

# Child Mortality Rate Comparison Between European Countries and Newly Industrialized Countries

## 1. Data description

The data set contains 6 columns, and the raw data are downloaded from Gapminder.

- **country:** Totally 172 countries are included.
- **child\_mortality\_17:** Death of children under five years of age per 1000 live births in 2017
- **mean\_schoolyears\_in\_women\_09:** The average number of years of school attended by woman of reproductive age 15-44, including primary, secondary and tertiary education in 2009.
- **children\_per\_woman\_17:** The number of children that would be born to each woman with prevailing age-specific fertility rates in 2017
- **health\_spending\_per\_person\_10:** The average health expenditure (in US dollars) per person that has been paid by government in 2010
- **income\_per\_person\_17:** GDP per person (in international dollar) adjusted for differences in purchasing power in 2017

## 2. Aims

Is there any difference of child mortality rate between selected European countries and 10 newly industrialized countries?

If there is a difference, which influence factors contribute to it?

**Selected European countries:** Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Iceland, Norway, Netherlands, Portugal, Spain, Sweden, United Kindom

**Newly industrialized countries:** Brazil, China, India, Indonesia, Malaysia, Mexico, Philippines, South Africa, Thailand, Turkey

### 3. Questions

- Is there any differences between the two groups for all five parameters?
- In each group, is there any correlation between the mortality rate and the other four factors?
- If there is a correlation, which one contributes most?

### 4. Discussion points

How will you assess the data quality (eg. distribution, outliers, other funky stuff)?

Which statistic hypothesis are you using for each analysis? Why?

Is there any outliers, if there is, what should we do with it?

Do you think the raw data is biased or not, i.e. could there be bias in the numbers obtained from Gapminder?

If we can do further analysis, what is your plan?