

experimentrPersuasion

John Bosworth

May 2, 2016

Experiment Details

Loading and Setup

```
## Warning: package 'ggplot2' was built under R version 3.2.5

## Warning: package 'dplyr' was built under R version 3.2.5

##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##   filter, lag

## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union

## Warning: package 'coin' was built under R version 3.2.5

## Loading required package: survival

## Warning: package 'pwr' was built under R version 3.2.3

## Warning: package 'shiny' was built under R version 3.2.5

## Warning: package 'miniUI' was built under R version 3.2.5

## Warning: package 'boot' was built under R version 3.2.5

##
## Attaching package: 'boot'

## The following object is masked from 'package:survival':
##
##   aml

## Warning: package 'tidyr' was built under R version 3.2.5

## Warning: package 'irr' was built under R version 3.2.3

## Loading required package: lpSolve

## Warning: package 'lpSolve' was built under R version 3.2.3

## Warning: package 'reshape2' was built under R version 3.2.5
```

Conversions and Filtering

```
data$time_diff_experiment <- data$time_diff_experiment/1000
data$time_diff_demo <- data$time_diff_demo/1000
data$time_diff_preTest <- data$time_diff_preTest/1000
data$time_diff_attentionCheck <- data$time_diff_attentionCheck/1000
#data$time_diff_postTest <- data$time_diff_postTest/1000
data$time_diff_qualitative <- data$time_diff_qualitative/1000

#seperate out attentioncheck
correct1Data <- subset(data, topic=="VideoGames")
correct2Data <- subset(correct1Data, subtopic=="violence")

# seperate by graph type
charts <- subset(correct2Data, visType=="charts")
interactiveGraphs <- subset(correct2Data, visType=="interactive graphs")
graphs <- subset(correct2Data, visType=="graphs")

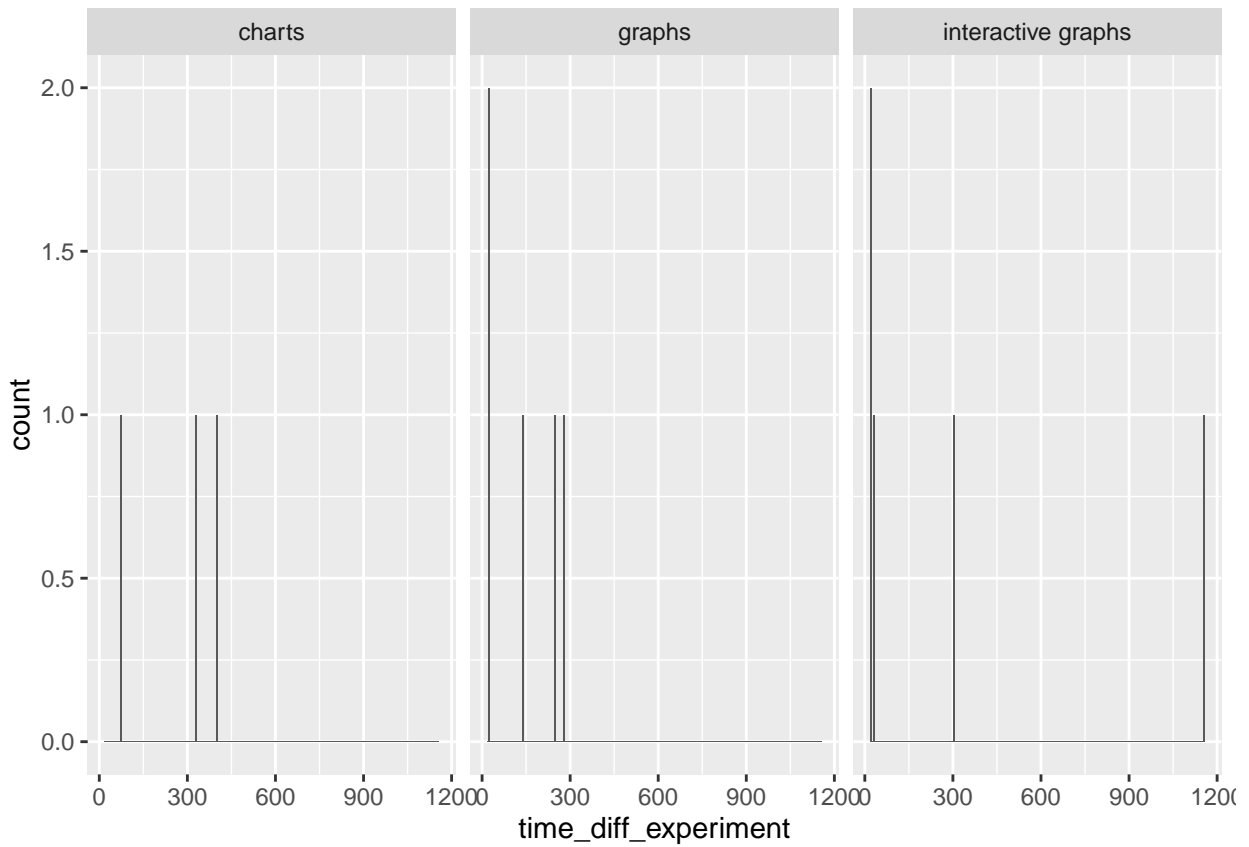
#seperate out the correct attention check
correctCharts <- subset(charts, displayType=="tables")
correctInteractiveGraphs <- subset(interactiveGraphs, displayType=="graphs")
correctGraphs <- subset(graphs, displayType=="graphs")
```

Histograms

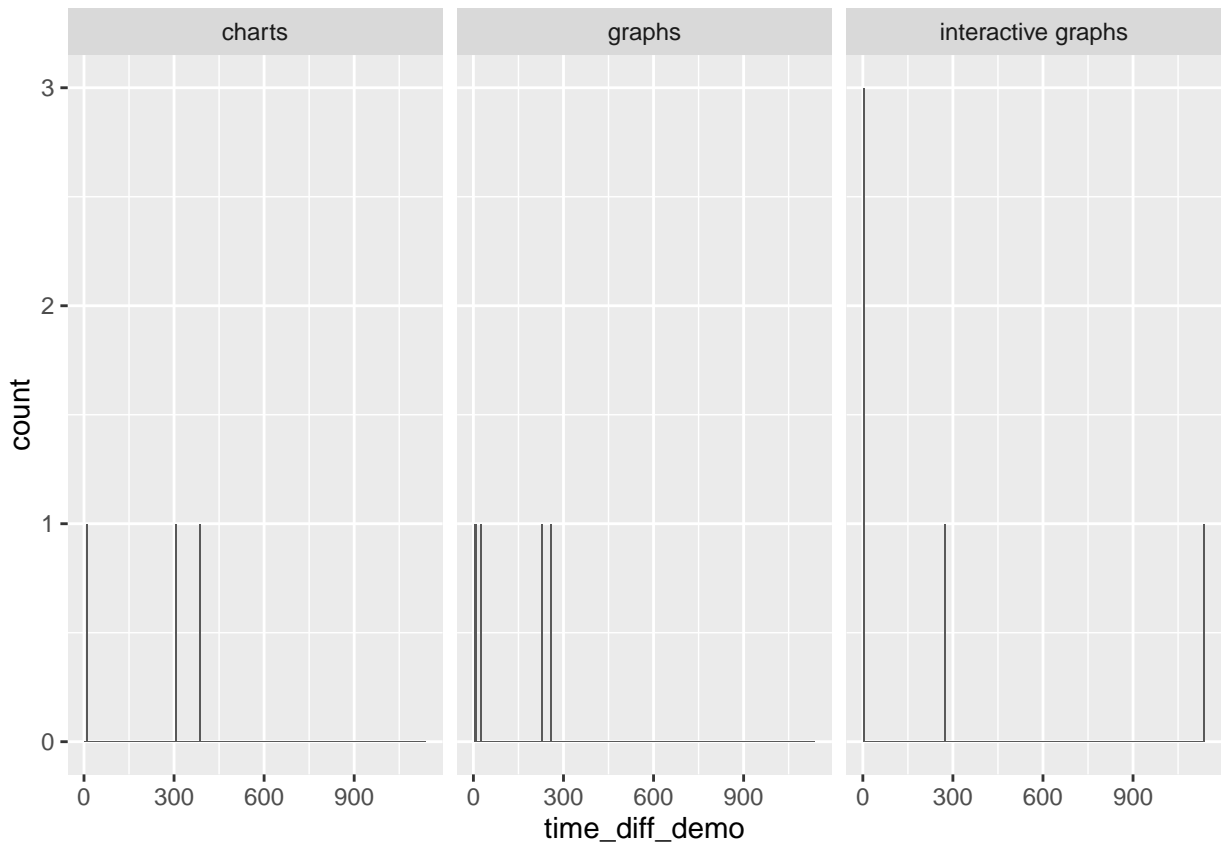
```
report(correct2Data, "time_diff_experiment")
```

```
## M=234.4,sd=309.3,Mdn=138.5,ma=175.2
```

