

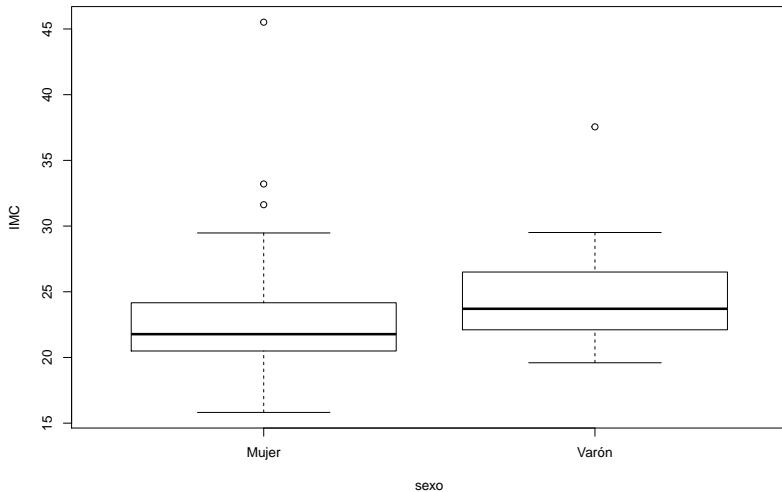
comparamedias_pwp_ Podología

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17/5/2020

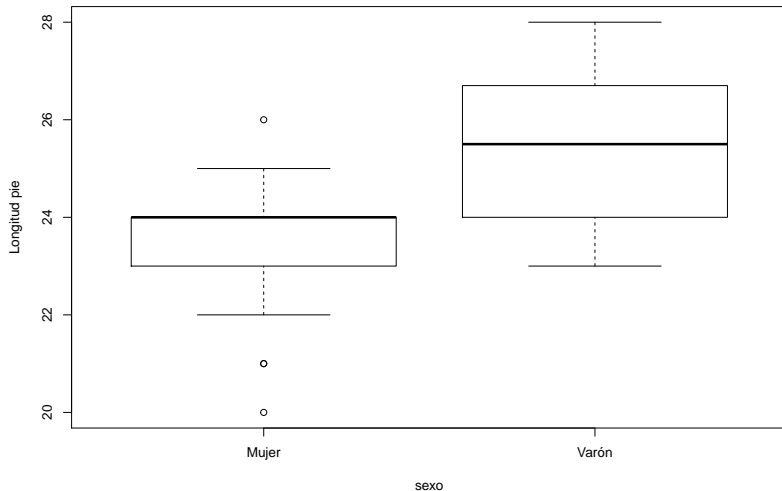
¿Son diferentes?

Respecto a su estructura corporal

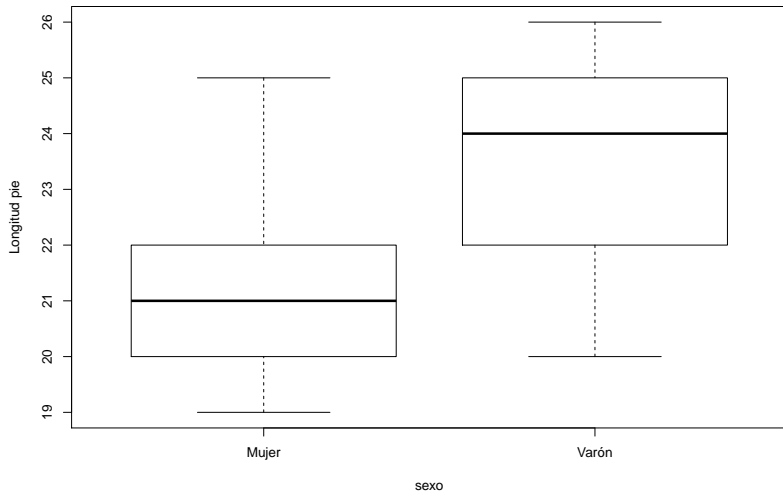


¿Son diferentes? (2)

Con respecto a las características de sus pies



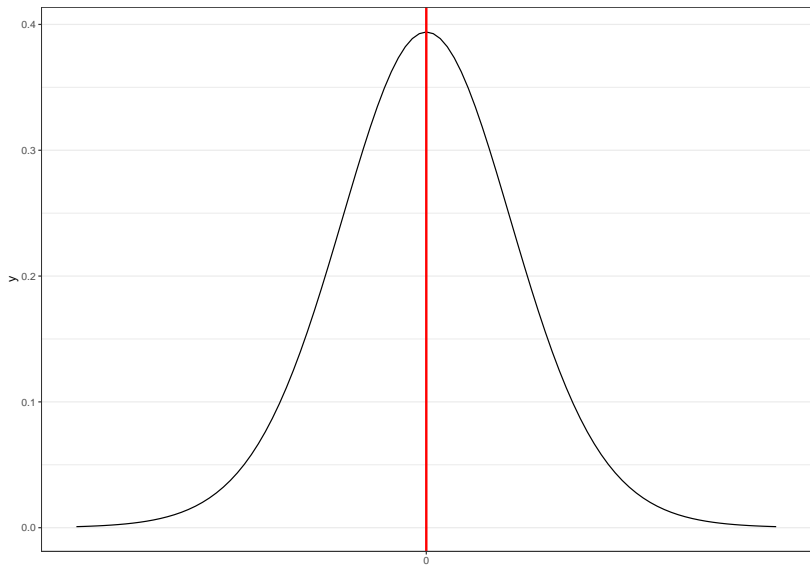
¿Son diferentes? (2)



