A radar chart, additionally called a spider plot is used to visualize the values over more than one quantitative variable.

A radar chart is an informative graphical tool in which multiple variables and compared on a two-dimensional space.

In this tutorial we are going to describes how to create a radar chart in R, using ggradar R packages.

Is it possible to compare multiple variables in one place instead of a table?”

Web, polar, star, radar, or spider charts, these diagrams help us to convert complex piece of information in a simpler manner.

In this article you will be familiar how to create spider graphs in R.

Basically, a spider chart can be used in any situation when you need to compare multivariable information in a 2D plane.

**Elements**

A spider plot is easy to interpret and it contains following elements.

**Center point:** Core of a spider chart from which different axes are drawn.

**Axis:** Each axis indicates a variable

**Grids:** When axes are connected in a spider chart, it divides the complete graph into distinct grids that assist us to constitute facts in a higher way.

**Values:** Once the graph is drawn, we constitute numerous values on every axis and plot the chart for each access through allocating extraordinary colors.

**Getting Data**

data<- data.frame(

row.names = c("A", "B", "C"),

Thickness = c(7.9, 3.9, 9.4),

Apperance = c(10, 7, 5),

Spredability = c(3.7, 6, 2.5),

Likeability = c(8.7, 6, 4)

)

data

In this data frame contains 3 observations with 4 variables.

Thickness Apperance Spredability Likeability

A 7.9 10 3.7 8.7

B 3.9 7 6.0 6.0

C 9.4 5 2.5 4.0

Let’s Load basic packages in R,

library(tidyverse)

#devtools::install\_github("ricardo-bion/ggradar")

library("ggradar")

df<-data %>% rownames\_to\_column("group")

df

Output:-

group Thickness Apperance Spredability Likeability

1 A 7.9 10 3.7 8.7

2 B 3.9 7 6.0 6.0

3 C 9.4 5 2.5 4.0

ggradar(

df,

values.radar = c("0", "5", "10"),

grid.min = 0, grid.mid = 5, grid.max = 10,

# Polygons

group.line.width = 1,

group.point.size = 3,

group.colours = c("#00AFBB", "#E7B800", "#FC4E07"),

background.circle.colour = "white",

gridline.mid.colour = "grey",

legend.position = "bottom"

)