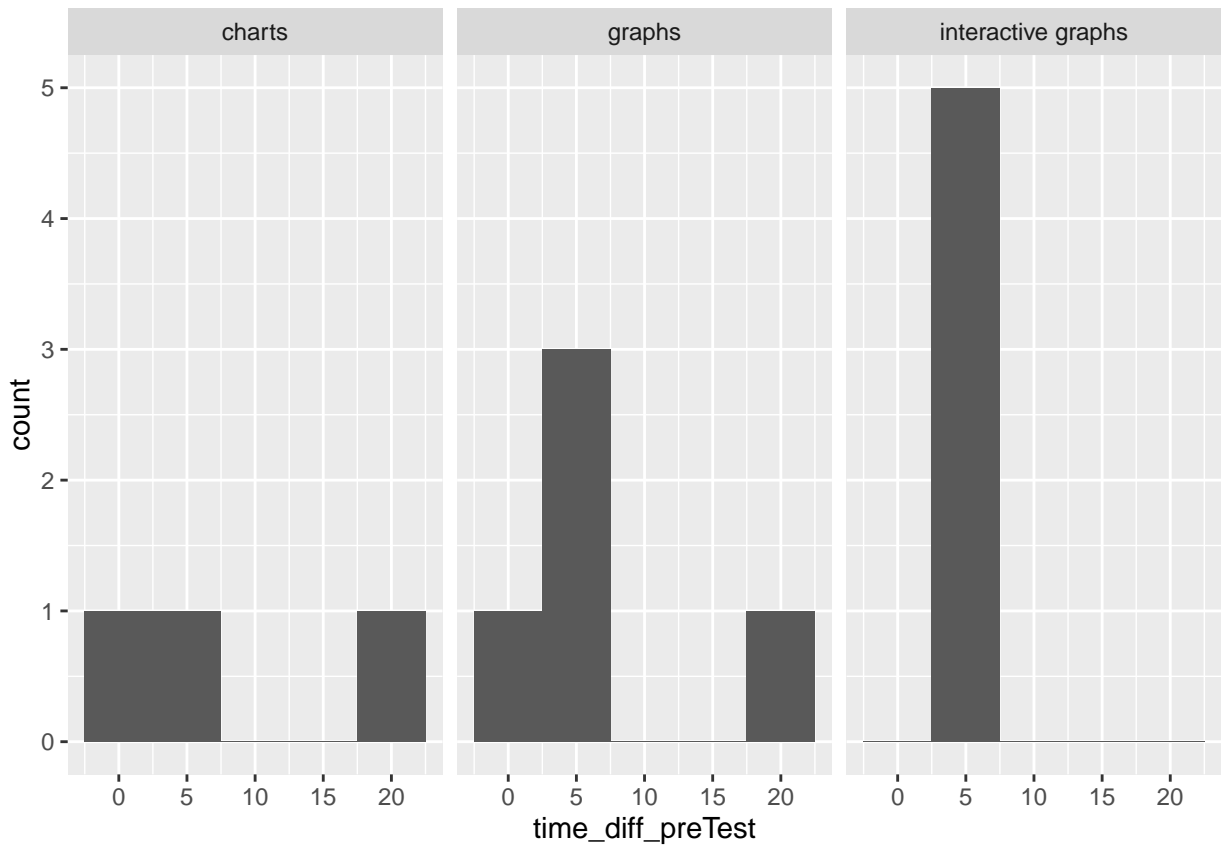
```
ggplot(correct2Data, aes(time_diff_experiment)) + geom_histogram( binwidth=5 ) + facet_grid(. ~ visType)
```



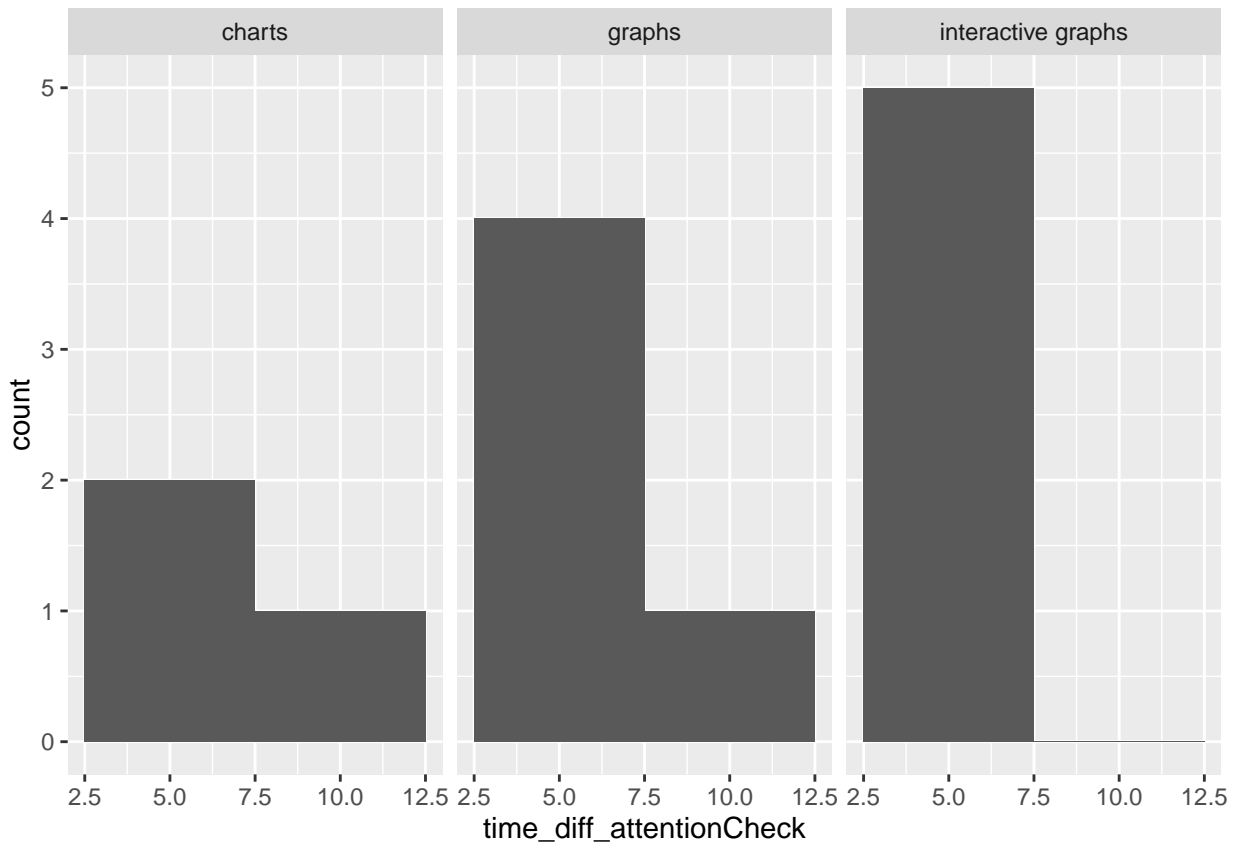
```
ggplot(correct2Data, aes(time_diff_demo)) + geom_histogram( binwidth=5 ) + facet_grid(. ~ visType)
```