Hipótesis nula

$$H_0 : \mu_A = \mu_B$$

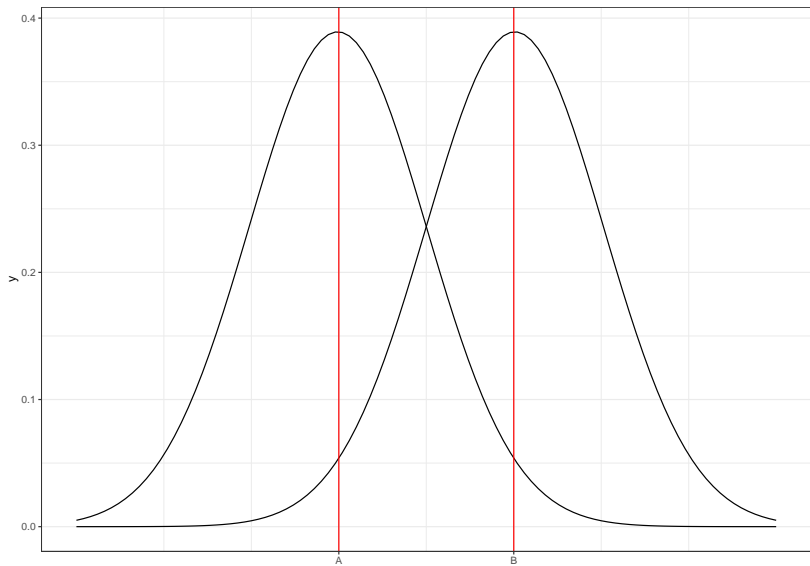
$$H_0 : \mu_A - \mu_B = 0$$



Hipótesis alternativa

$$H_1 : \mu_A \neq \mu_B$$

$$H_1 : \mu_A - \mu_B \neq 0$$



Estadístico del test

$$t_{exp} = \frac{\bar{x}_A - \bar{x}_B}{E.T.(\bar{x}_A - \bar{x}_B)}$$

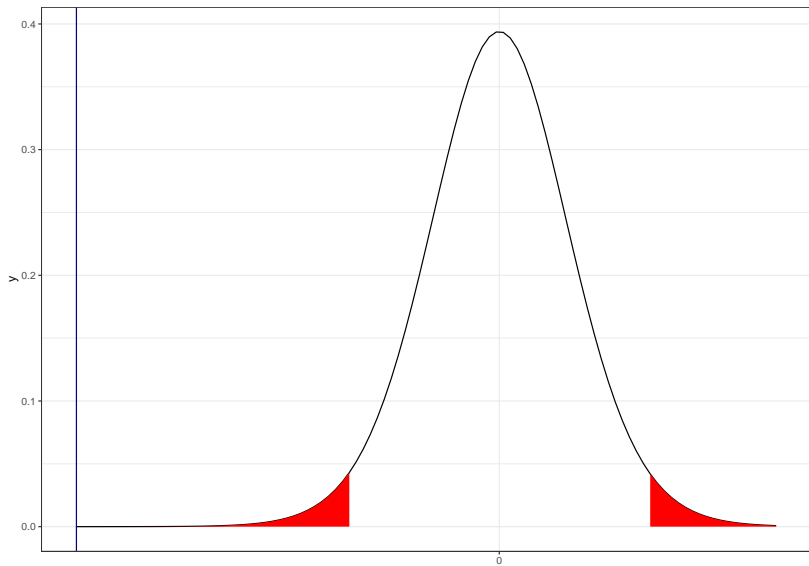
$$t_{exp} = \frac{\bar{x}_A - \bar{x}_B}{\sqrt{s_A/n_A - s_B/n_B}}$$

Orden de R

```
t.test(ancho.pie~sexo, alternative='two.sided', conf.level=0.95,  
data=pies_1920)
```

Resultado del test bilateral

```
##  
## Two Sample t-test  
##  
## data: ancho.pie by sexo  
## t = -6.1087, df = 51, p-value = 1.385e-07  
## alternative hypothesis: true difference in means is not  
## 95 percent confidence interval:  
## -3.399480 -1.717736  
## sample estimates:  
## mean in group Mujer mean in group Varón  
## 21.01282 23.57143
```



Resultado del test unilateral

```
##
```

```
##  Welch Two Sample t-test
```

```
##
```

```
## data:  ancho.pie by sexo
```

```
## t = -5.4144, df = 18.915, p-value = 1.613e-05
```

```
## alternative hypothesis: true difference in means is less
```

```
## 95 percent confidence interval:
```

```
##          -Inf -1.741304
```

```
## sample estimates:
```

```
## mean in group Mujer mean in group Varón
```

```
##          21.01282          23.57143
```

