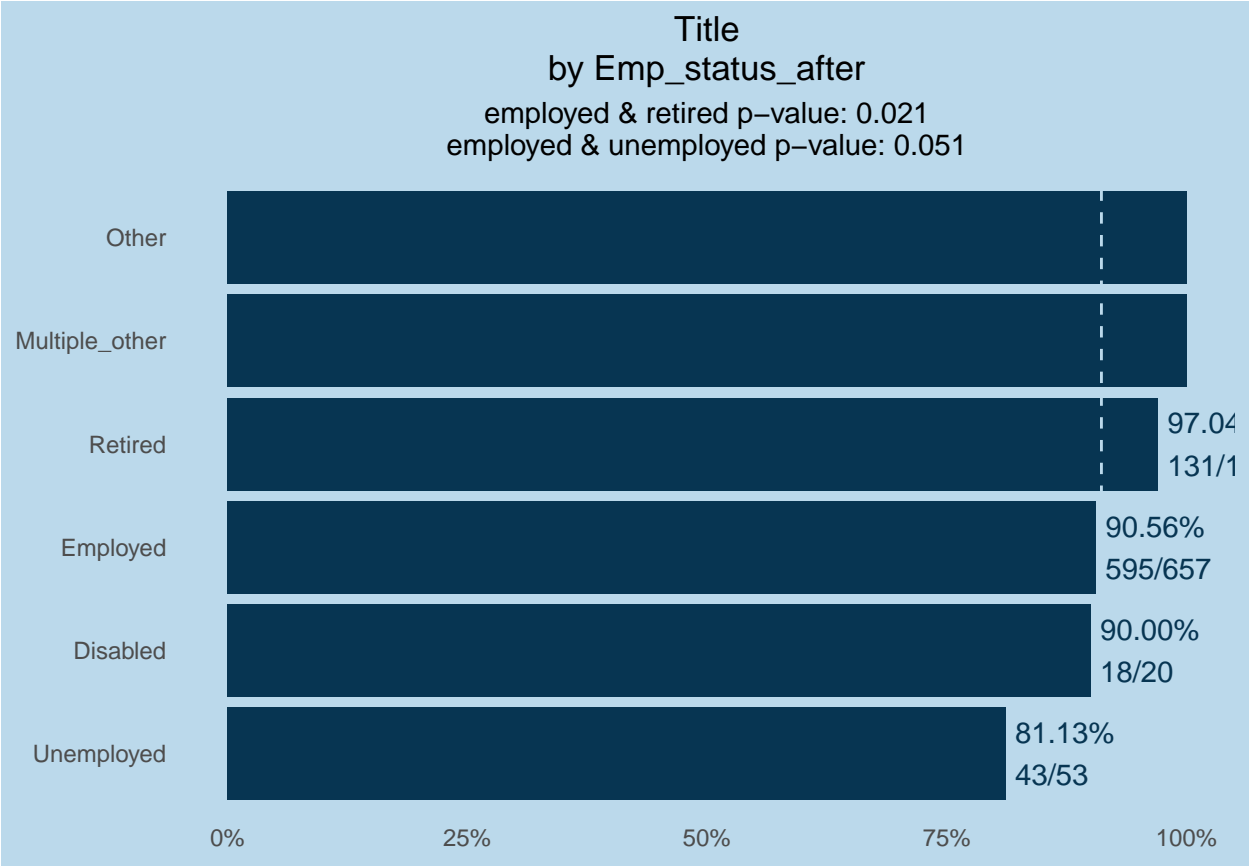
```
##  
## $sch_level_cat
```



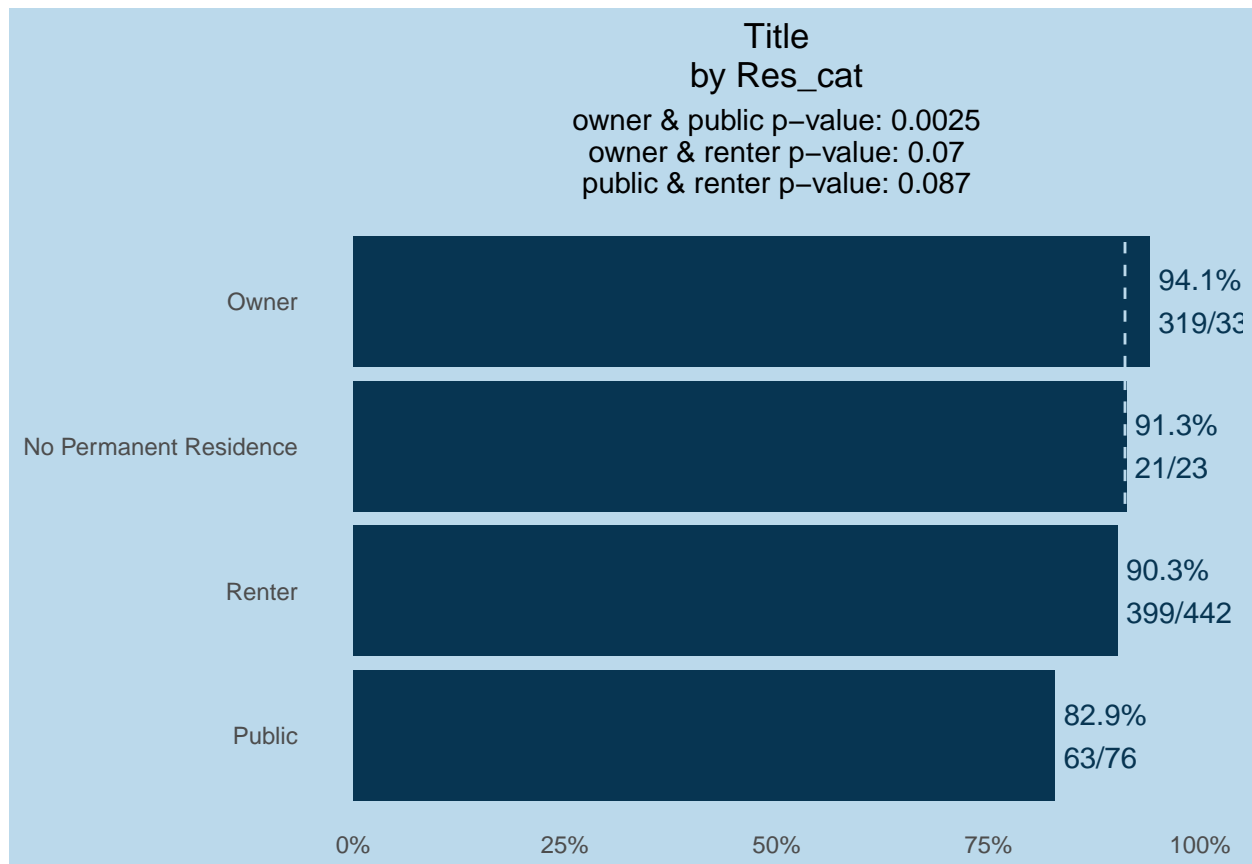
\$inc_dist



```
##  
## $emp_status_after  
  
## Warning: Removed 2 rows containing missing values (geom_text).
```

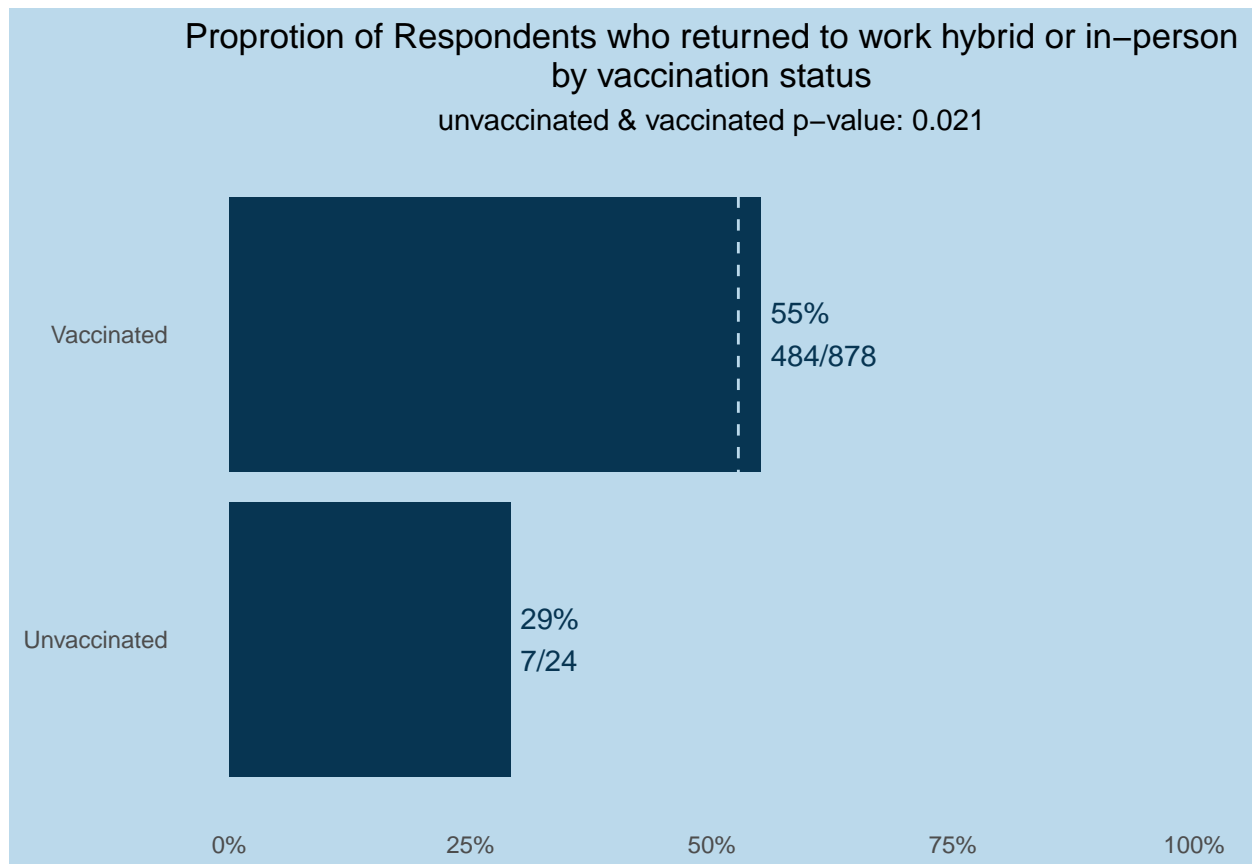


```
##  
## $res_cat
```



4.4) People who returned to work in person are more likely to be vaccinated against COVID-19. Find respondents who returned to work in person or hybrid [20]. Find proportion of subset who reported being at least partially vaccinated against COVID-19 [32]. Find proportion not in subset who reported being at least partially vaccinated against COVID-19 and compare (test unequal proportions).

```
make_plots(wrangled, by_vars = "vax_bi", hyp_var = "wrk_in")$vax + ggtitle("Proportion of Respondents w
```



4.5) People who ranked the government response as average or above average were more likely to be vaccinated against COVID-19. Find respondents who rated the government response as average, good, or excellent [33]. Find proportion of subset who reported being at least partially vaccinated against COVID-19 [32]. Find proportion not in subset who reported being at least partially vaccinated against COVID-19 and compare (test unequal proportions).

Findings: nope

```
make_plots(wrangled, "rate_gov_good", "vax_bi")
```

```
## $rate_gov_good
## NULL
```

4.7) People who have been discriminated against or are worried about discrimination due to COVID-19 [37]. Run distribution over population. Run distribution by sub-demographics (a-k). Compare and find gaps (test unequal proportions).

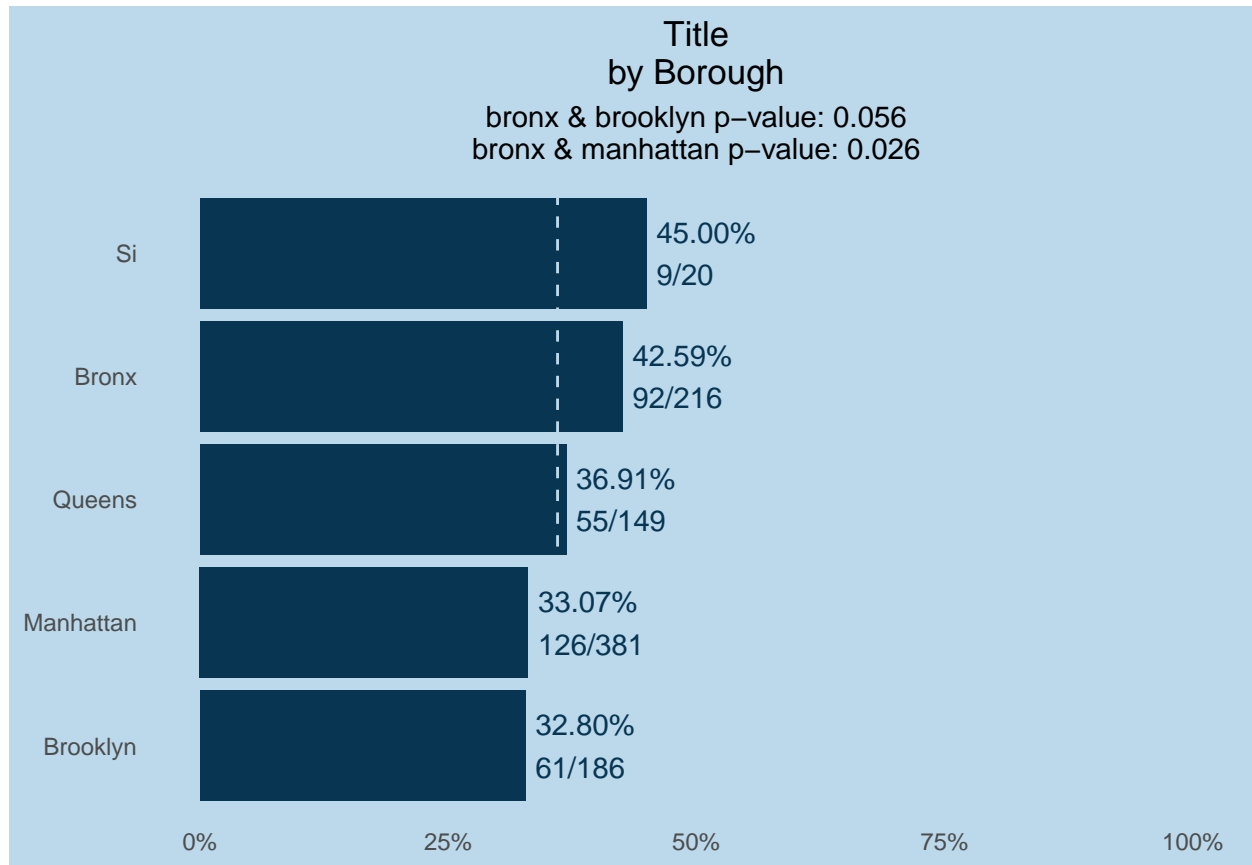
```
mean(wrangled$discrim_bi, na.rm = TRUE)
```

```
## [1] 0.3602941
```



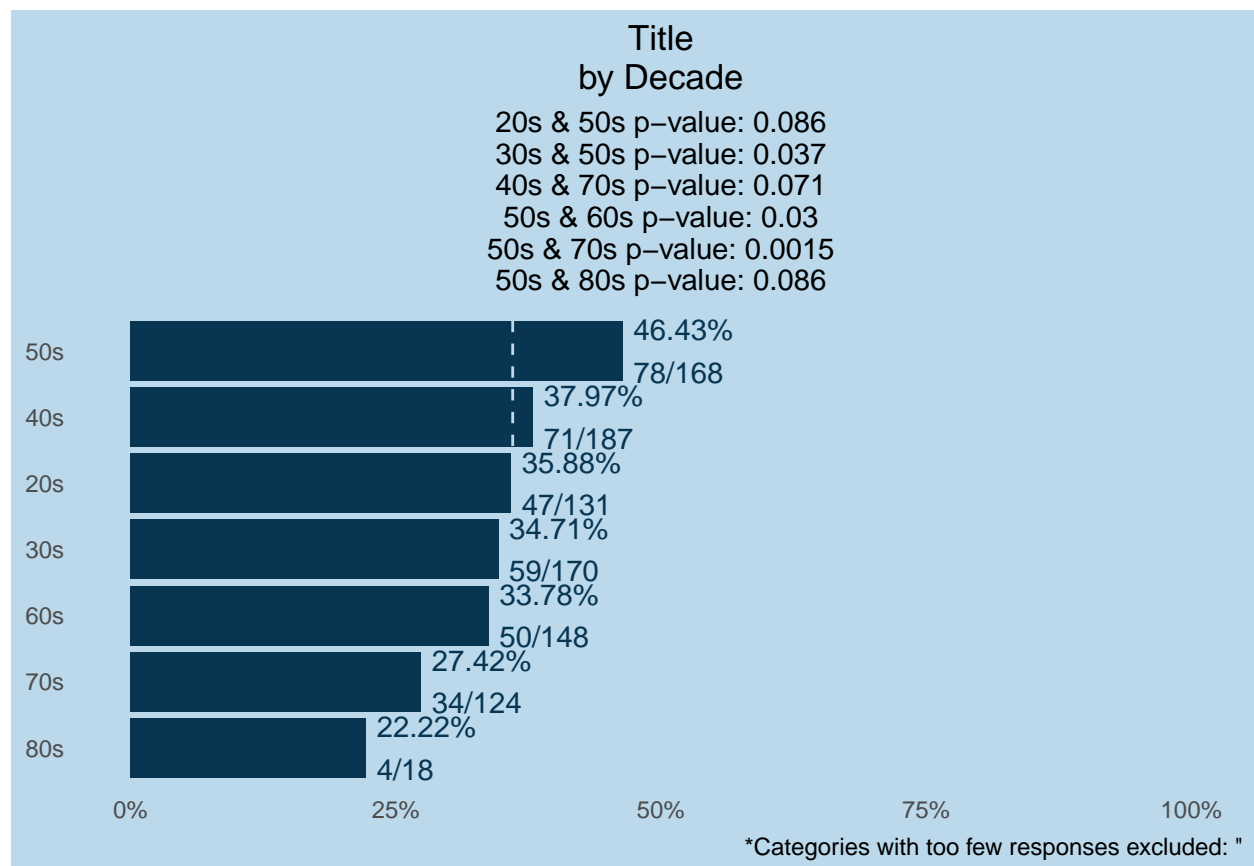
```
plots <- make_plots(wrangled, demographics, "discrim_bi", min = 10)
plots$race_census <- plots$race_census + labs(subtitle = NULL)
plots
```

```
## $borough
```