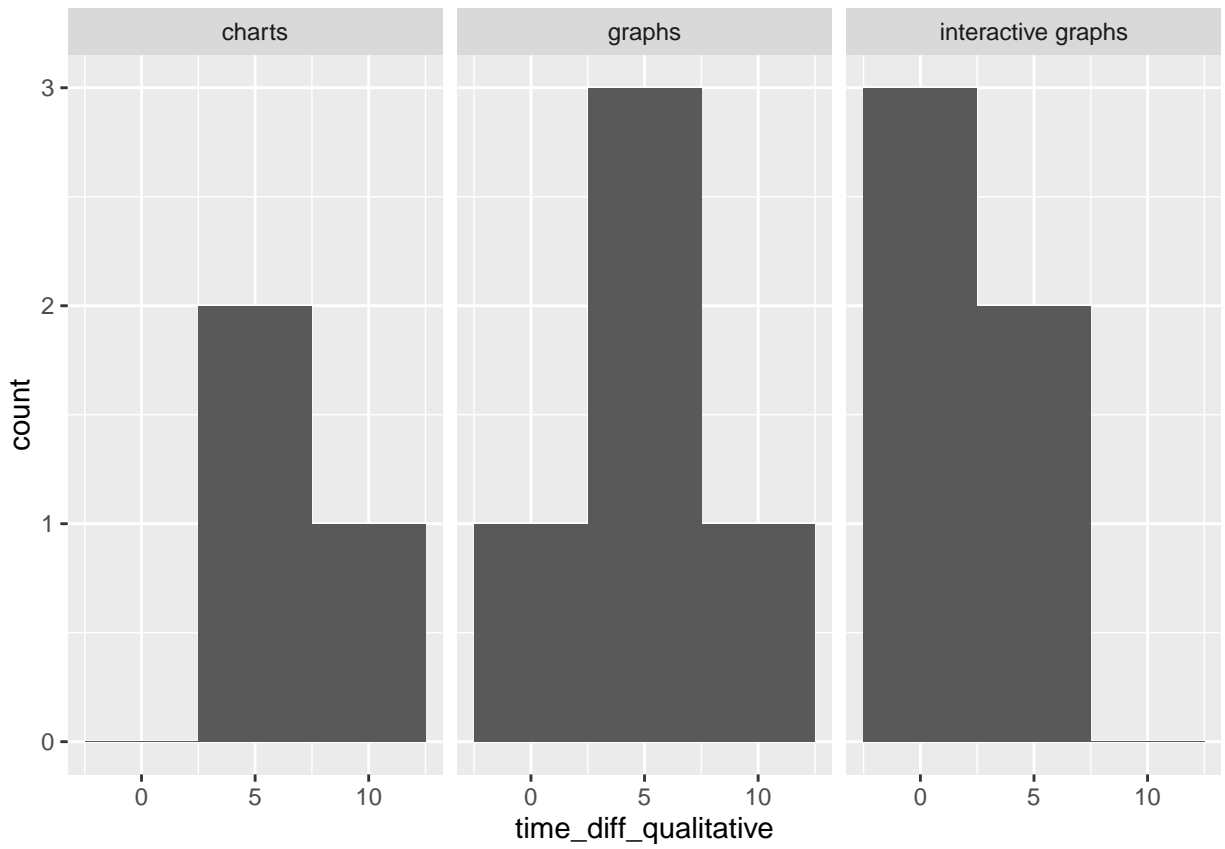
```
ggplot(correct2Data, aes(time_diff_preTest)) + geom_histogram( binwidth=5 ) + facet_grid(. ~ visType)
```



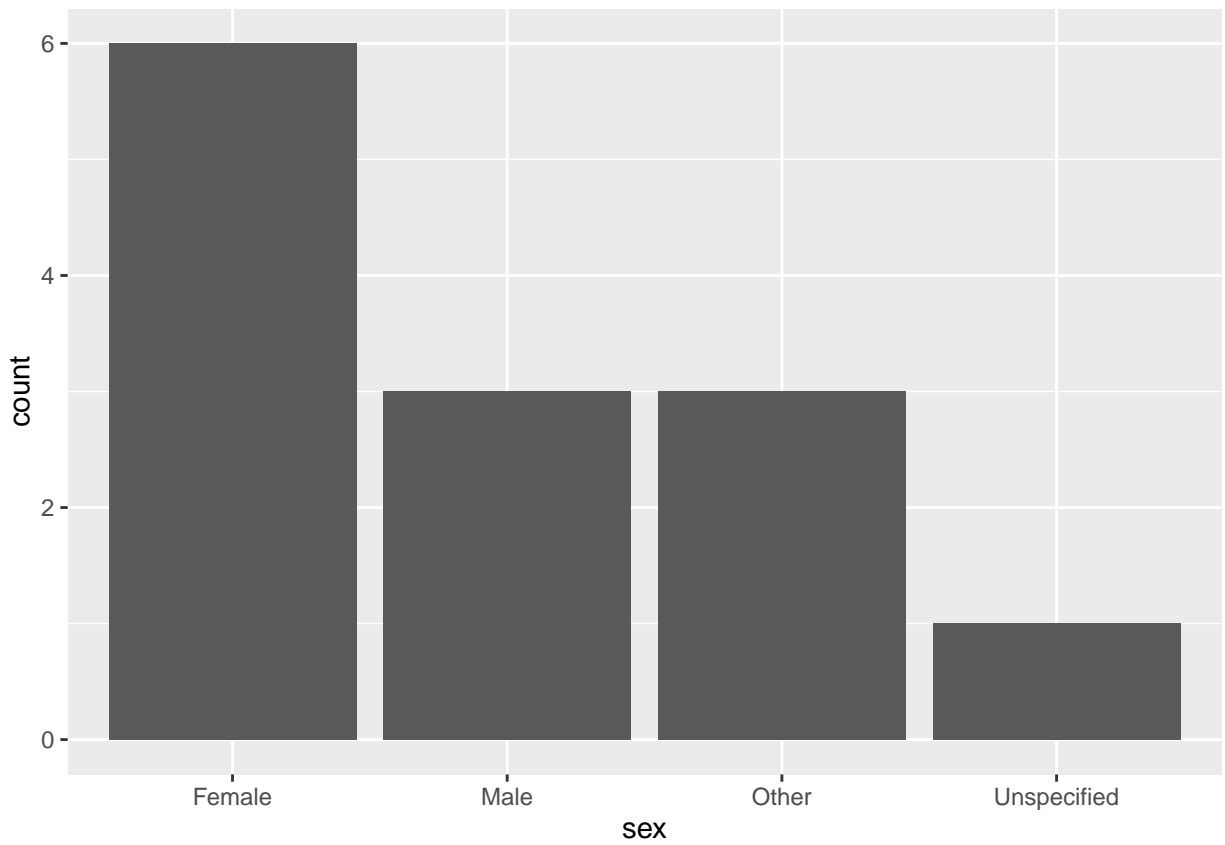
```
ggplot(correct2Data, aes(time_diff_attentionCheck)) + geom_histogram( binwidth=5 ) + facet_grid(. ~ vis'
```



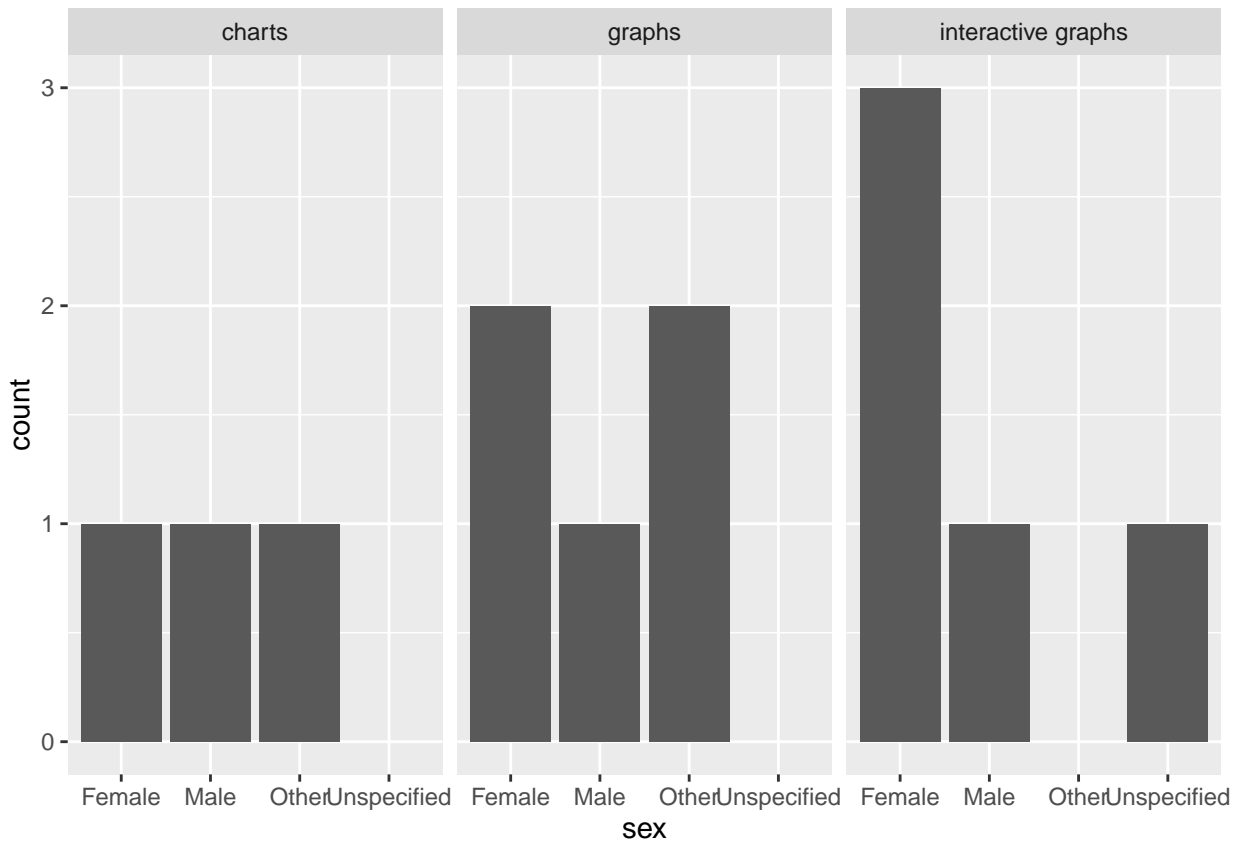
```
#ggplot(correct2Data, aes(time_diff_postTest)) + geom_histogram( binwidth=5 ) + facet_grid(. ~ visType)
ggplot(correct2Data, aes(time_diff_qualitative)) + geom_histogram( binwidth=5 ) + facet_grid(. ~ visType)
```



