

Lead IQ Report

Sarah Bird

2022-10-09

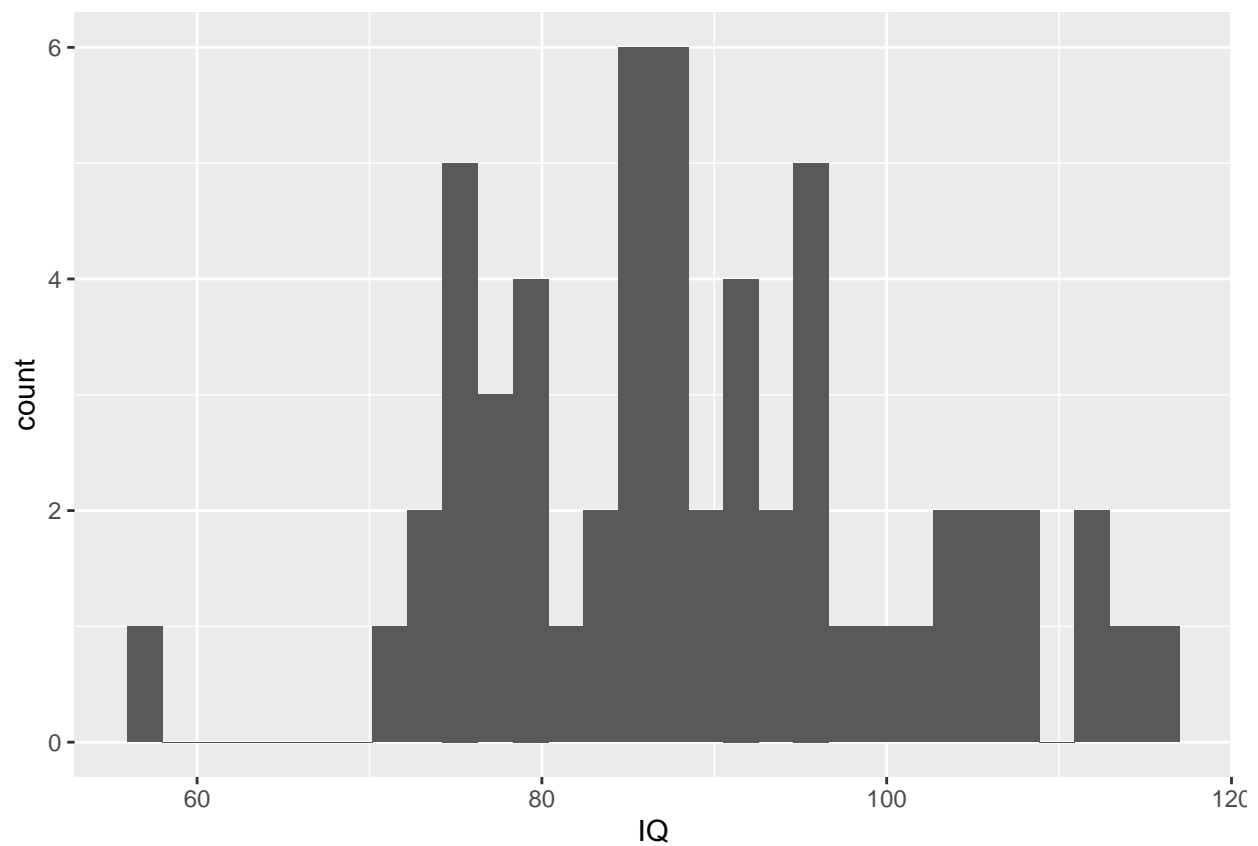
First we must read in the data.

```
data <- read.csv("lead-iq-01.csv")
dataNear <- data %>% filter(Smelter == "Near")
dataFar <- data %>% filter(Smelter == "Far")
```

