ICC_kline

kaggle

2/29/2020

```r
#library
  #run this code in case you don't have those packages
  #install.packages( c("readxl", "dplyer", "Hmisc" ) )

library(readxl)
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```r
library(Hmisc)
```

```
## Loading required package: lattice
```

```
## Loading required package: survival
```

```
## Warning: package 'survival' was built under R version 3.6.2
```

```
## Loading required package: Formula
```

```
## Loading required package: ggplot2
```

```
##
## Attaching package: 'Hmisc'
```

```
## The following objects are masked from 'package:dplyr':
##
##     src, summarize
```

```
## The following objects are masked from 'package:base':
##
##     format.pval, units
```

```r
library(tidyr)
library(tibble)
library(knitr)
library(PerformanceAnalytics)
```

```
## Warning: package 'PerformanceAnalytics' was built under R version 3.6.2

## Loading required package: xts

## Warning: package 'xts' was built under R version 3.6.2

## Loading required package: zoo

##
## Attaching package: 'zoo'

## The following objects are masked from 'package:base':
##
##      as.Date, as.Date.numeric

##
## Attaching package: 'xts'

## The following objects are masked from 'package:dplyr':
##
##      first, last

##
## Attaching package: 'PerformanceAnalytics'

## The following object is masked from 'package:graphics':
##
##      legend
```

Item Stats

rowname	mean	sd	n
SCHB_GM	2.20	3.636	20
SCHB_GP	2.65	3.031	20
SCHB_RP	2.60	2.583	20
SCHB_AZ	2.85	3.117	20

rowname	mean	sd	n
PAE_GM	0.50	0.827	20
PAE_GP	0.50	0.889	20
PAE_RP	0.35	0.933	20

rowname	mean	sd	n
PAE_AZ	1.25	1.293	20

| rowname	mean	sd	n
EMS_GM	0.50	0.761	20
EMS_GP	0.90	1.119	20
EMS_RP	0.80	0.834	20
EMS_AZ	1.25	1.743	20

inter-Item correlation matrix

|	SCHB_GM	SCHB_GP	SCHB_RP	SCHB_AZ
SCHB_GM	1.000	0.909	0.838	0.885
SCHB_GP	0.909	1.000	0.915	0.852
SCHB_RP	0.838	0.915	1.000	0.750
SCHB_AZ	0.885	0.852	0.750	1.000

	EMS_GM	EMS_GP	EMS_RP	EMS_AZ
EMS_GM	1.000	0.742	0.581	0.575
EMS_GP	0.742	1.000	0.654	0.580
EMS_RP	0.581	0.654	1.000	0.869
EMS_AZ	0.575	0.580	0.869	1.000