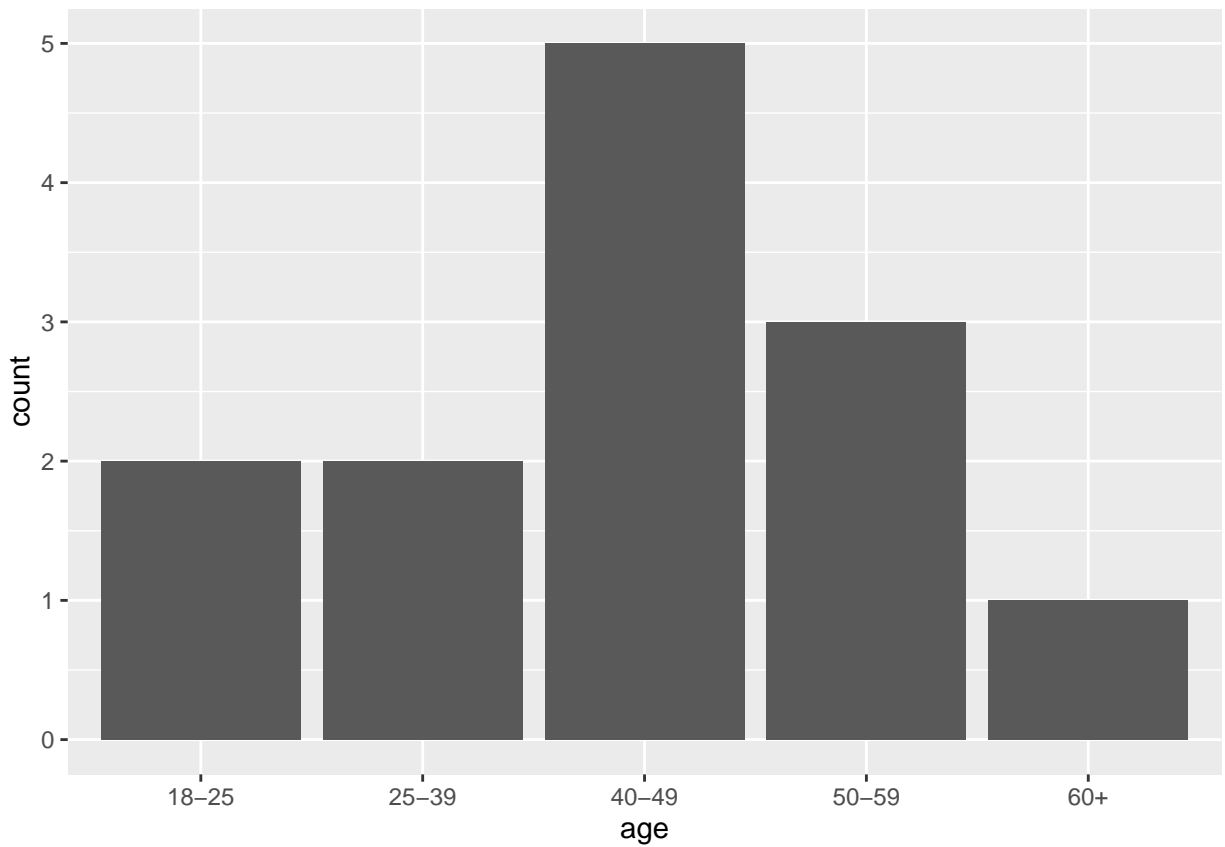
```
ggplot(correct2Data, aes(sex)) + geom_bar(stat = "count")
```



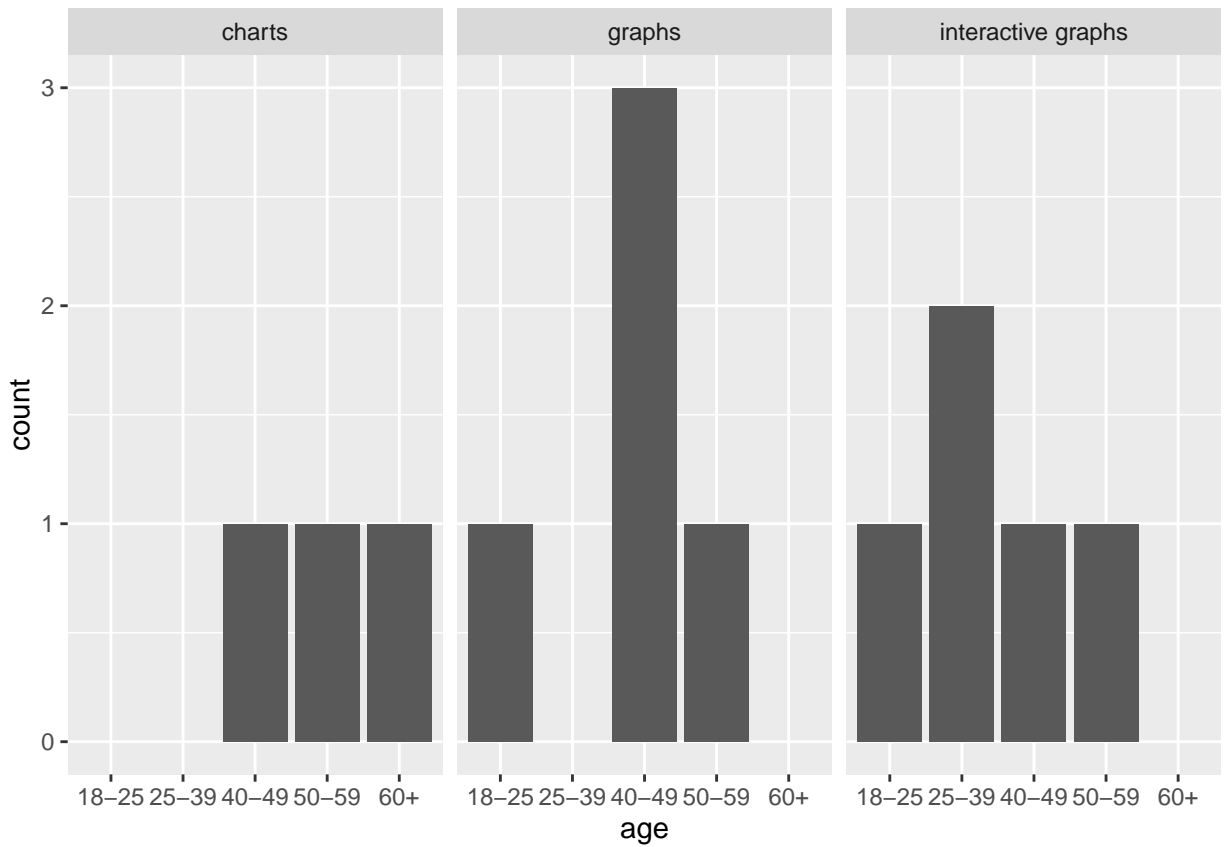
```
ggplot(correct2Data, aes(sex)) + geom_bar(stat = "count") + facet_grid(. ~ visType)
```