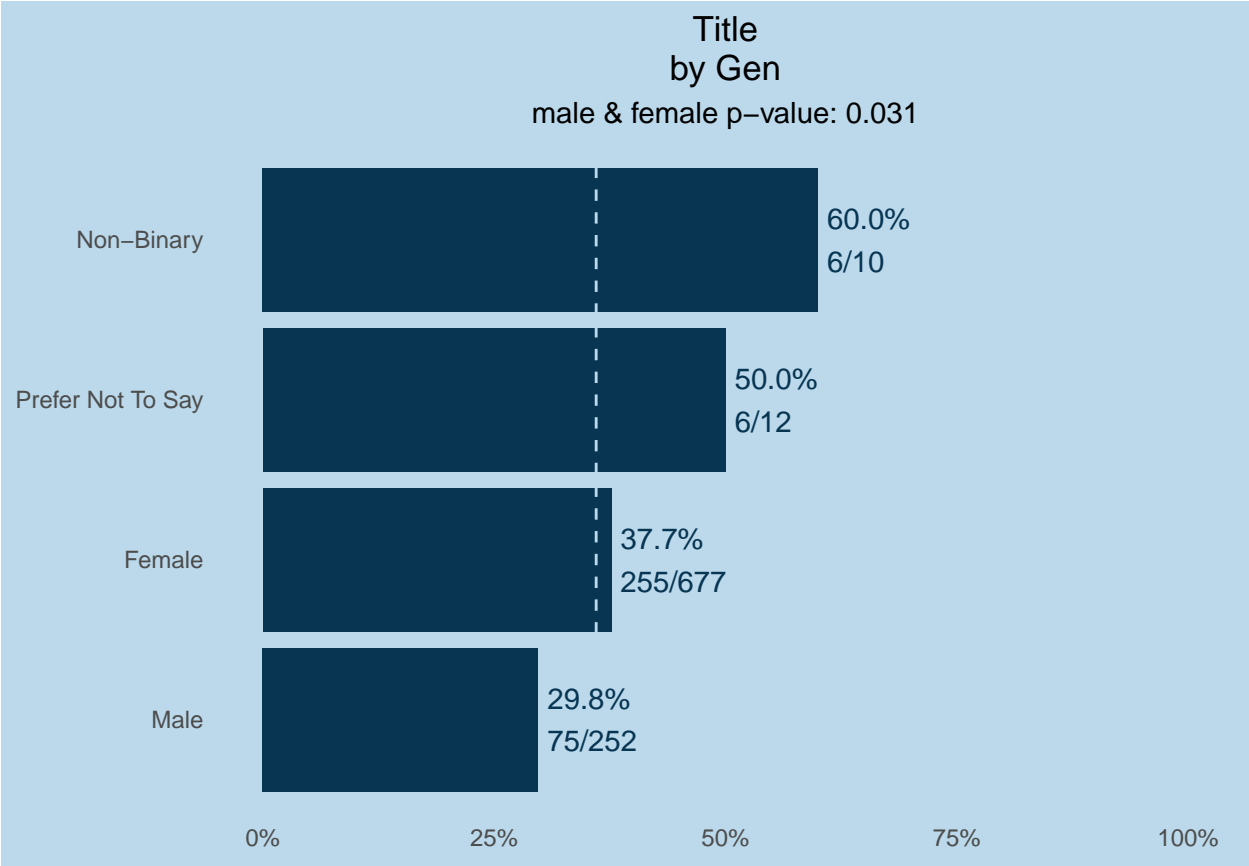
```
##
```

```
## $decade
```

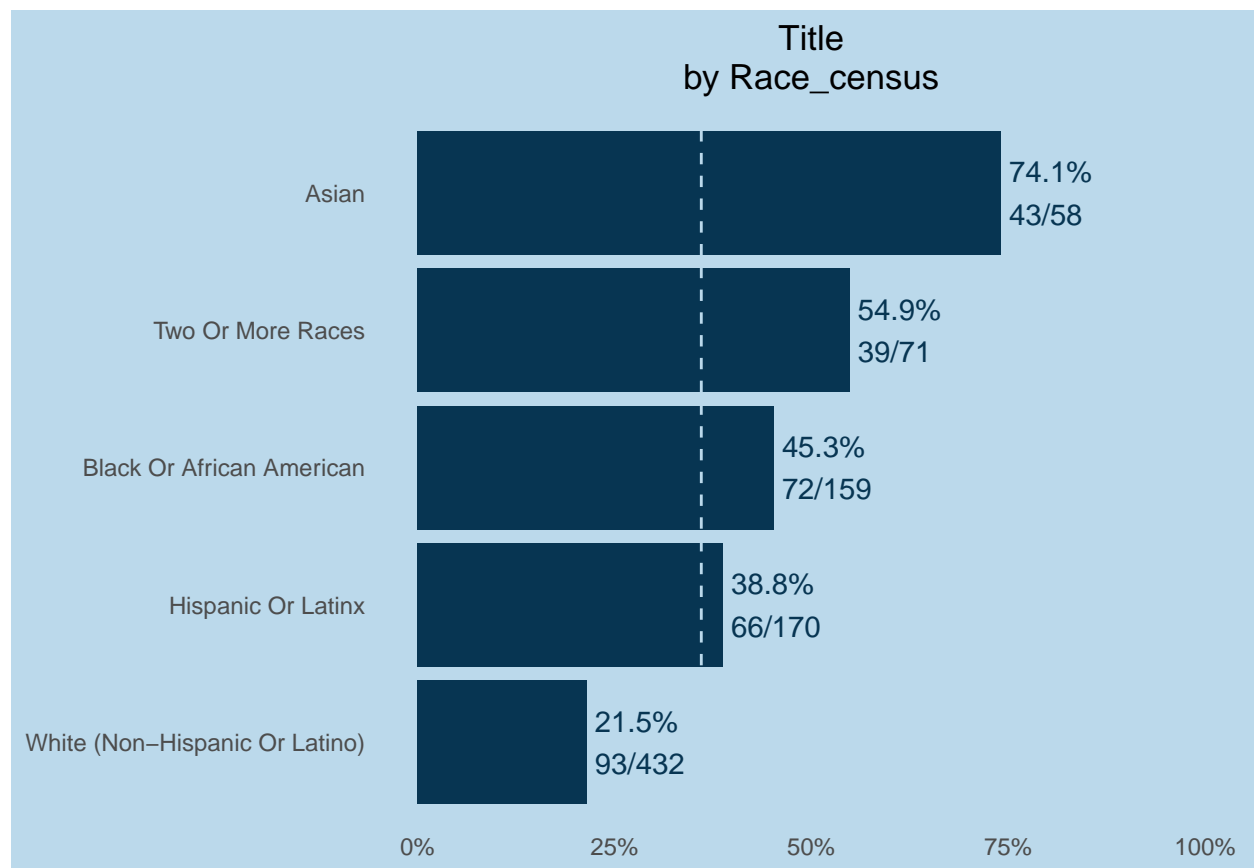


##

\$gen

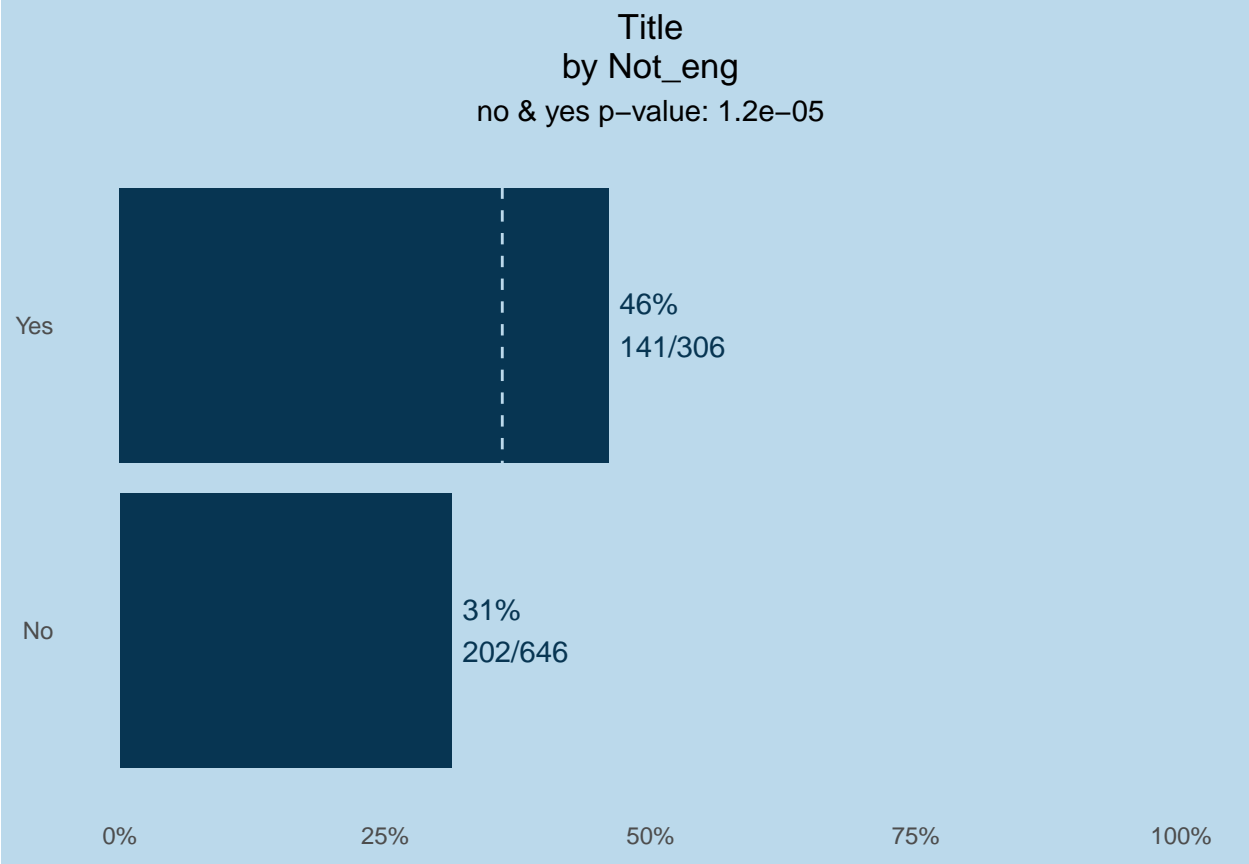


```
##  
## $race_census
```

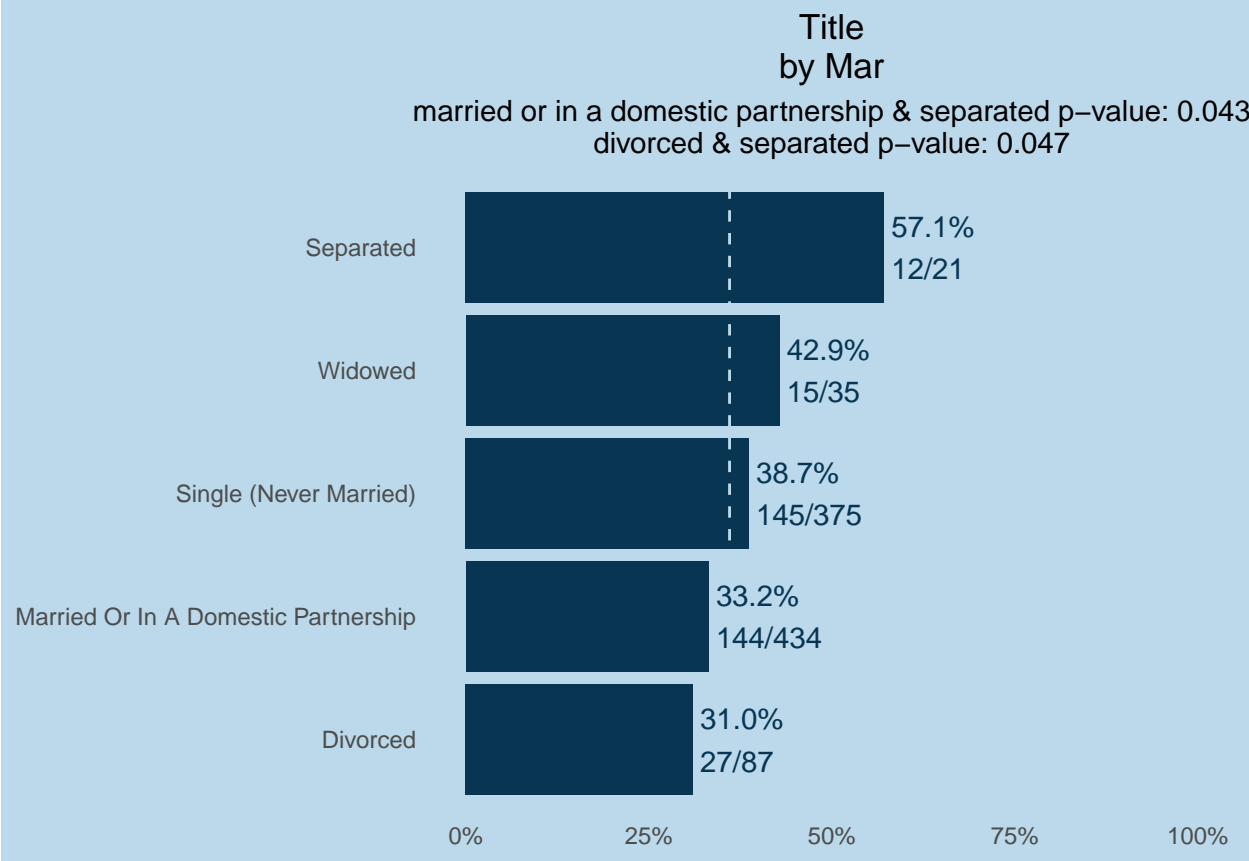


##

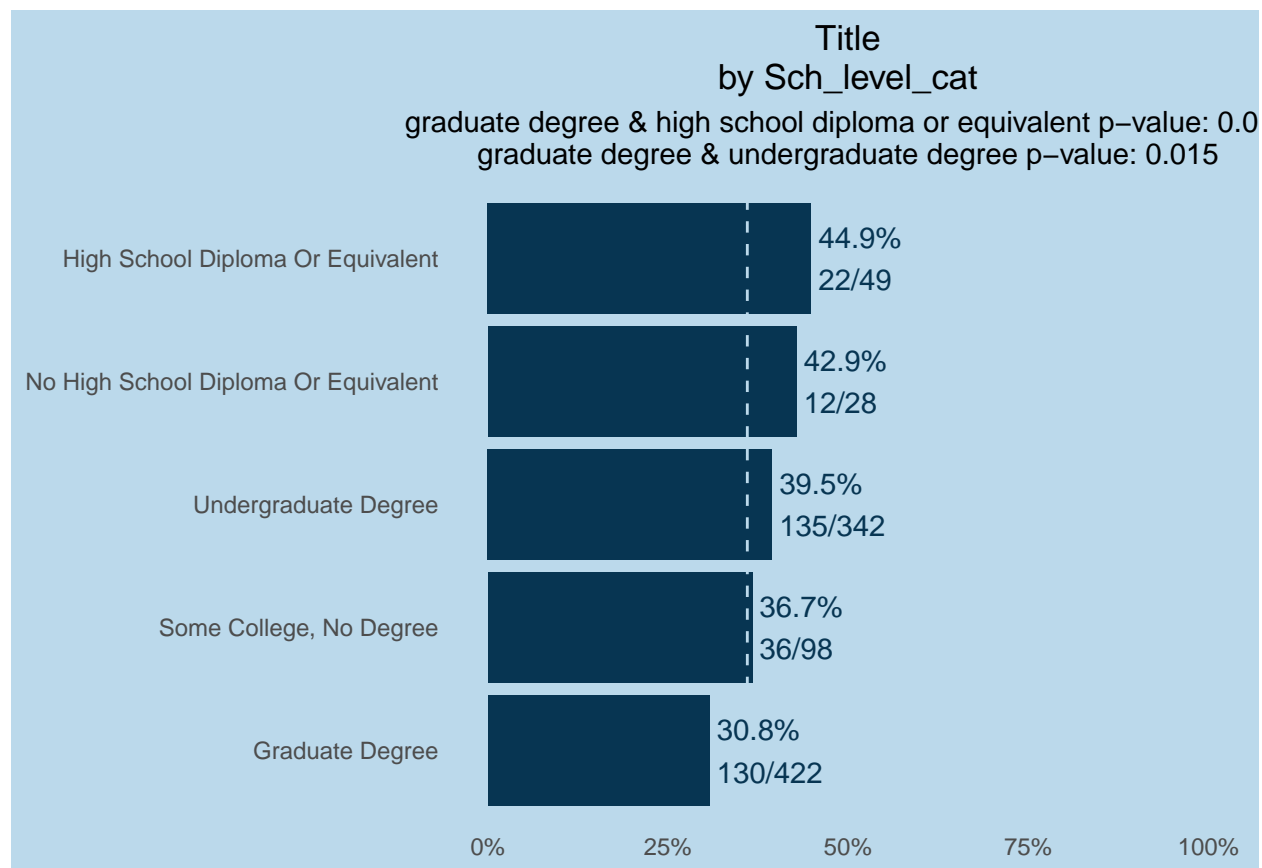
\$not_eng



\$mar

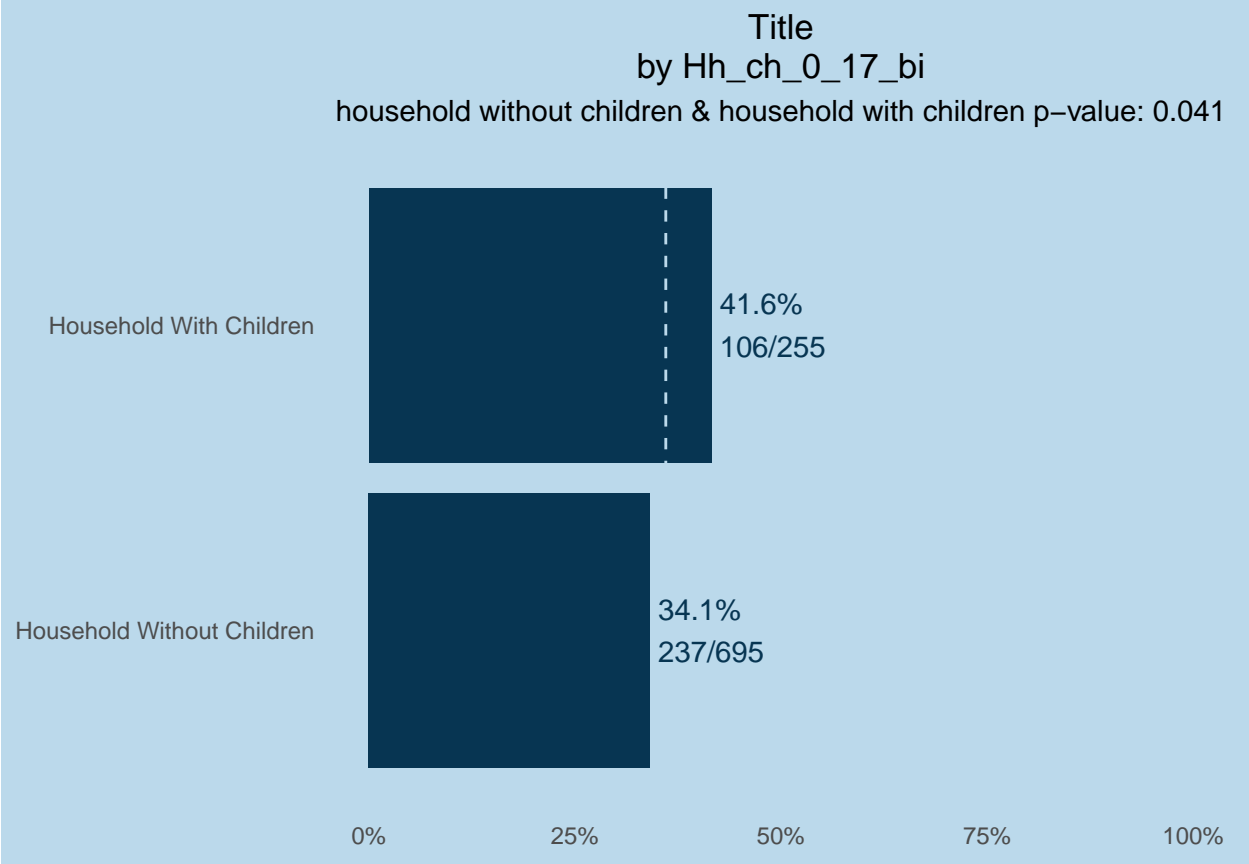


\$sch_level_cat

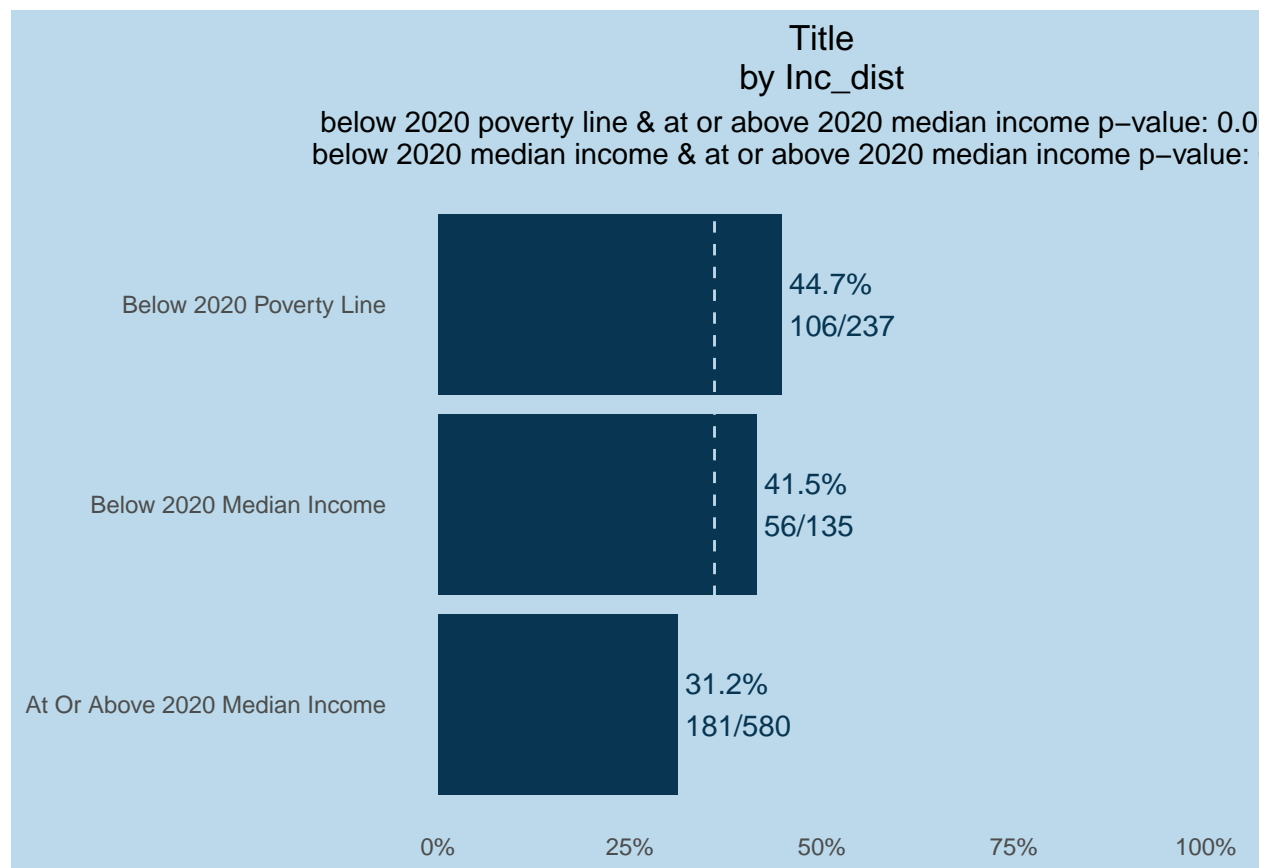


##

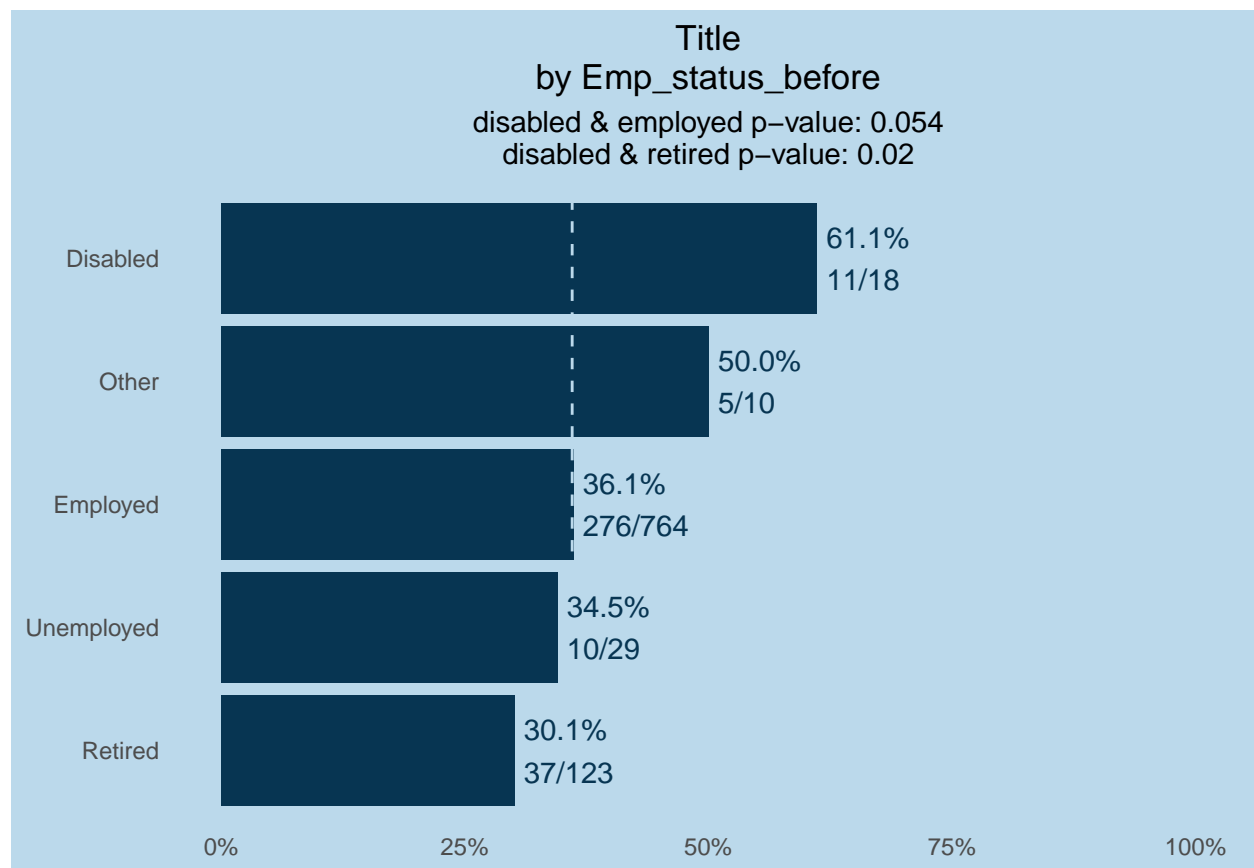
\$hh_ch_0_17_bi



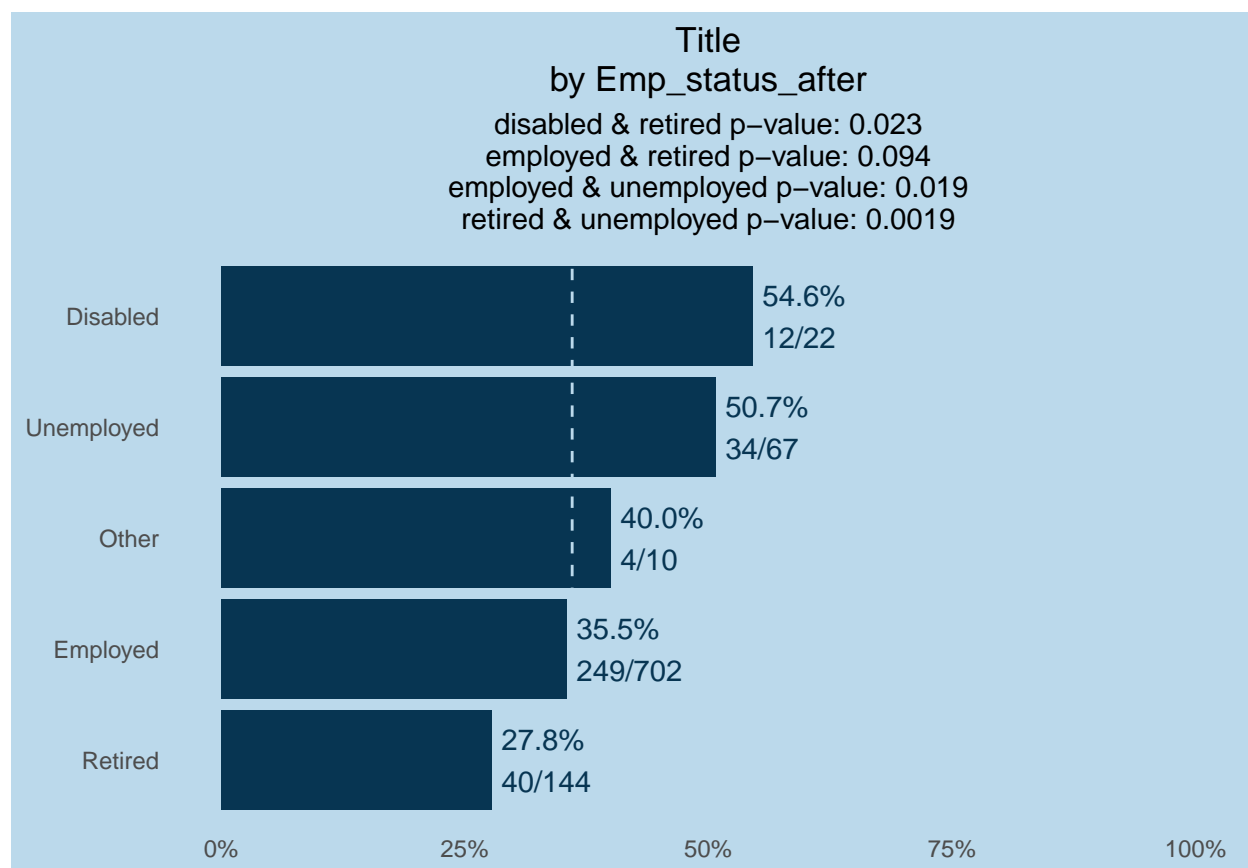
```
##  
## $hh_65_bi  
## NULL  
##  
## $inc_dist
```

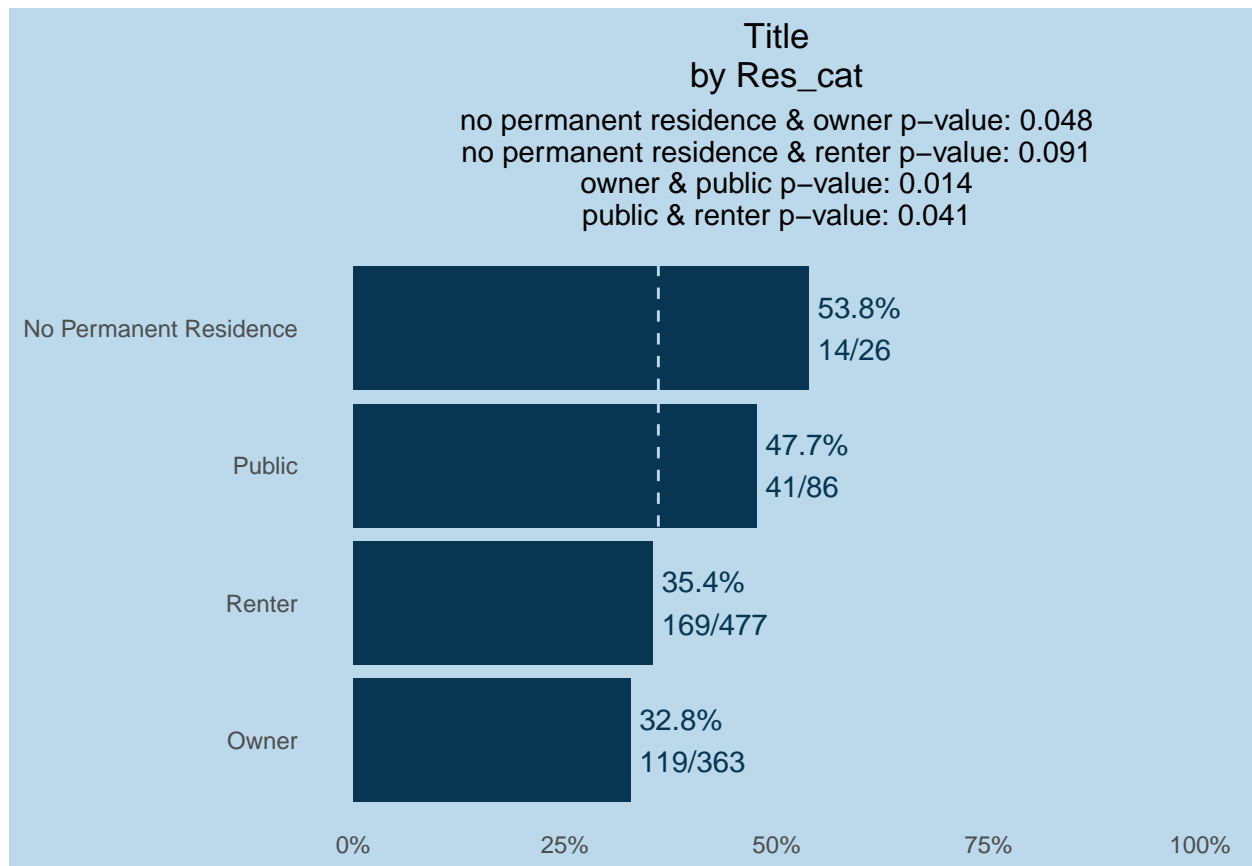
```
##
## $emp_status_before
```



```
##
## $emp_status_after
```



```
##
## $res_cat
```

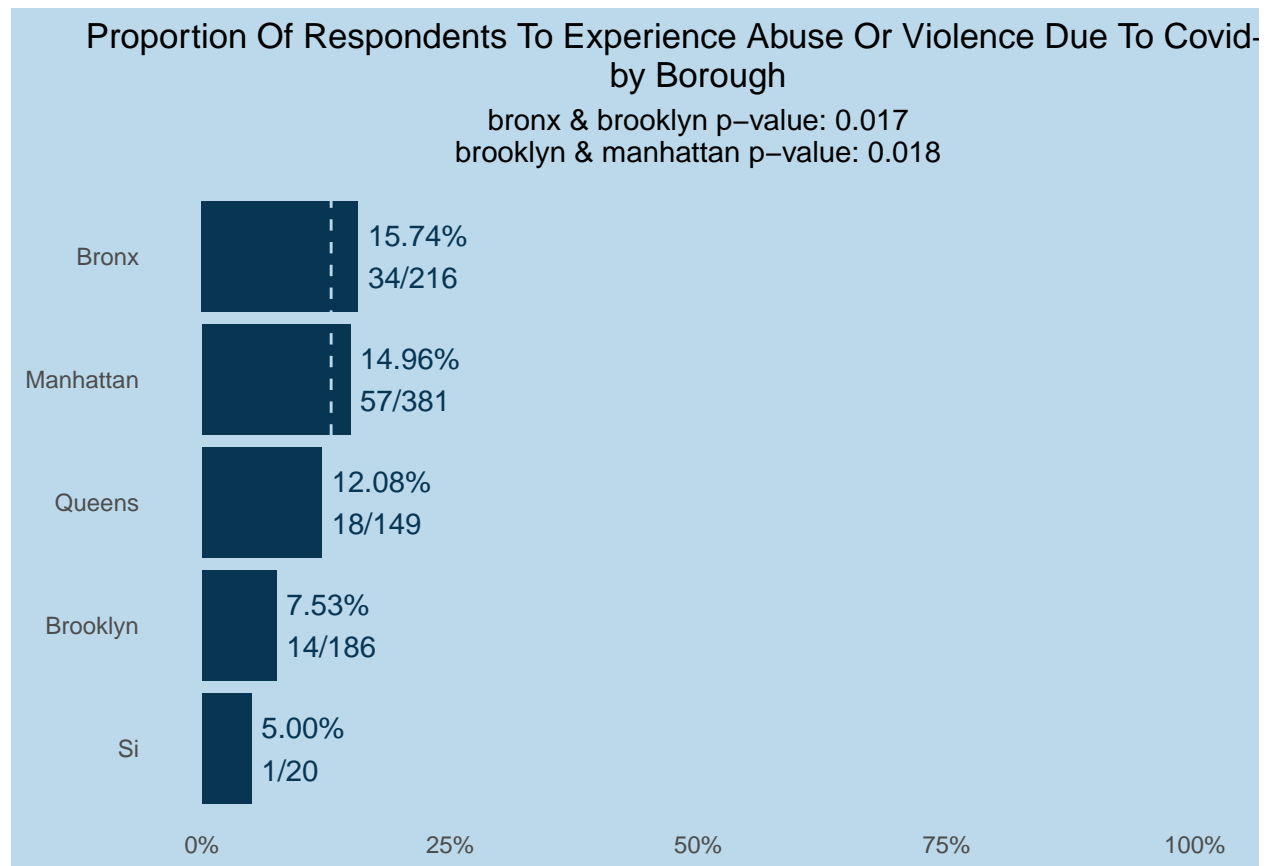


4.8) People who have experienced abuse or violence due to COVID-19 [36]

