Tratamiento

Julio Ladron de Guevara

2023-03-13

This function is used when we want to compare a health measurement of a group of patients, after and before a treatment. To do so we need the ggplot2 library. The function variables are dataset, before, after and two colours.

```
options(repos = c(CRAN = "https://cran.rstudio.com"))

install.packages("carData")
```

```
## package 'carData' successfully unpacked and MD5 sums checked
##
## The downloaded binary packages are in
##  C:\Users\julio\AppData\Local\Temp\RtmpcVFjTg\downloaded_packages
```

```
install.packages("prettyR")
```

```
## package 'prettyR' successfully unpacked and MD5 sums checked
##
## The downloaded binary packages are in
##  C:\Users\julio\AppData\Local\Temp\RtmpcVFjTg\downloaded_packages
```

```
install.packages('latexpdf', repos= "http://cran.us.r-project.org")
```

```
## package 'latexpdf' successfully unpacked and MD5 sums checked
##
## The downloaded binary packages are in
##  C:\Users\julio\AppData\Local\Temp\RtmpcVFjTg\downloaded_packages
```

```
install.packages('tinytex', repos= "http://cran.us.r-project.org")
```

```
## package 'tinytex' successfully unpacked and MD5 sums checked
##
## The downloaded binary packages are in
##  C:\Users\julio\AppData\Local\Temp\RtmpcVFjTg\downloaded_packages
```

```
library(ggplot2)

tratamiento <- function(dataset, antes, despues, color1, color2){
  # Calcular la diferencia entre las variables "antes" y "después"
```

```
  dataset$diferencia <- dataset[[despues]] - dataset[[antes]]

  # Crear el gráfico de barras con escala de color
  ggplot(data = dataset, aes(x = rownames(dataset),
                             y = diferencia, fill = diferencia)) +
    geom_bar(stat = "identity") +
    xlab("Categoría") +
    ylab("Diferencia") +
    ggtitle("Diferencia de Salud en los Tratamientos") +
    scale_fill_gradient(low = color1, high = color2) +
    theme(axis.text.x = element_text(angle = 45, hjust = 1))
}
```

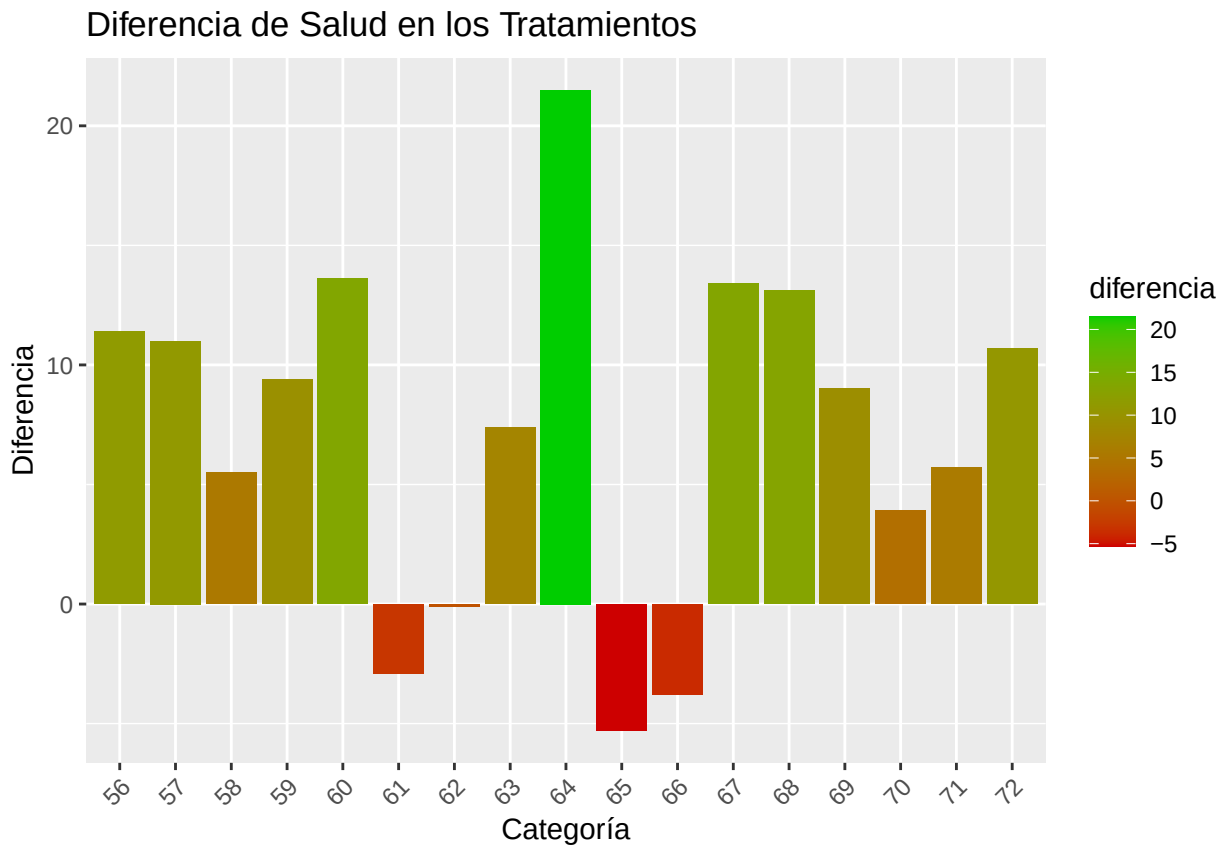
```
library(MASS)

data("anorexia")

data = anorexia

anorexia_FT = subset (anorexia,
                      subset = Treat == "FT")

tratamiento(anorexia_FT, "Prewt", "Postwt","red3","green3")
```



```
tratamiento(anorexia_FT, "Prewt", "Postwt","lightblue2","red3")
```