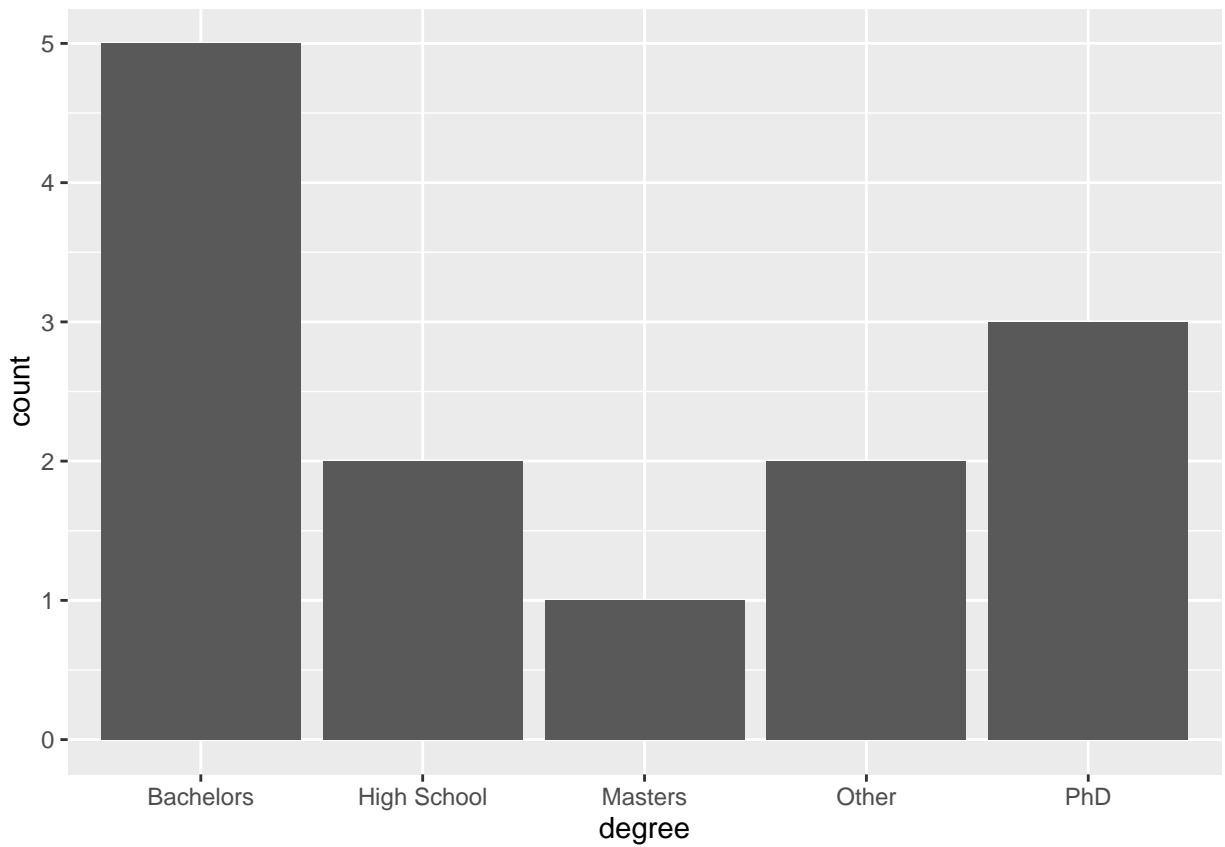
```
ggplot(correct2Data, aes(age)) + geom_bar(stat = "count")
```



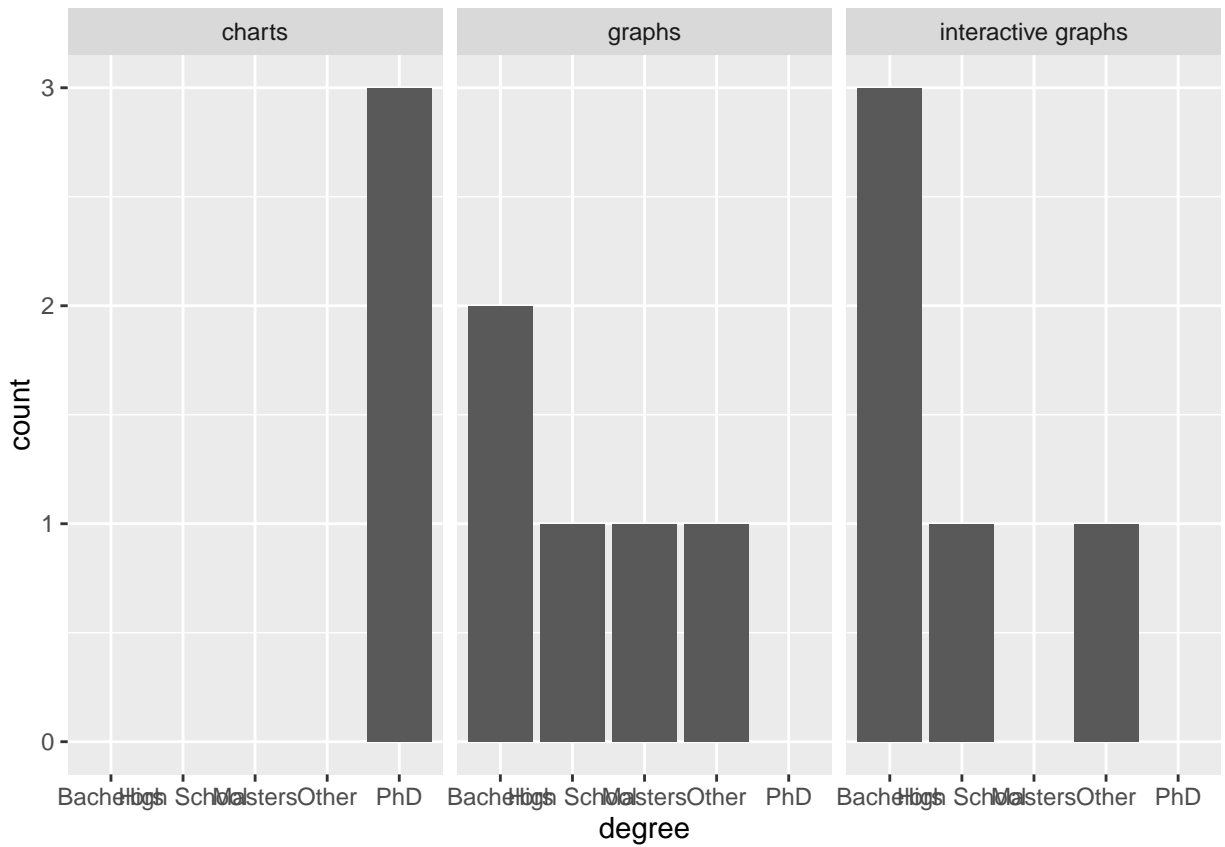
```
ggplot(correct2Data, aes(age)) + geom_bar(stat = "count") + facet_grid(. ~ visType)
```



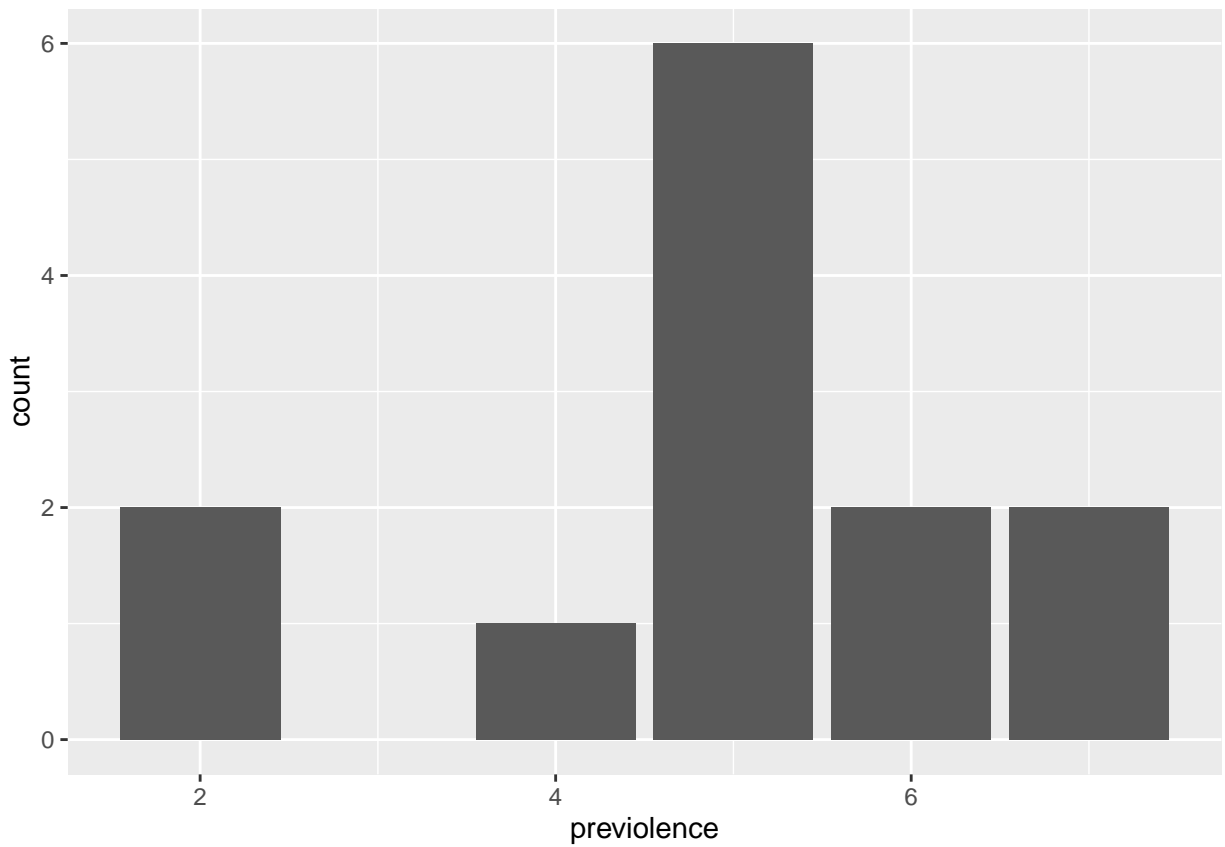
```
ggplot(correct2Data, aes(degree)) + geom_bar(stat = "count")
```



