

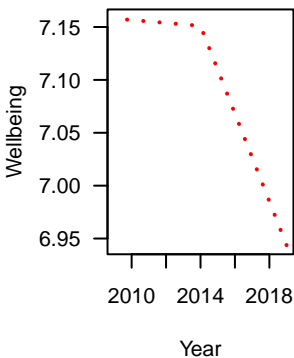
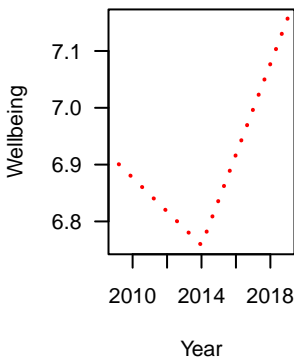
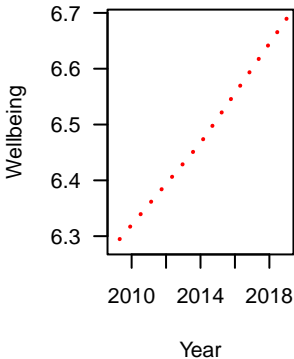
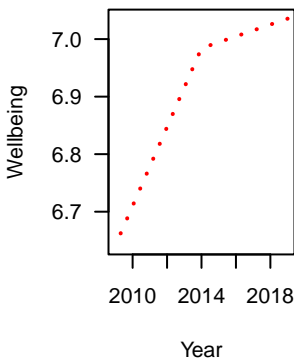
Results of Data Analysis

