

# experimentrPersuasion

*John Bosworth*

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## Experiment Details

## Loading and Setup

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

```
## Warning: package 'plyr' 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")
correct2Data$opinionChange <- correct2Data$postviolence - correct2Data$previolence

# 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")

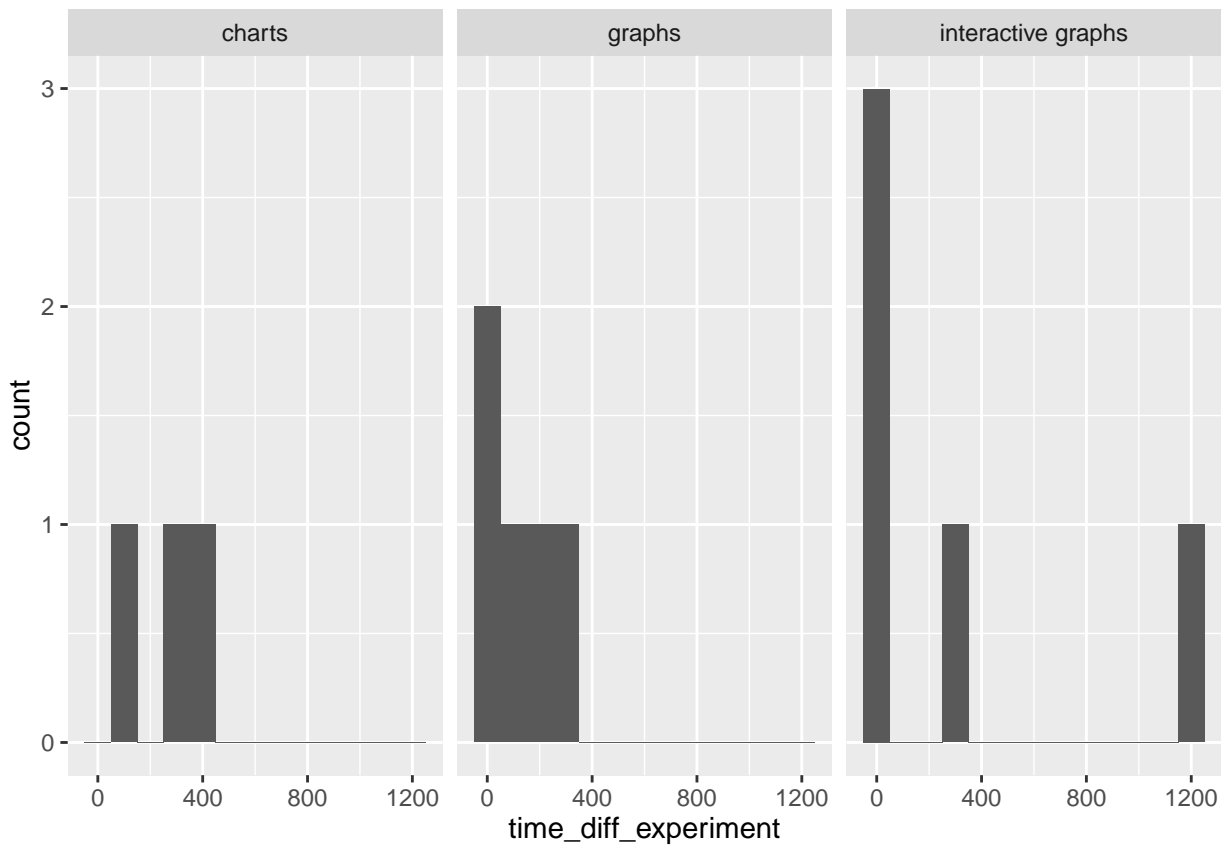
correct2Data <- rbind(correctCharts, correctInteractiveGraphs)
correct2Data <- rbind(correct2Data, correctGraphs)
```

## Histograms

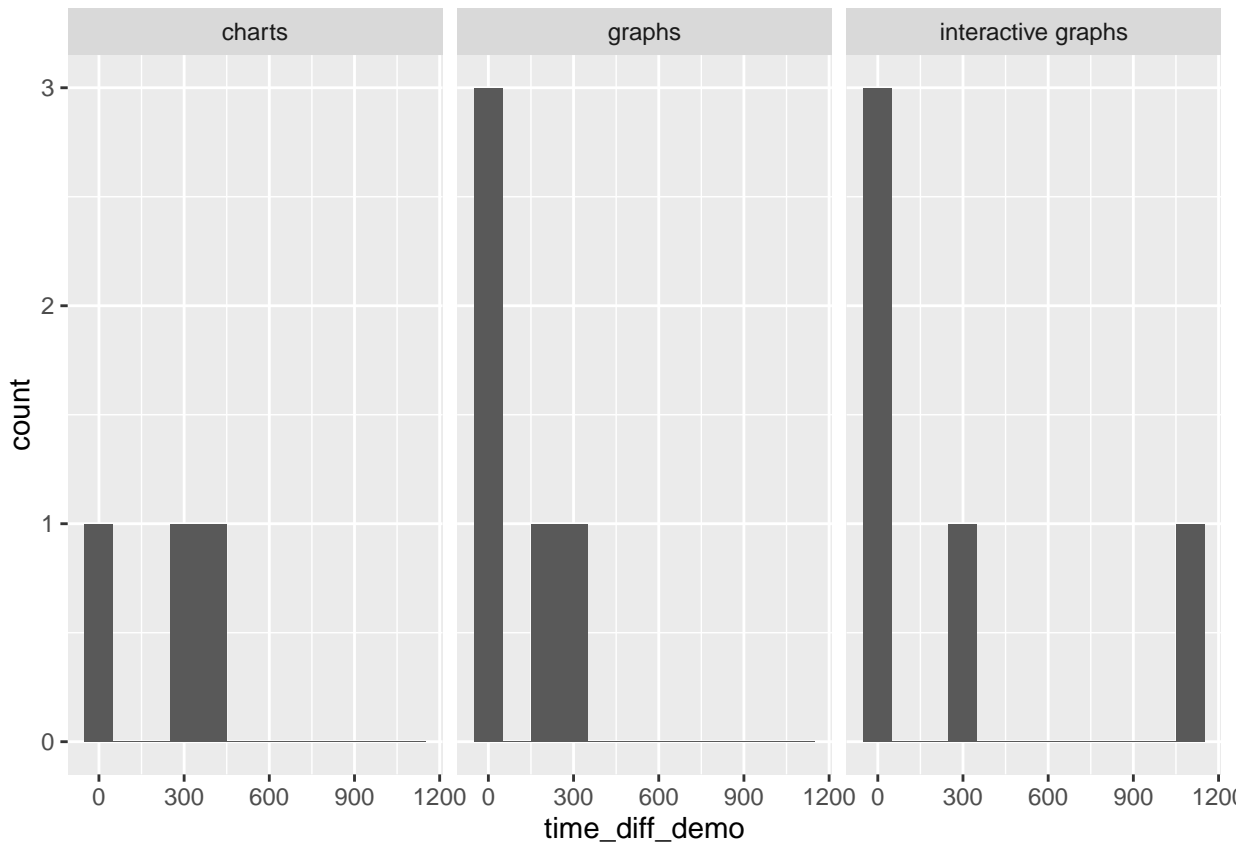
```
report(correct2Data, "time_diff_experiment")
```

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

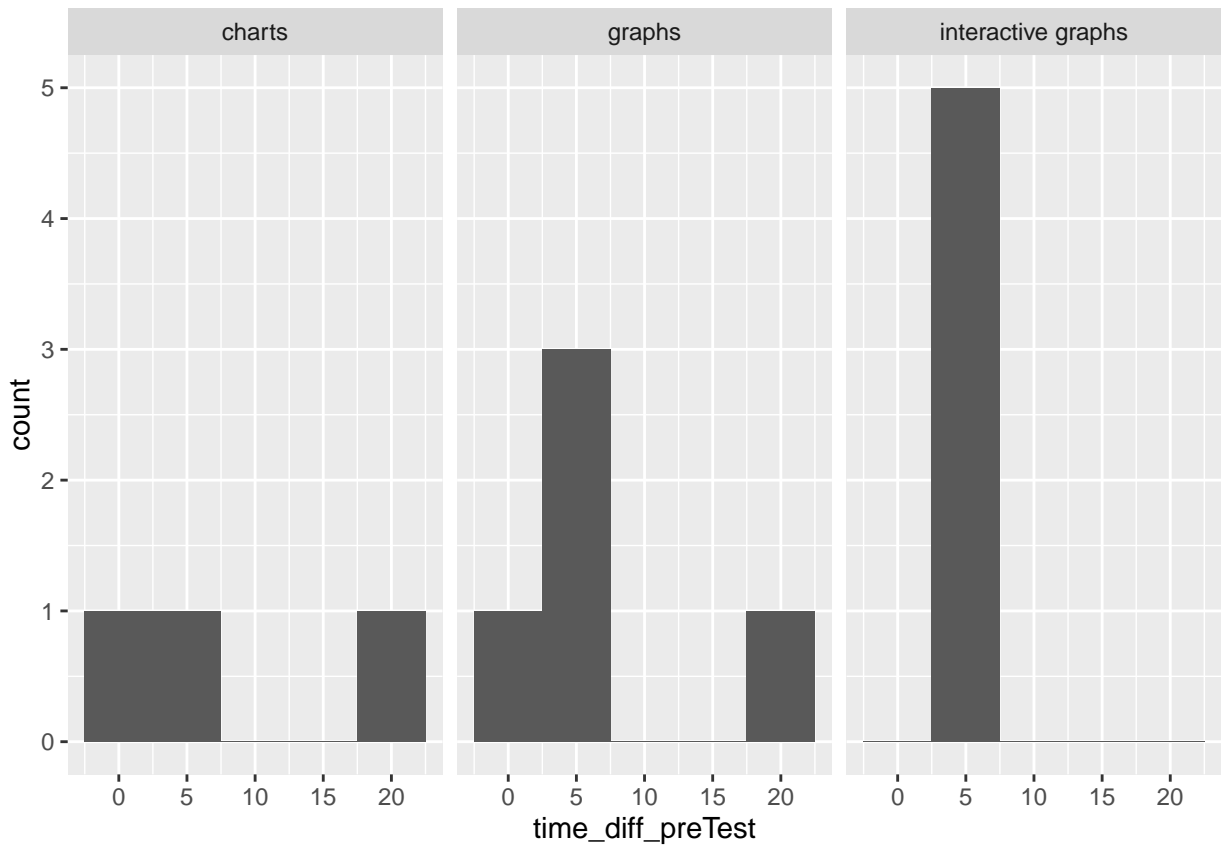
```
ggplot(correct2Data, aes(time_diff_experiment)) + geom_histogram( binwidth=100 ) + facet_grid(. ~ visType)
```