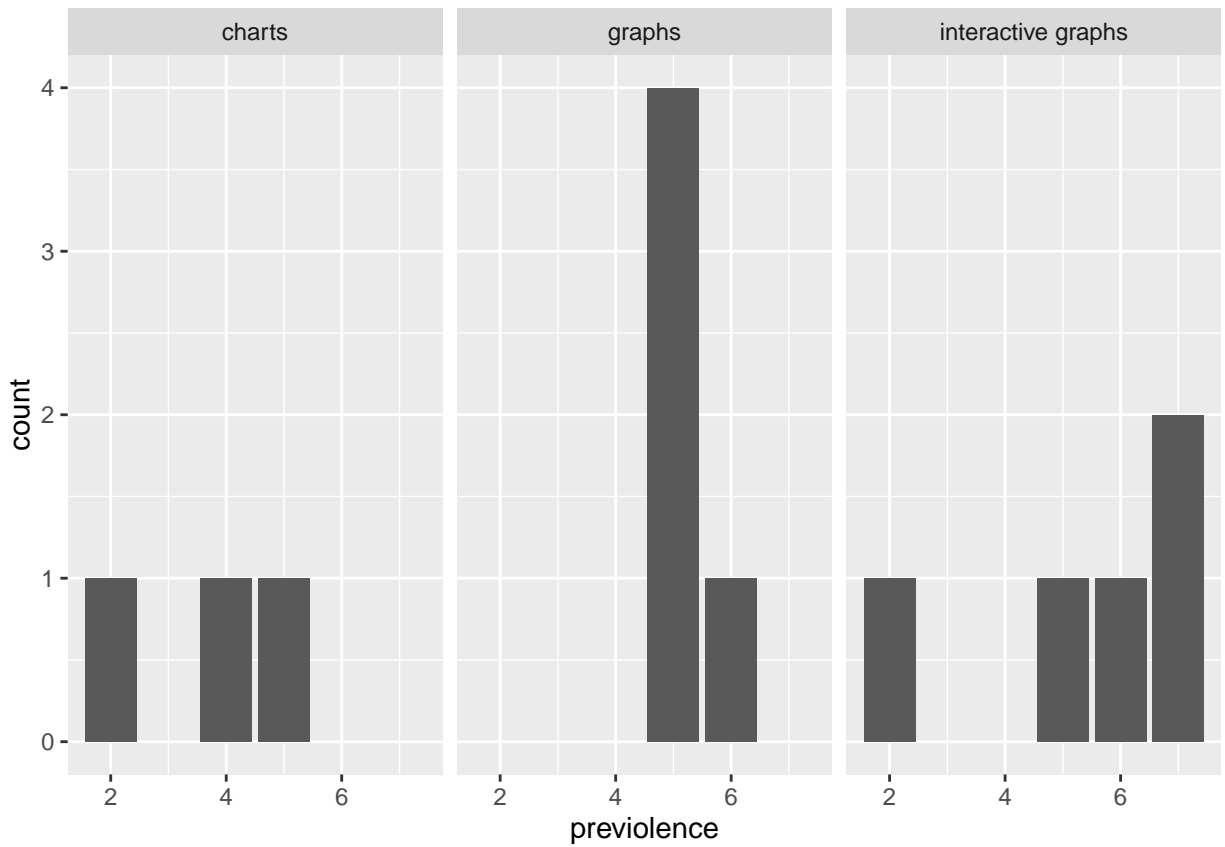
```
ggplot(correct2Data, aes(degree)) + geom_bar(stat = "count") + facet_grid(. ~ visType)
```



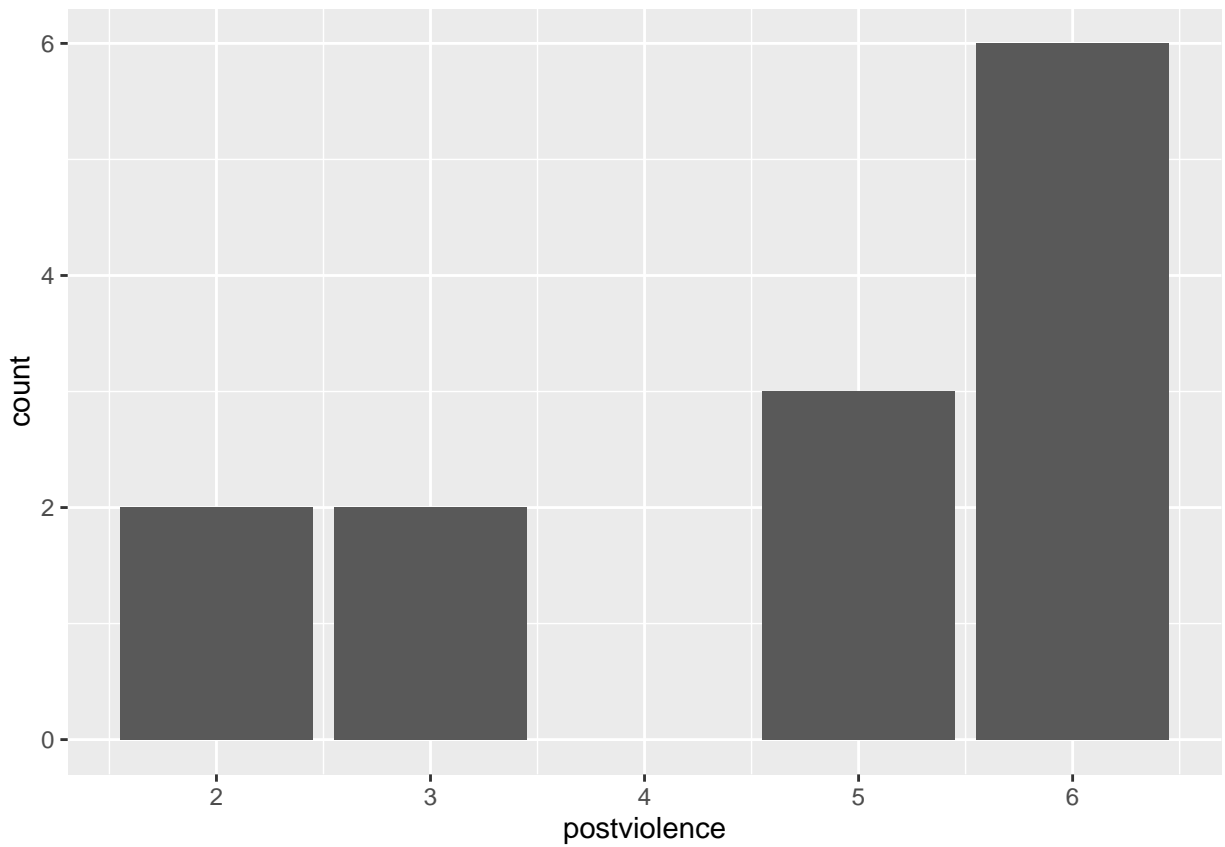
```
ggplot(correct2Data, aes(prevalence)) + geom_bar(stat = "count")
```