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

```
## [1] 0.1302521
```

```
## $borough
```



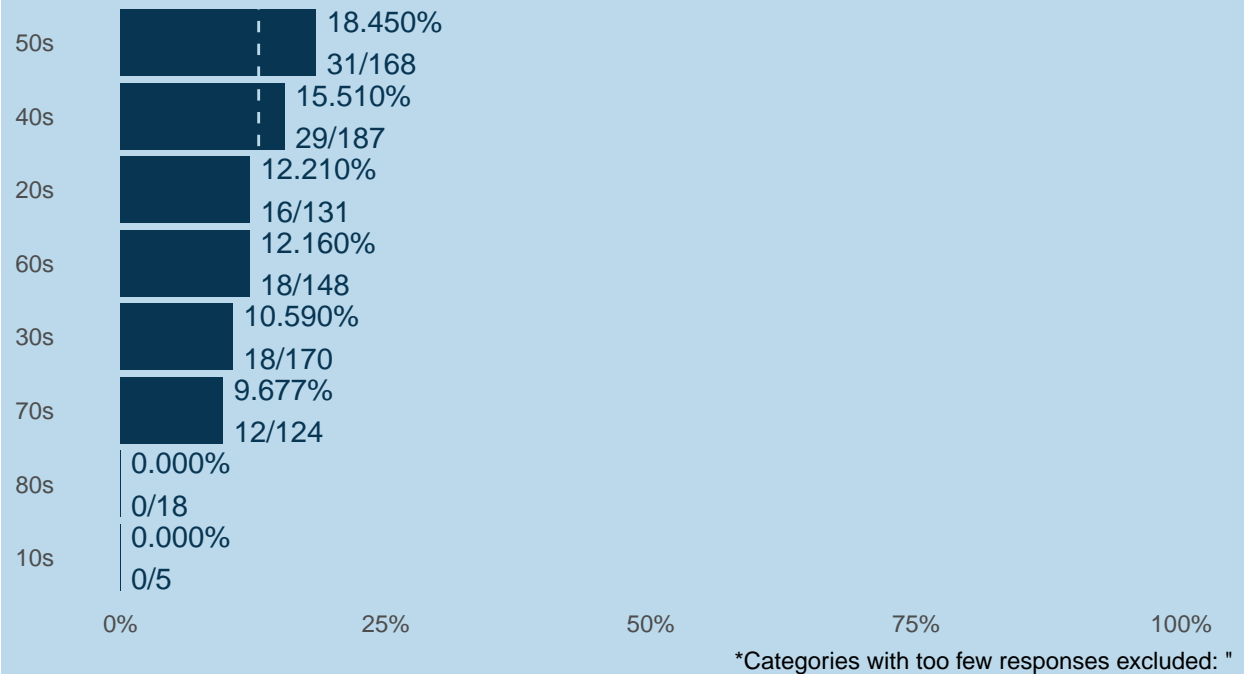
##

\$decade

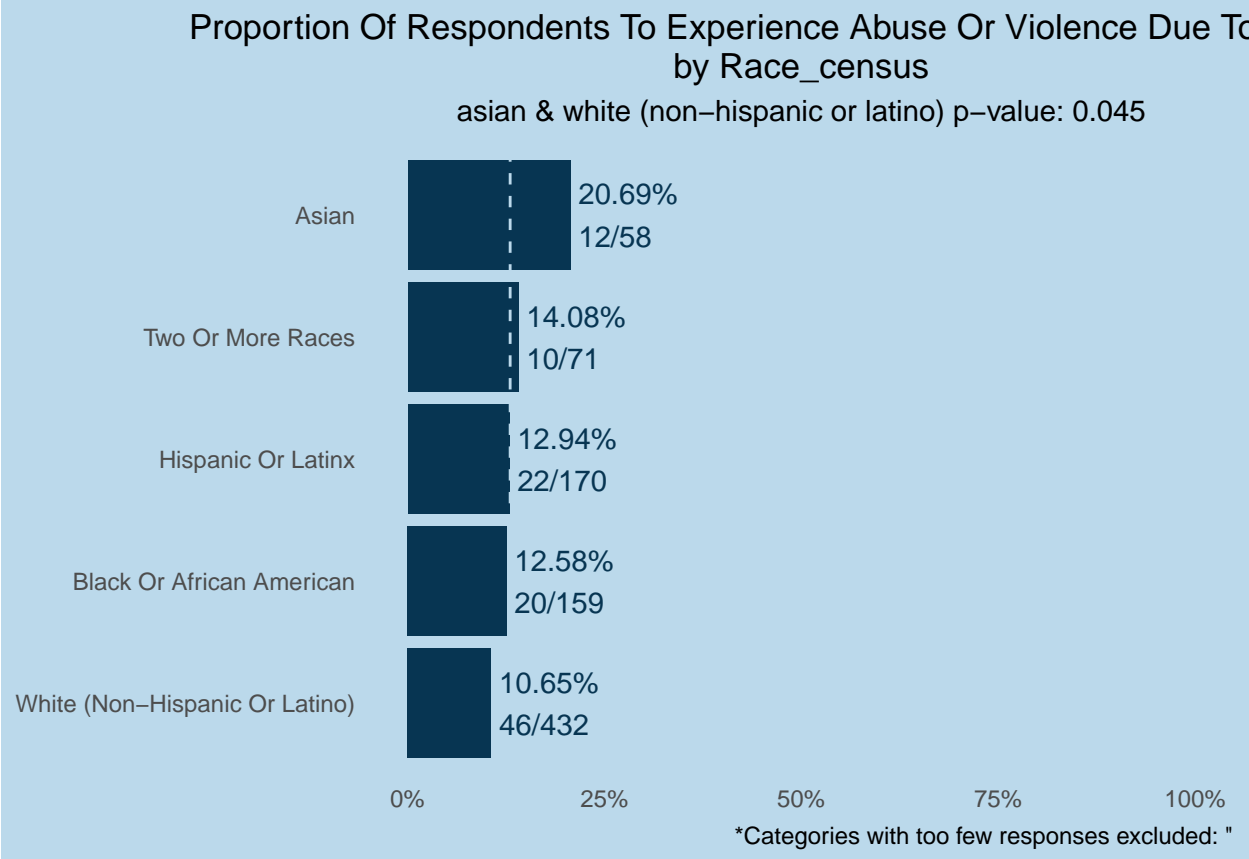
Proportion Of Respondents To Experience Abuse Or Violence Due To Covid-19 by Decade

30s & 50s p-value: 0.058

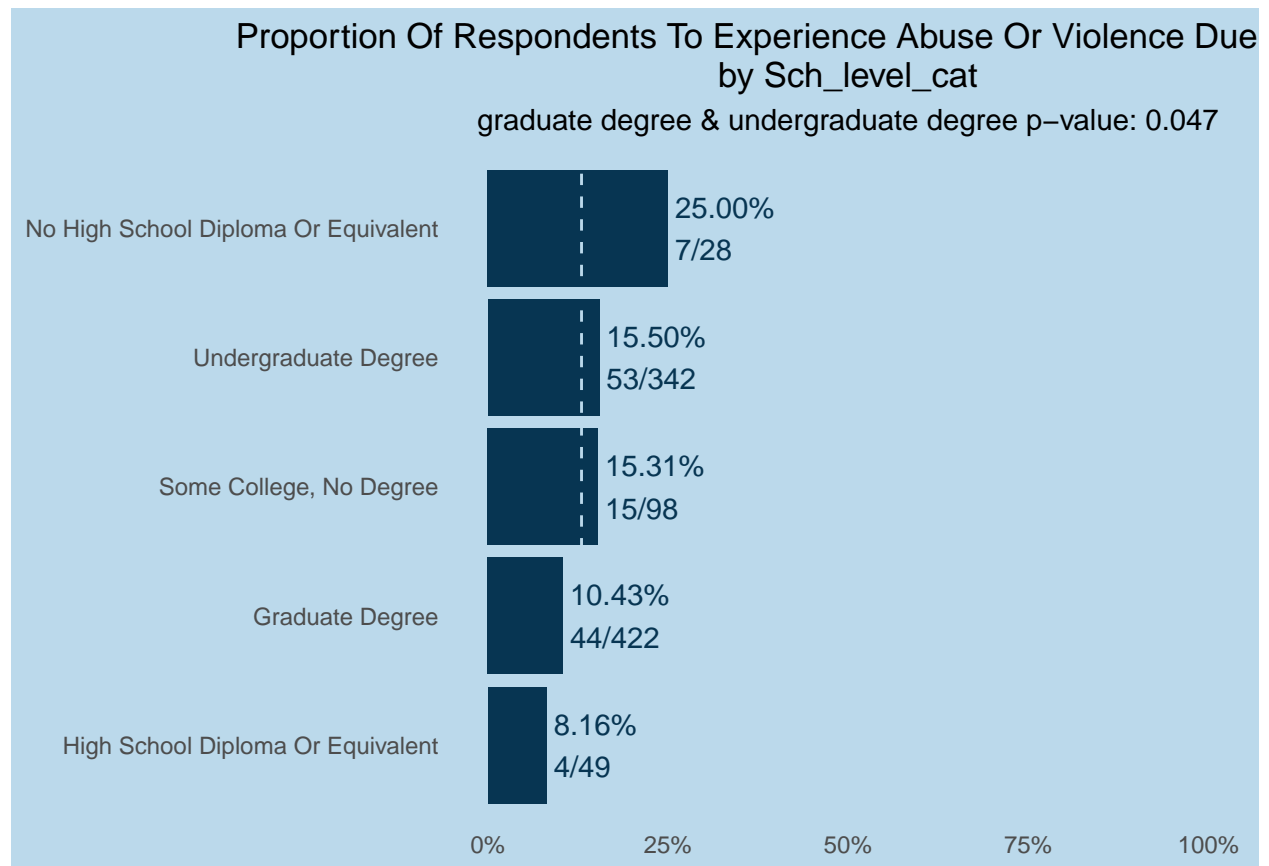
50s & 70s p-value: 0.054



```
##
## $gen
## NULL
##
## $race_census
```



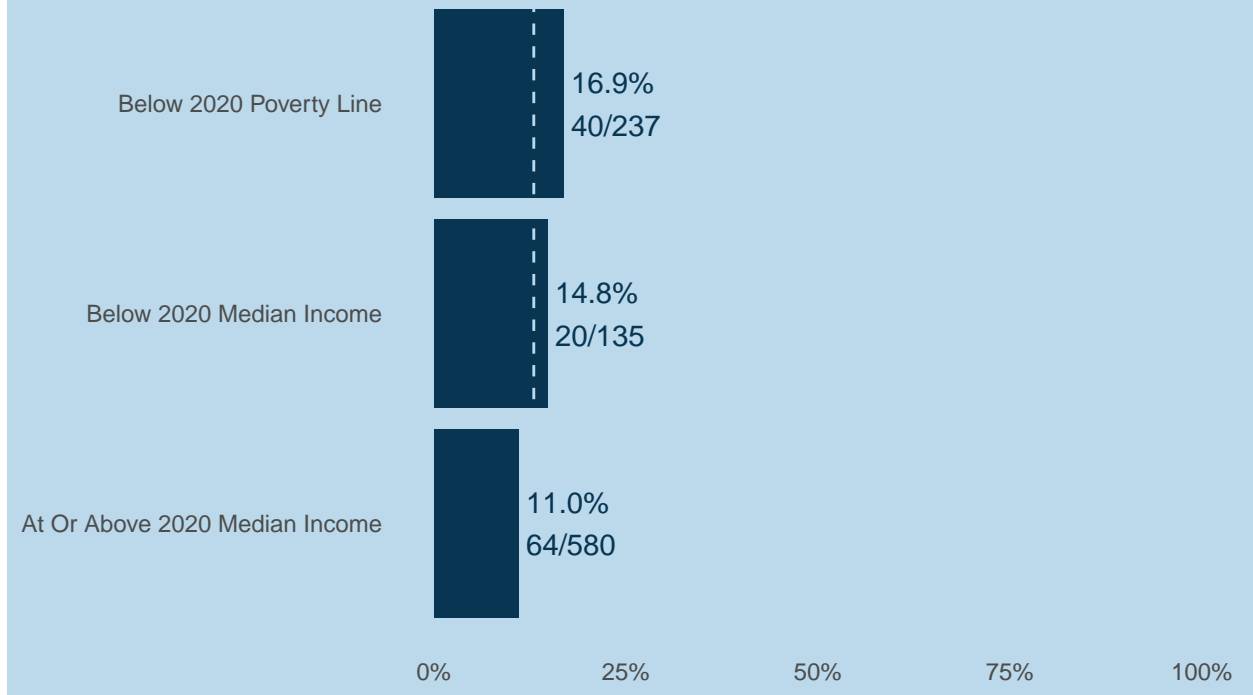
```
##  
## $not_eng  
## NULL  
##  
## $mar  
## NULL  
##  
## $sch_level_cat
```



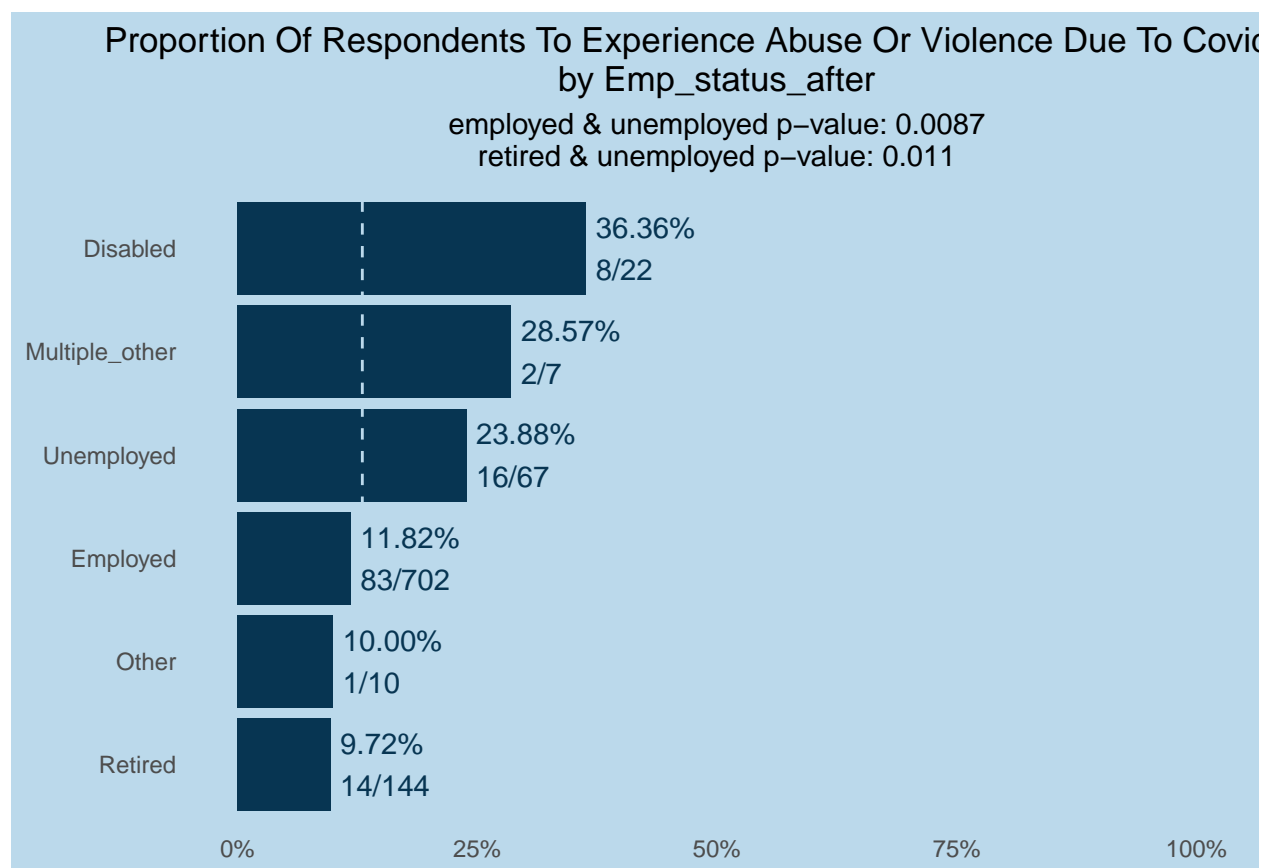
```
##
## $hh_ch_0_17_bi
## NULL
##
## $hh_65_bi
## NULL
##
## $inc_dist
```


Proportion Of Respondents To Experience Abuse Or Violence Due To by Inc_dist

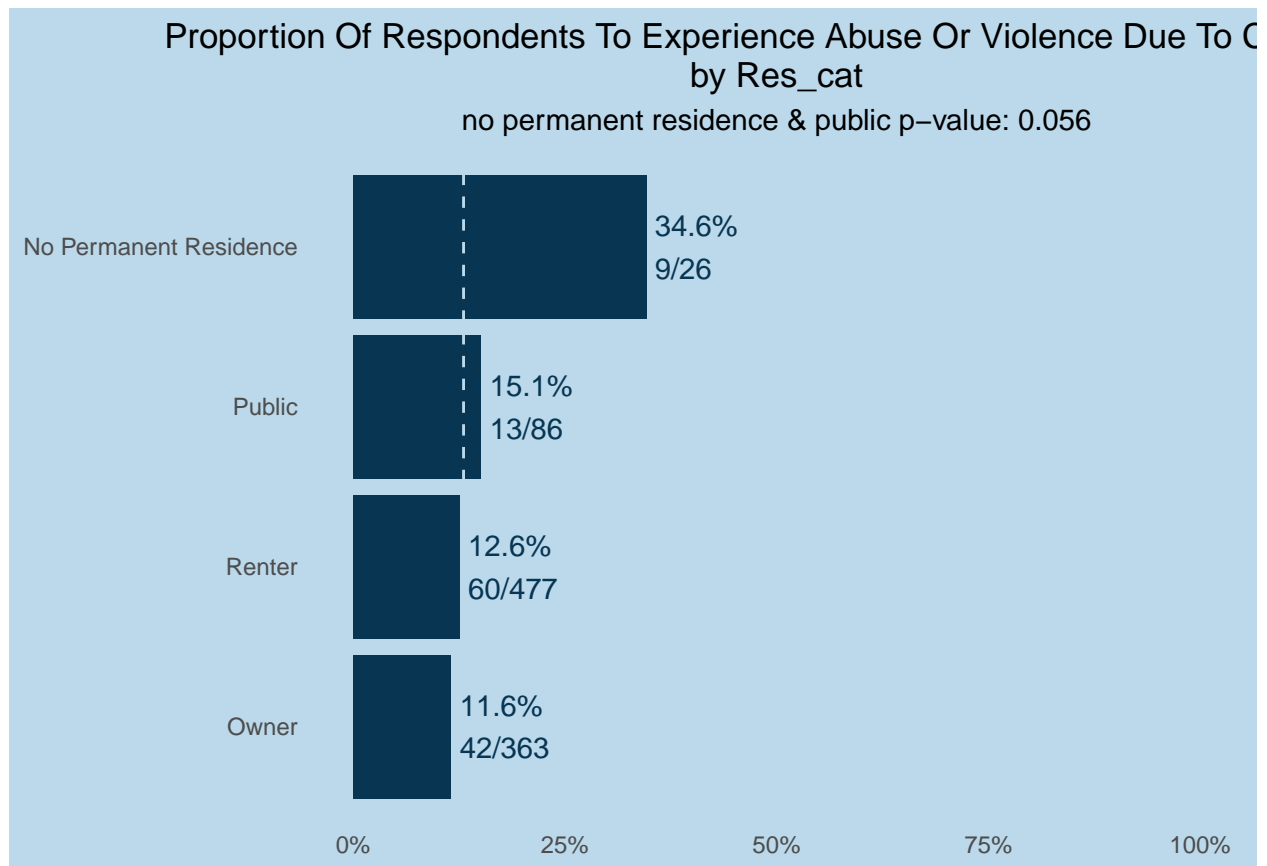
below 2020 poverty line & at or above 2020 median income p-value: 0.



```
##
## $emp_status_before
## NULL
##
## $emp_status_after
```



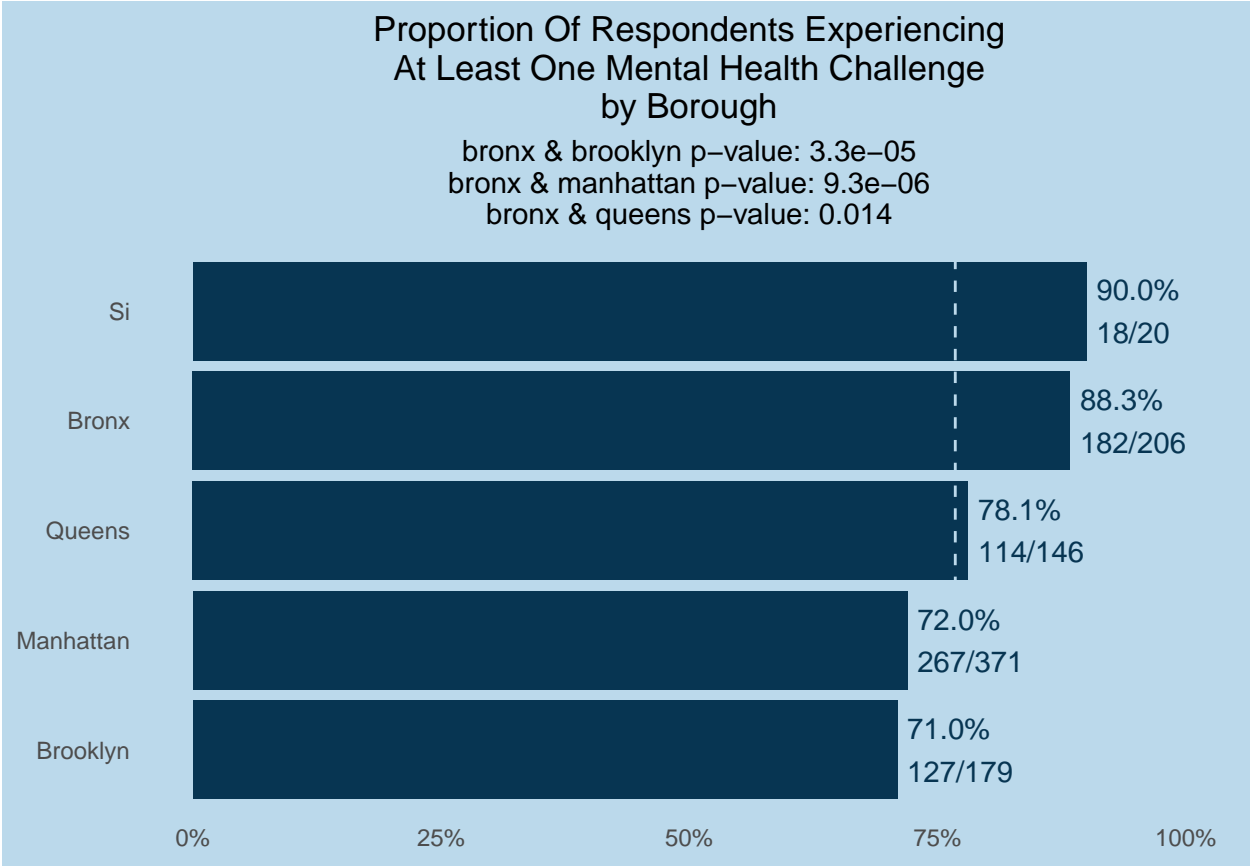
```
##
## $res_cat
```



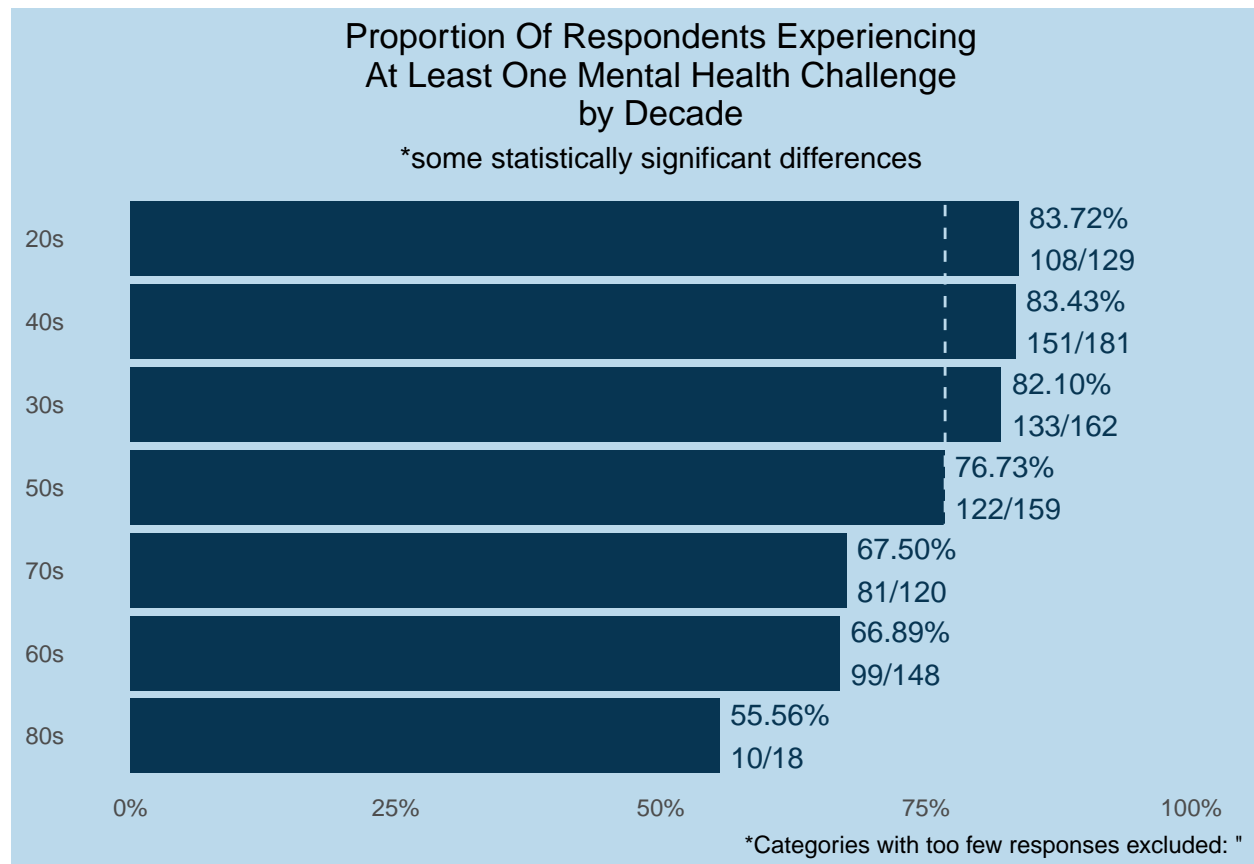
4.9) People who experienced at least one mental health challenge in the last month [41]