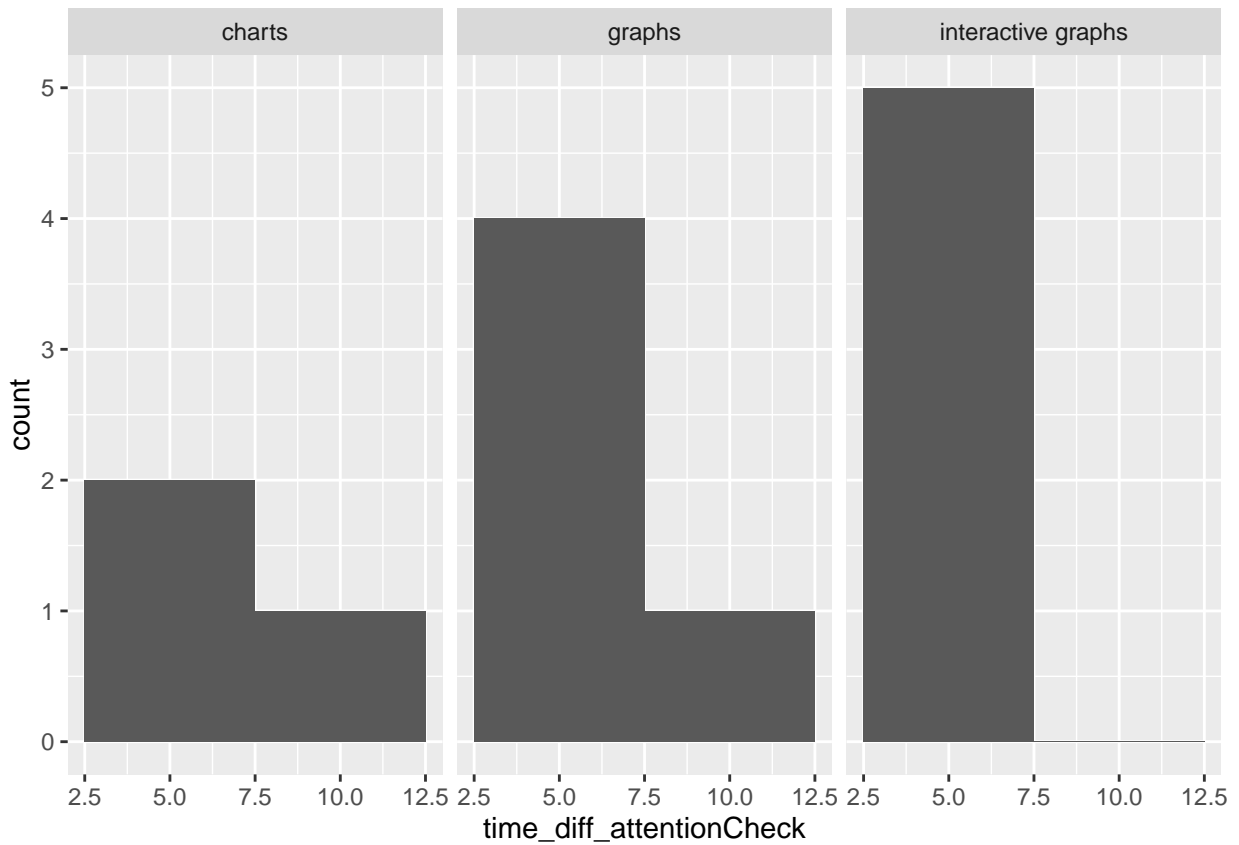
```
ggplot(correct2Data, aes(time_diff_demo)) + geom_histogram( binwidth=100 ) + facet_grid(. ~ visType)
```



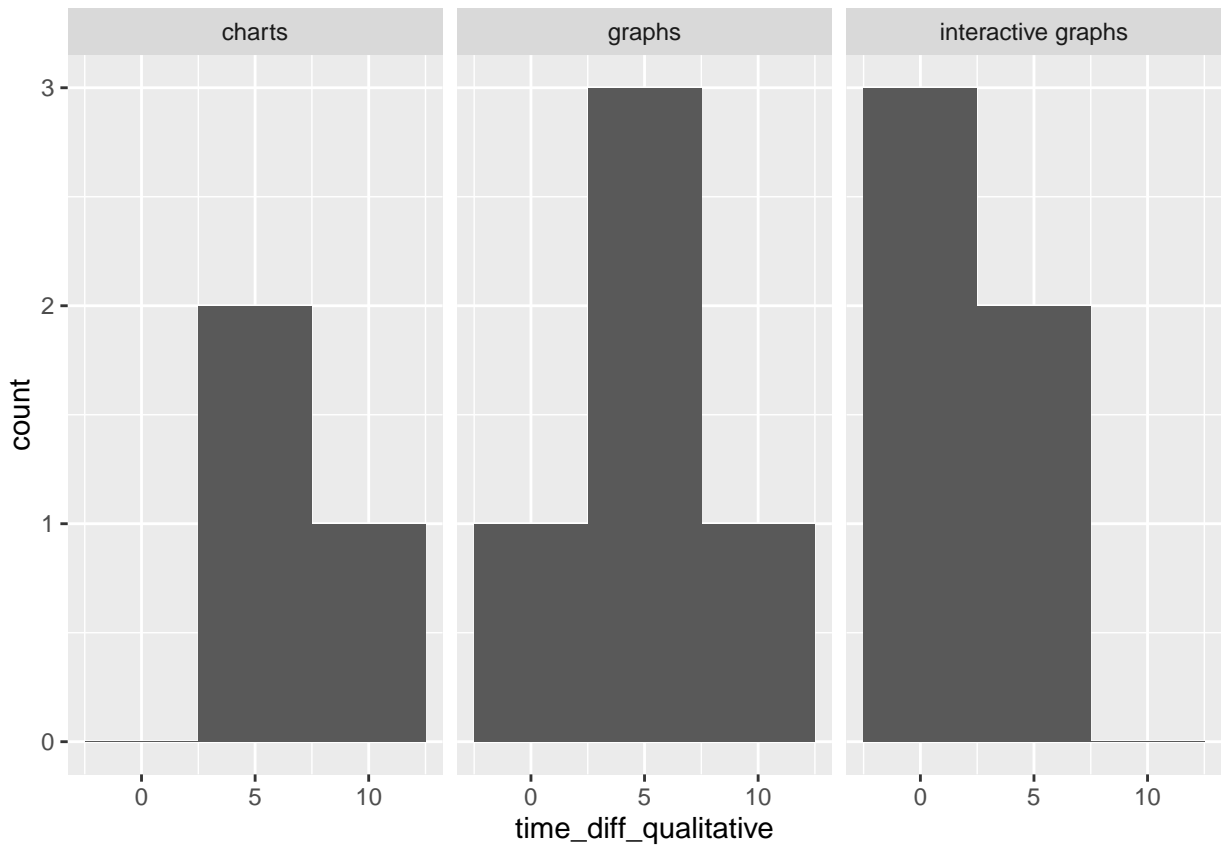
```
ggplot(correct2Data, aes(time_diff_preTest)) + geom_histogram( binwidth=5 ) + facet_grid(. ~ visType)
```



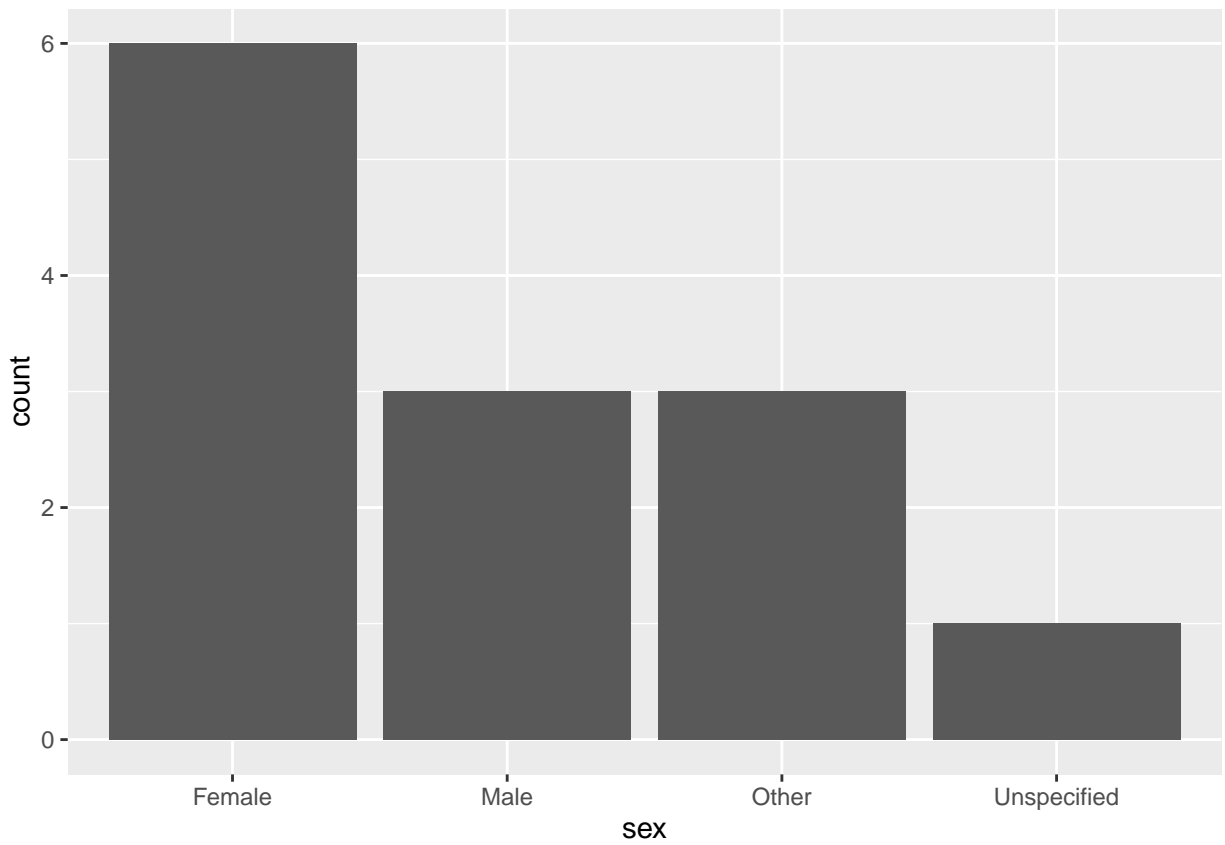
```
ggplot(correct2Data, aes(time_diff_attentionCheck)) + geom_histogram( binwidth=5 ) + facet_grid(. ~ vis'
```