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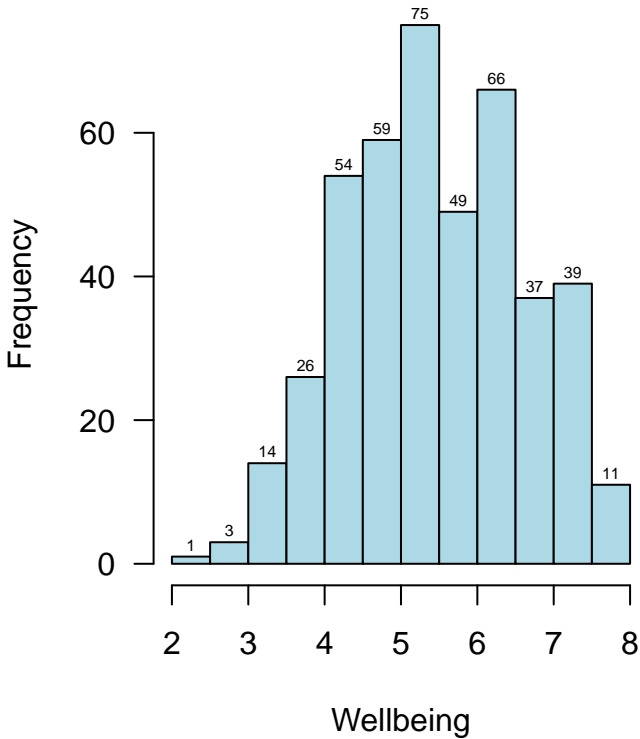
> names(HP_data_set) #Review dataframe names
[1] "HPI_rank"      "Year"          "Country"        "Continent"      "Pop"           "Life_Expectancy"
[7] "Wellbeing"     "Ecolog_Footprint" "HPI"            "Biocapacity"    "GDP_per_capita"
> Str(HP_data_set) #Review classes
Error in Str(HP_data_set) : could not find function "Str"
> str(HP_data_set) #Review classes
tibble [456 x 11] (S3: tbl_df/tbl/data.frame)
 $ HPI_rank      : num [1:456] 1 2 3 4 5 6 7 8 9 10 ...
 $ Year          : num [1:456] 2019 2019 2019 2019 2019 ...
 $ Country       : chr [1:456] "Costa Rica" "Vanuatu" "Colombia" "Switzerland" ...
 $ Continent     : num [1:456] 1 8 1 3 1 1 1 1 1 1 ...
 $ Pop          : num [1:456] 5048 300 50339 8591 17374 ...
 $ Life_Expectancy : num [1:456] 80.3 70.5 77.3 83.8 77 78.5 74.5 74.3 75.3 77.9 ...
 $ Wellbeing     : num [1:456] 7 6.96 6.35 7.69 5.81 ...
 $ Ecolog_Footprint: num [1:456] 2.65 1.62 1.9 4.14 1.51 ...
 $ HPI           : num [1:456] 62.1 60.4 60.2 60.1 58.8 ...
 $ Biocapacity   : num [1:456] 1.56 1.56 1.56 1.56 1.56 1.56 1.56 1.56 1.56 1.56 ...
 $ GDP_per_capita : chr [1:456] "20296.82150273478" "3153.0151677584245" "14624.971296534655"
"68390.712985453865" ...
> countna <- function(x){sum(is.na(x))} #Define count the number of nas function
> sapply(HP_data_set, countna) #Count number of nas within dataframe
      HPI_rank      Year      Country      Continent      Pop Life_Expectancy      Wellbeing
      32          0          0          0          0          22
Ecolog_Footprint      HPI      Biocapacity GDP_per_capita
      11          32          0          154
> summary(HP_data_set) #Summarize dataframe components
      HPI_rank      Year      Country      Continent      Pop      Life_Expectancy Wellbeing
Min. : 1.00 Min. :2009 Length:456 Min. :1.000 Min. : 230.2 Min. :44.10 Min. :2.375
1st Qu.: 36.00 1st Qu.:2009 Class :character 1st Qu.:3.000 1st Qu.: 4709.4 1st Qu.:66.10 1st Qu.:4.574
Median : 71.00 Median :2014 Mode :character Median :5.000 Median : 10646.6 Median :73.75 Median :5.430
Mean : 71.43 Mean :2014 Mean :4.717 Mean : 47040.2 Mean :71.56 Mean :5.475
3rd Qu.:106.25 3rd Qu.:2019 3rd Qu.:7.000 3rd Qu.: 33885.9 3rd Qu.:77.83 3rd Qu.:6.332
Max. :152.00 Max. :2019 Max. :8.000 Max. :1433783.7 Max. :84.90 Max. :7.780
NA's :32 NA's :22
Ecolog_Footprint      HPI      Biocapacity GDP_per_capita
Min. : 0.5157 Min. :23.94 Min. :1.560 Length:456
1st Qu.: 1.4201 1st Qu.:38.05 1st Qu.:1.560 Class :character
Median : 2.4460 Median :43.84 Median :1.630 Mode :character
Mean : 3.2805 Mean :43.66 Mean :1.627 2
3rd Qu.: 4.5935 3rd Qu.:49.99 3rd Qu.:1.690
Max. :15.4588 Max. :69.74 Max. :1.690

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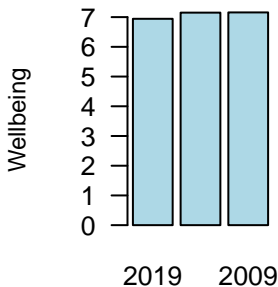
Results of Graphics Code

USA**UK****France****Germany**

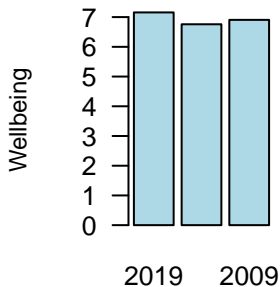
All Country Wellbeing (2009, 2014, 2019)



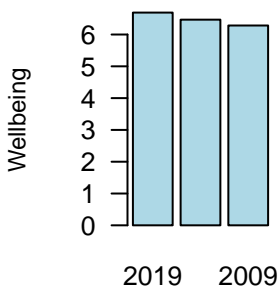
USA



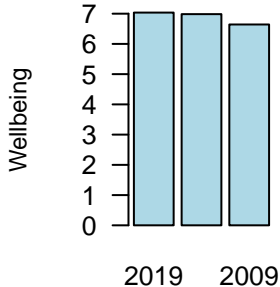
UK



France



Germany



Worldwide Wellbeing by Year