Now we can use this data to create a graph showing IQ levels by location status

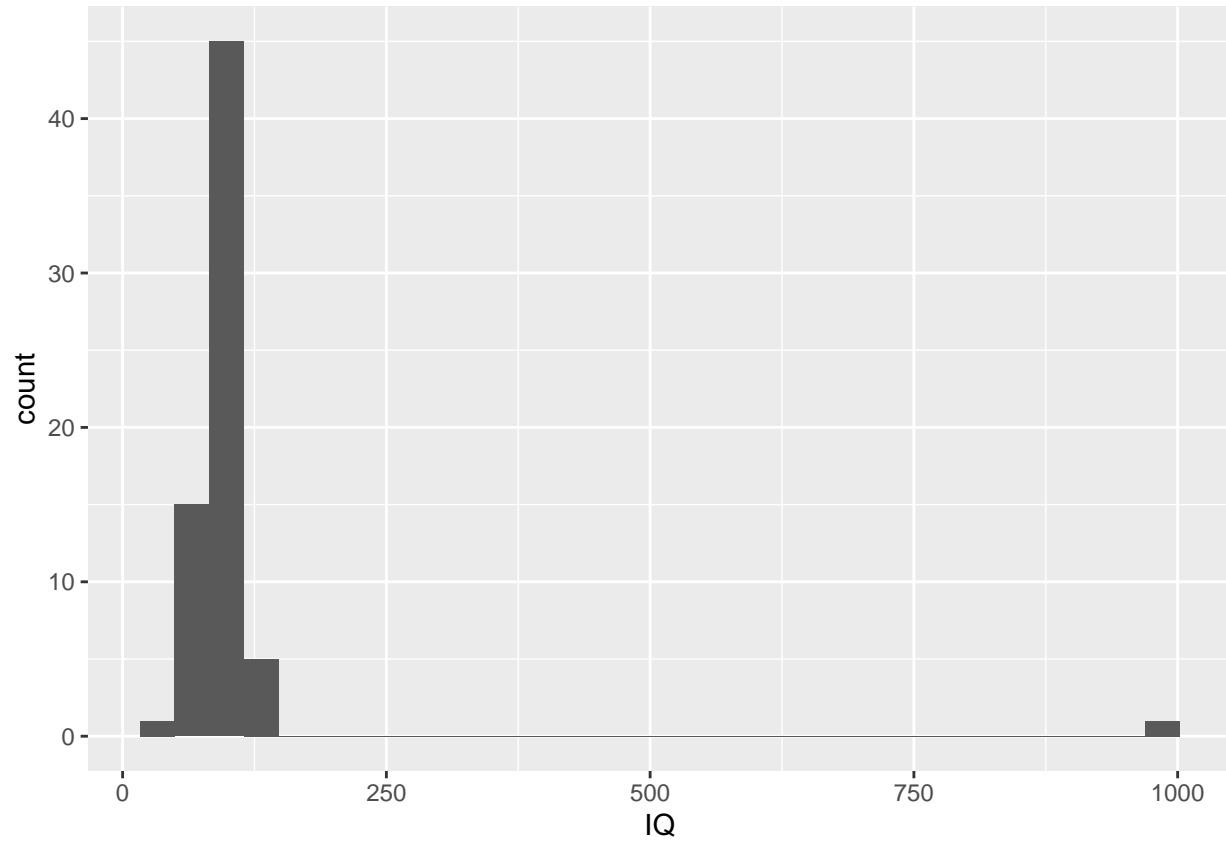
```
ggplot(data=dataNear, aes(x=IQ)) + geom_histogram()
```

```
## 'stat_bin()' using 'bins = 30'. Pick better value with 'binwidth'.
```



```
ggplot(data=dataFar, aes(x=IQ)) + geom_histogram()
```

```
## 'stat_bin()' using 'bins = 30'. Pick better value with 'binwidth'.
```



Let's view all of the observations of IQ in the near

```
tableInfo <- matrix( data = c(mean(dataNear$IQ), mean(dataFar$IQ), sd(dataNear$IQ), sd(dataFar$IQ)), nrow = 2, ncol = 2, byrow = TRUE)
colnames(tableInfo) <- c("Near", "Far")
rownames(tableInfo) <- c("Mean", "SD")
kable(tableInfo)
```

	Near	Far
Mean	89.19298	106.1194
SD	12.17497	111.8791

Thus we can see that the mean of the near variable is 89.1929825 while the mean of the far variable is 106.119403.