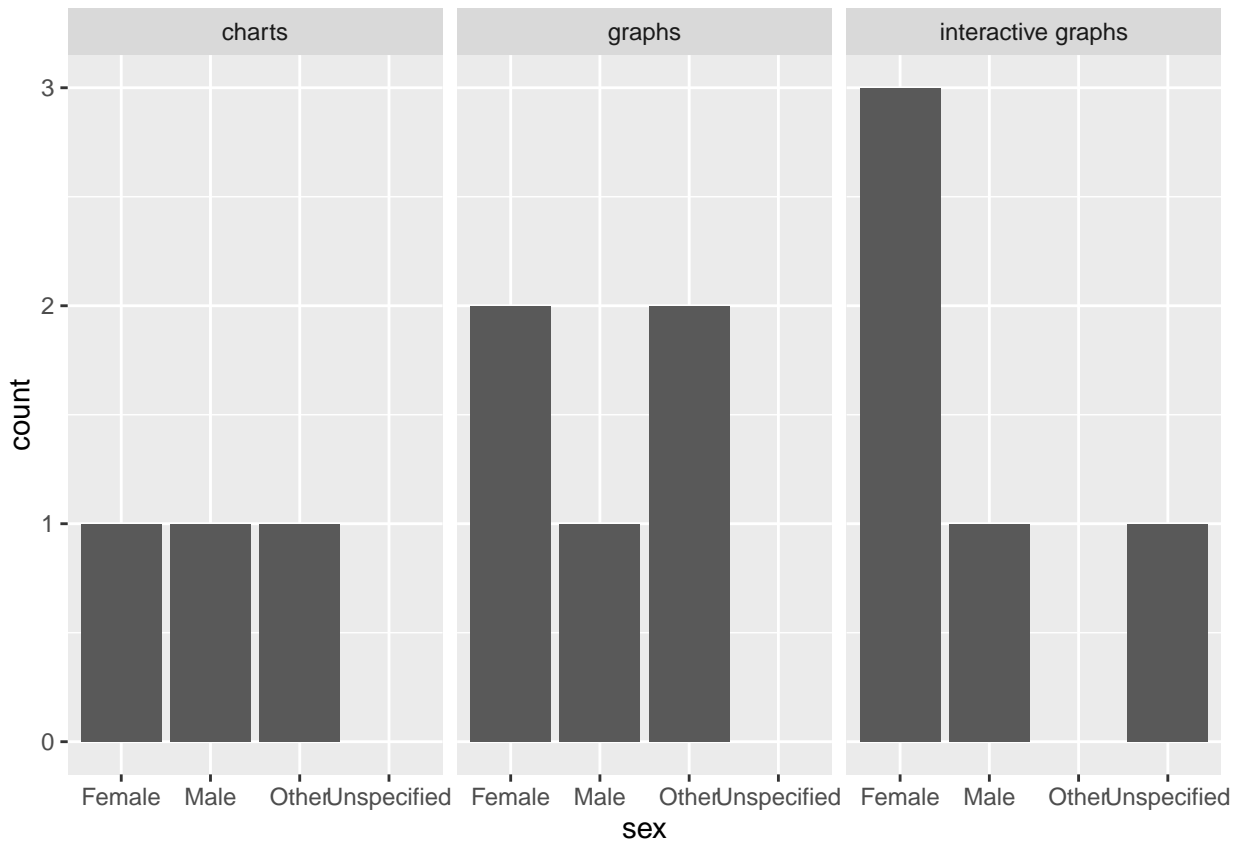
```
#ggplot(correct2Data, aes(time_diff_postTest)) + geom_histogram( binwidth=5 ) + facet_grid(. ~ visType)
ggplot(correct2Data, aes(time_diff_qualitative)) + geom_histogram( binwidth=5 ) + facet_grid(. ~ visType)
```



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

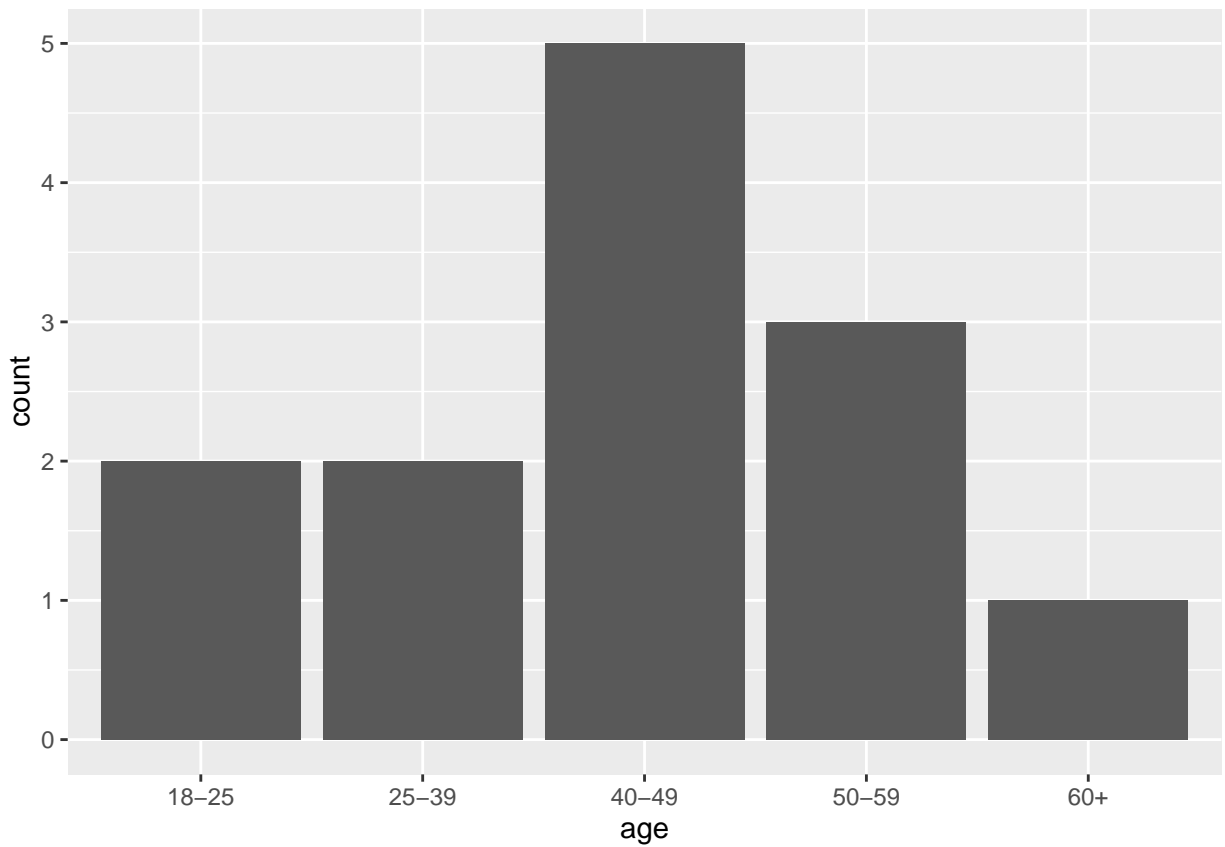


```
ggplot(correct2Data, aes(sex)) + geom_bar(stat = "count") + facet_grid(. ~ visType)
```

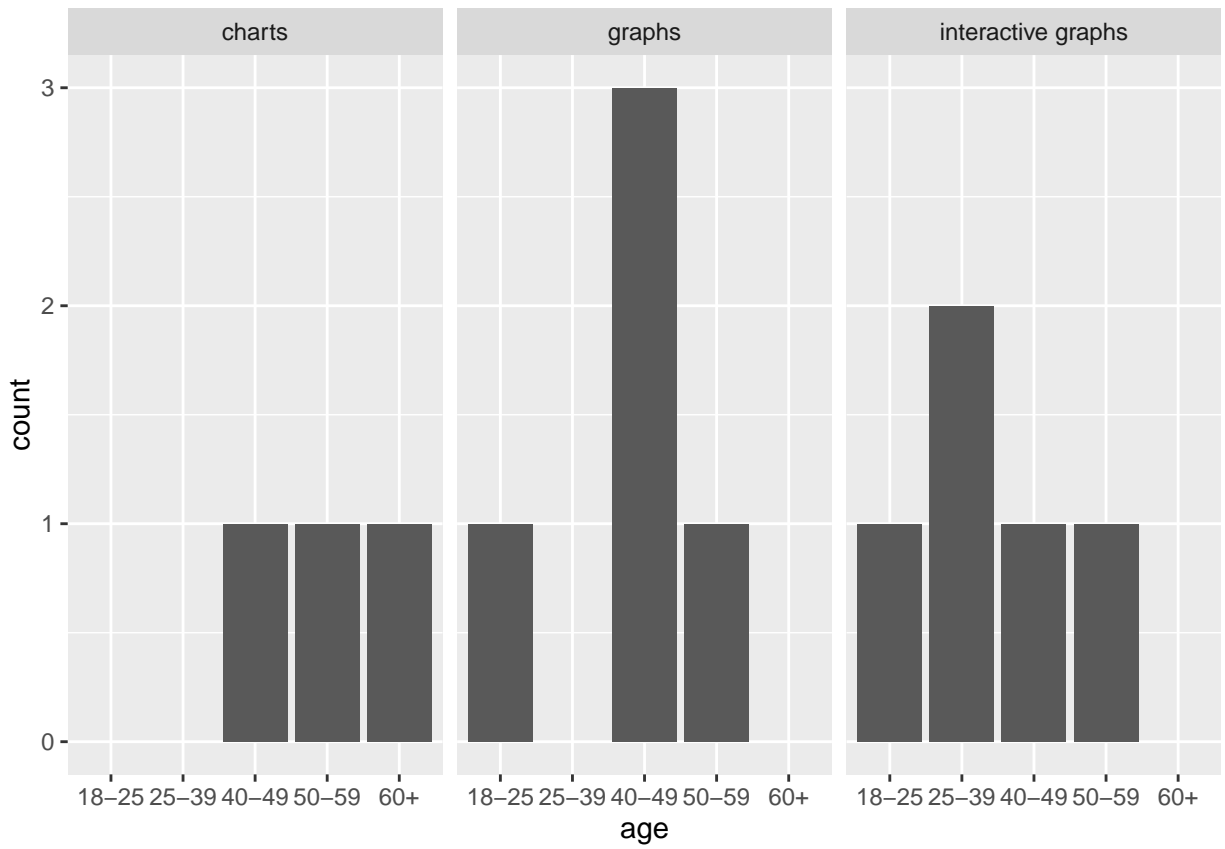


```
ggplot(correct2Data, aes(age)) + geom_bar(stat = "count")
```