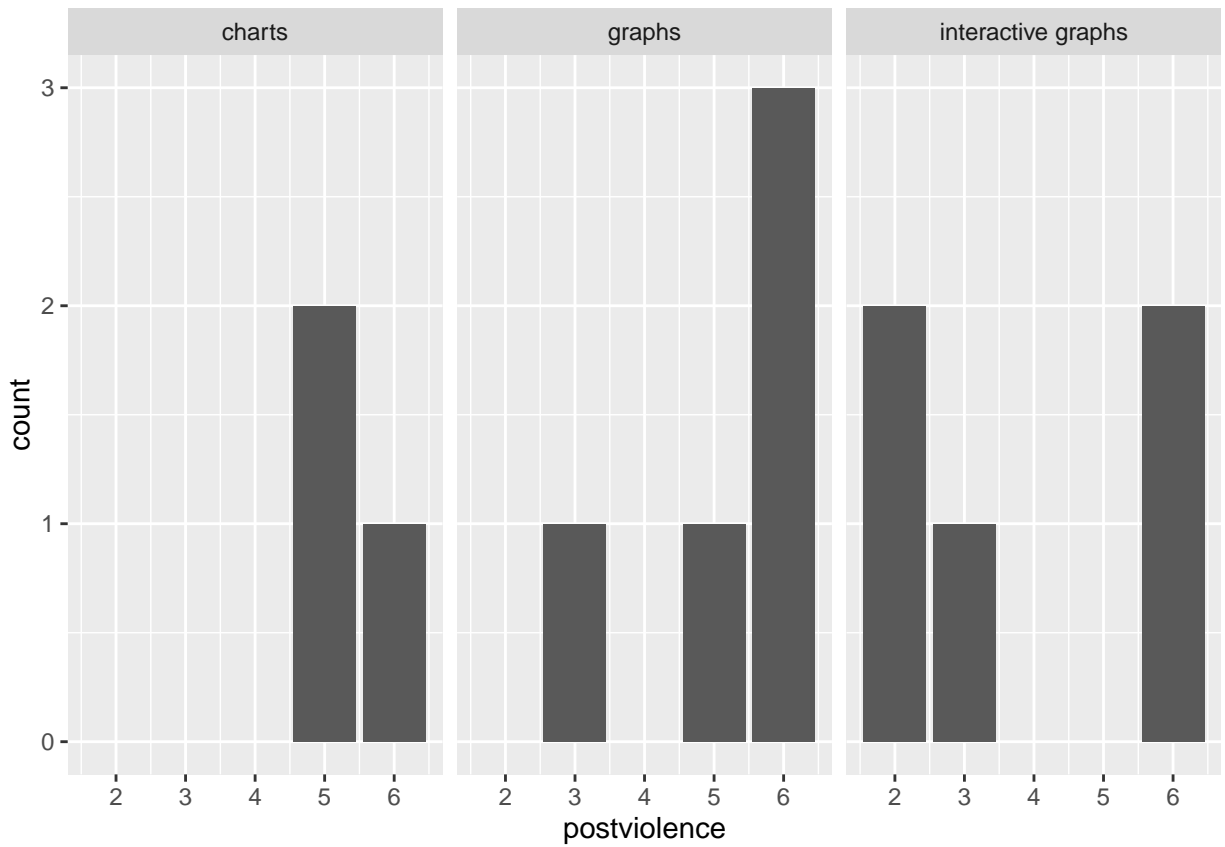
```
ggplot(correct2Data, aes(prevalence)) + geom_bar(stat = "count") + facet_grid(. ~ visType)
```



```
ggplot(correct2Data, aes(postviolence)) + geom_bar(stat = "count")
```

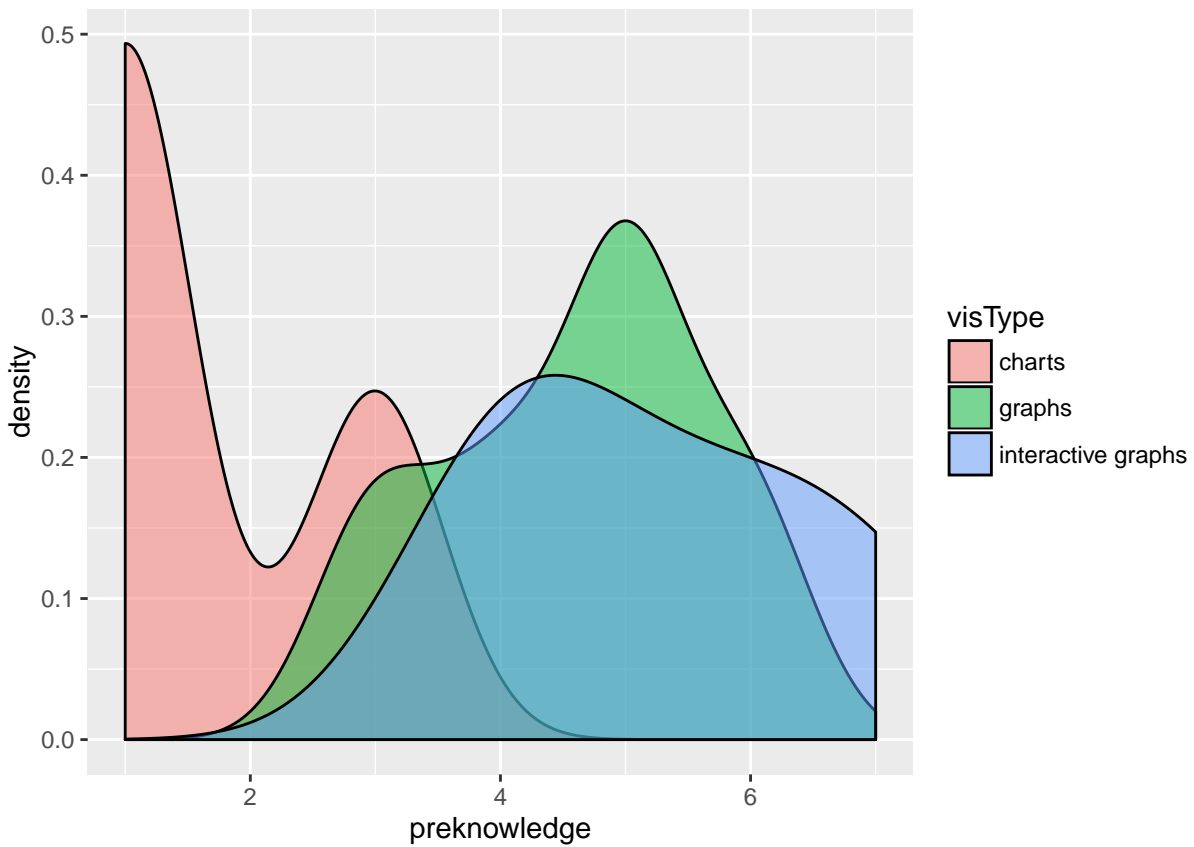


```
ggplot(correct2Data, aes(postviolence)) + geom_bar(stat = "count") + facet_grid(. ~ visType)
```

