Phone models used by completed participants
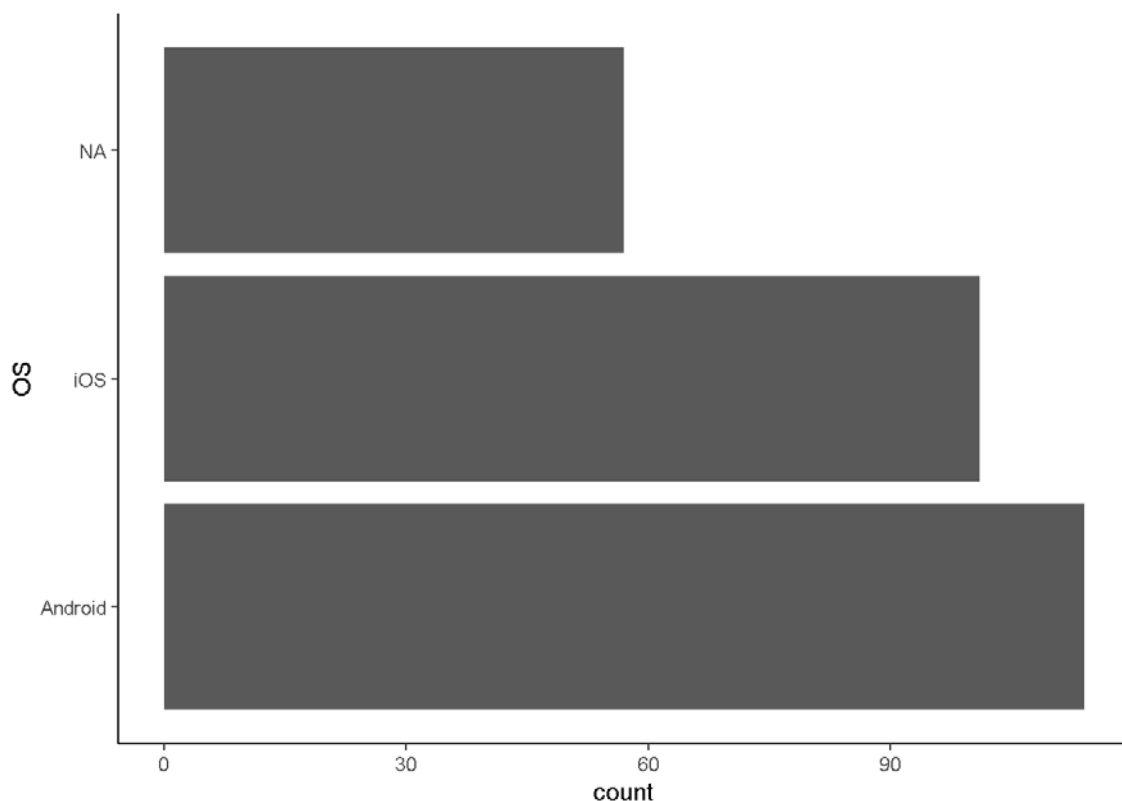
OS distribution

The general OS distribution was slightly in favor of Android (42% to 37%); and this does not account for participants who were ported from Android to iPhone (about 19 users).

Phone data was not collected for about 21% of the 272 consented participants.

```
tabyl(phone_models$OS)
```

```
##   phone_models$OS    n    percent  valid_percent
##          Android  114  0.4191176      0.5302326
##              iOS  101  0.3713235      0.4697674
##             <NA>   57  0.2095588             NA
```

```
library(ggthemes)
theme_set(theme_classic())
ggplot(data = phone_models , aes(y = OS), stat="count") +
  geom_bar()
```