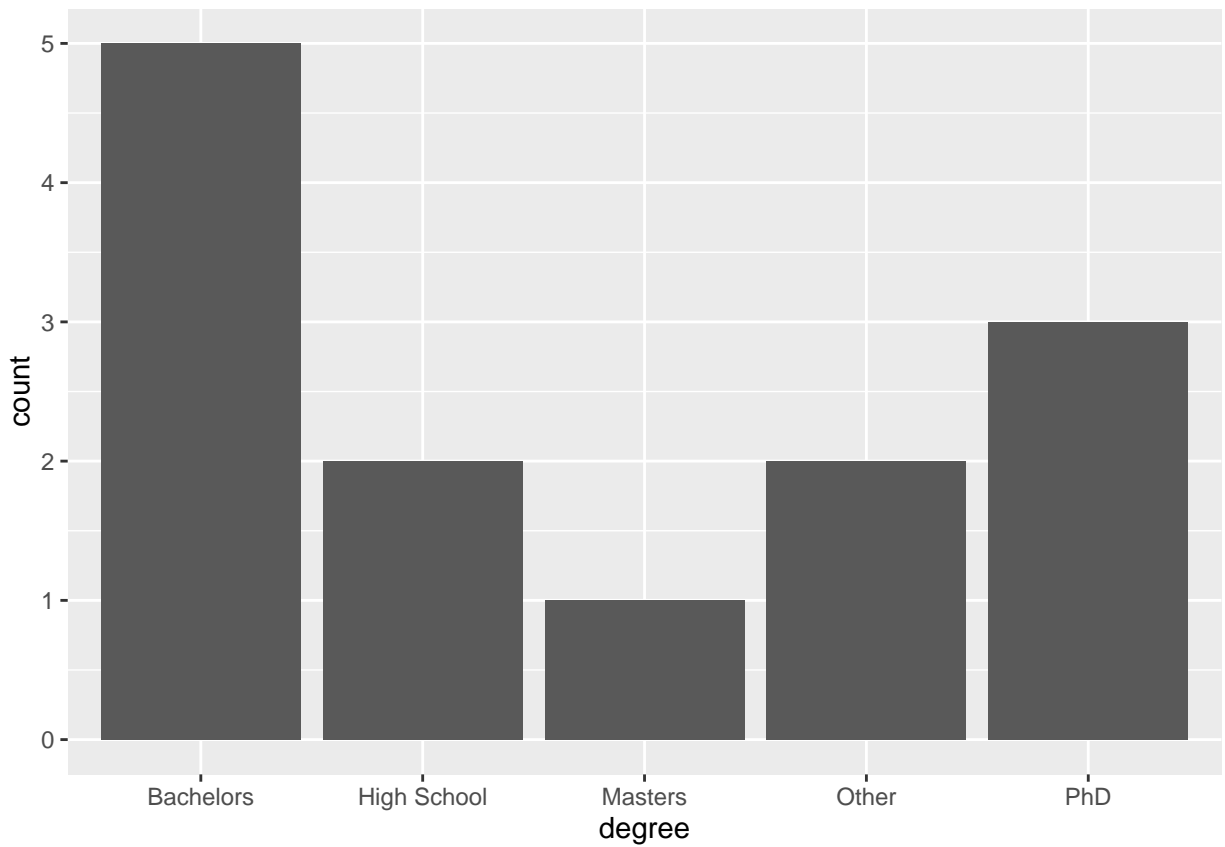




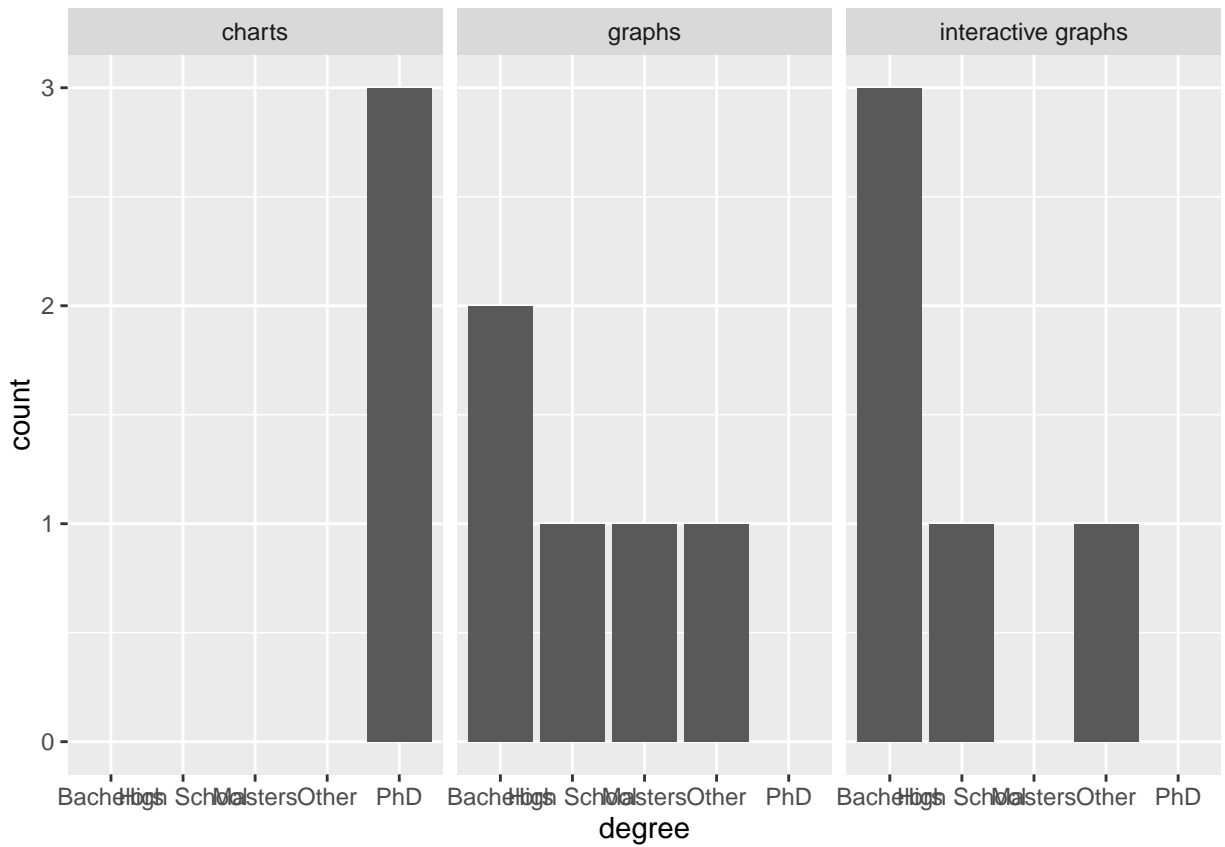
```
ggplot(correct2Data, aes(age)) + geom_bar(stat = "count") + facet_grid(. ~ visType)
```



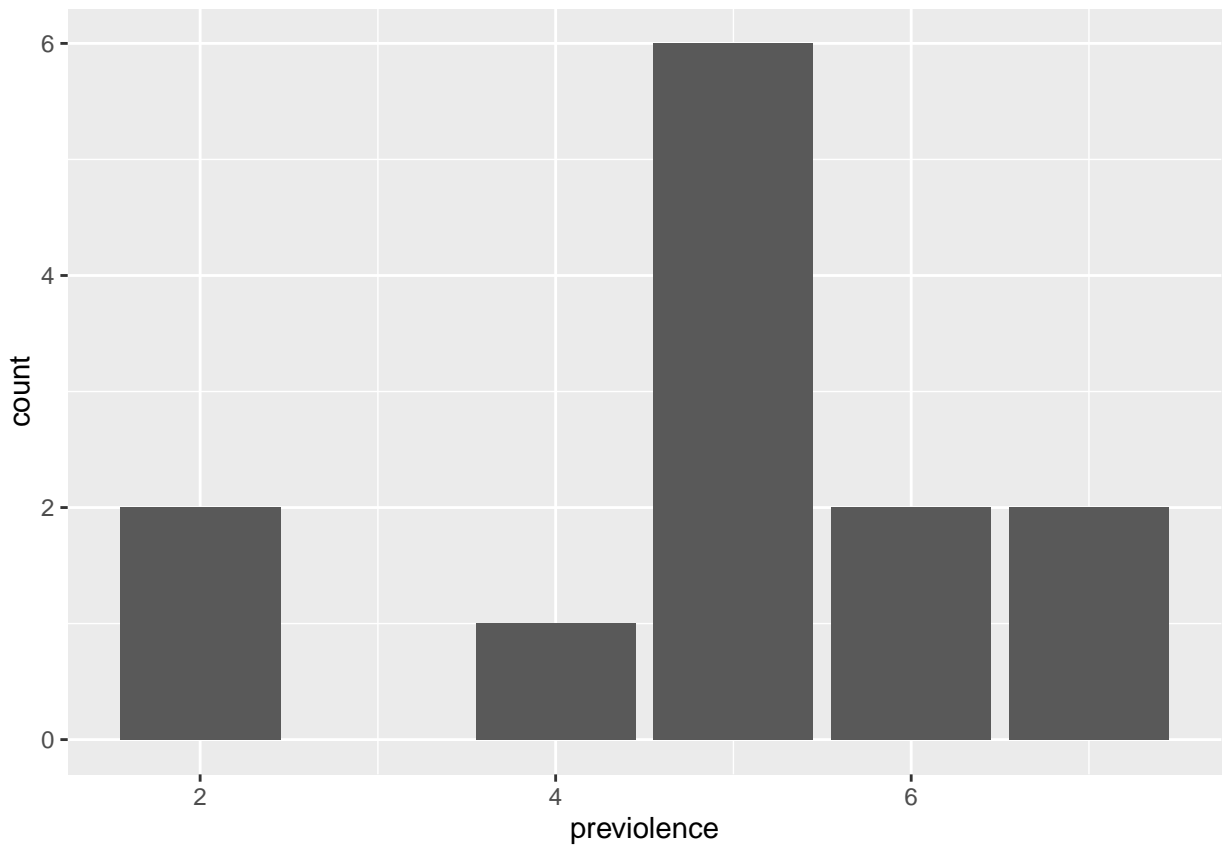
```
ggplot(correct2Data, aes(degree)) + geom_bar(stat = "count")
```



