Baltimore Schools Report Card Analyses

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rm(list=ls())  
  
library(tidyverse)

## -- Attaching packages --------------------------------------------------------------------- tidyverse 1.3.0 --

## v ggplot2 3.2.1 v purrr 0.3.3  
## v tibble 2.1.3 v dplyr 0.8.4  
## v tidyr 1.0.2 v stringr 1.4.0  
## v readr 1.3.1 v forcats 0.4.0

## -- Conflicts ------------------------------------------------------------------------ tidyverse\_conflicts() --  
## x dplyr::filter() masks stats::filter()  
## x dplyr::lag() masks stats::lag()

library(summarytools)

## Warning: package 'summarytools' was built under R version 3.6.3

## Registered S3 method overwritten by 'pryr':  
## method from  
## print.bytes Rcpp

## For best results, restart R session and update pander using devtools:: or remotes::install\_github('rapporter/pander')

##   
## Attaching package: 'summarytools'

## The following object is masked from 'package:tibble':  
##   
## view

library(stargazer)

##   
## Please cite as:

## Hlavac, Marek (2018). stargazer: Well-Formatted Regression and Summary Statistics Tables.

## R package version 5.2.2. https://CRAN.R-project.org/package=stargazer

# load data  
load(file="data/analytic.RData")  
  
analytic <- analytic %>% mutate\_at(vars(-schid, -schname, -star\_rating, -points\_earned), function(col\_vec) {  
 as.numeric(recode(col\_vec, "<= 5.0" = "2.5", "< 5.0" = "2.5", ">= 95.0" = "97.5", "> 95.0" = "97.5"))  
})

with(analytic, cor(points\_earned, farms\_per))

## [1] -0.644429

with(analytic, lm(points\_earned ~ farms\_per))

##   
## Call:  
## lm(formula = points\_earned ~ farms\_per)  
##   
## Coefficients:  
## (Intercept) farms\_per   
## 68.8015 -0.4296

with(analytic, stby(farms\_per, star\_rating, descr))

## Descriptive Statistics   
## farms\_per by star\_rating   
## Data Frame: analytic   
## N: 12   
##   
## 1 2 3 4 5  
## ----------------- -------- -------- -------- -------- --------  
## Mean 68.64 64.98 52.77 30.04 23.30  
## Std.Dev 8.67 13.32 13.90 17.29 NaN  
## Min 53.10 36.30 17.00 12.10 23.30  
## Q1 63.55 55.40 44.10 19.60 23.30  
## Median 69.00 65.95 53.10 25.50 23.30  
## Q3 74.25 76.60 62.50 35.85 23.30  
## Max 82.80 85.40 81.30 76.40 23.30  
## MAD 8.08 15.72 13.94 10.60 0.00  
## IQR 9.35 20.98 18.40 14.67 0.00  
## CV 0.13 0.20 0.26 0.58 NaN  
## Skewness -0.09 -0.40 -0.29 1.46 NA  
## SE.Skewness 0.64 0.28 0.31 0.64 0.00  
## Kurtosis -1.03 -0.86 -0.29 1.53 NA  
## N.Valid 12.00 74.00 61.00 12.00 1.00  
## Pct.Valid 100.00 100.00 100.00 100.00 100.00