Phone Manufacturer distribution

However an overwhelming percentage (37%) used iPhones. This does include users who were enrolled using a study iPhone instead of their personal phone so is a slight overestimate. Samsung was the next most frequent model.

```
tabyl(phone_models$make)
```

```
##        phone_models$make   n      percent valid_percent
##                   Alcatel   2  0.007352941    0.009302326
##     Android, type unknown   8  0.029411765    0.037209302
##                BlackBerry   1  0.003676471    0.004651163
##                Flip Phone   1  0.003676471    0.004651163
##              Google Pixel   3  0.011029412    0.013953488
##                       HTC   2  0.007352941    0.009302326
##                    Huawei   1  0.003676471    0.004651163
##                    iPhone 101  0.371323529    0.469767442
##                    Lenovo   1  0.003676471    0.004651163
##                        LG  17  0.062500000    0.079069767
##                  Motorola  10  0.036764706    0.046511628
##                   Samsung  62  0.227941176    0.288372093
##                       ZTE   6  0.022058824    0.027906977
##                      <NA>  57  0.209558824             NA
```

```
library(ggthemes)
theme_set(theme_classic())
ggplot(data = phone_models , aes(y = make), stat="count") +
  geom_bar()
```
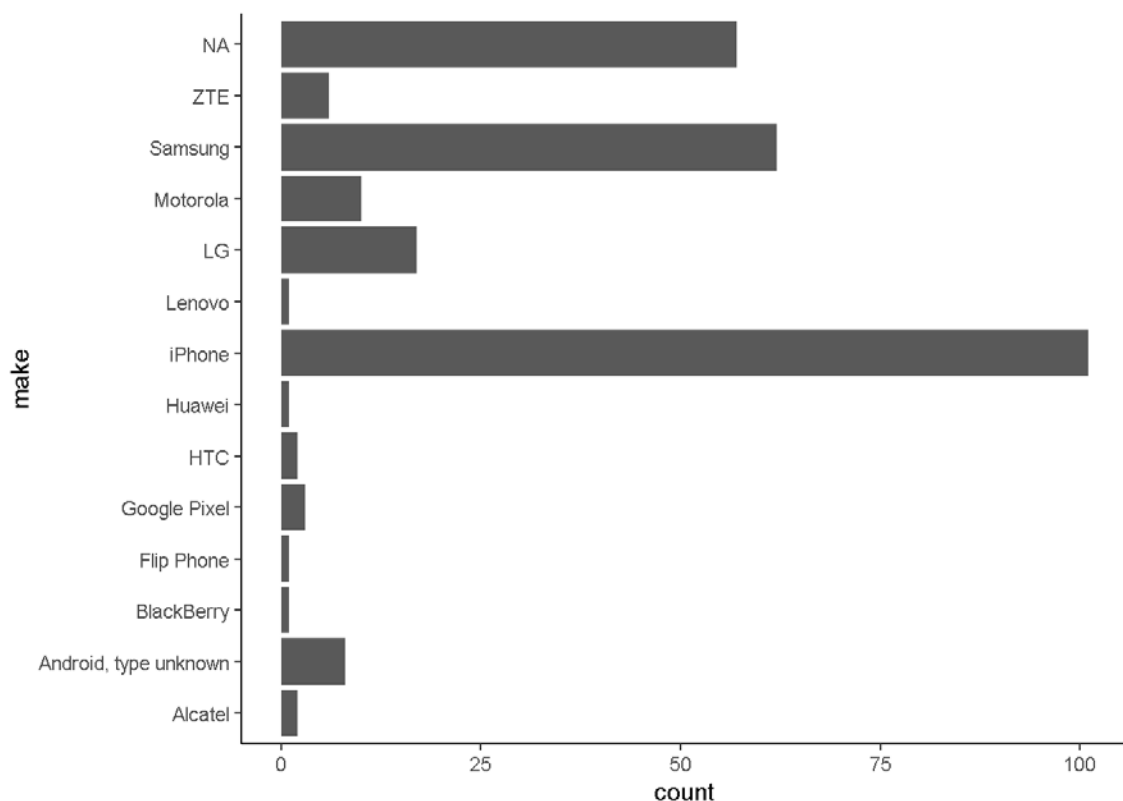