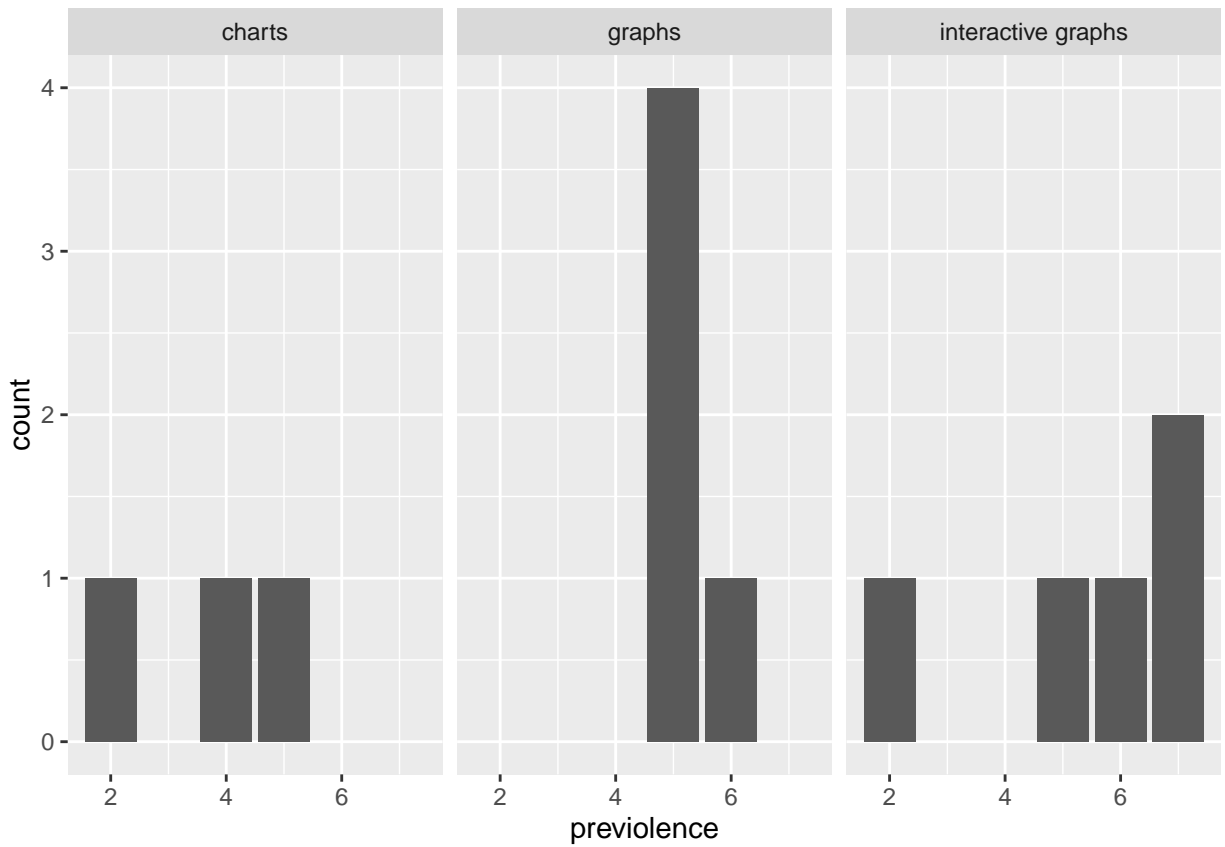
```
ggplot(correct2Data, aes(degree)) + geom_bar(stat = "count") + facet_grid(. ~ visType)
```



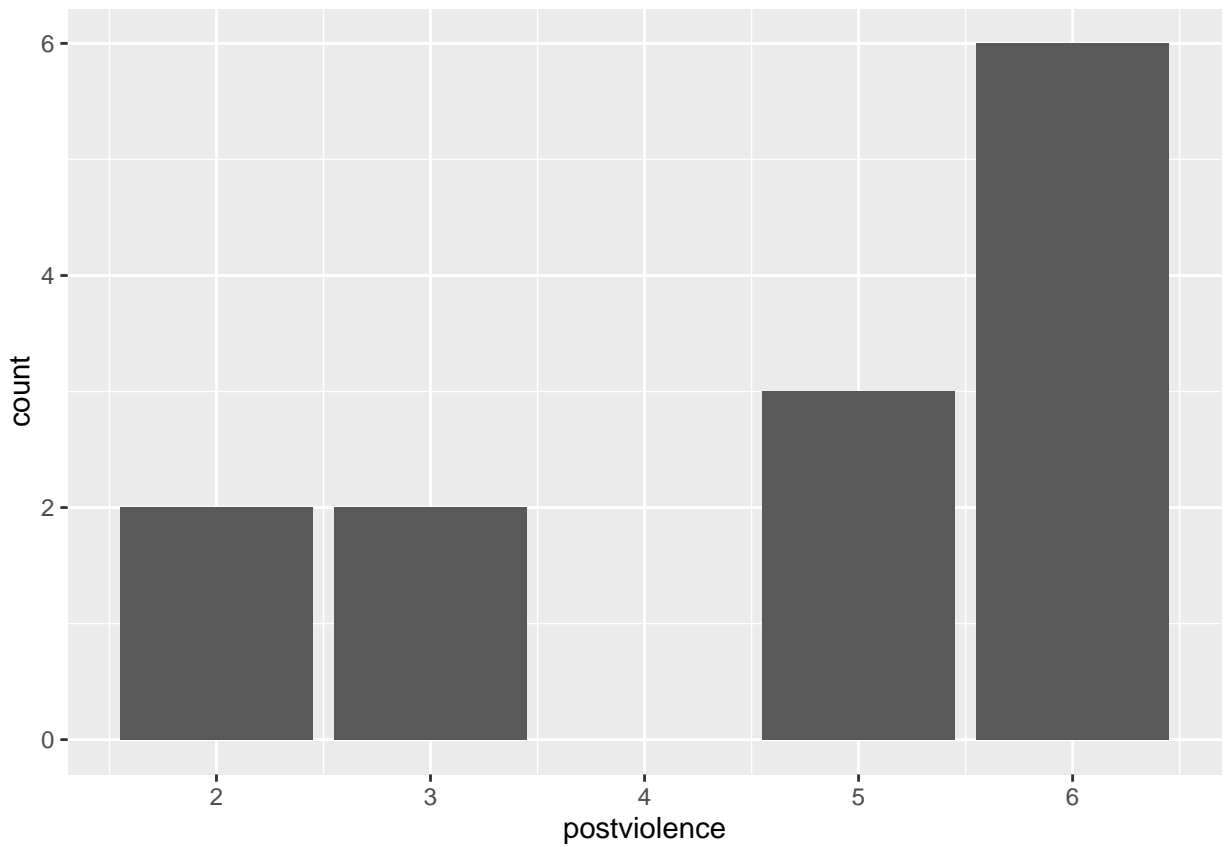
```
ggplot(correct2Data, aes(prevalence)) + geom_bar(stat = "count")
```



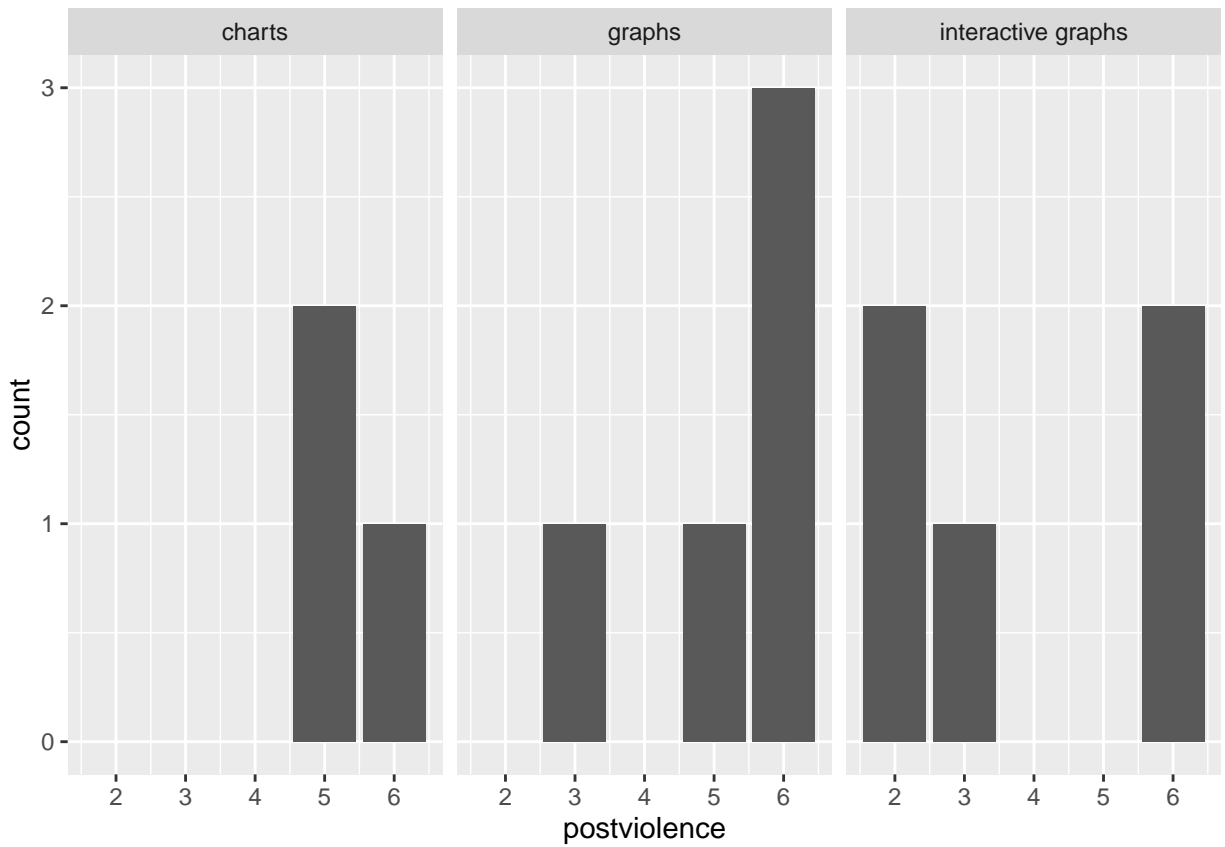
```
ggplot(correct2Data, aes(prevalence)) + geom_bar(stat = "count") + facet_grid(. ~ visType)
```



