TU DORTMUND
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Summer Semester 2024

Case Studies I

Project 1: Descriptive data analysis
Goodbye Germany - A selected analysis of the World Happiness Report

Deadline: 24.04.24 − 11:59 am

Paul has always wanted to emigrate. That's why he wants to study the United Nations World Happiness Report to choose his future home. Help him with the analysis.

To investigate this question, the file *Happiness*.csv contains various values such as life satisfaction, mental health, freedom of life choices and log per capita gross domestic product from a large number of countries, all of which are considered important influencing factors for happiness. This data is published annually by the United Nations and covers the period from 2008 to 2018.
Carry out a descriptive analysis of the data set and consider the following questions in particular.

- Total score:
  Which countries have the highest/lowest overall score and are therefore particularly suitable as a new home or are more likely to be excluded? Which influencing factors could be responsible for this?

  Covariates
  Log.GDP.per.capita,
  Social.support,
  Healthy.life.expectancy.at.birth,
  Freedom.to.make.life.choices,
  Generosity,
  Perceptions.of.corruption,
  Positive.affect,
  Negative.affect

- Gini Index:
  Determine the Gini index for the last year for all countries.

- Missing values:
  In some areas the data set is not complete. How can this come about and how could this be addressed in the description?

- As Paul likes to eat Asian food, he is particularly interested in the comparison of Hong Kong, China and Germany. This should be presented to him visually.

  Freedom to make choices
  Delivery quality

- Investigate 3 additional aspects of your choice.

Use suitable descriptive methods to answer the questions.

Literatur:

- Albert J. (2022): A Course in Exploratory Data Analysis `https://bayesball.github.io/EDA/`