Run categorical distribution over population (0-4) Indicators: responses to [41] Unable to control: fairly often or very often Confident: never or almost never Going your way: never or almost never Piling up: fairly often or very often Yes = 1+ indicators No = 0 indicators Run distribution by sub-demographics (a-k)

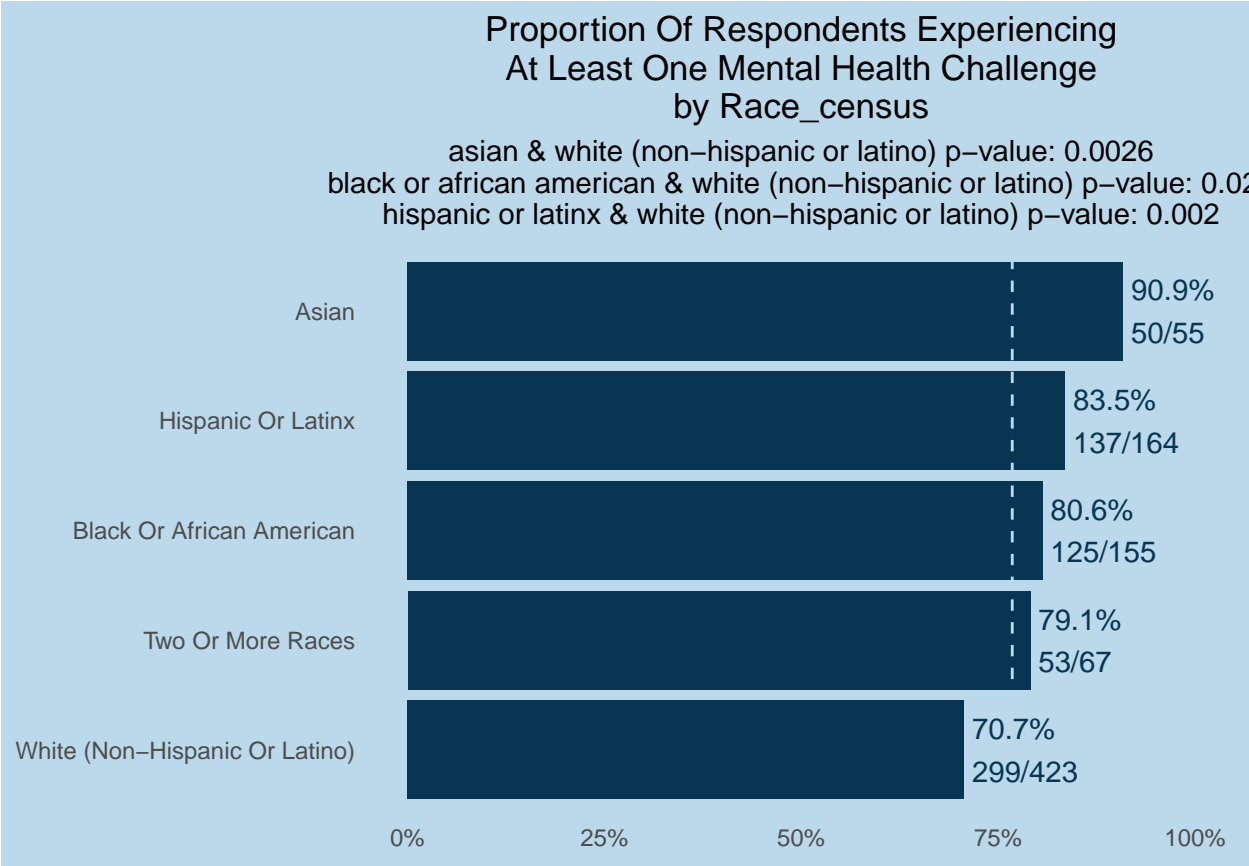
\$borough



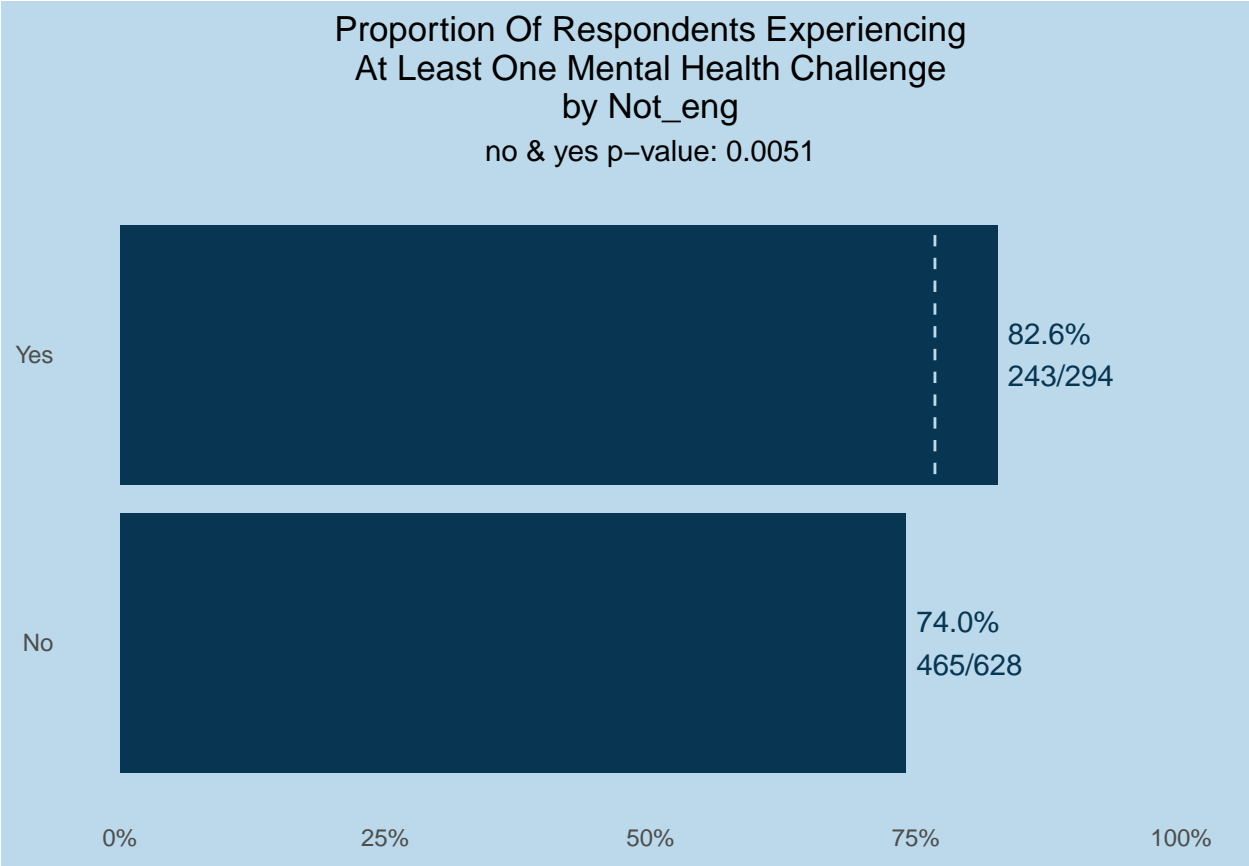
\$decade



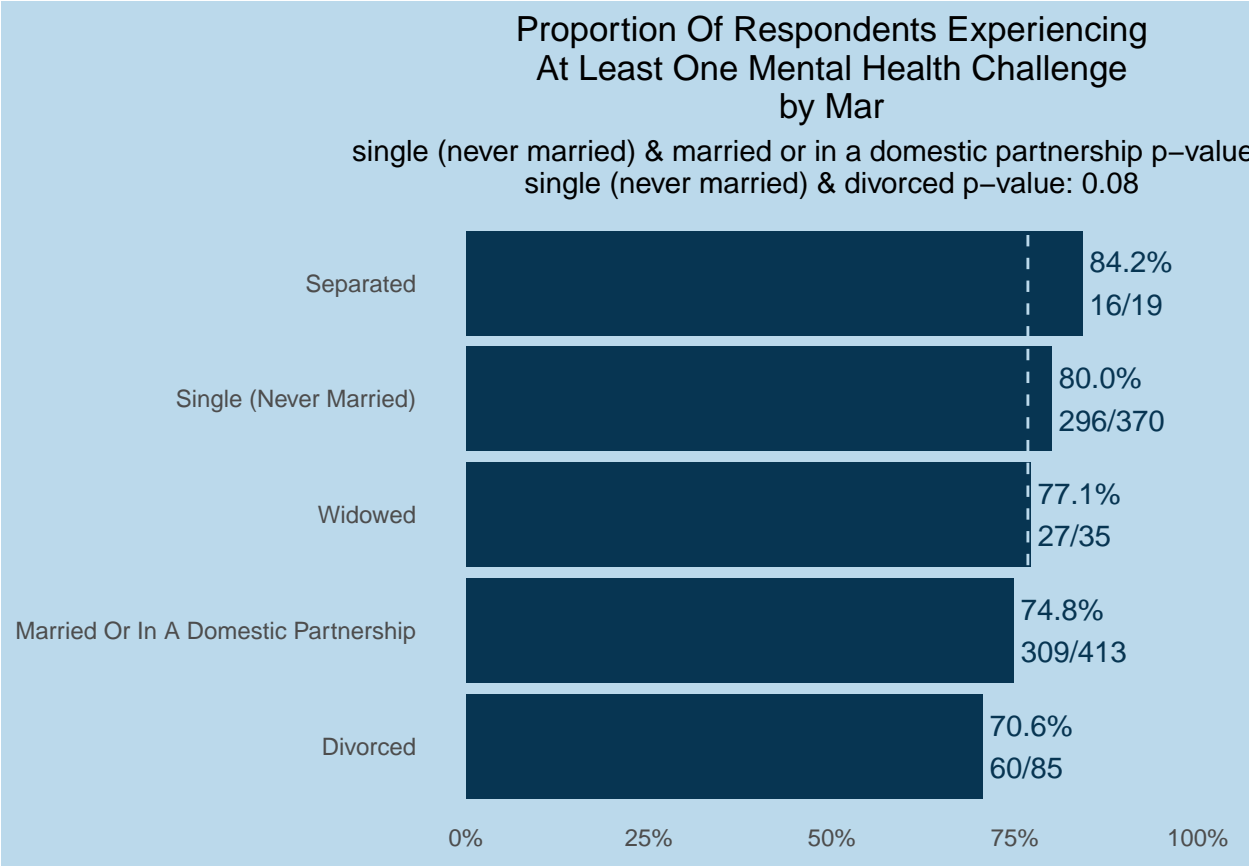
```
##
## $gen
## NULL
##
## $race_census
```