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



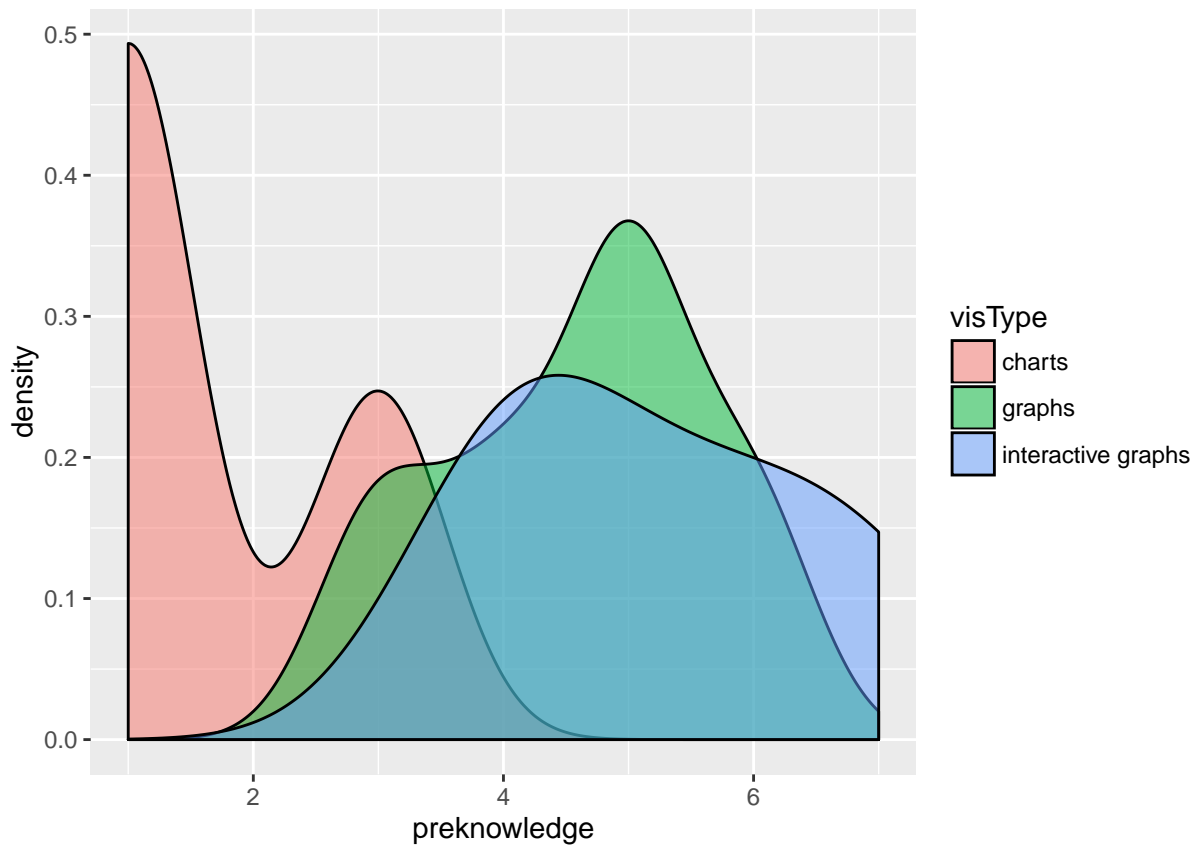
```
ggplot(correct2Data, aes(postviolence)) + geom_bar(stat = "count") + facet_grid(. ~ visType)
```



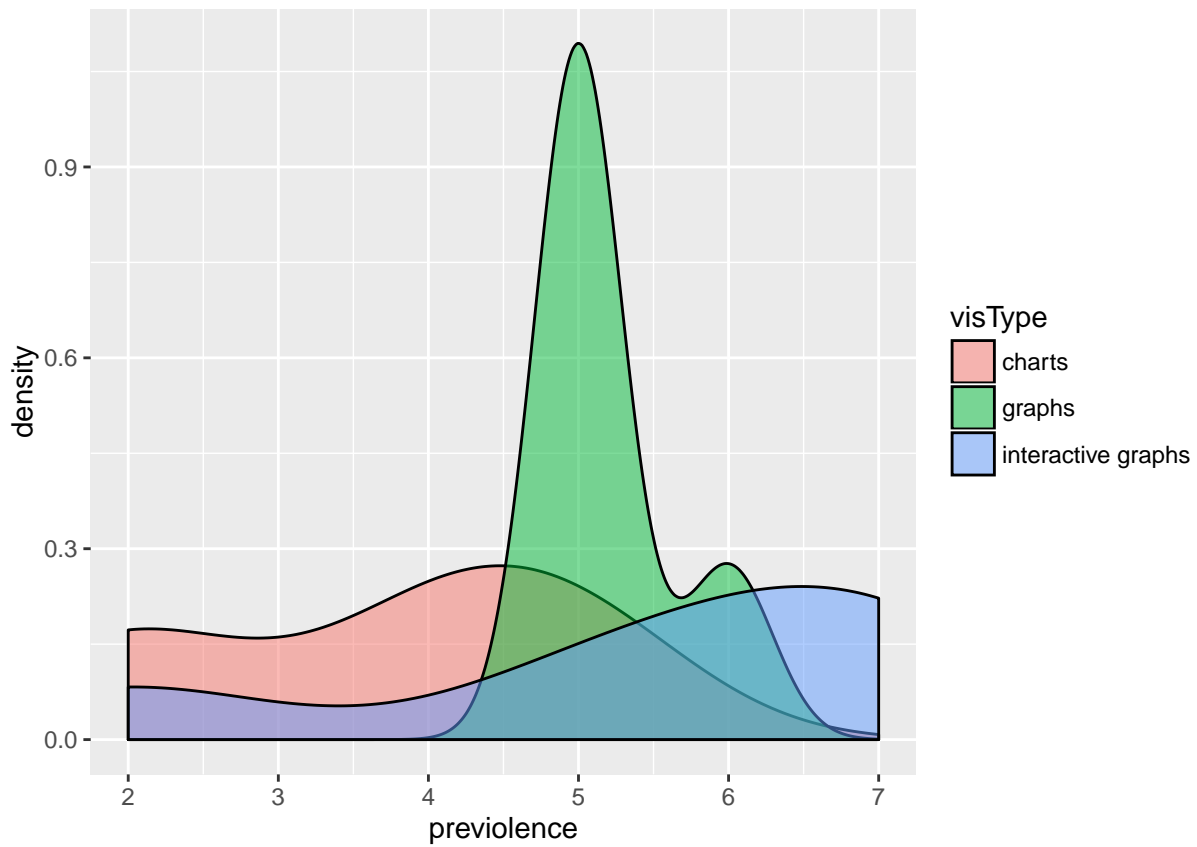
## Densities of opinions

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

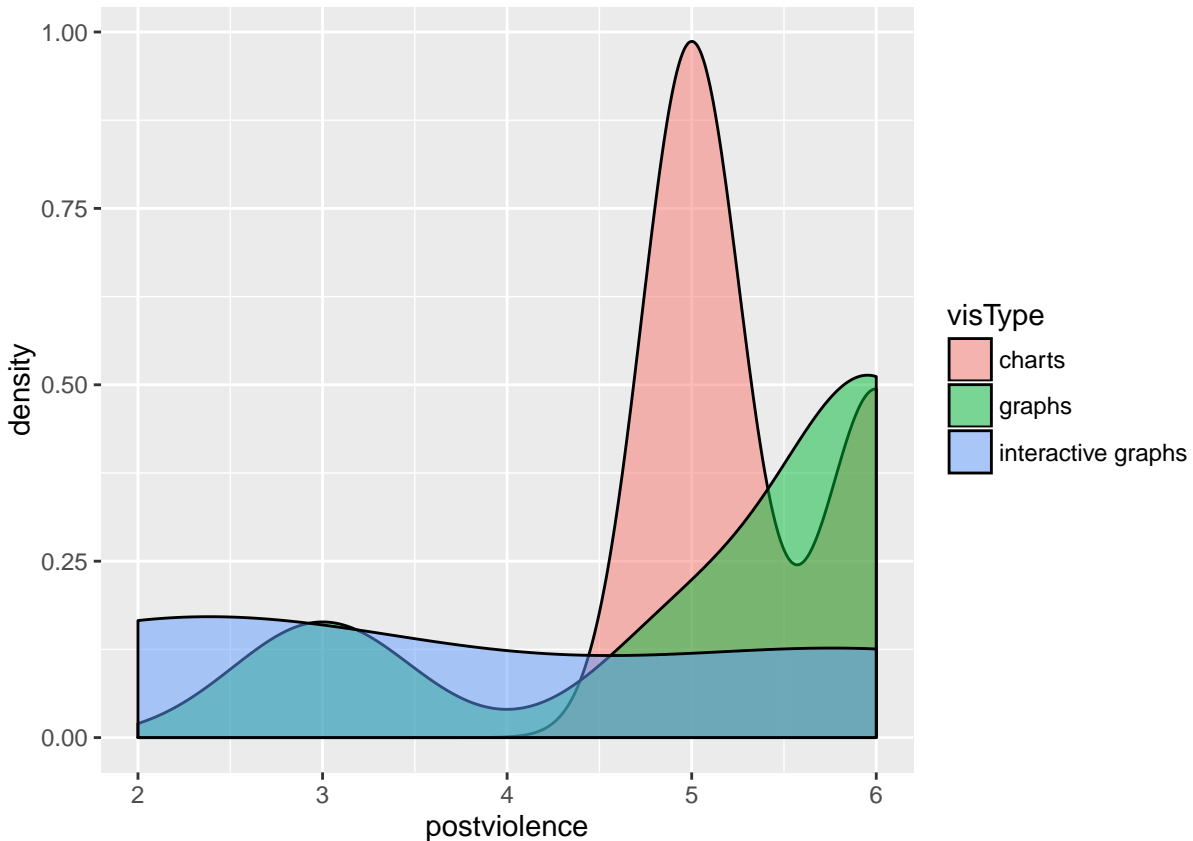




```
ggplot(correct2Data, aes(preknowledge, fill=visType)) + geom_density(alpha=0.5)
```