Phone Model distribution

There are a far greater variety of phone models among Android phones vs iPhones. This is visible even just looking at Samsungs: we recorded about 23 flavors of Samsung, vs about 16 flavors of iPhone (this table was not corrected for differences in spelling). This warns we may see some trouble with subtle differences in installation, permissions, and notification controls in Androids for Risk2.

```
options(tibble.print_max = Inf)
phone_models %>% filter(str_detect(model,"Samsung")) %>% select(model) %>% unique()
```

```
## # A tibble: 28 x 1
##    model
##    <chr>
##  1 Samsung Galaxy
##  2 Samsung Galaxy 7
##  3 Samsung Galaxy 8
##  4 Samsung galaxy 7
##  5 Samsung Galaxy 7 Active
##  6 Samsung Galaxy 5
##  7 Samsung Galaxy J3 Emerge
##  8 Samsung Galaxy S6
##  9 Samsung Galaxy S5
## 10 Samsung Galaxy S7
## 11 Samsung Galaxy S4
## 12 Samsung Galaxy S9
## 13 Samsung Note 8
## 14 Samsung Galaxy S8
## 15 Samsung Halo
## 16 Samsung S6
## 17 Samsung S8+
## 18 Samsung S5
## 19 Samsung 5
## 20 Samsung Galaxy 9
## 21 Samsung Edge S7
## 22 Samsung LG
## 23 Samsung Galaxy J3 Aura
## 24 Samsung Galaxy 8 Plus
## 25 Samsung S3
## 26 Samsung Galaxy J7 Refine
## 27 Samsung j3
## 28 Samsung J7
```

```
phone_models %>% filter(str_detect(model,"iPhone")) %>% select(model) %>% unique()
```

```
## # A tibble: 23 x 1
##    model
##    <chr>
##  1 Study iPhone
##  2 iPhone 7
##  3 iPhone 5
##  4 iPhone
##  5 iPhone 6
##  6 iPhone 8
##  7 iPhone 5C
##  8 iPhone 7S
##  9 iPhone 7+
## 10 iPhone 6s+
## 11 iPhone 5 SE
## 12 iPhone X
## 13 iPhone 6S
## 14 iPhone 8s
## 15 iPhone 8+
## 16 iPhone 6+
## 17 iPhone 6s
## 18 iPhone 6 +
## 19 iPhone 6 (?)
## 20 iPhone 6 or 7
## 21 iPhone SE
## 22 iPhone 5S
## 23 iPhone 4
```

```
options(tibble.print_max = 10)
```

Carrier distribution

Unfortunately carrier (cell provider) was not collected for a significant number of consented participants (55%).

For those that we did collect (N=95 out of 272 consented), 58% used US Cellular (33%) or Verizon (25%); another 16% used AT&T. This helpfully gives us some carriers that were not on our list for Risk2.

```
carriers <- phone_models %>% filter(!is.na(carrier))

tabyl(carriers$carrier)
```

```
##    carriers$carrier  n    percent
##                AT&T 15 0.15789474
##               Boost  2 0.02105263
##    Consumer Cellular  1 0.01052632
##             Cricket  3 0.03157895
##            GoogleFi  1 0.01052632
##            MetroPCS  1 0.01052632
##             prepaid  2 0.02105263
##      Qlink Wireless  2 0.02105263
##           SmartTalk  1 0.01052632
##              Sprint  6 0.06315789
##            T-Mobile  3 0.03157895
##                 TDS  1 0.01052632
##           Tracphone  1 0.01052632
##         US Cellular 31 0.32631579
##             Verizon 24 0.25263158
##       Virgin Mobile  1 0.01052632
```

```
library(ggthemes)
theme_set(theme_classic())
ggplot(data = carriers , aes(y = carrier), stat="count") +
  geom_bar()
```

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