	PAE_GM	PAE_GP	PAE_RP	PAE_AZ
PAE_GM	1.000	0.931	0.784	0.615
PAE_GP	0.931	1.000	0.730	0.573
PAE_RP	0.784	0.730	1.000	0.316
PAE_AZ	0.615	0.573	0.316	1.000

```
k20.sum %>%
  select( starts_with("SCHB")) %>%
  chart.Correlation(histogram=TRUE, pch=19)
```
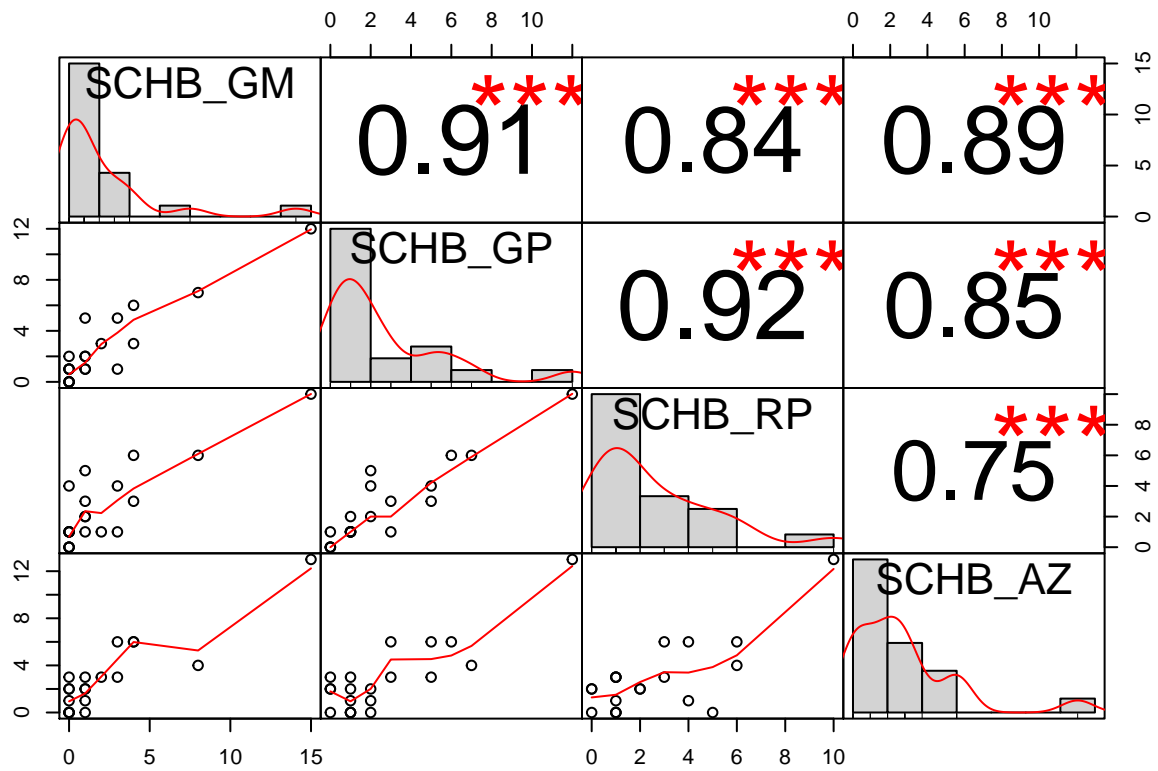
```
k20.sum %>%
  select( starts_with("EMS")) %>%
  chart.Correlation(histogram=TRUE, pch=19)
```
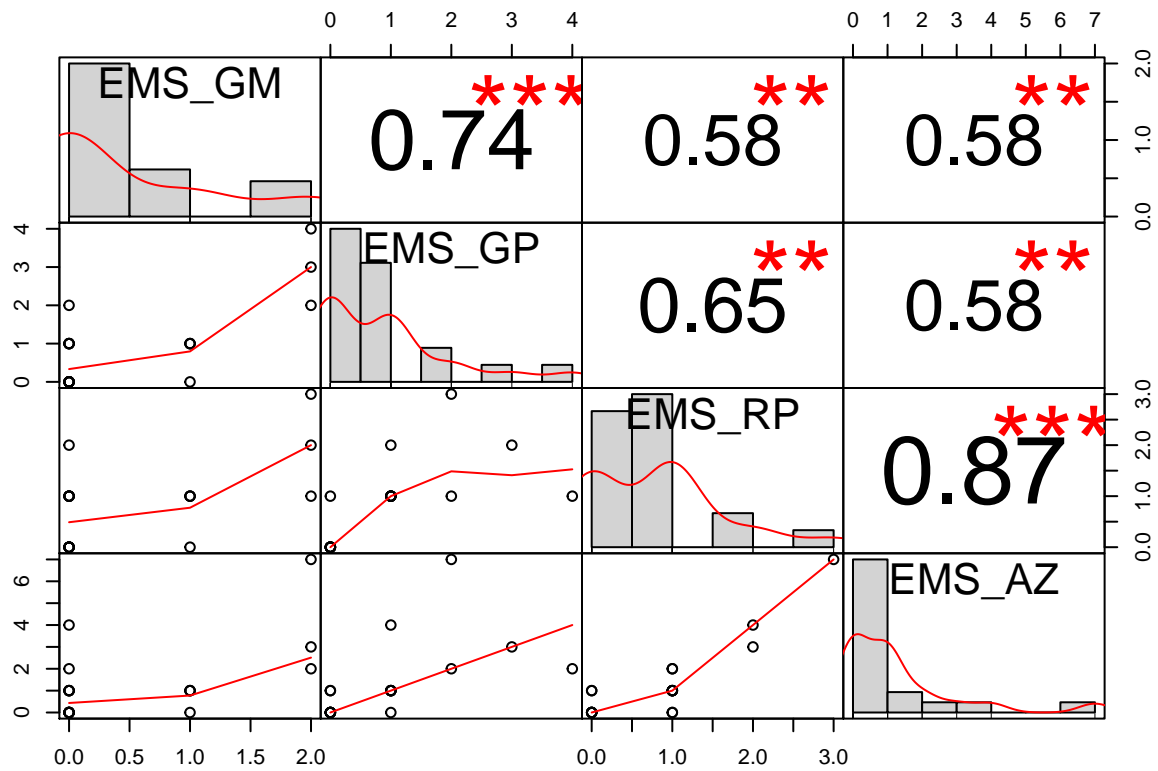
```
k20.sum %>%
  select( starts_with("PAE")) %>%
  chart.Correlation(histogram=TRUE, pch=19)
```