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



```
#statistics
correct2Data$opinionChangeDirection <- correct2Data$opinionChange
correct2Data$opinionChangeDirection <- changeStatistics(correct2Data, "opinionChangeDirection")

## total=13, Neg=4/13 (30.77%), zero=3/13 (23.08%), positive=6/13 (46.15%)

correctGraphs$opinionChangeDirection <- correctGraphs$opinionChange
correctGraphs$opinionChangeDirection <- changeStatistics(correctGraphs, "opinionChangeDirection")

## total=5, Neg=1/5 (20%), zero=1/5 (20%), positive=3/5 (60%)

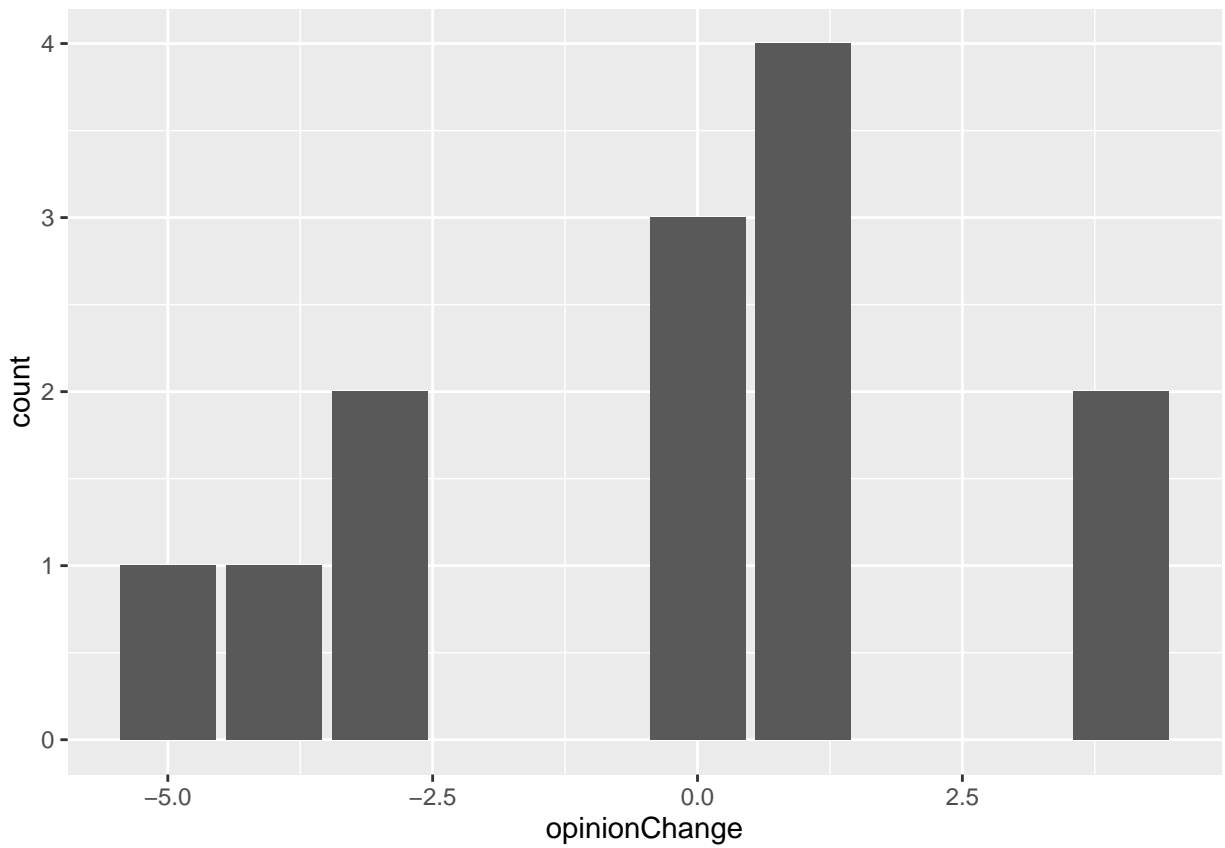
correctInteractiveGraphs$opinionChangeDirection <- correctInteractiveGraphs$opinionChange
correctInteractiveGraphs$opinionChangeDirection <- changeStatistics(correctInteractiveGraphs, "opinionChangeDirection")

## total=5, Neg=3/5 (60%), zero=1/5 (20%), positive=1/5 (20%)

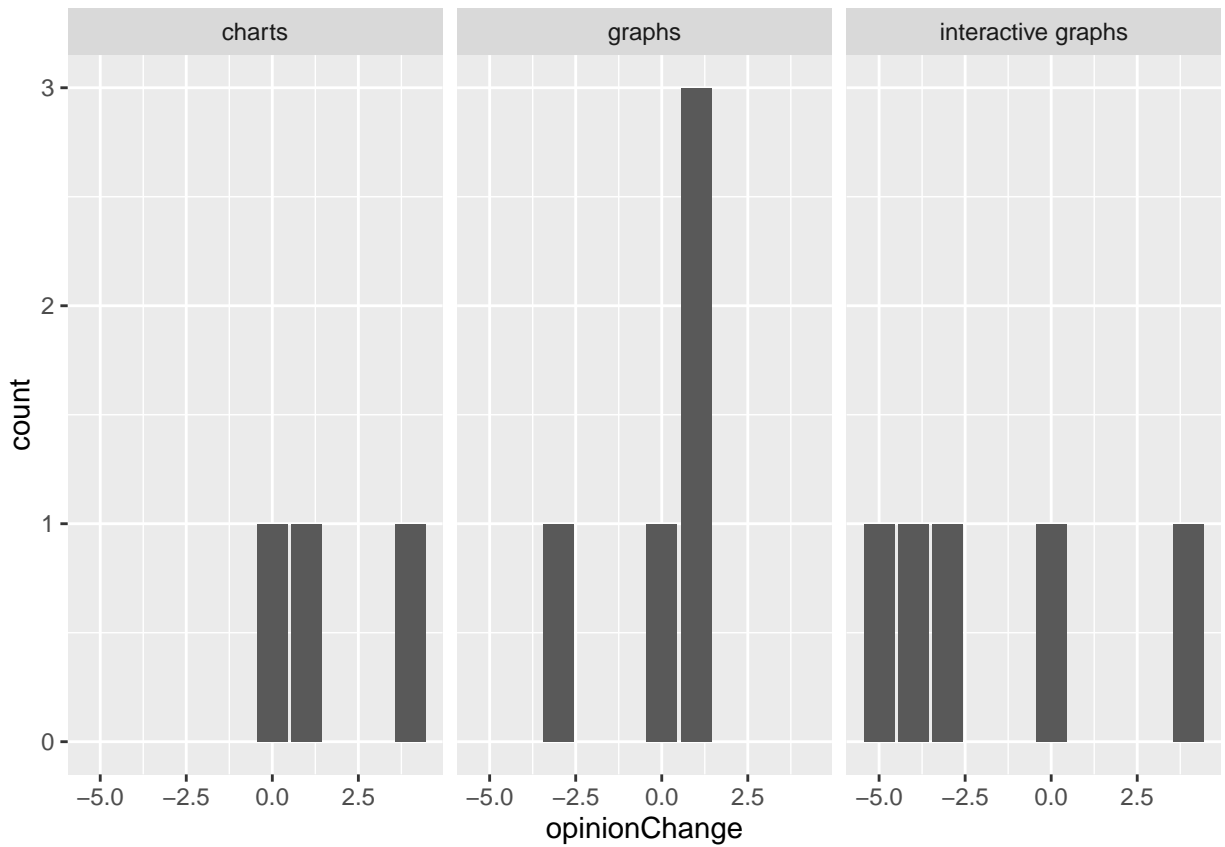
correctCharts$opinionChangeDirection <- correctCharts$opinionChange
correctCharts$opinionChangeDirection <- changeStatistics(correctCharts, "opinionChangeDirection")

## total=3, Neg=0/3 (0%), zero=1/3 (33.33%), positive=2/3 (66.67%)
```

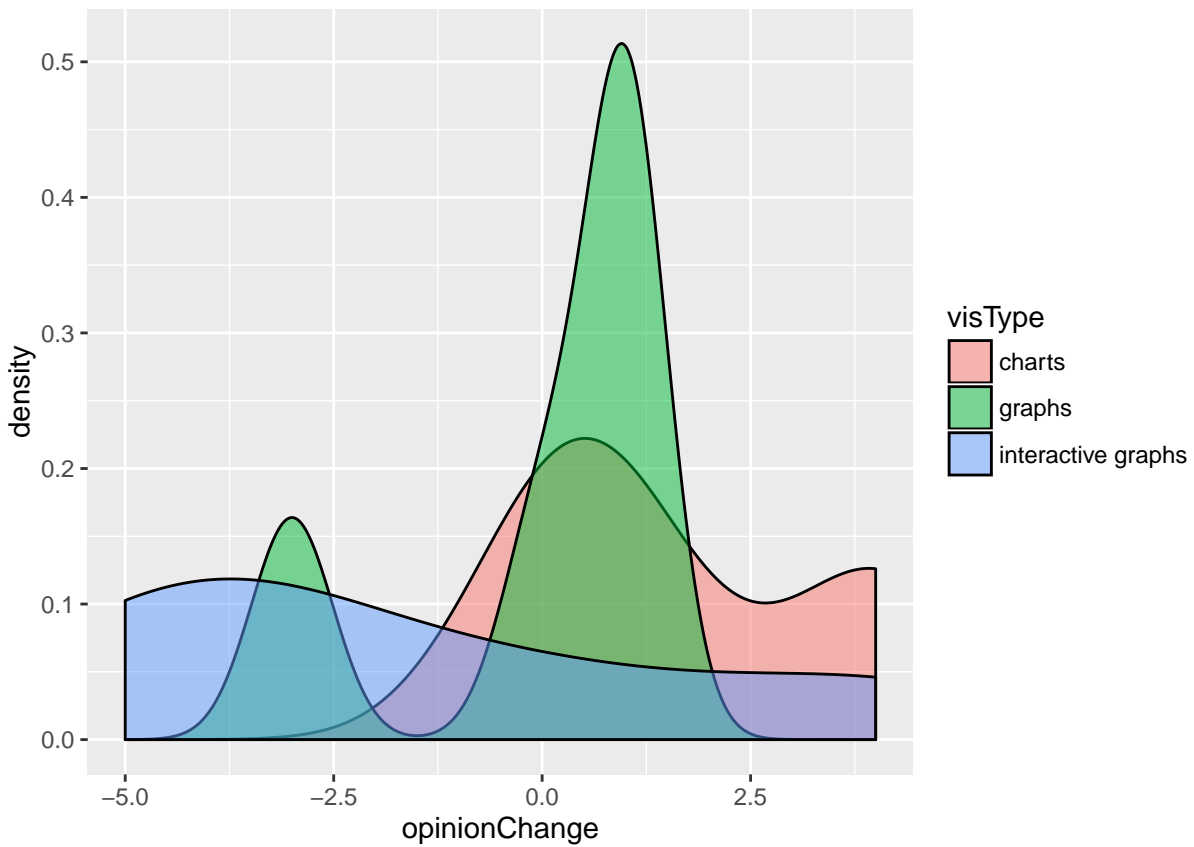
```
#graphs of how people changed their minds  
ggplot(correct2Data, aes(opinionChange)) + geom_bar()
```



