Dados Regular

2024-05-07

```
############ Pacotes que irei utilizar ##################
library(ggplot2)
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v dplyr     1.1.4     v readr     2.1.5
## v forcats   1.0.0     v stringr   1.5.1
## v lubridate 1.9.3     v tibble    3.2.1
## v purrr     1.0.2     v tidyr     1.3.1
## -- Conflicts ---------------------------------------- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become error
```

```
library(patchwork)
library(ggplot2)
library(dplyr)
library(betareg)
library(gamlss)
```

```
## Loading required package: splines
## Loading required package: gamlss.data
##
## Attaching package: 'gamlss.data'
##
## The following object is masked from 'package:datasets':
##
##     sleep
##
## Loading required package: gamlss.dist
## Loading required package: nlme
##
## Attaching package: 'nlme'
##
## The following object is masked from 'package:dplyr':
##
##     collapse
##
## Loading required package: parallel
##  **********   GAMLSS Version 5.4-22  **********
## For more on GAMLSS look at https://www.gamlss.com/
## Type gamlssNews() to see new features/changes/bug fixes.
```

```
library(car)
```

```
## Loading required package: carData
##
```

```
## Attaching package: 'car'
##
## The following object is masked from 'package:dplyr':
##
##     recode
##
## The following object is masked from 'package:purrr':
##
##     some
```

```
library(lmtest)
```

```
## Loading required package: zoo
##
## Attaching package: 'zoo'
##
## The following objects are masked from 'package:base':
##
##     as.Date, as.Date.numeric
```

```
######### Leitura dos dados ########################
dados_r <- readxl::read_xlsx("Temporada_NBA.xlsx", sheet = "Regular") #Temporada regular

dados_regular <- dados_r %>% mutate(Posicao = as.integer(Posicao)) %>%
  mutate(TEAM = as.factor(TEAM)) %>%
  mutate(W = as.integer(W)) %>%
  mutate(L = as.integer(L)) %>%
  mutate(WINP = as.double(WINP)) %>%
  mutate(MIN = as.double(MIN)) %>%
  mutate(PTS = as.double(PTS)) %>%
  mutate(FGM = as.double(FGM)) %>%
  mutate(FGA = as.double(FGA)) %>%
  mutate(FGP = as.double(FGP)) %>%
  mutate(`3PM` = as.double(`3PM`)) %>%
  mutate(`3PA` = as.double(`3PA`)) %>%
  mutate(`3PP` = as.double(`3PP`)) %>%
  mutate(FTM = as.double(FTM)) %>%
  mutate(FTA = as.double(FTA)) %>%
  mutate(FTP = as.double(FTP)) %>%
  mutate(OREB = as.double(OREB)) %>%
  mutate(DREB = as.double(DREB)) %>%
  mutate(REB = as.double(REB)) %>%
  mutate(AST = as.double(AST)) %>%
  mutate(TOV = as.double(TOV)) %>%
  mutate(STL = as.double(STL)) %>%
  mutate(BLK = as.double(BLK)) %>%
  mutate(BLKA = as.double(BLKA)) %>%
  mutate(PF = as.double(PF)) %>%
  mutate(PFD = as.double(PFD)) %>%
  mutate(PlusMinus = as.double(PlusMinus)) %>%
  mutate(Temporada = as.character(Temporada)) %>%
  mutate(Conferencia = as.character(Conferencia)) %>%
  mutate(Numero_temporada = as.factor(Numero_temporada))

######### Dados Regressão ########
```

```r
dados_regressao <- dados_regular %>% dplyr::select(-c(Posicao, GP, W, L, MIN, Temporada, Conferencia))
dados_regressao
```

```
## # A tibble: 450 x 24
##    TEAM   WINP   PTS   FGM   FGA   FGP `3PM` `3PA` `3PP`   FTM   FTA   FTP  OREB
##    <fct> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl>
##  1 Milw~ 0.707  117.  42.7  90.4  47.3  14.8  40.3  36.8  16.6  22.4  74.3  11.1
##  2 Bost~ 0.695  118.  42.2  88.8  47.5  16    42.6  37.7  17.5  21.6  81.2   9.7
##  3 Phil~ 0.659  115.  40.8  83.8  48.7  12.6  32.6  38.7  21    25.1  83.5   8.7
##  4 Denv~ 0.646  116.  43.6  86.4  50.4  11.8  31.2  37.9  16.8  22.4  75.1  10.1
##  5 Clev~ 0.622  112.  41.6  85.2  48.8  11.6  31.6  36.7  17.5  22.5  78     9.7
##  6 Memp~ 0.622  117.  43.7  92.1  47.5  12    34.2  35.1  17.5  23.8  73.3  12
##  7 Sacr~ 0.585  121.  43.6  88.2  49.4  13.8  37.3  36.9  19.8  25.1  79     9.5
##  8 New ~ 0.573  116   42    89.4  47    12.6  35.7  35.4  19.4  25.5  76.1  12.6
##  9 Broo~ 0.549  113.  41.5  85.1  48.7  12.8  33.8  37.8  17.7  22.1  80     8.2
## 10 Phoe~ 0.549  114.  42.1  90.1  46.7  12.2  32.6  37.4  17.2  21.7  79.3  11.8
## # i 440 more rows
## # i 11 more variables: DREB <dbl>, REB <dbl>, AST <dbl>, TOV <dbl>, STL <dbl>,
## #   BLK <dbl>, BLKA <dbl>, PF <dbl>, PFD <dbl>, PlusMinus <dbl>,
## #   Numero_temporada <fct>
```