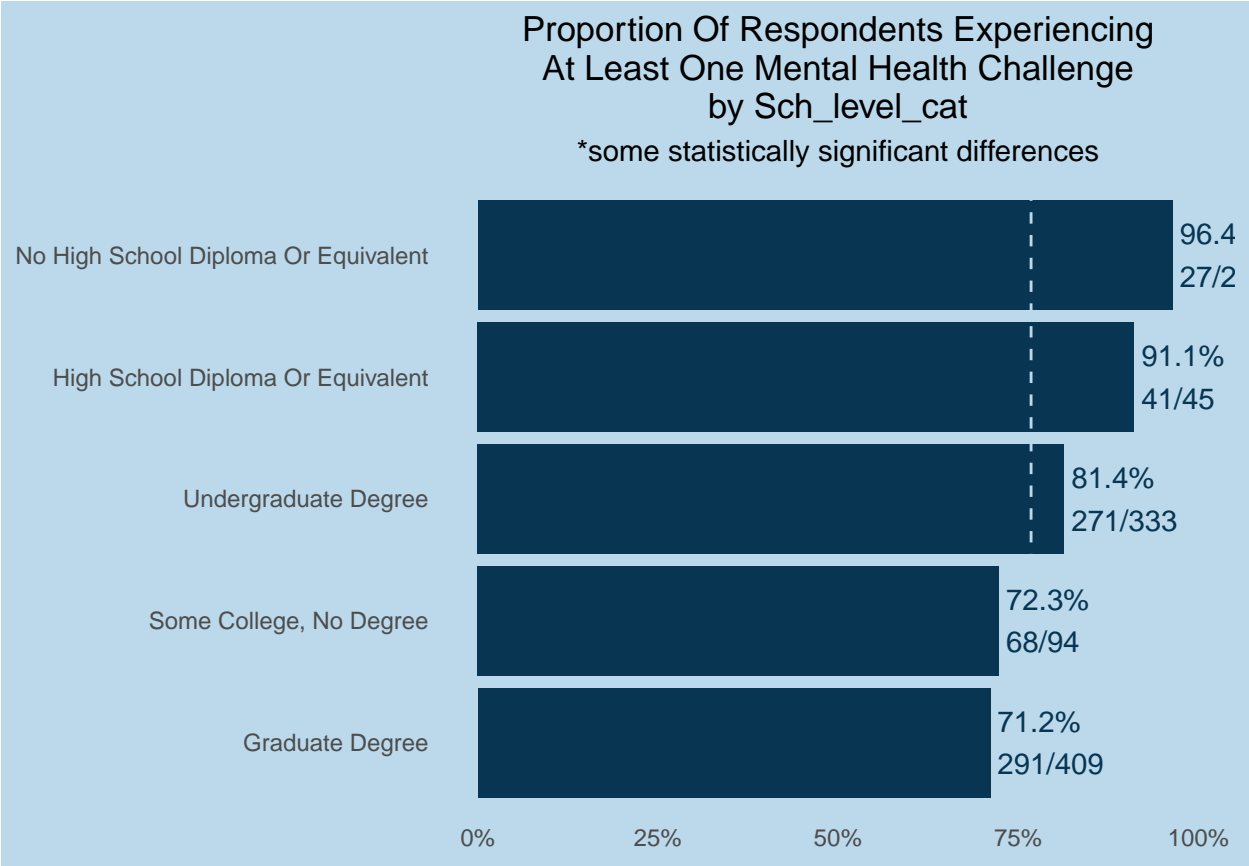
\$not_eng



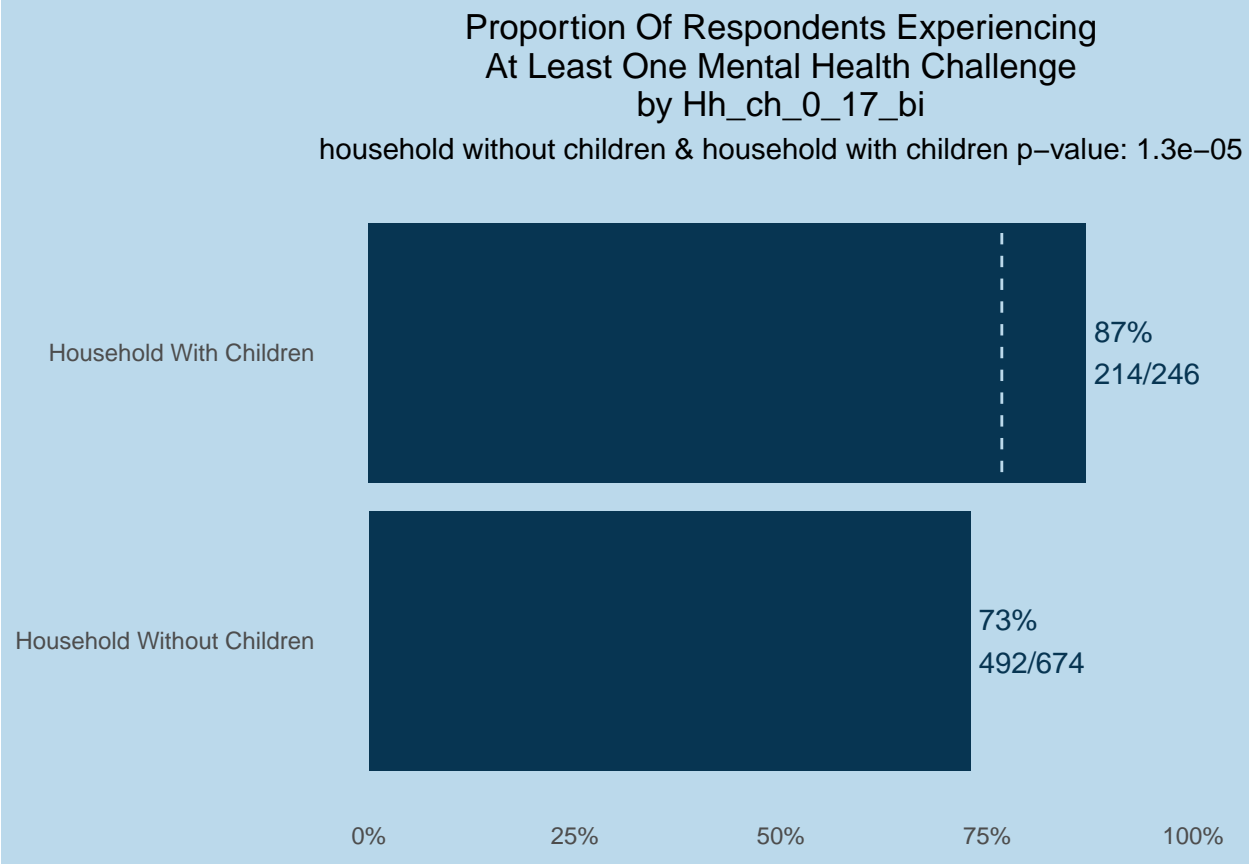
\$mar



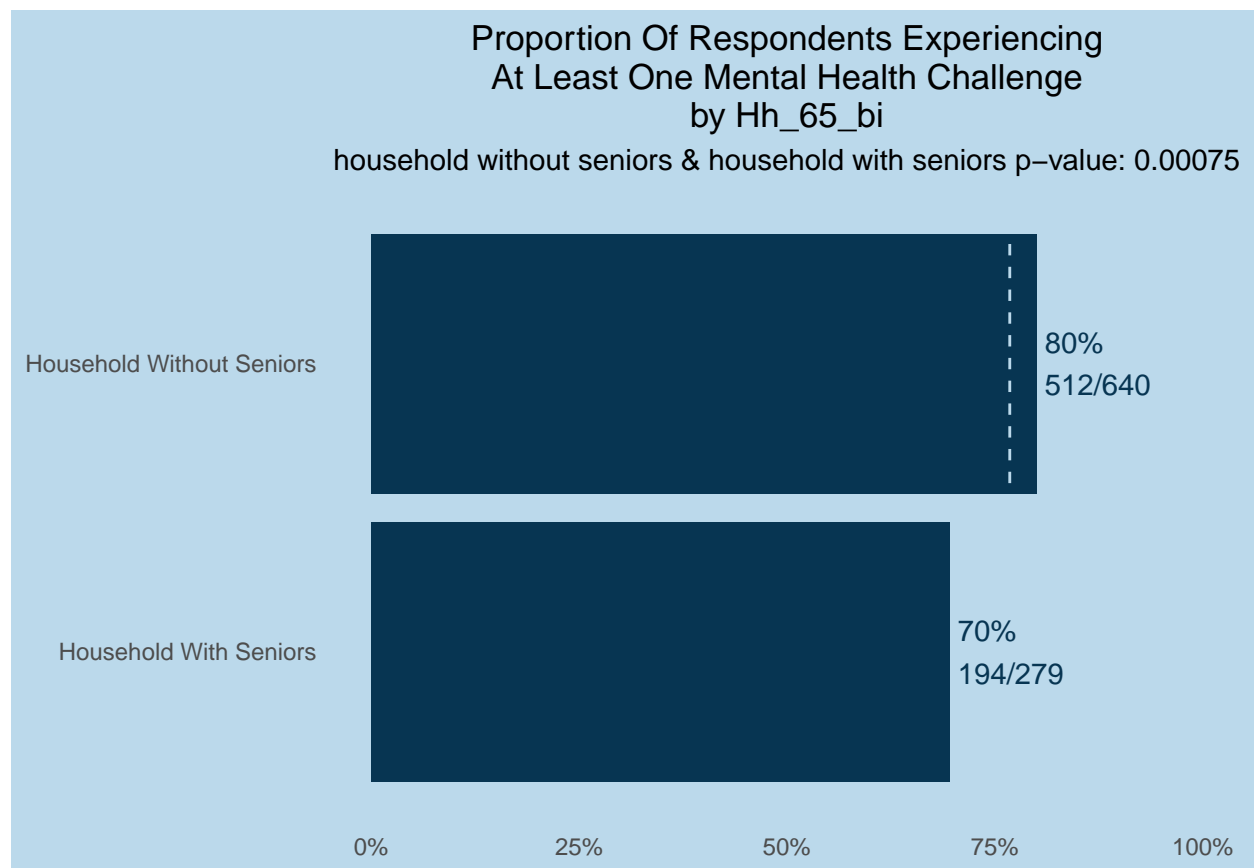
\$sch_level_cat



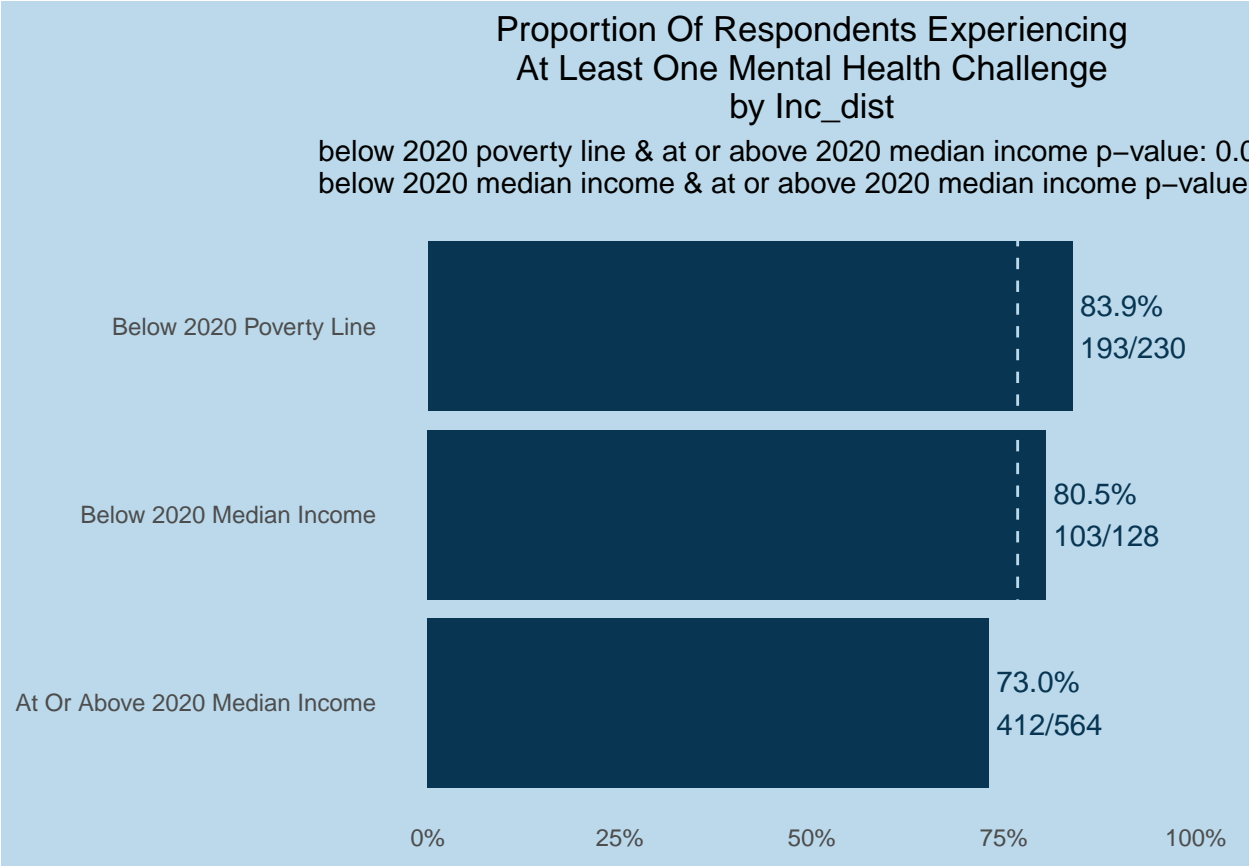
\$hh_ch_0_17_bi



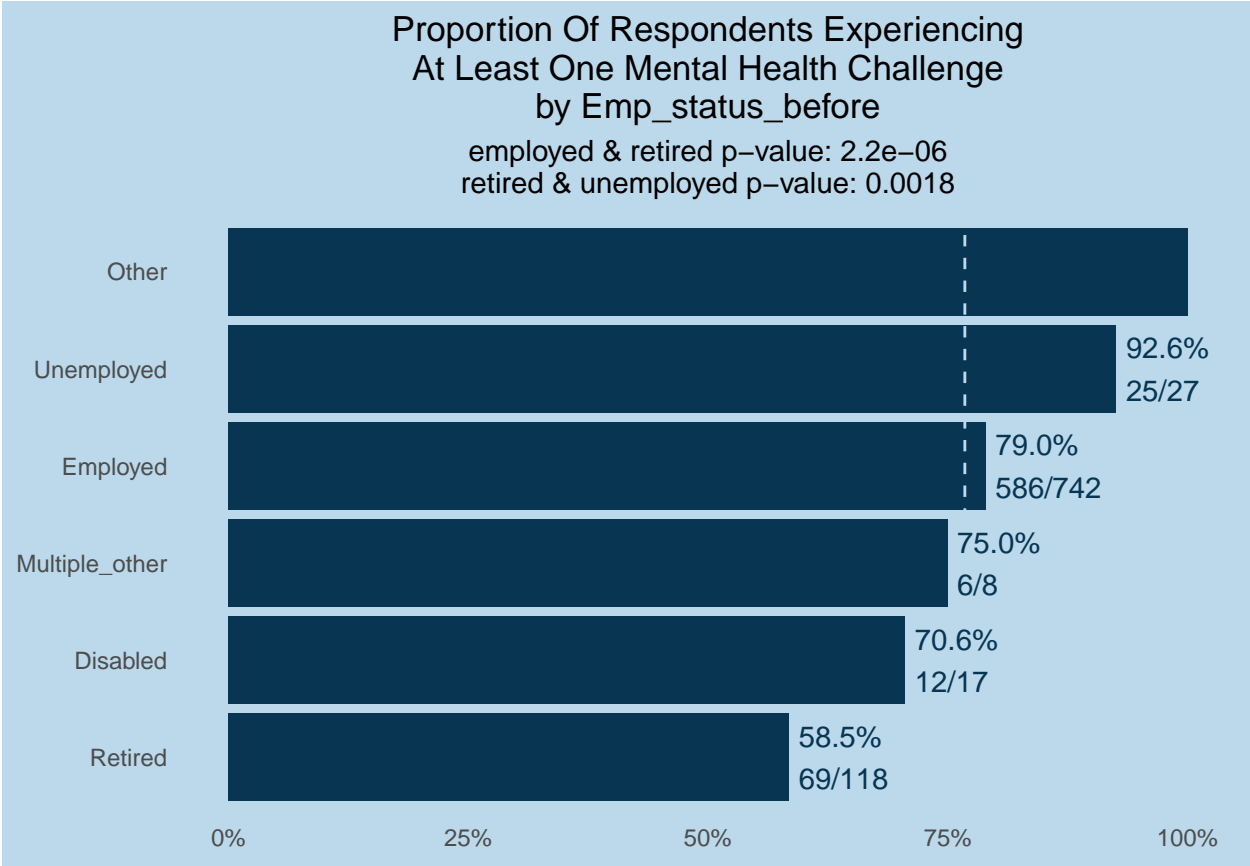
\$hh_65_bi



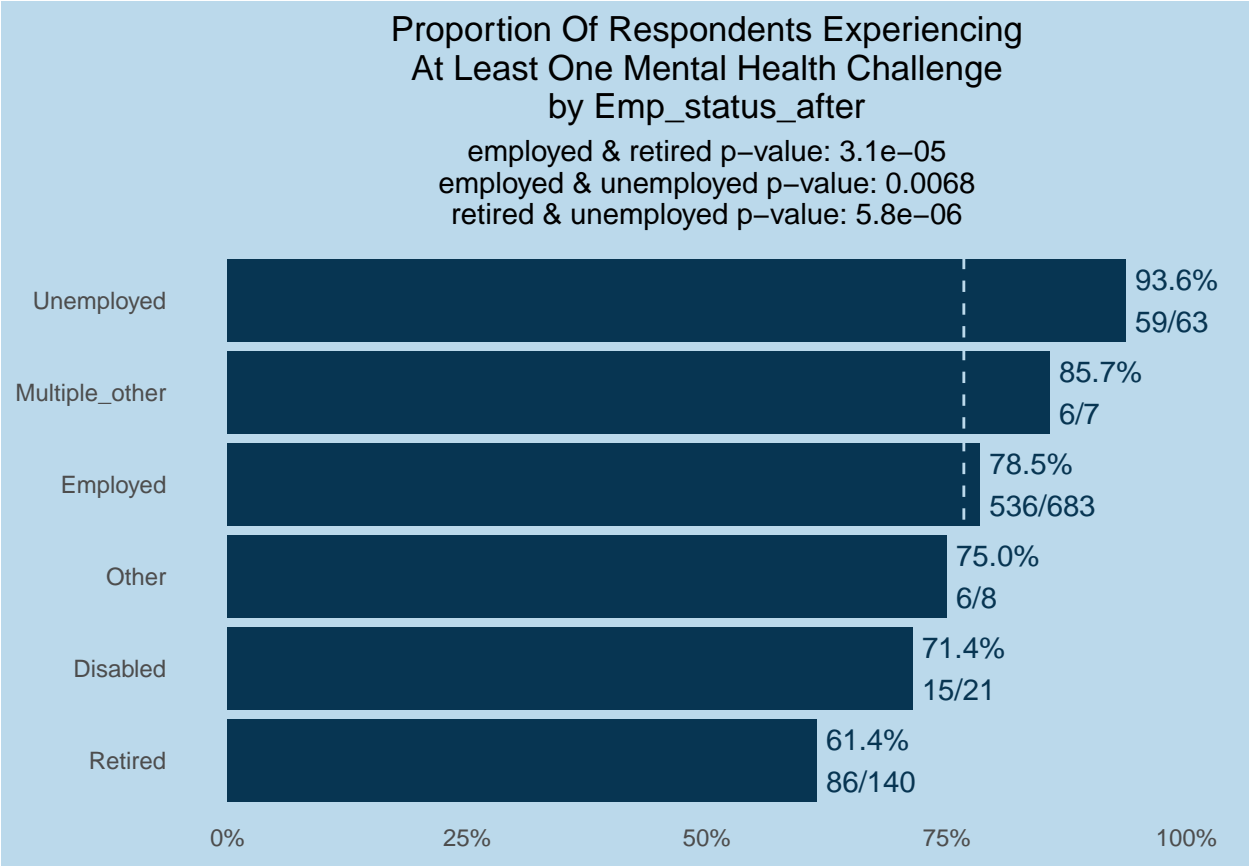
```
##  
## $inc_dist
```



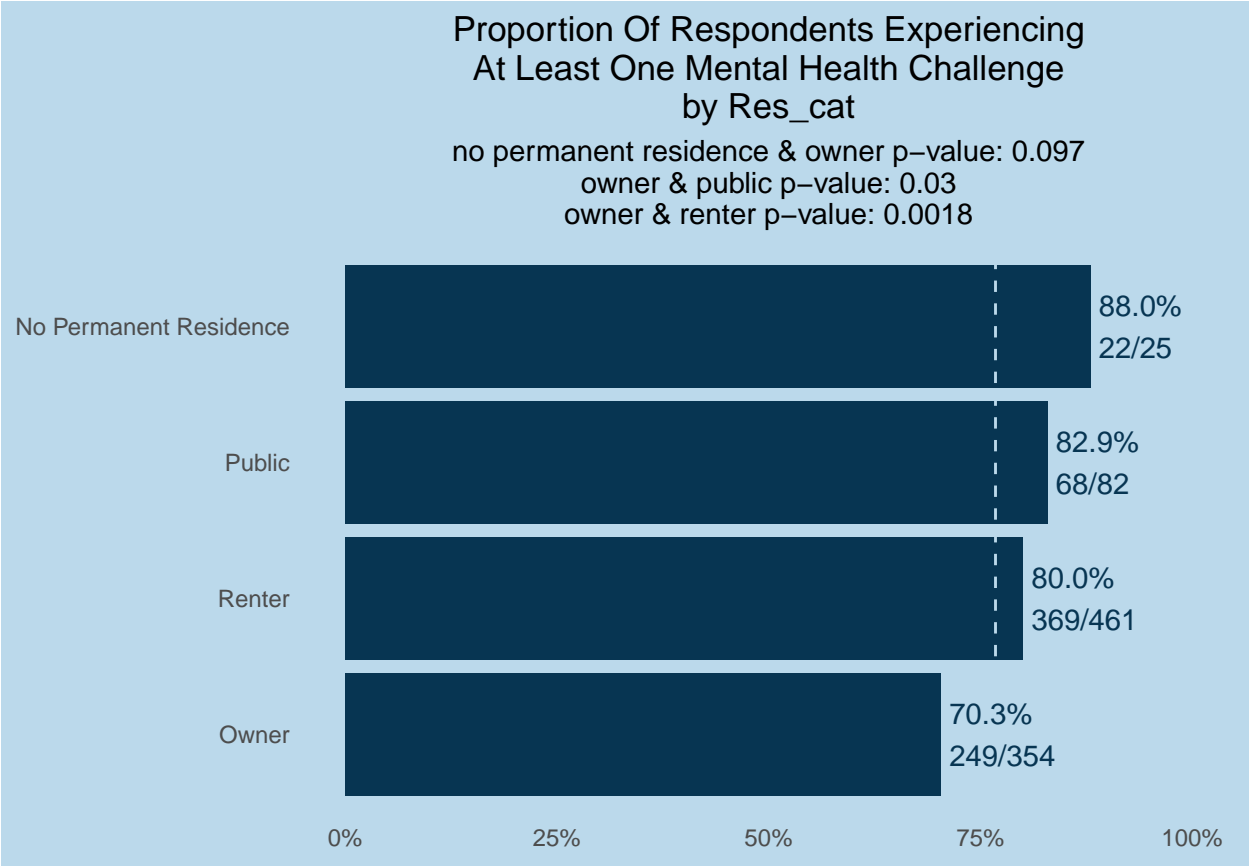
```
##  
## $emp_status_before
```



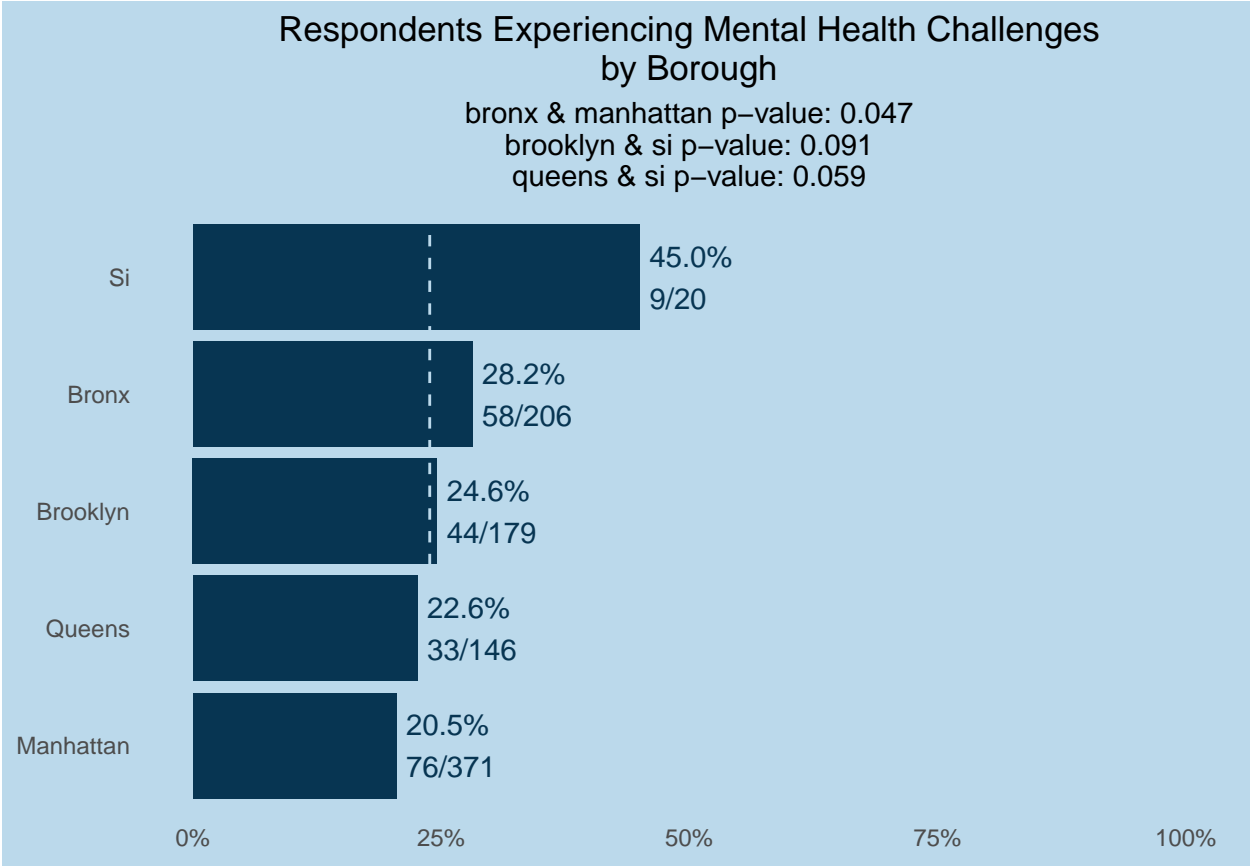
```
##  
## $emp_status_after
```



```
##  
## $res_cat
```

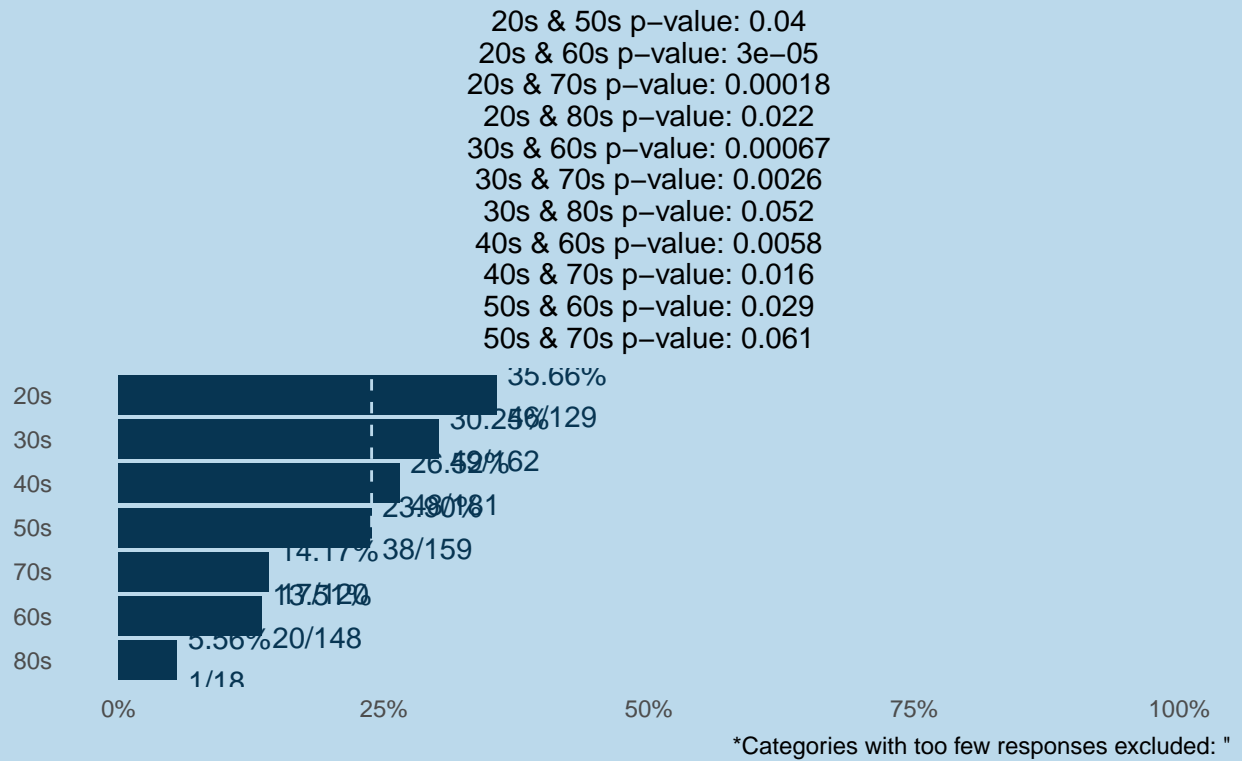


\$borough

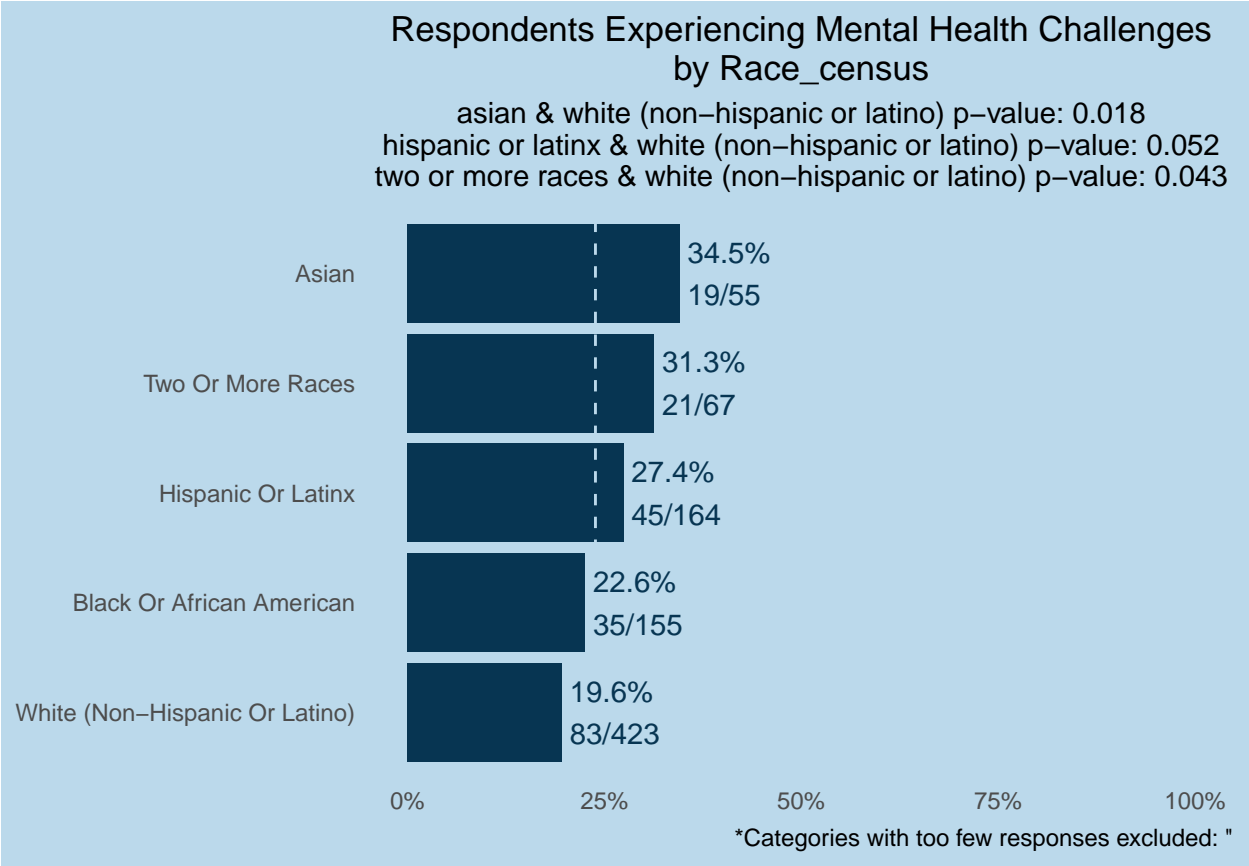


\$decade

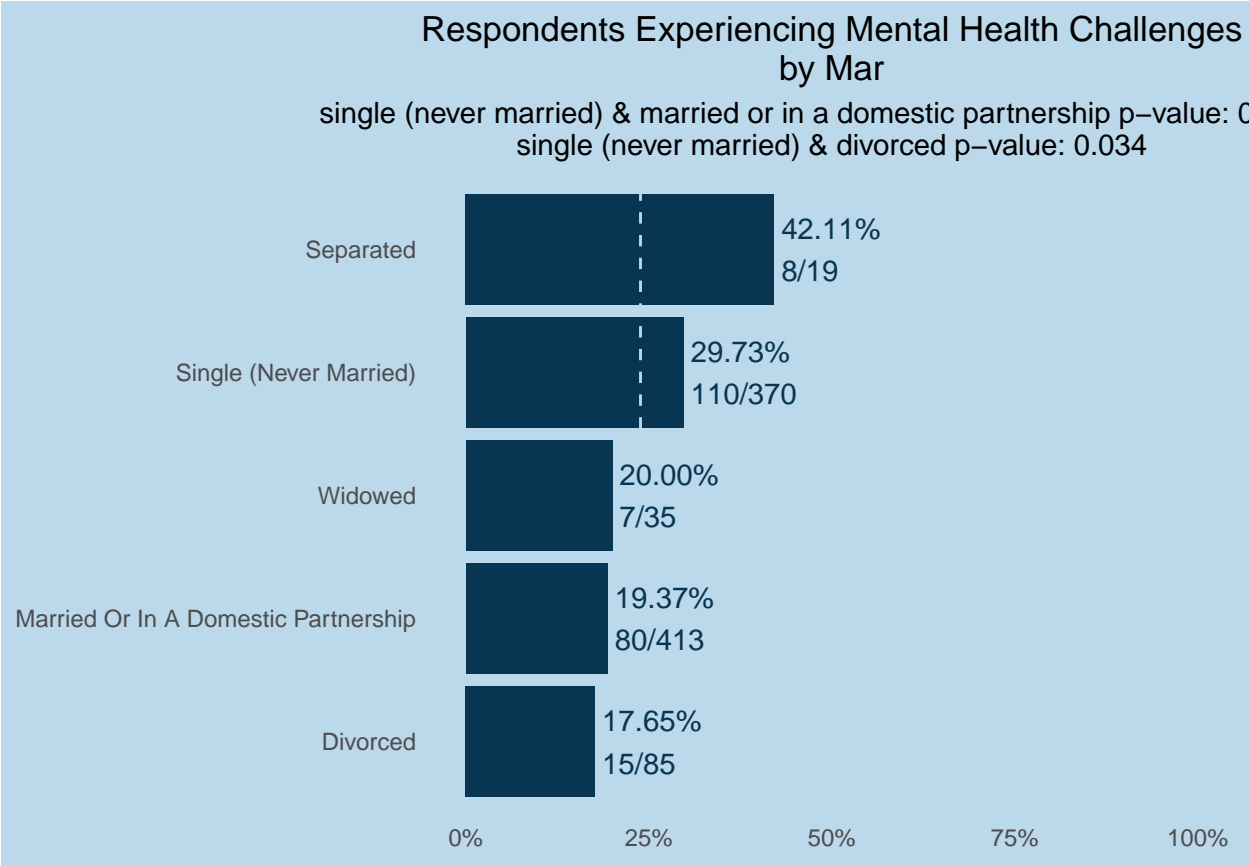
Respondents Experiencing Mental Health Challenges by Decade



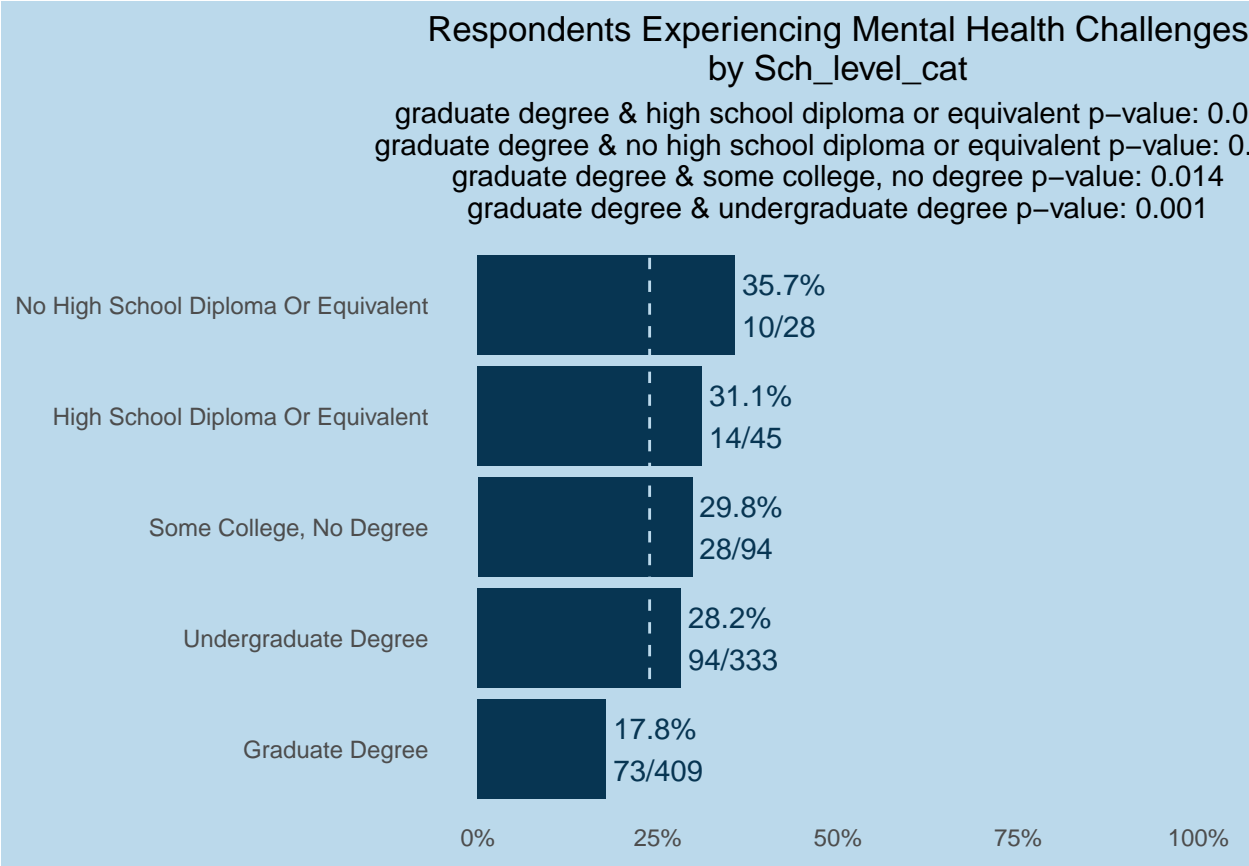
```
##
## $gen
## NULL
##
## $race_census
```



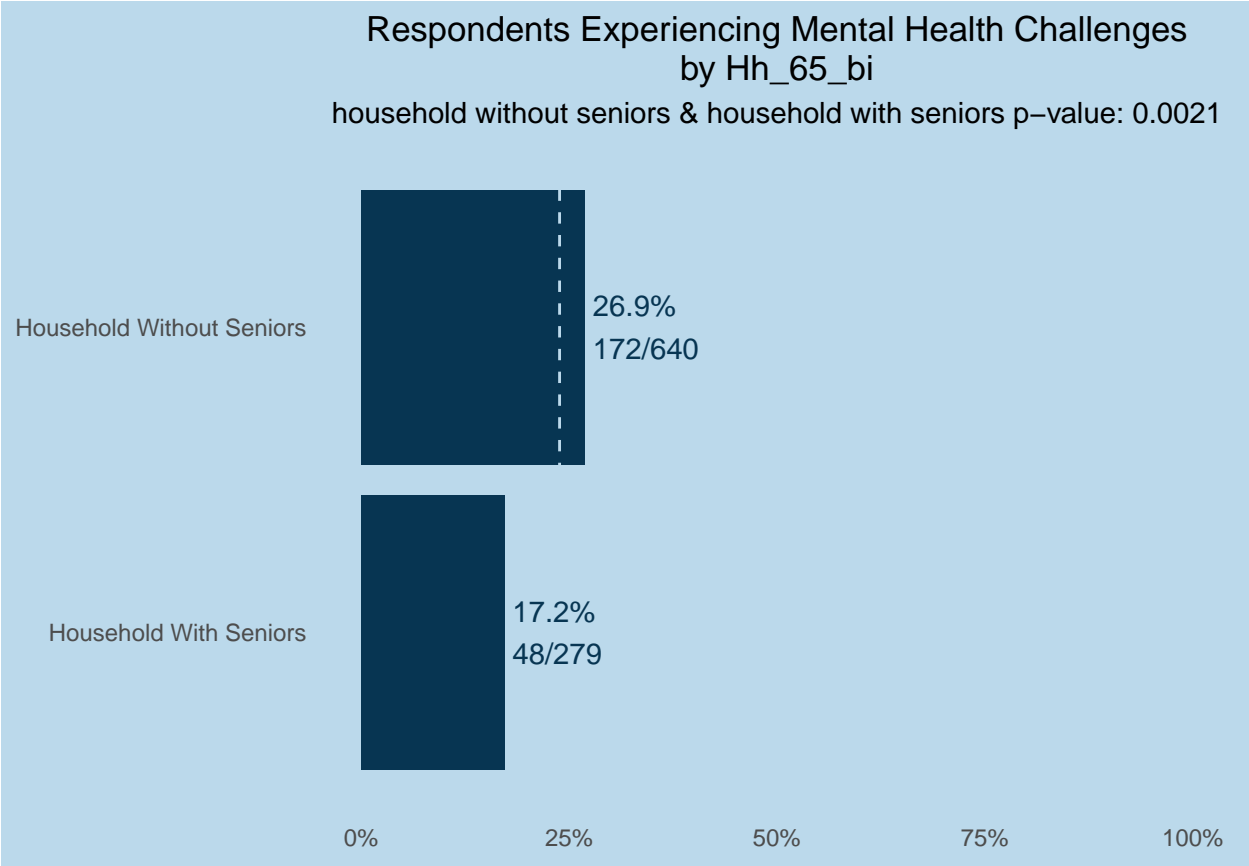
```
##
## $not_eng
## NULL
##
## $mar
```



