

Matched Pairs Lab

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```
library(readr)
Circles930 <- read_csv("~/CSVs/Circles930.csv")

## Rows: 18 Columns: 4

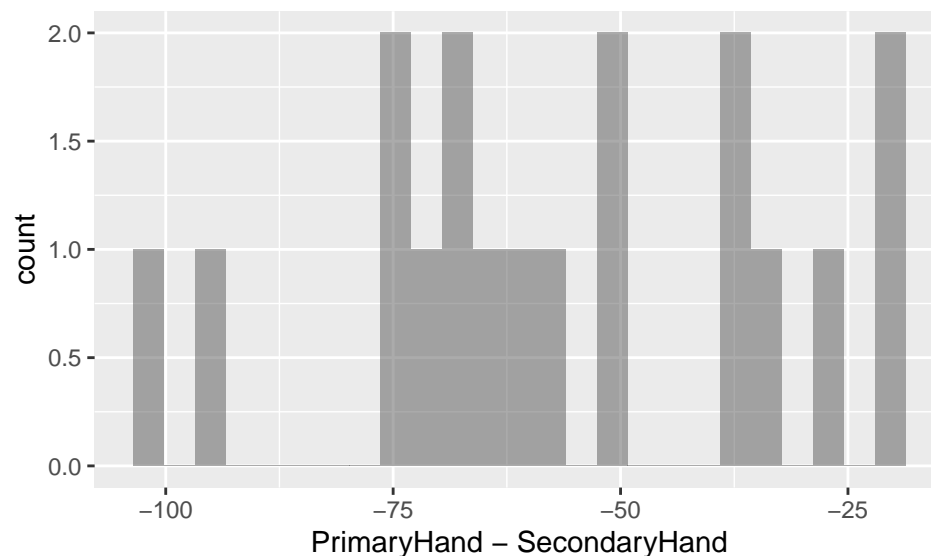
## -- Column specification -----
## Delimiter: ","
## chr (2): PrimaryFirst, Utensil
## dbl (2): PrimaryHand, SecondaryHand

##
## i Use `spec()` to retrieve the full column specification for this data.
## i Specify the column types or set `show_col_types = FALSE` to quiet this message.

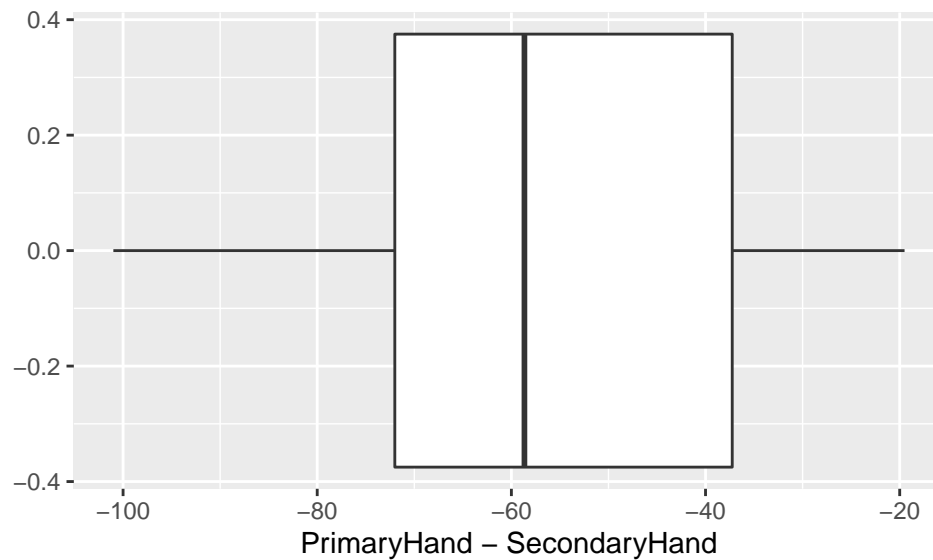
head(Circles930)
```

```
## # A tibble: 6 x 4
##   PrimaryHand SecondaryHand PrimaryFirst Utensil
##   <dbl>         <dbl> <chr>      <chr>
## 1      54         150 First      Pencil
## 2      54         120 First      Pencil
## 3     31.3        52.3 First      Pencil
## 4     28.5         48 First      Pencil
## 5     53.2        79.5 First      Pencil
## 6      42         102 First      Pencil
```