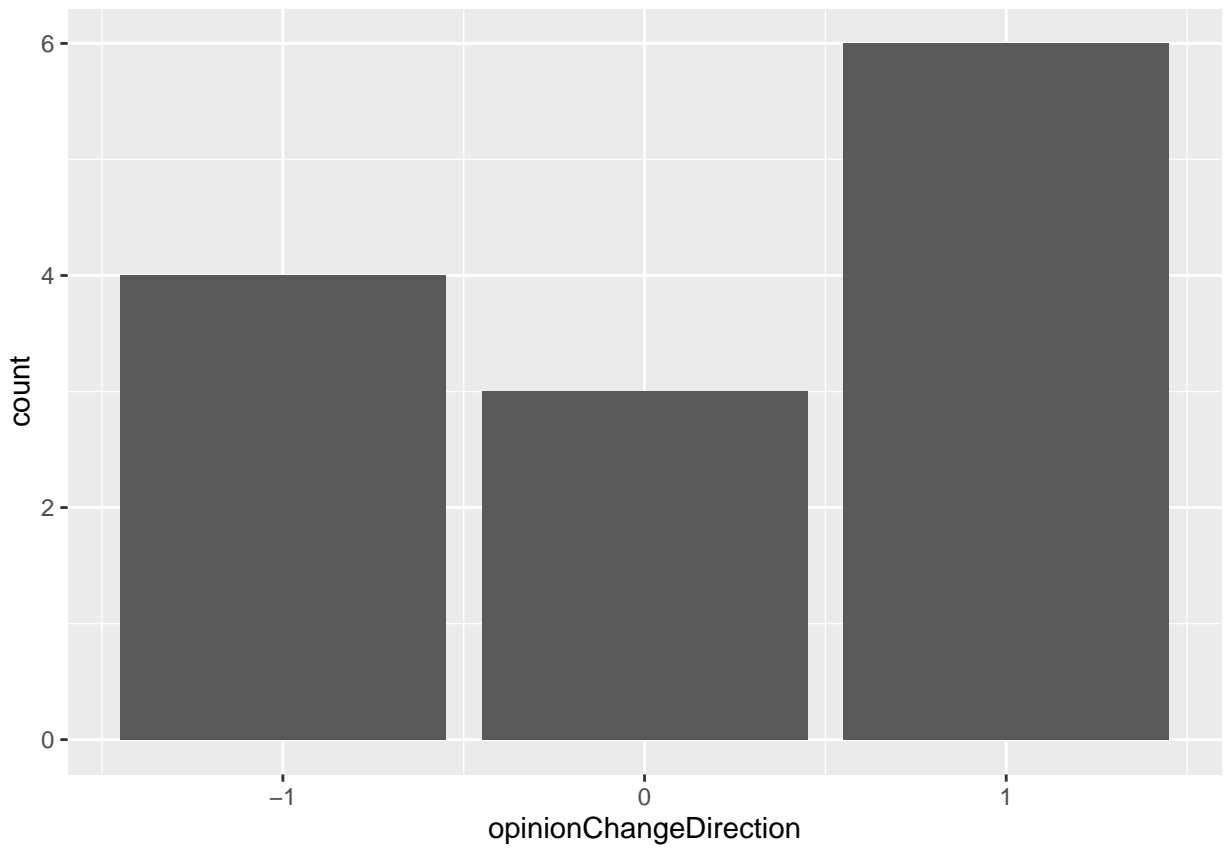
```
ggplot(correct2Data, aes(opinionChange)) + geom_bar() + facet_grid(. ~ visType)
```



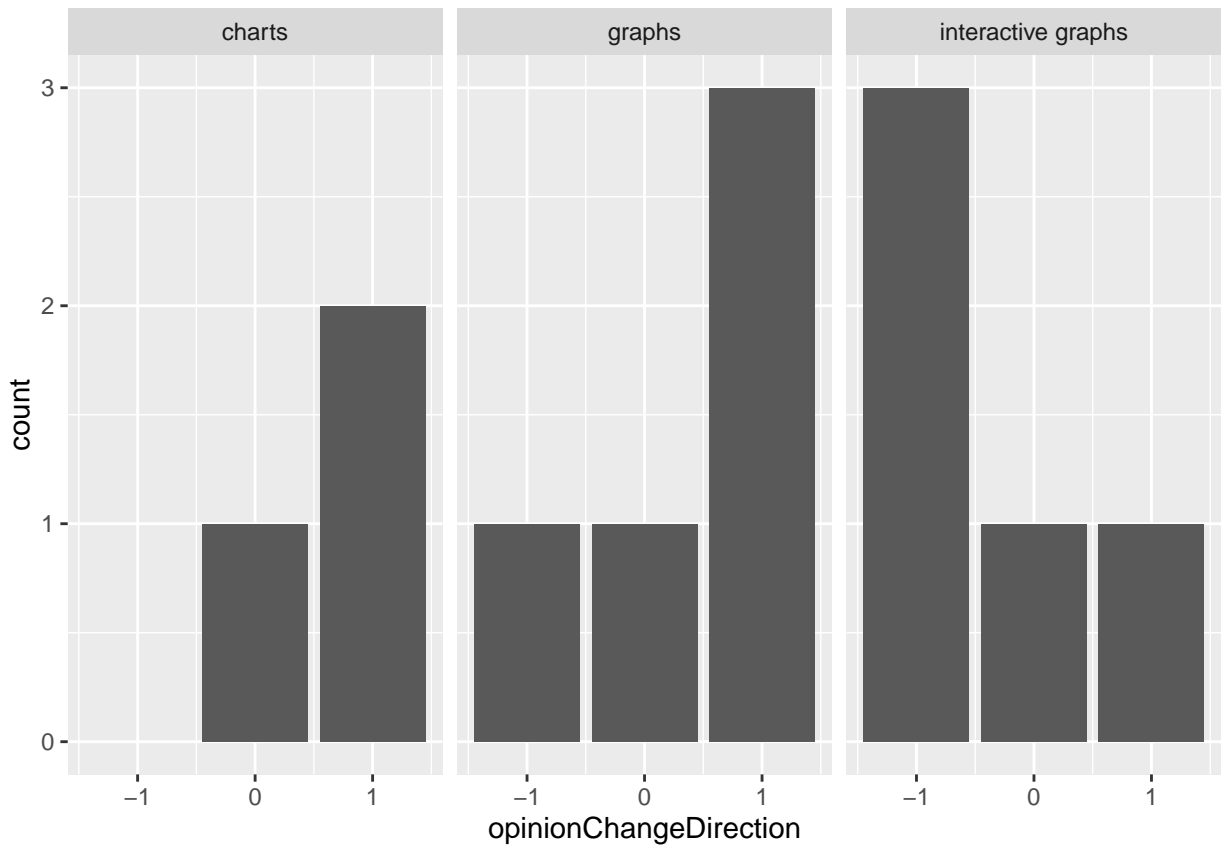
```
ggplot(correct2Data, aes(opinionChange, fill=visType)) + geom_density( alpha=0.5 )
```



```
ggplot(correct2Data, aes(opinionChangeDirection)) + geom_bar()
```

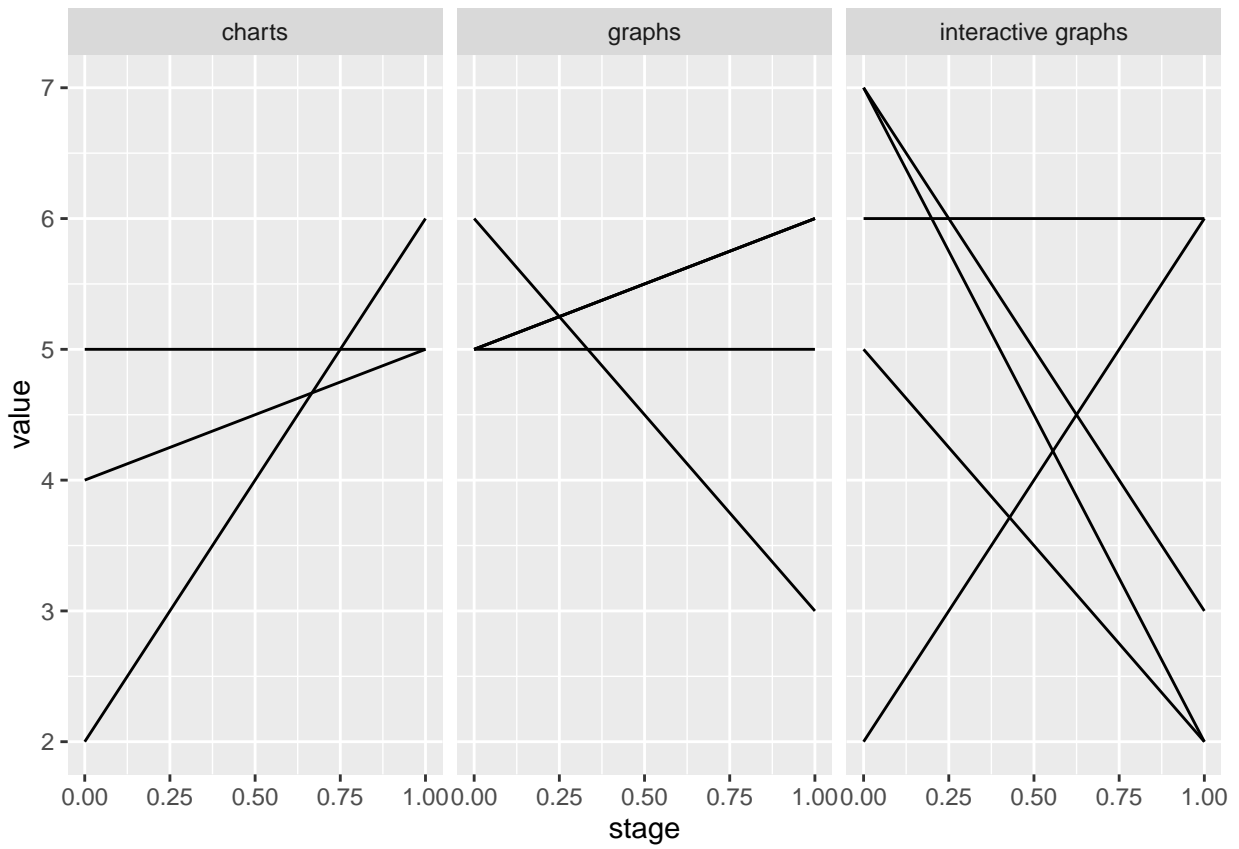


```
ggplot(correct2Data, aes(opinionChangeDirection)) + geom_bar() + facet_grid(. ~ visType)
```



```
#Graphs showing how people change their minds from pre (0) to post (1)
ggplot(correct2Data, aes(stage, value)) + geom_segment(aes(x = 0, y = prevalence, xend = 1, yend = post))
```





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