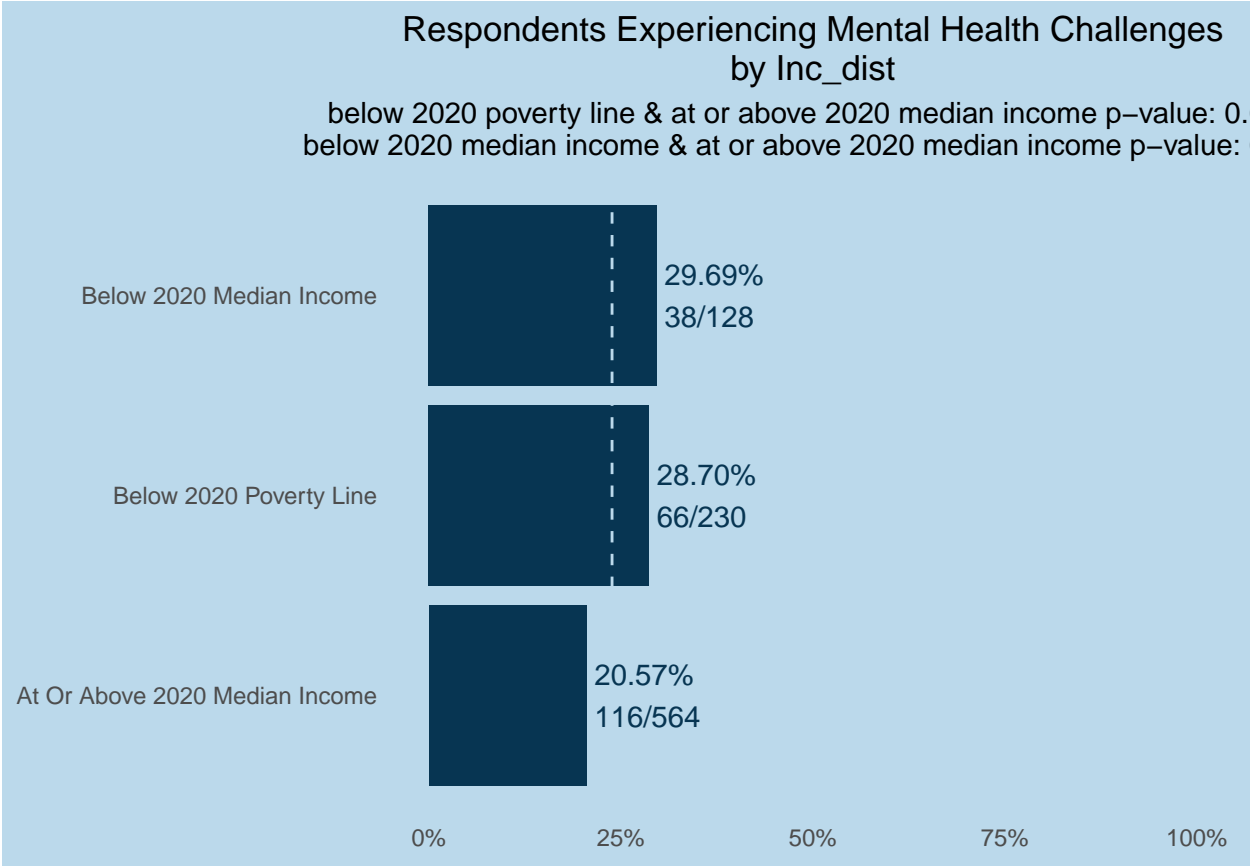
\$sch_level_cat



```
##  
## $hh_ch_0_17_bi  
## NULL  
##  
## $hh_65_bi
```



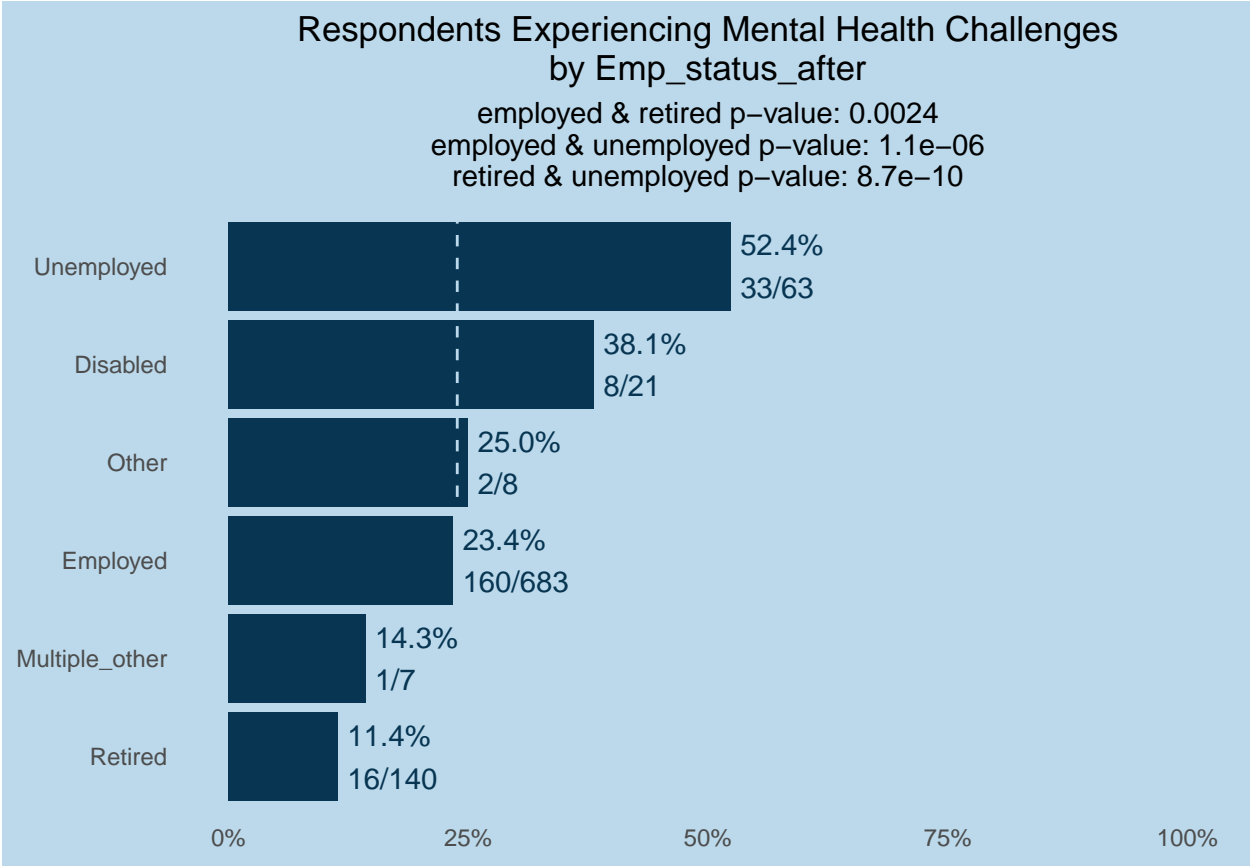
\$inc_dist



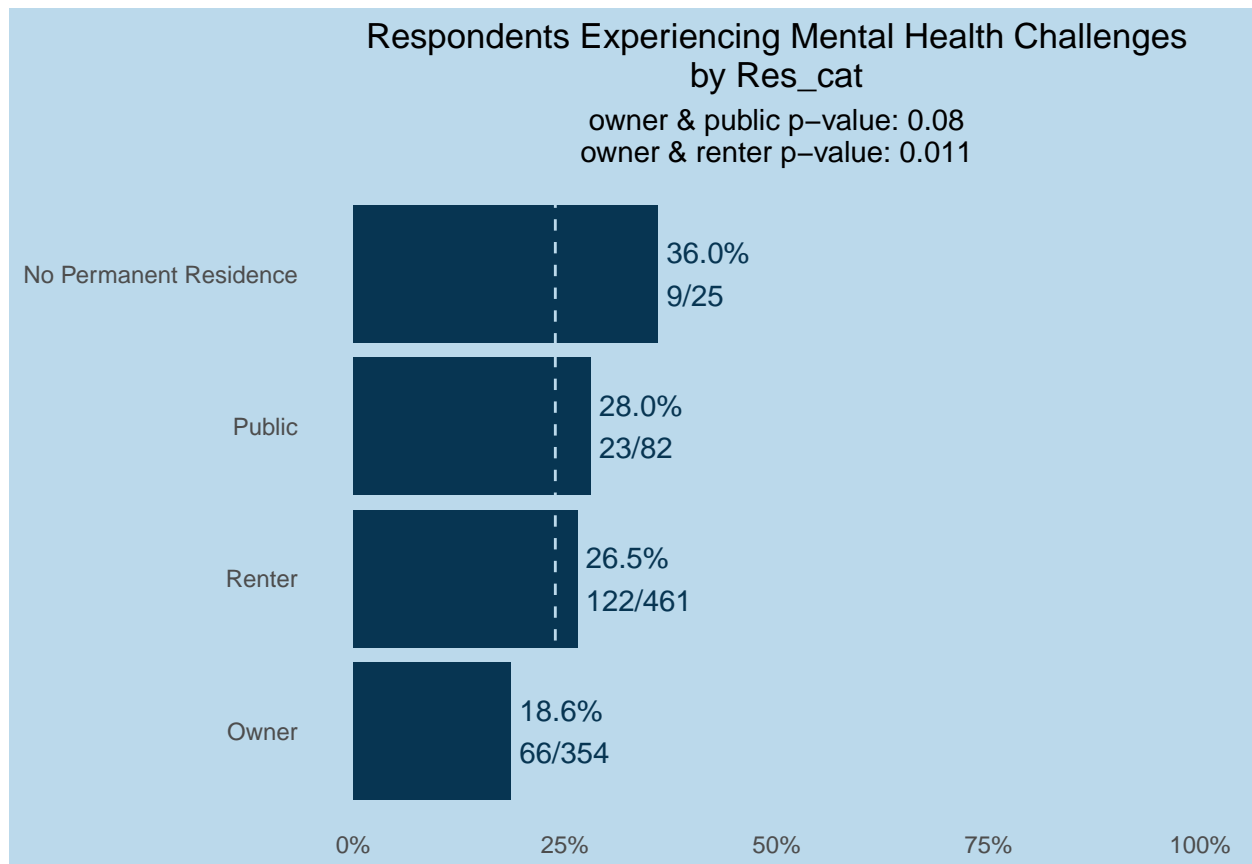
\$emp_status_before



```
##  
## $emp_status_after
```



\$res_cat



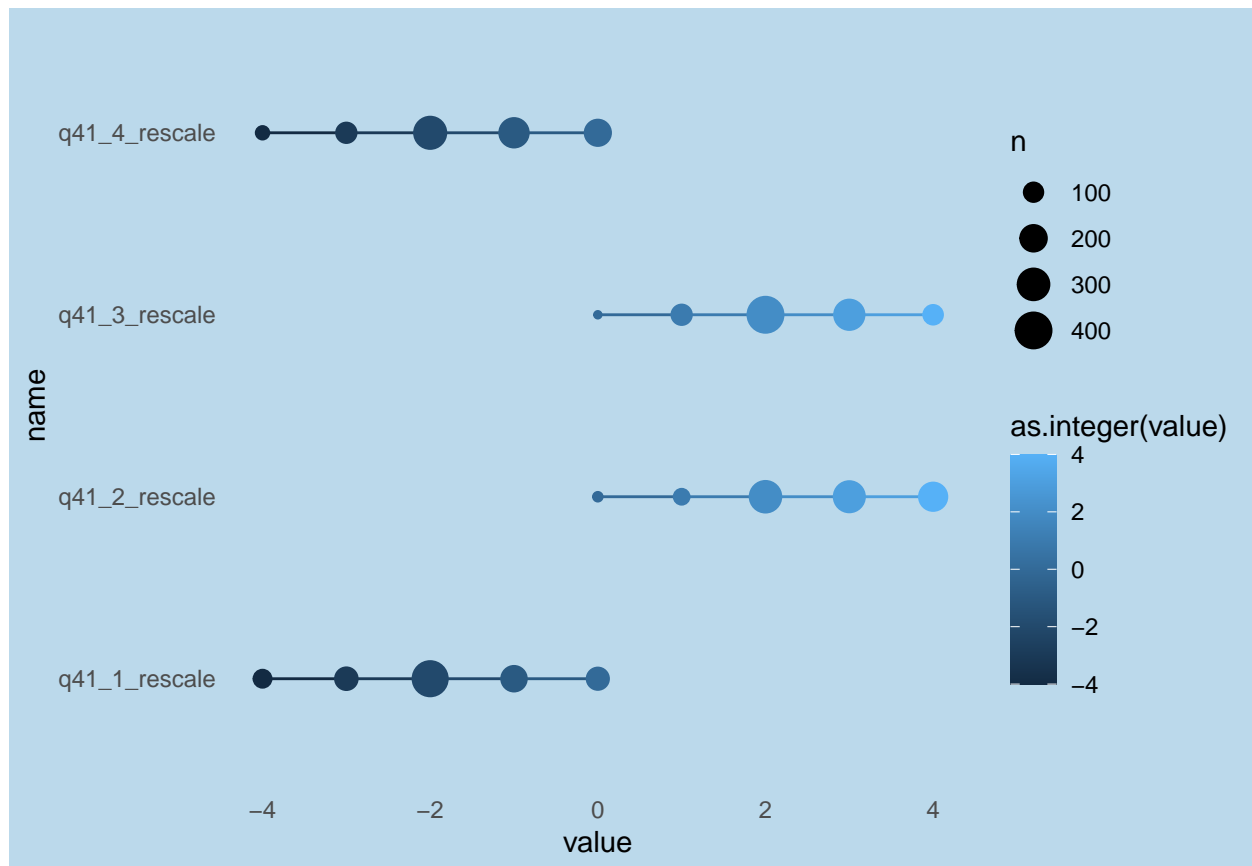
NULL

4.10) People who are currently unemployed are more likely to experience at least one form of mental health challenge in the last month

Find respondents who are currently unemployed [17] Find proportion of subset that experienced at least one challenge in the last month [41] Find proportion not in subset and compare (test unequal proportions)

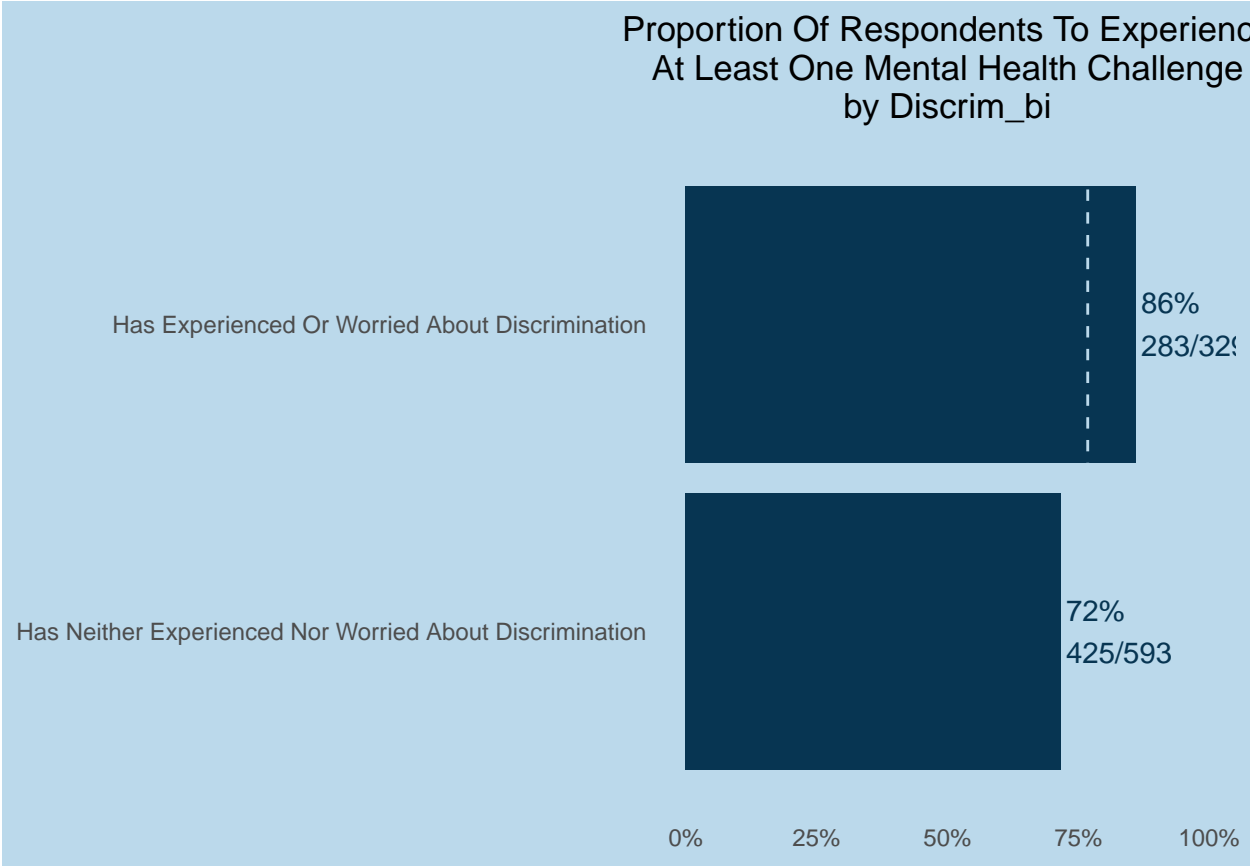
```
wrangled %>% select(contains("rescale")) %>% pivot_longer(contains("rescale")) %>%
  mutate(label = labelled::to_character(value),
         color = case_when(
           value == 0 ~ "neutral",
           value > 0 ~ "positive",
           value < 0 ~ "negative"
         )) %>% group_by(name, label, value) %>% summarize(n = n()) %>%
  drop_na %>%
  ggplot(aes(x = value, y = name, color = as.integer(value))) + geom_line() + geom_point(aes(size = n))
```

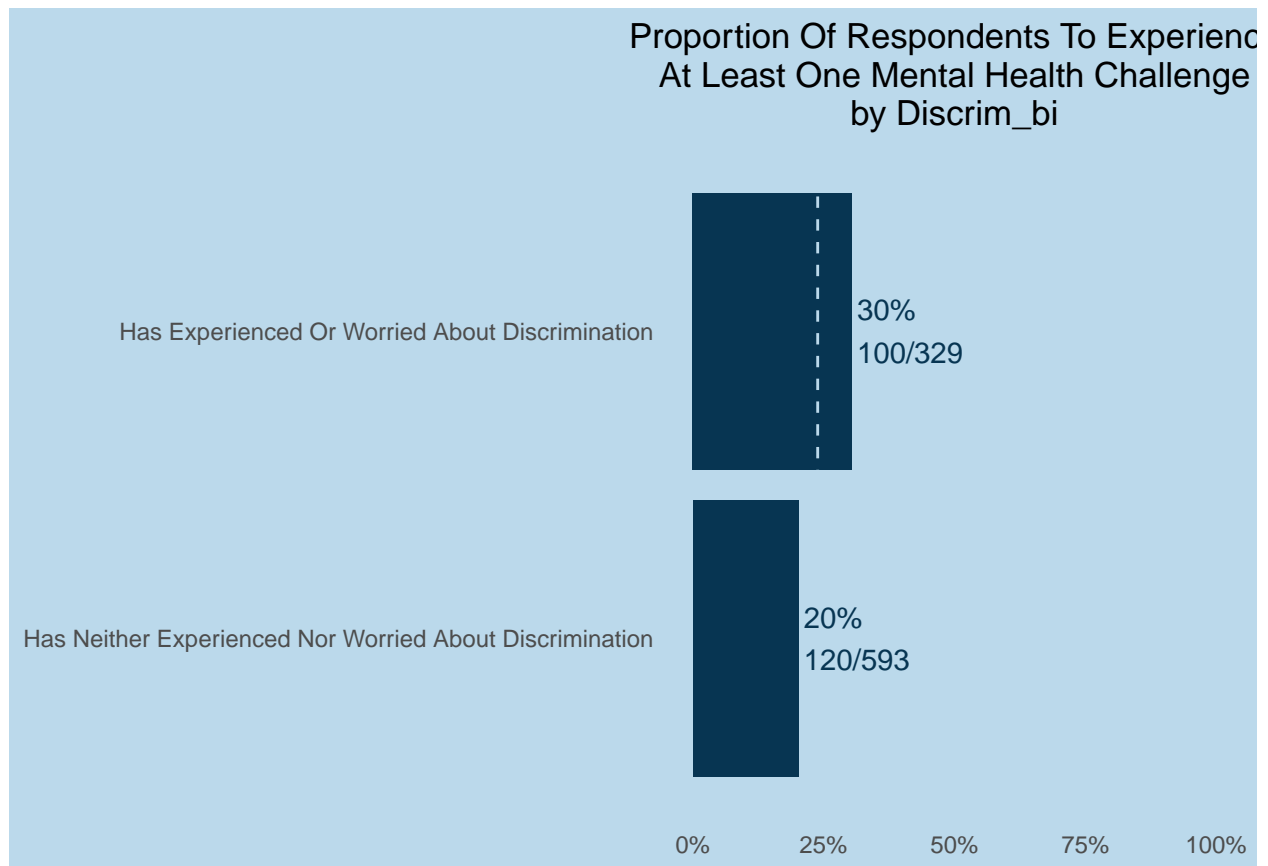
```
## 'summarise()' has grouped output by 'name', 'label'. You can override using the
## '.groups' argument.
## Don't know how to automatically pick scale for object of type
## haven_labelled/vctrs_vctr/double. Defaulting to continuous.
```



4.12) People who have been discriminated against are more likely to experience at least one mental health challenge

Find respondents who have been discriminated against [37] Find proportion of subset that experienced at least one challenge in the last month [41] Find proportion not in subset and compare (test unequal proportions)





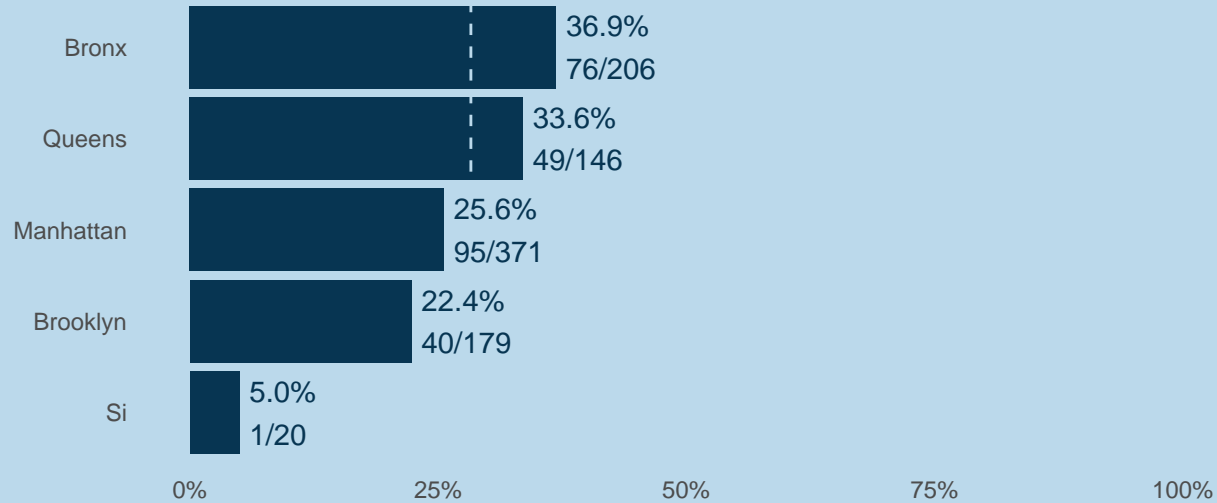
4.13) People who have expressed hesitancy since the city reopened in approaching a healthcare facility [40]

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

\$borough

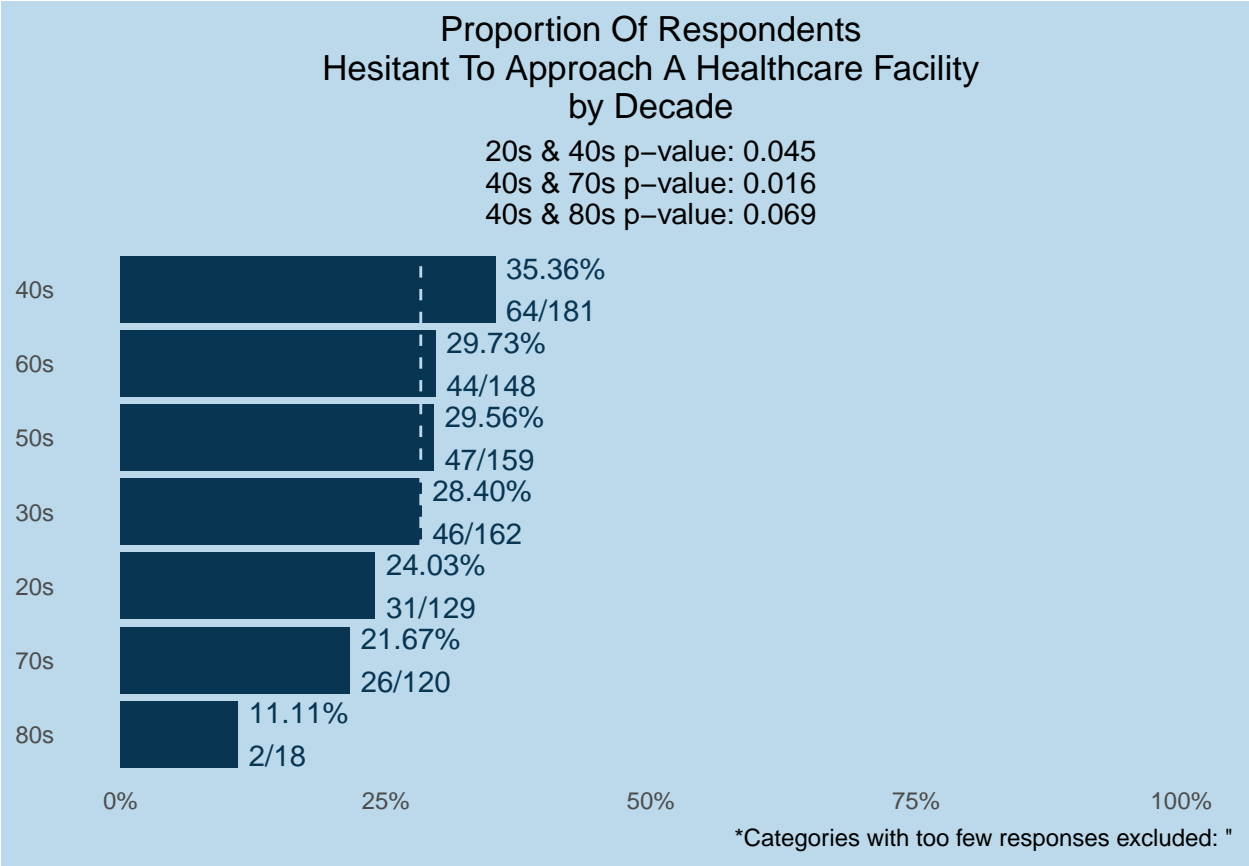
Proportion Of Respondents Hesitant To Approach A Healthcare Facility by Borough

bronx & brooklyn p-value: 0.0028
 bronx & manhattan p-value: 0.006
 bronx & si p-value: 0.0086
 brooklyn & queens p-value: 0.033
 manhattan & queens p-value: 0.088
 queens & si p-value: 0.019