```
gf_histogram(~PrimaryHand - SecondaryHand, data=Circles930)
```



```
gf_boxplot(~PrimaryHand - SecondaryHand, data=Circles930)
```



```
favstats(~PrimaryHand-SecondaryHand, data=Circles930)
```

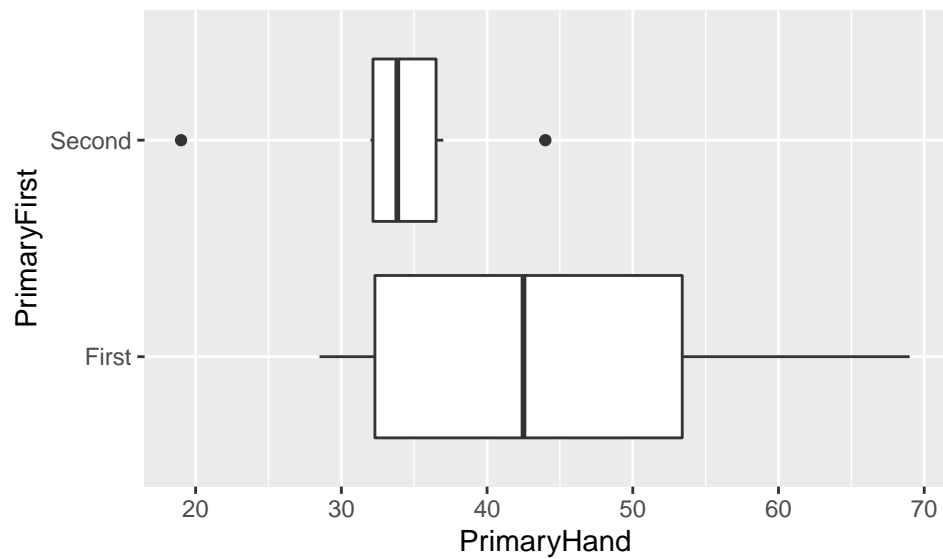
```
##      min      Q1  median      Q3      max      mean      sd  n missing
##    -101 -72.0075 -58.655 -37.25 -19.5 -56.53389 23.90441 18      0
```

```
t.test(~PrimaryHand-SecondaryHand, data=Circles930, alternative="less")
```

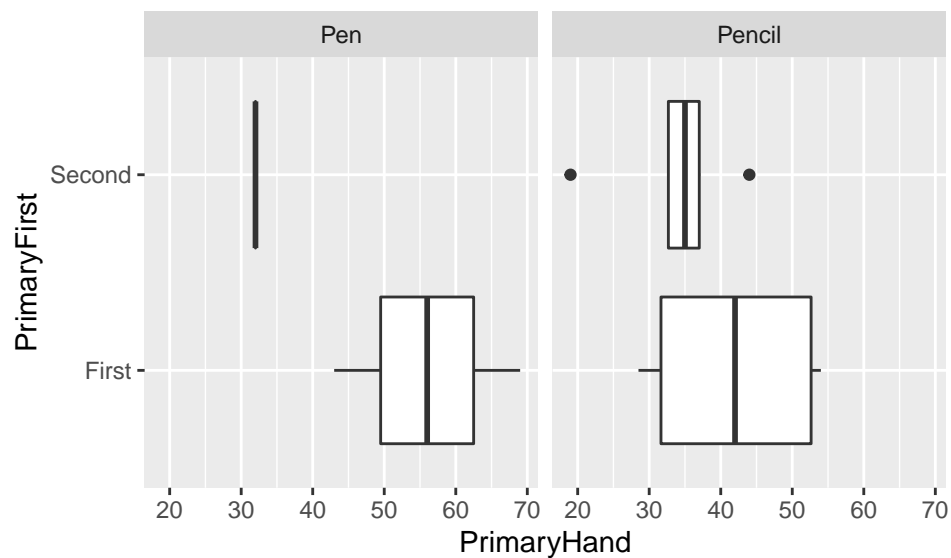
```
##
## One Sample t-test
##
## data: PrimaryHand - SecondaryHand
## t = -10.034, df = 17, p-value = 7.367e-09
## alternative hypothesis: true mean is less than 0
## 95 percent confidence interval:
##      -Inf -46.73238
## sample estimates:
## mean of x
## -56.53389
```

```
# Just for fun
```

```
gf_boxplot(PrimaryFirst~PrimaryHand, data=Circles930)
```



```
gf_boxplot(PrimaryFirst~PrimaryHand|Utensil, data=Circles930)
```



```
favstats(PrimaryHand~Utensil, data=Circles930)
```

##	Utensil	min	Q1	median	Q3	max	mean	sd	n	missing
## 1	Pen	32	37.500	43	56.000	69	48.00000	19.00000	3	0
## 2	Pencil	19	31.975	37	47.485	54	39.11467	10.62556	15	0

```
gf_boxplot(Utensil~PrimaryHand, data=Circles930)
```