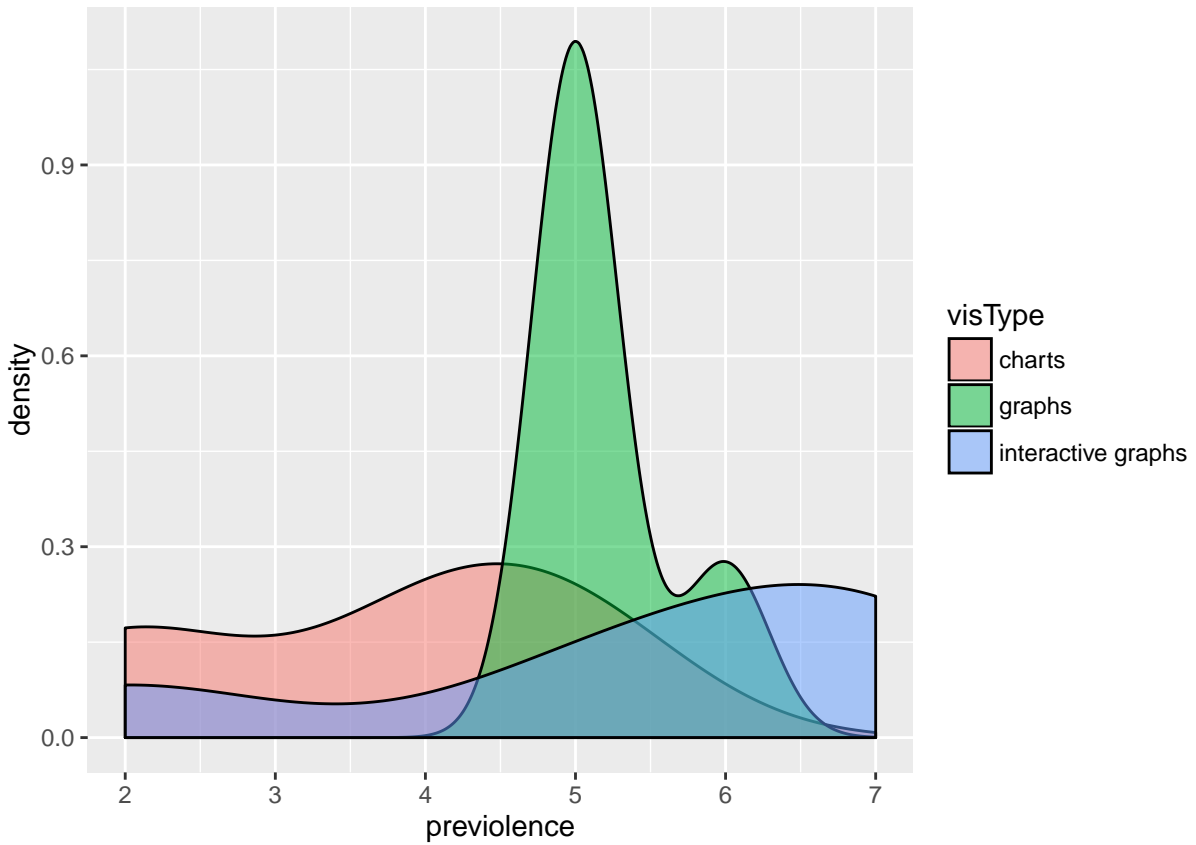



Densities of opinions

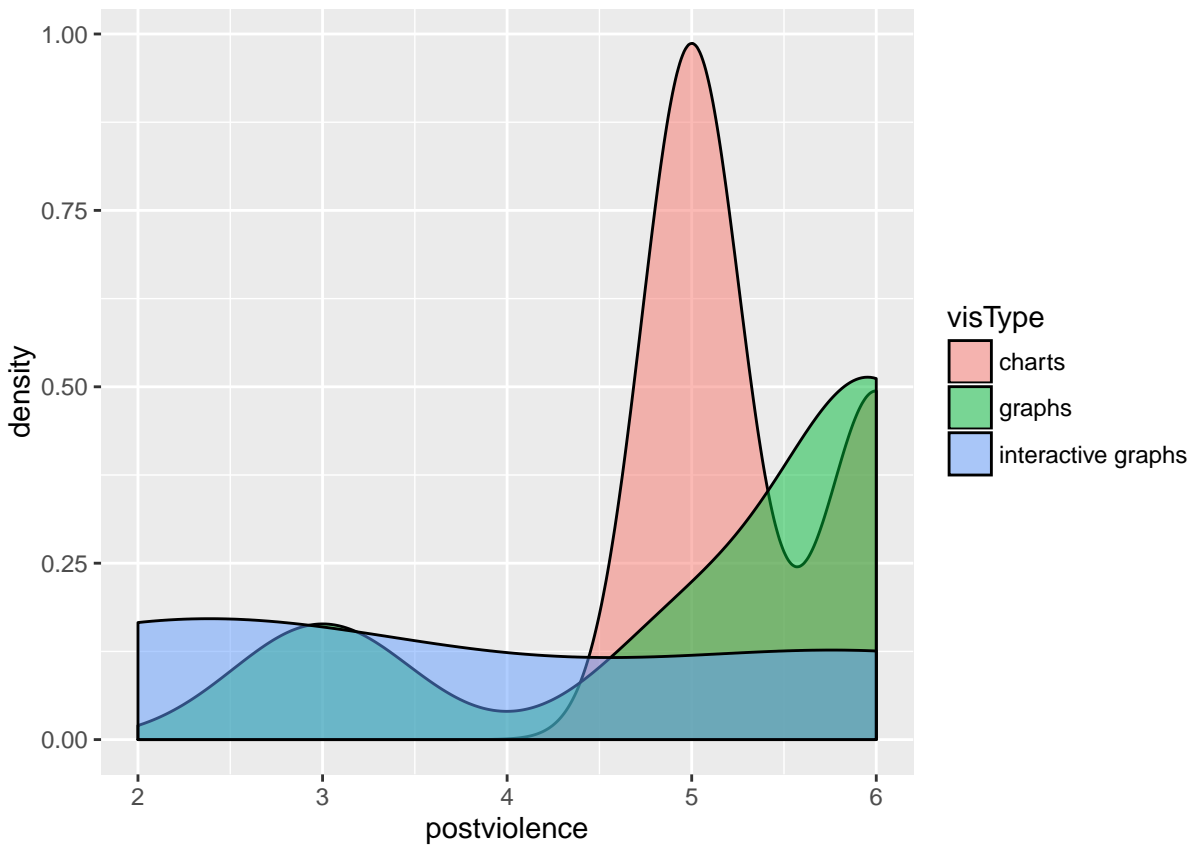
```
ggplot(correct2Data, aes(preknowledge, fill=visType)) + geom_density( alpha=0.5 )
```



```
ggplot(correct2Data, aes(preknowledge, fill=visType)) + geom_density(alpha=0.5)
```

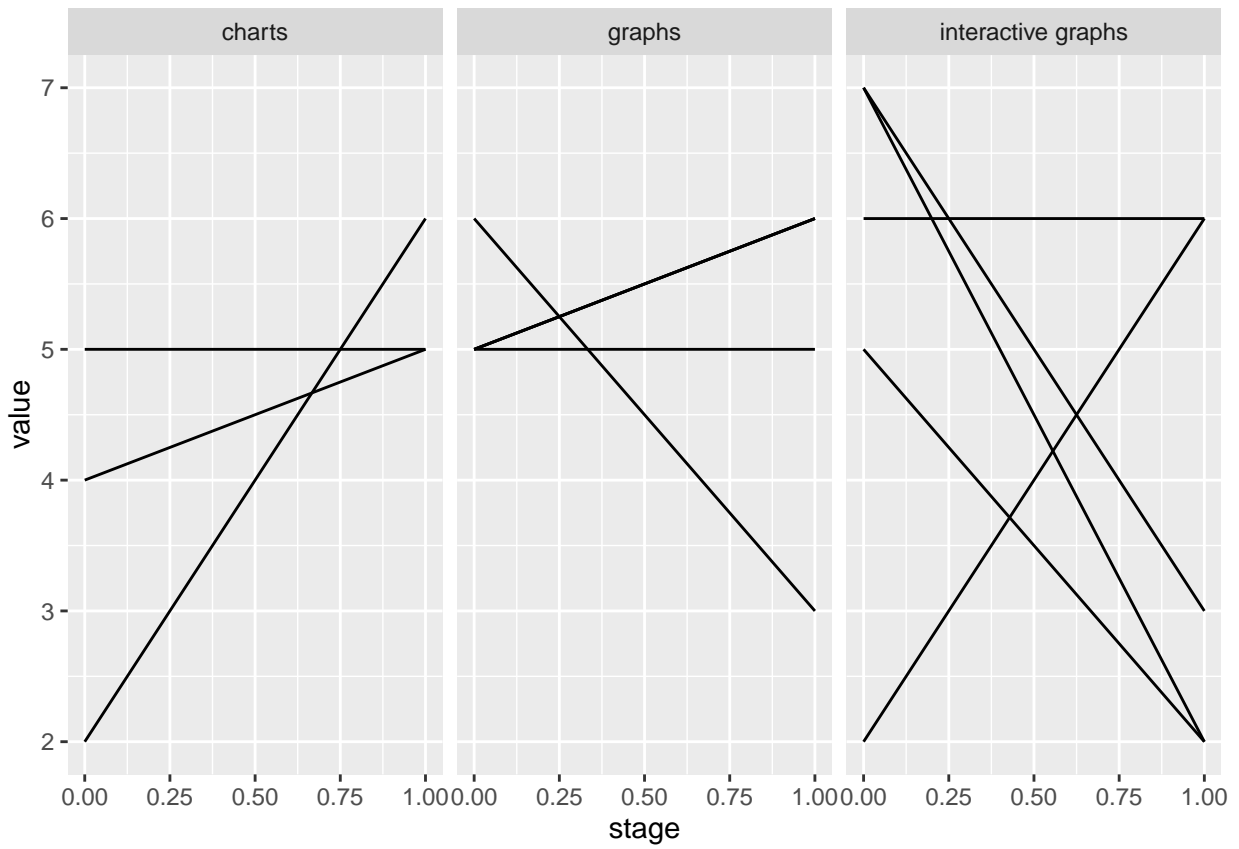


```
ggplot(correct2Data, aes(postviolence, fill=visType)) + geom_density( alpha=0.5 )
```



```
correct2Data$new <- correct2Data$postviolence - correct2Data$previolence

#graph showing change from pretest (0) to posttest(1)
ggplot(correct2Data, aes(stage, value)) + geom_segment(aes(x = 0, y = previolence, xend = 1, yend = pos
```



```
ggplot(correct2Data, aes(stage, value)) + geom_segment(aes(x = 0, y = previolence, xend = 1, yend = pos
```