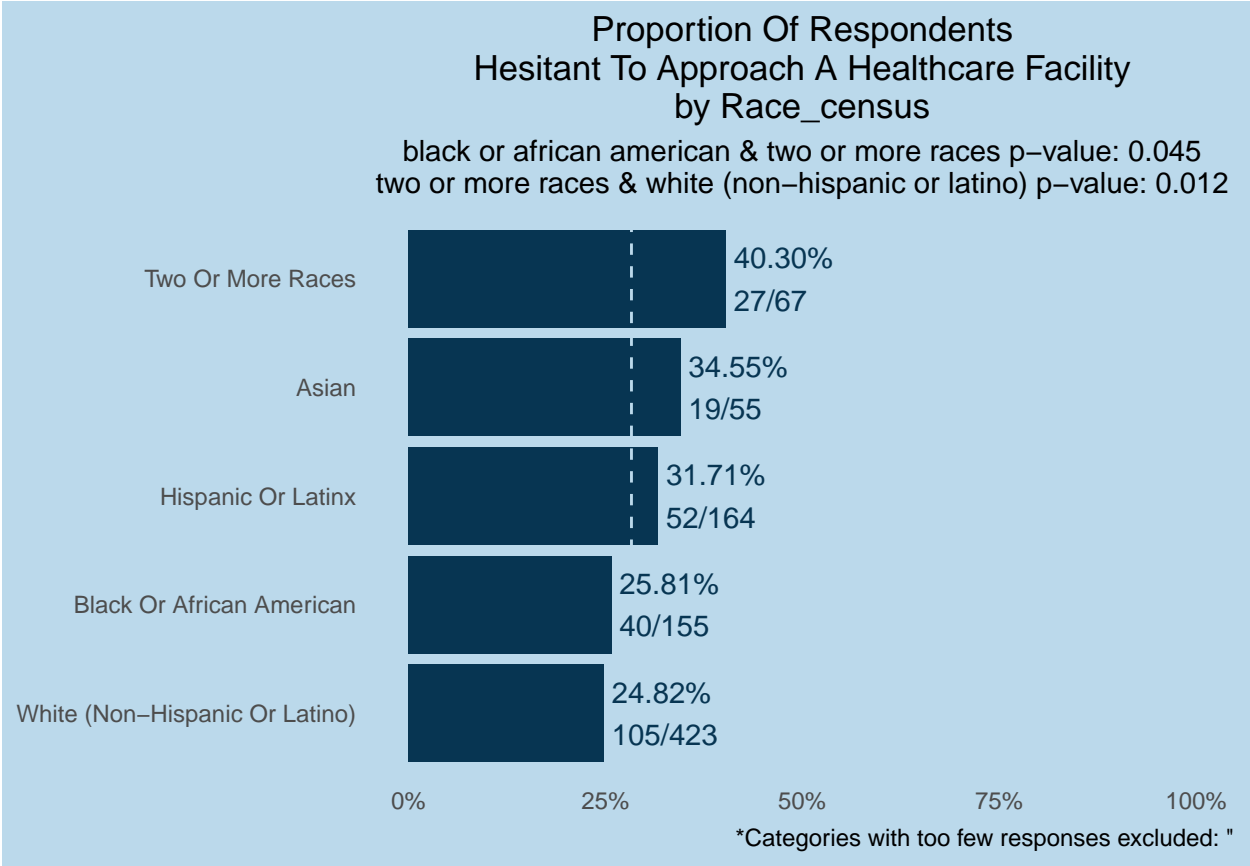


##

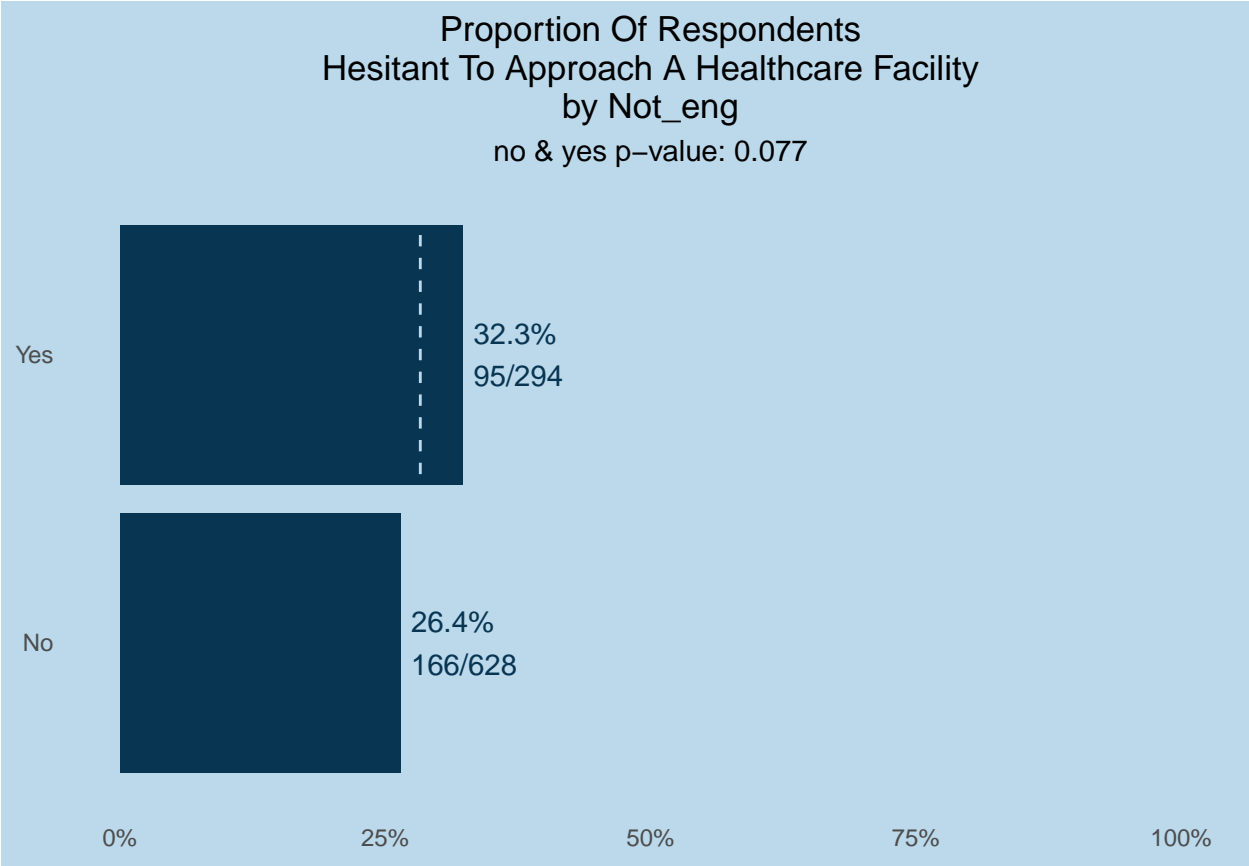
\$decade



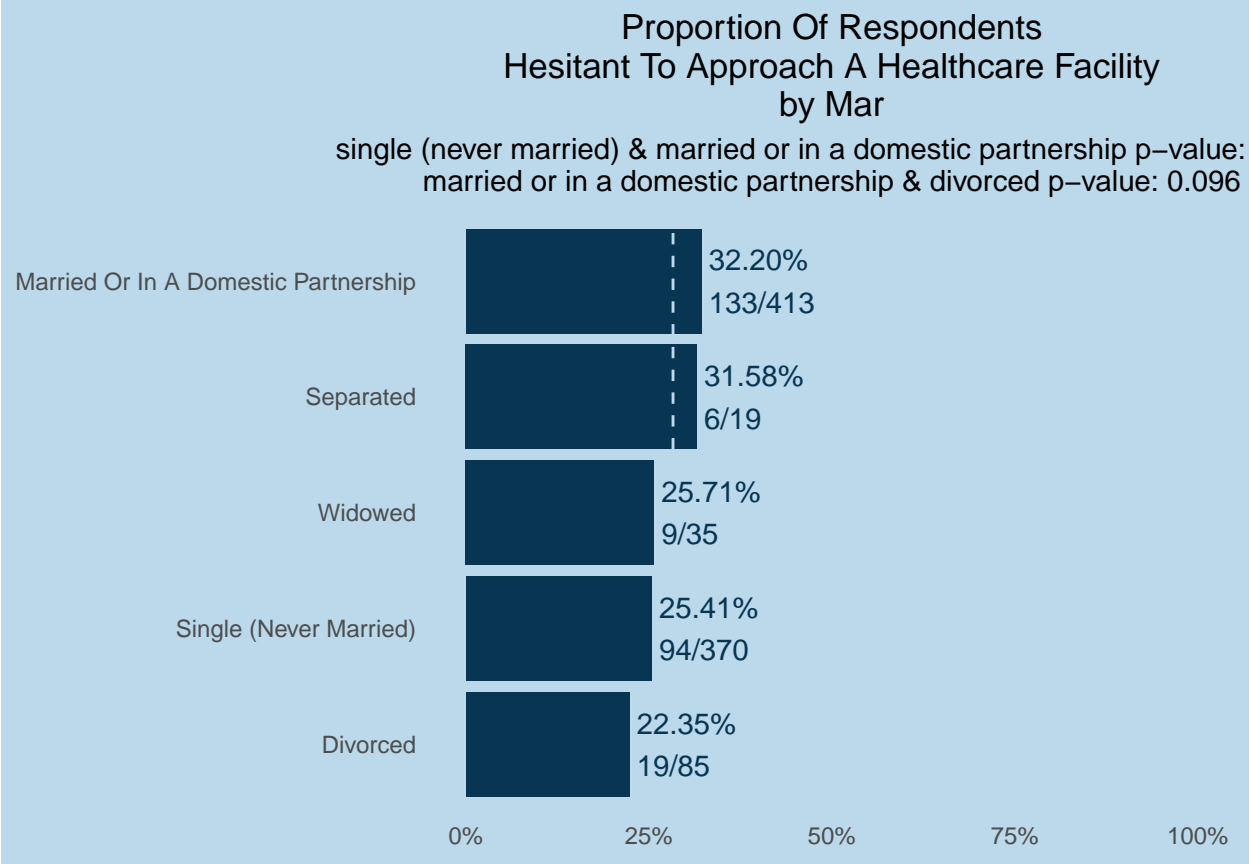
```
##  
## $gen  
## NULL  
##  
## $race_census
```



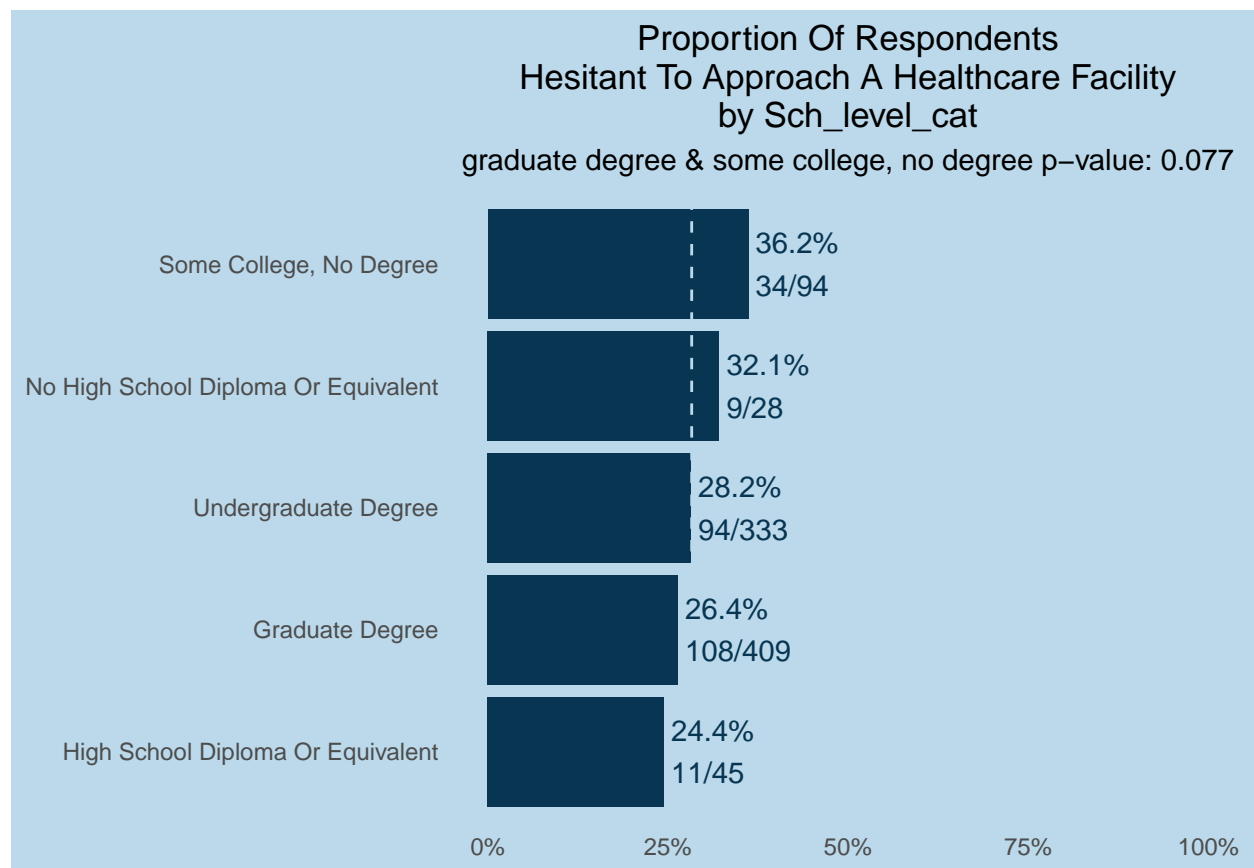
\$not_eng



\$mar

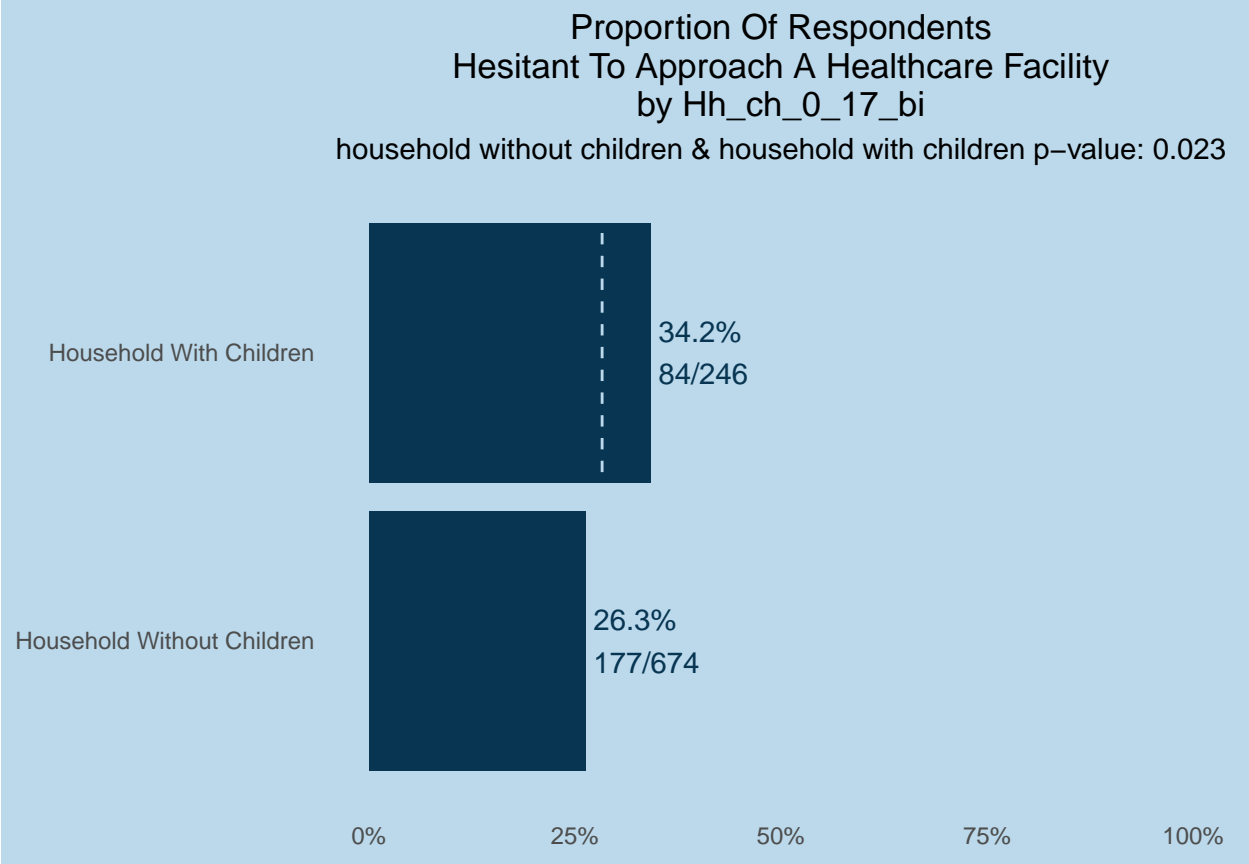


```
##  
## $sch_level_cat
```

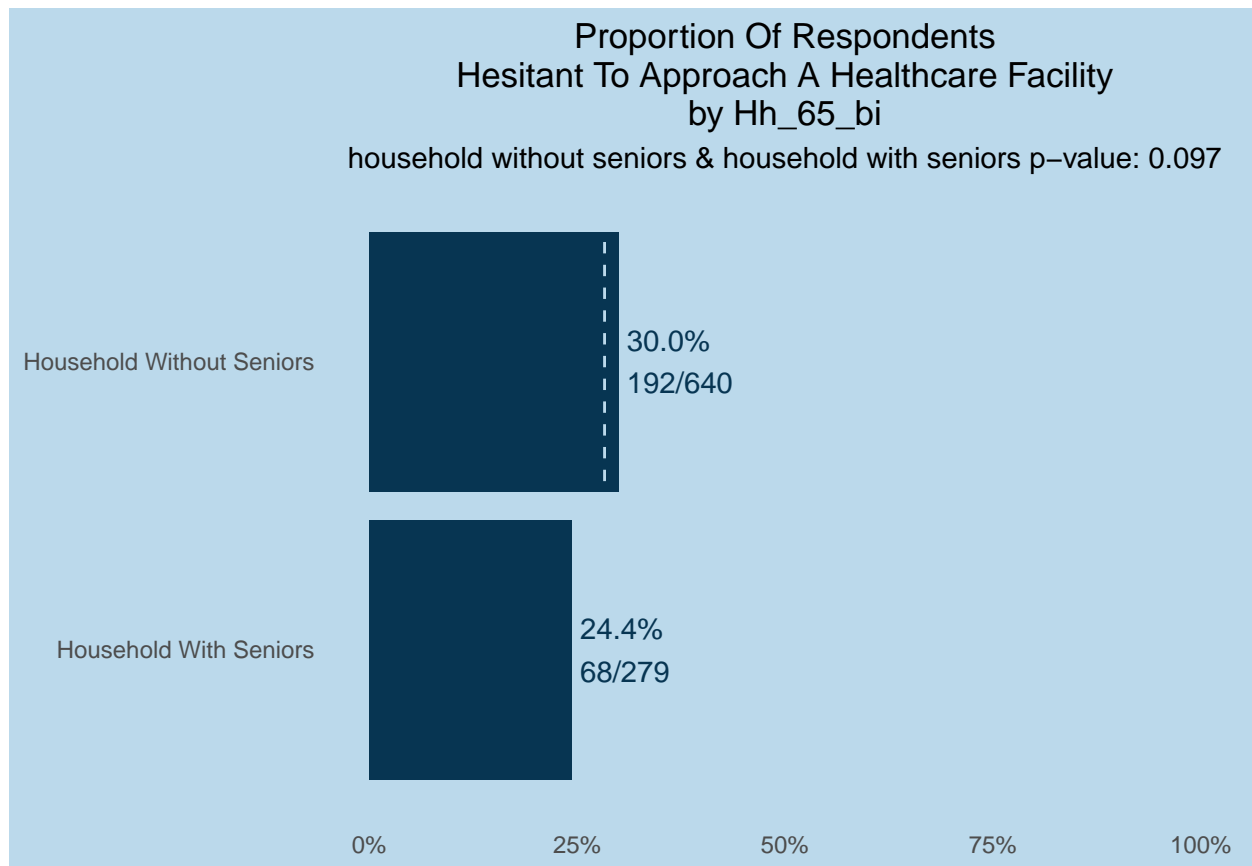


##

\$hh_ch_0_17_bi



\$hh_65_bi

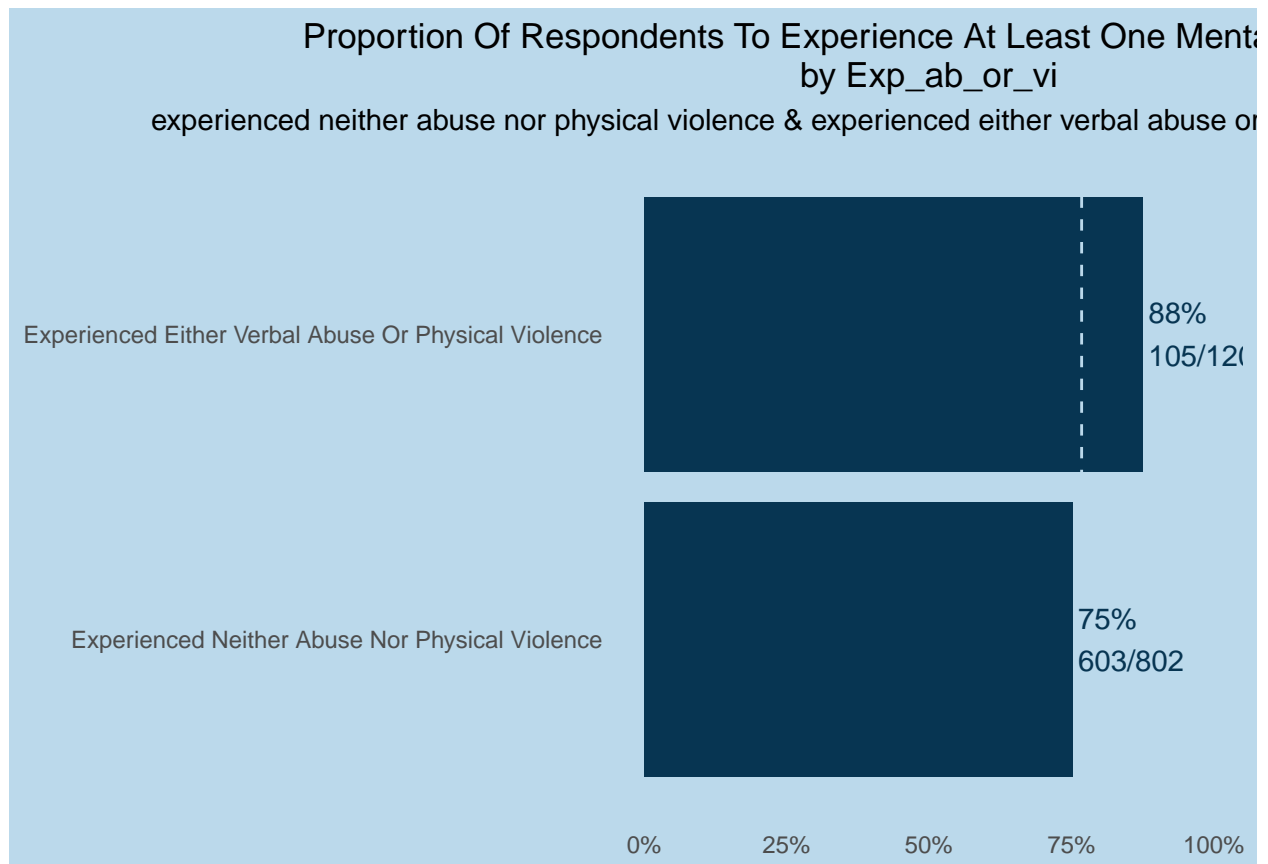


```
##
## $inc_dist
## NULL
##
## $emp_status_before
## NULL
##
## $emp_status_after
## NULL
##
## $res_cat
## NULL
```

4.11) People who have experienced abuse or violence are more likely to experience at least one mental health challenge

Run binary distribution over population [36] Yes = experienced verbal abuse or physical abuse No = has not experienced any abuse or violence Find respondents who have experienced violence or abuse Find proportion of subset that experienced at least one challenge in the last month [41] Find proportion not in subset and compare (test unequal proportions)

```
## $exp_ab_or_vi
```



4.14) Health will be positively correlated with going back to work in person for respondents above median age

Run distribution by age Look at health concerns as related to going back to work divided by age category

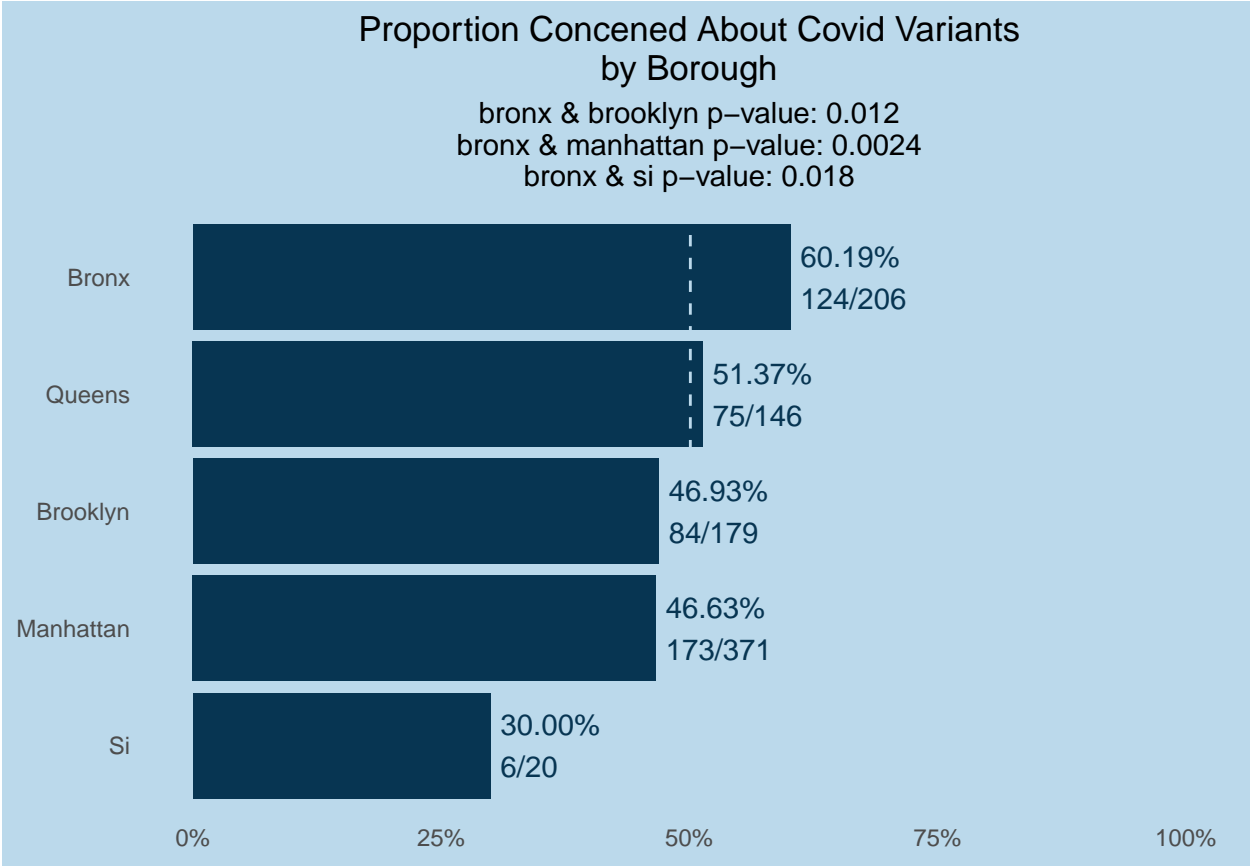
#not sure I understand

```
median_age <- median(wrangled$age)
```

