Dados Playoffs

Rubens Cortelazzi Roncato

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```
############ 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 errors
```

```
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.
```

```r
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
```

```r
library(lmtest)
```

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

```r
######### Leitura dos dados ########################
dados_p <- readxl::read_xlsx("Temporada_NBA.xlsx", sheet = "Playoffs") #Playoffs

dados_playoffs <- dados_p %>% 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))

######## Regressão Linear Playoffs #############

dados_regressaop <- dados_playoffs %>% dplyr::select(-c(Posicao, GP, W, L, MIN, Temporada, Conferencia))
dados_regressaop
```

```
## # A tibble: 240 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 Denv~ 0.8    114.  42.3  86    49.2  11.3  30    37.5  17.7  22.1  80.1  10.1
##  2 Phil~ 0.636  102.  36.7  84    43.7  12.2  33.9  35.9  16.9  19.1  88.6  10
##  3 Miam~ 0.565  108.  39.7  86.8  45.8  12.8  33.7  38    16.1  19.8  81.3   9.2
##  4 Bost~ 0.55   112   40.9  85.5  47.8  14.1  38.7  36.4  16.2  20    81     9.5
##  5 New ~ 0.545  100.  35.3  81.5  43.3   9.5  32.7  29.2  20    26.8  74.6  12.9
##  6 Phoe~ 0.545  114.  43.1  86.8  49.6   9.4  25.8  36.3  18.6  23.4  79.8   9.2
##  7 Los ~ 0.5    112.  41.1  87.1  47.1  10.1  30.3  33.5  20.1  24.8  80.9   9.1
##  8 Gold~ 0.462  113.  41.9  93.6  44.8  14.5  42.5  34    14.8  19.7  75    12.5
##  9 Sacr~ 0.429  114.  41    95.6  42.9  12.1  39.7  30.6  19.6  25.7  76.1  14
## 10 Atla~ 0.333  116.  44    96.3  45.7  14    37.3  37.5  13.8  17    81.4  12.2
## # i 230 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>
```

```
######## Playoffs transformado ######
playoffs_transformado <- dados_regressaop %>%
  mutate(WINP_transformado = (dados_regressaop$WINP*(240 - 1) + 0.5)/240) %>%
  dplyr::select(-WINP)
```