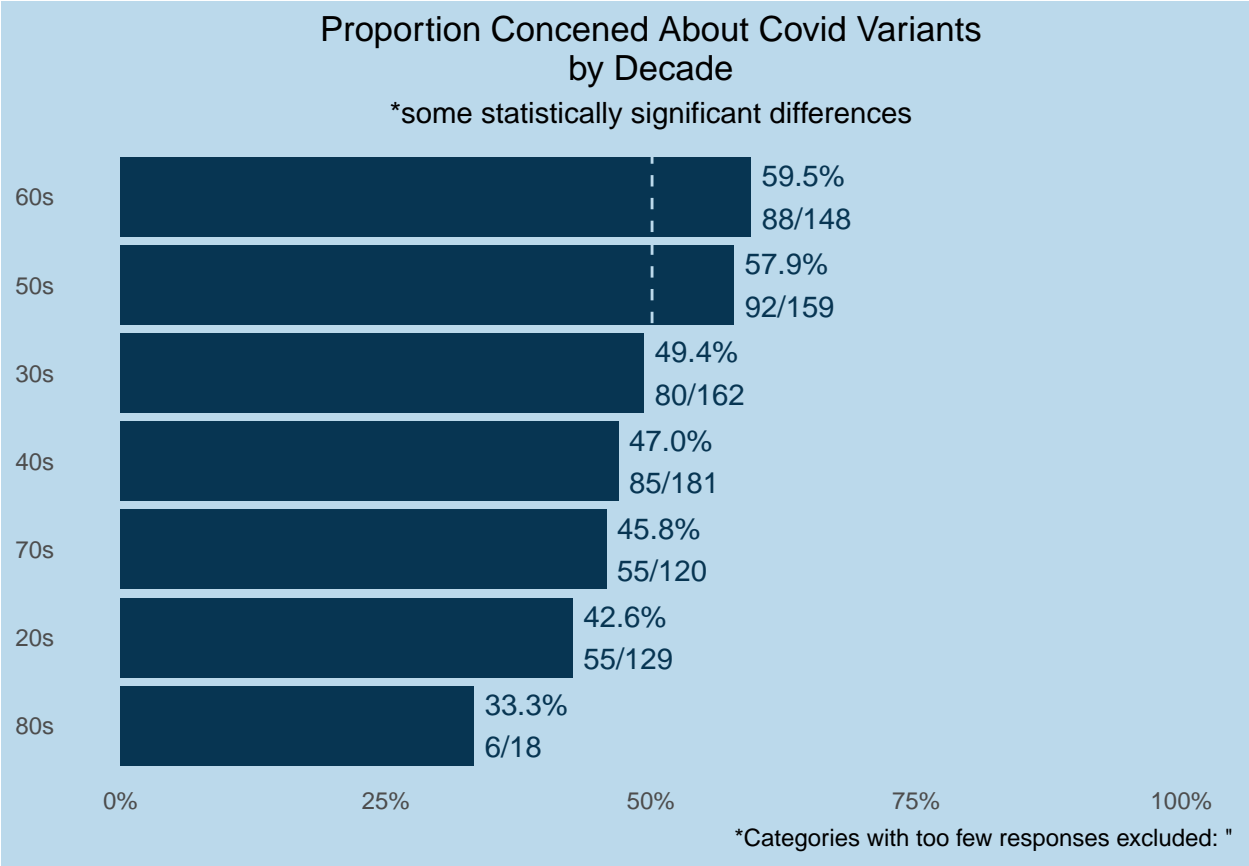
4.15) People who were concerned/ not concerned about the Delta variant

Run distribution over population Compare distribution by concern about Delta variant

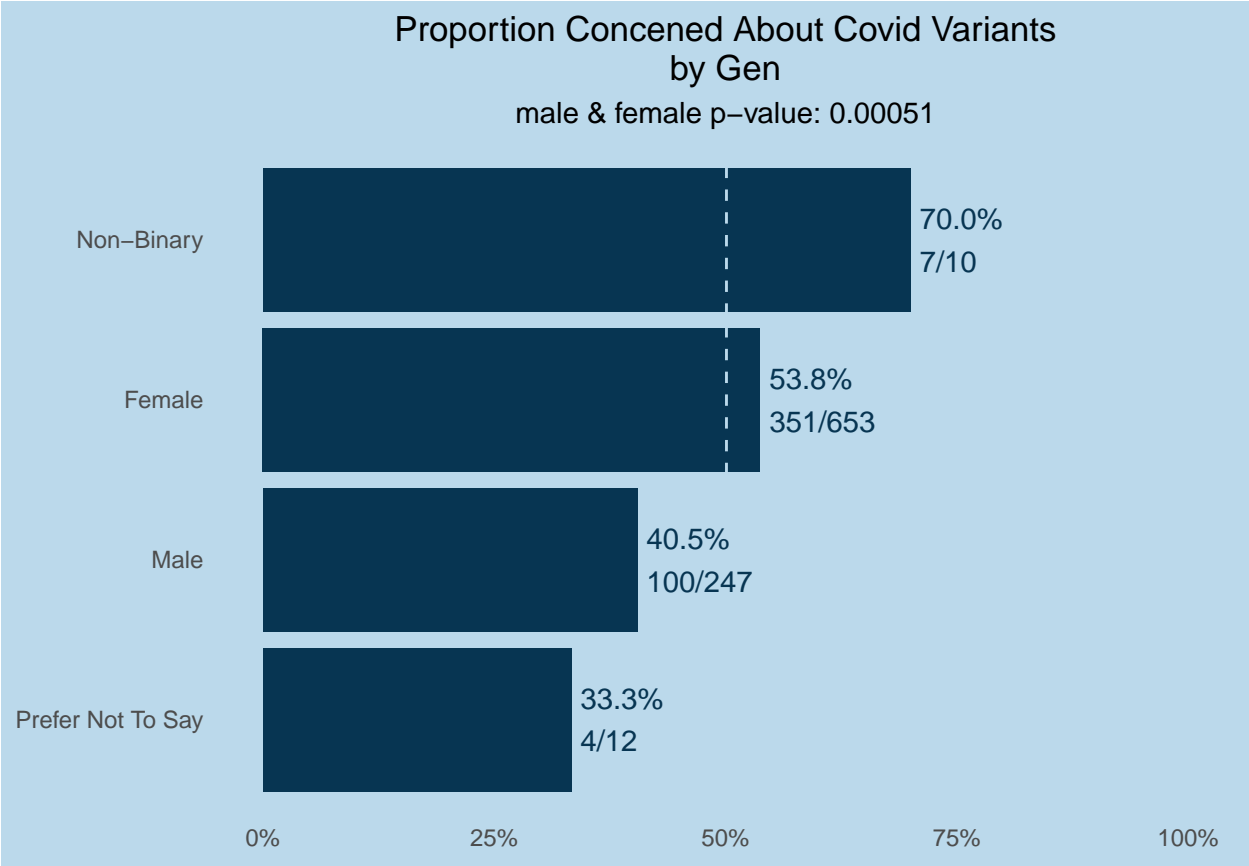
```
## $borough
```



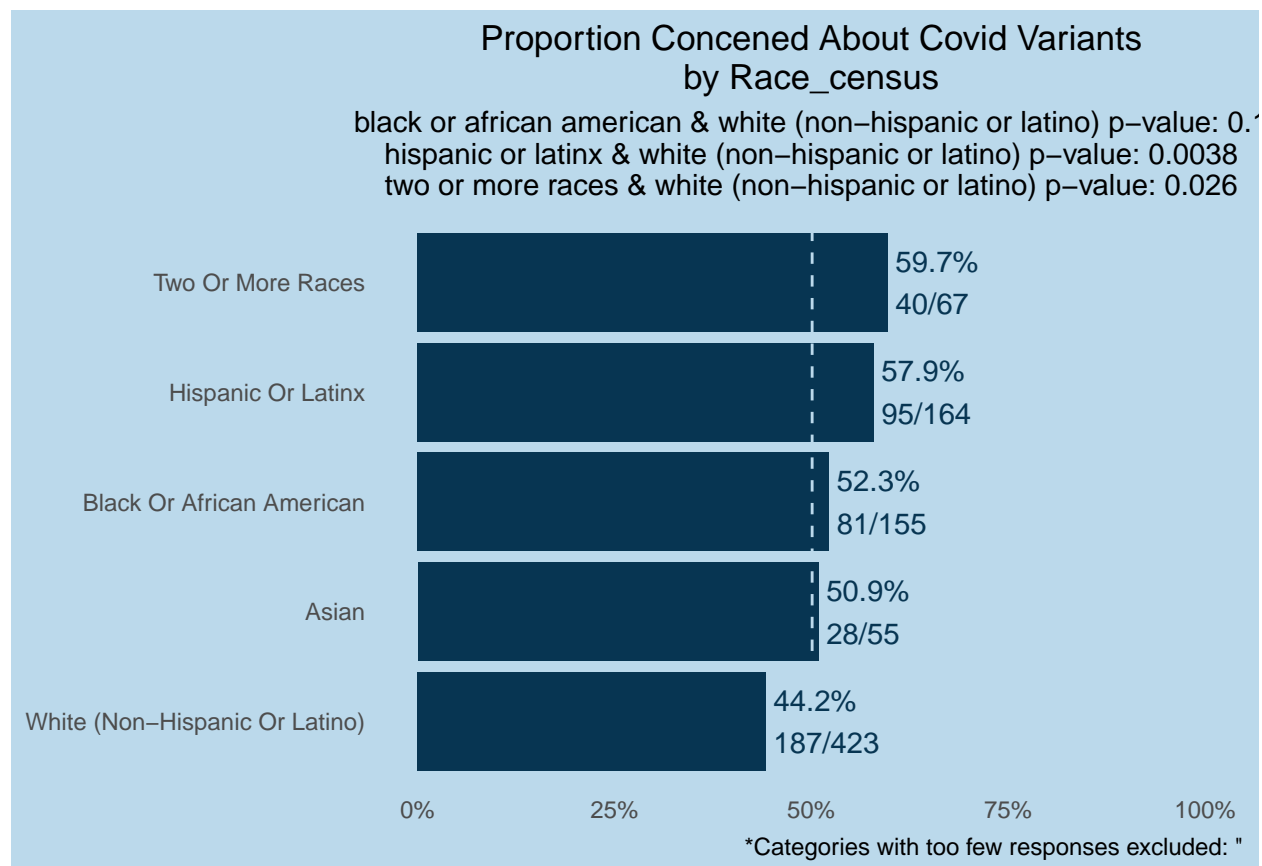
\$decade



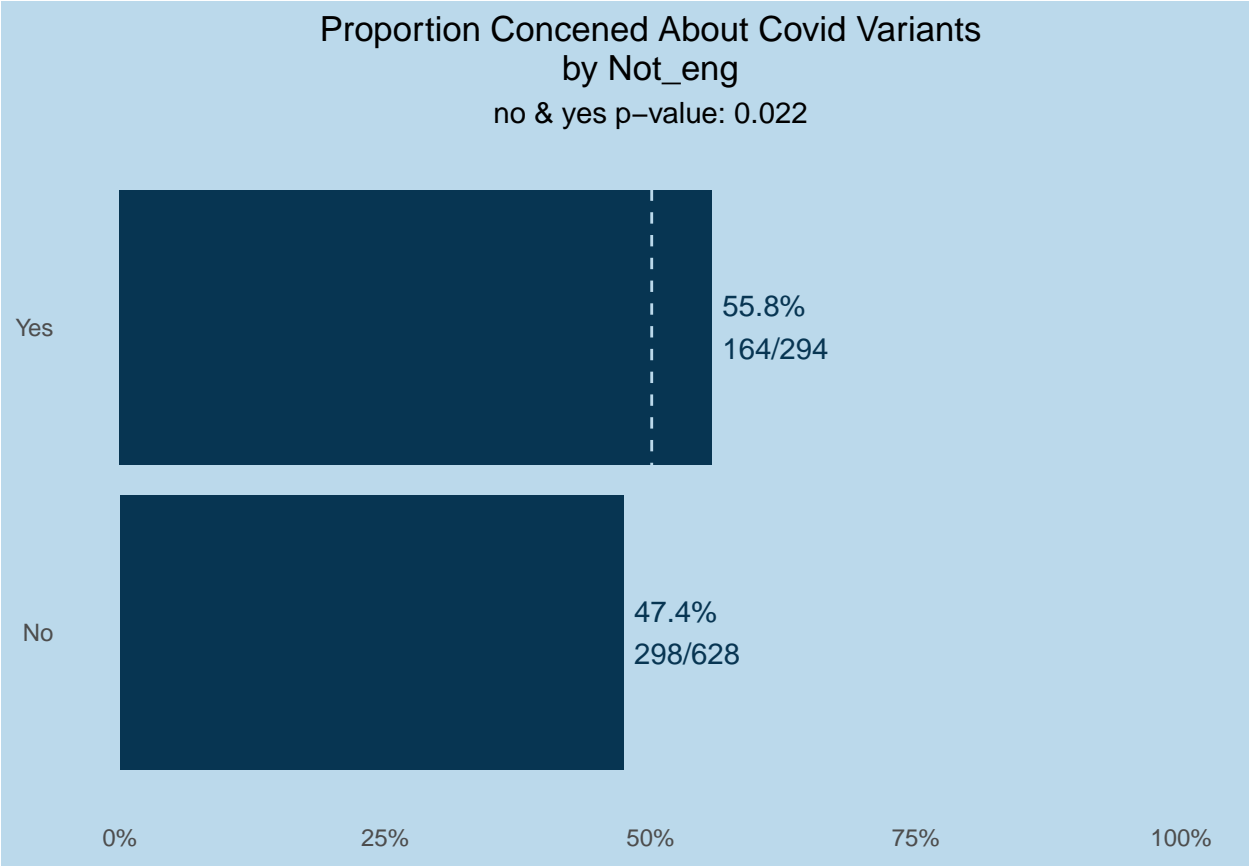
\$gen



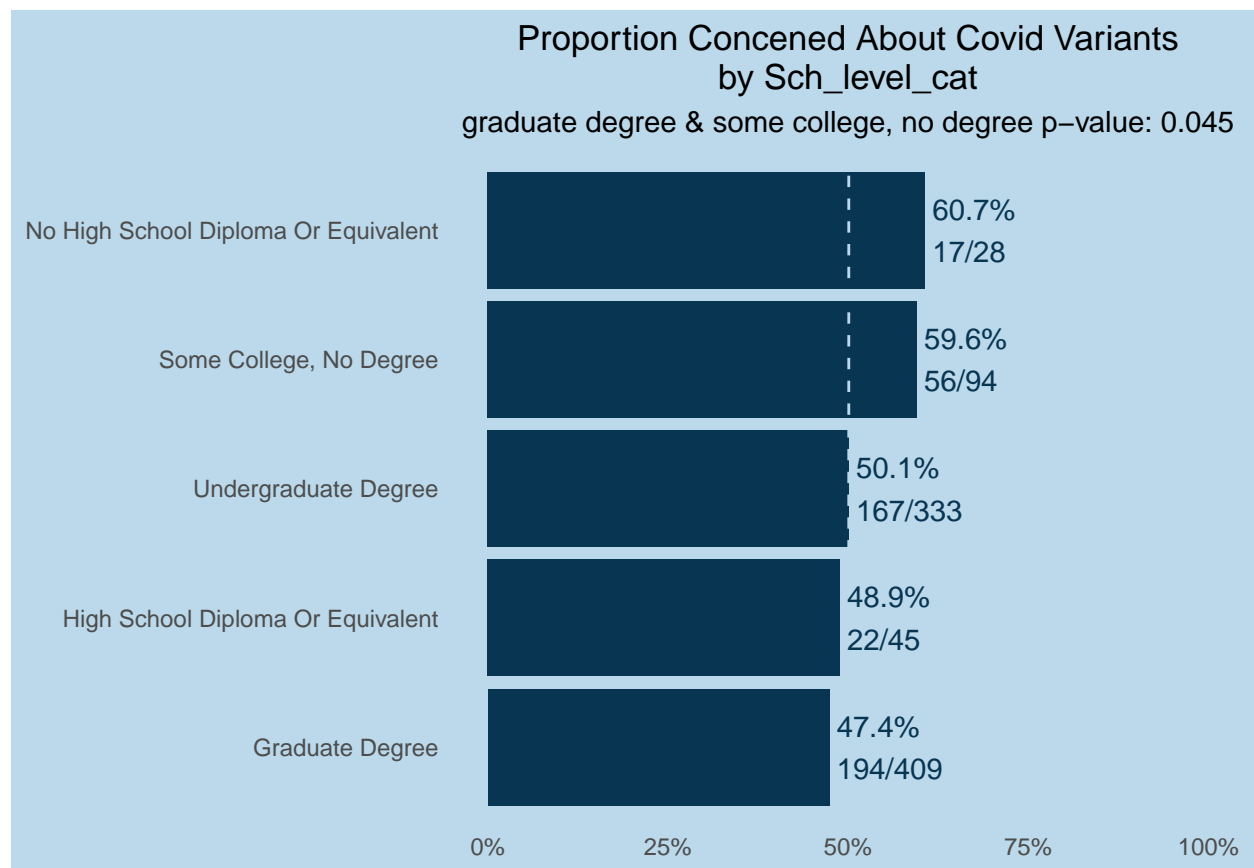
\$race_census



 ## \$not_eng

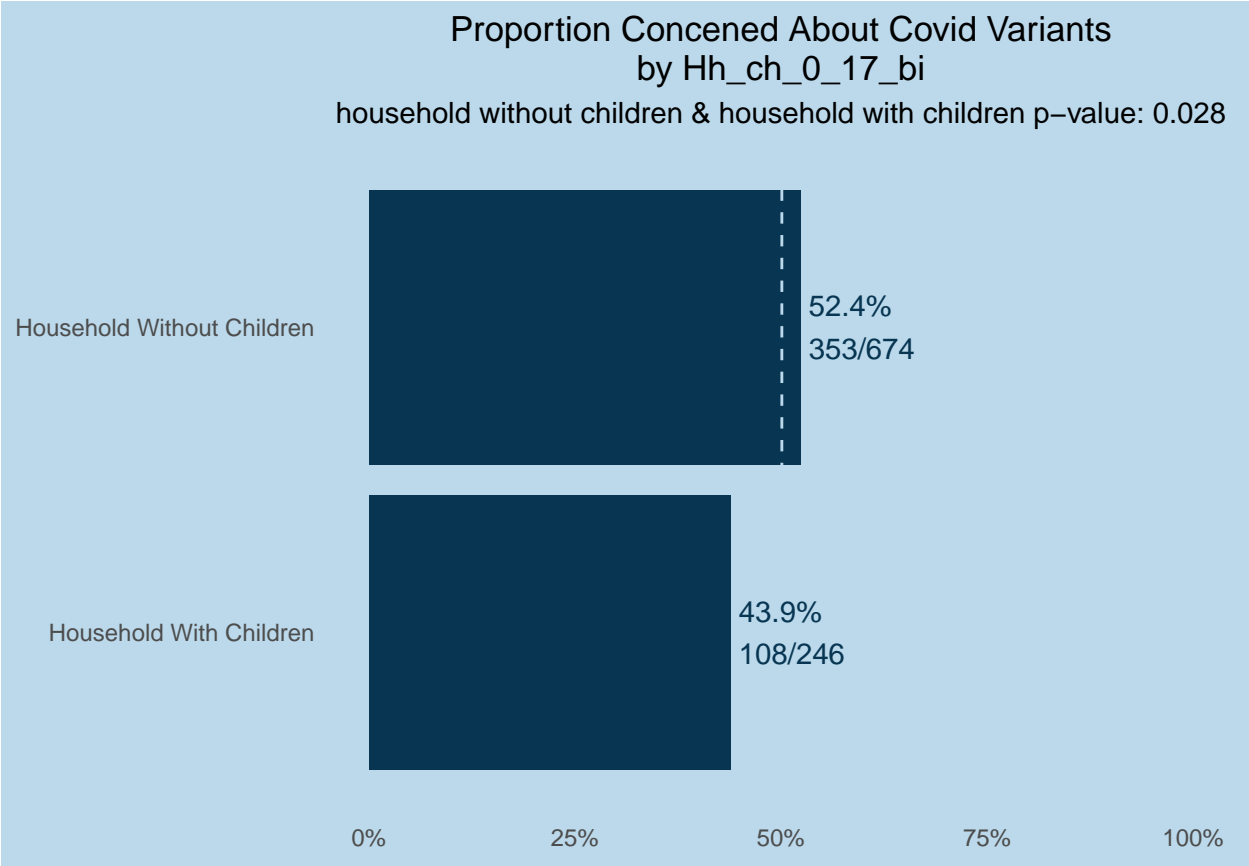


```
##  
## $mar  
## NULL  
##  
## $sch_level_cat
```

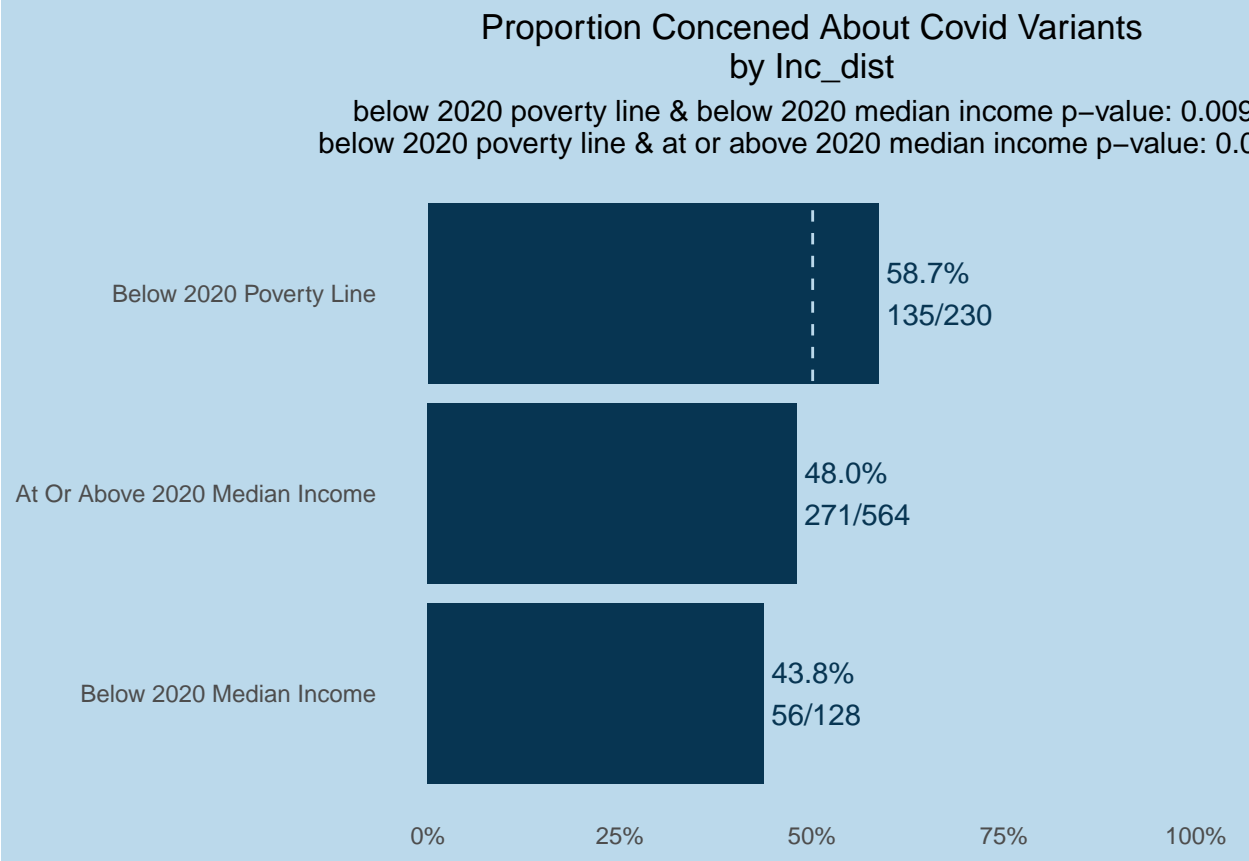


##

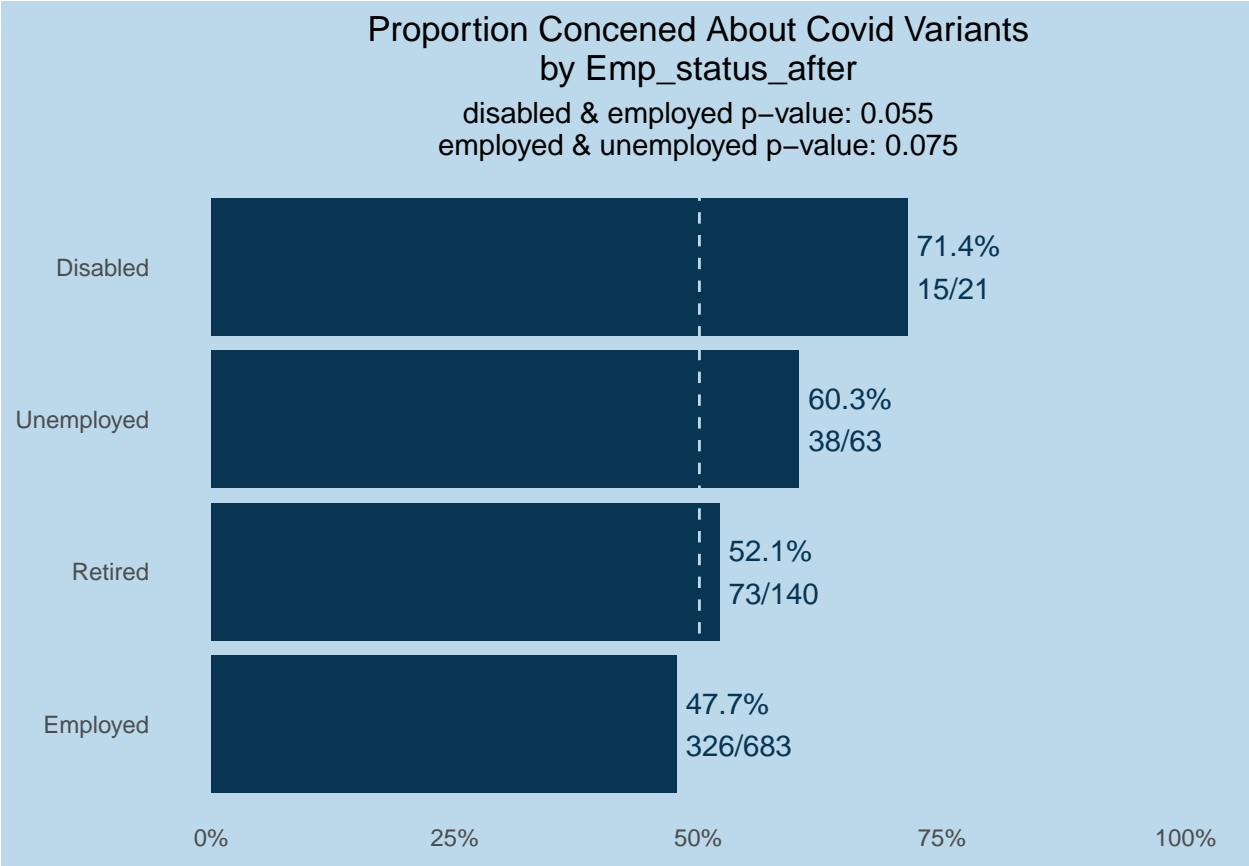
\$hh_ch_0_17_bi



```
##  
## $hh_65_bi  
## NULL  
##  
## $inc_dist
```



```
##  
## $emp_status_before  
## NULL  
##  
## $emp_status_after
```



```
##  
## $res_cat  
## NULL
```