# Pitch-Text Praxisseminar Data Analytics for Business and Psychology

**Methods and Analysis**

We predicted that happiness ratings in countries that applied more stringent methods to contain the spread of Covid would in turn have lower happiness ratings and that this effect would be particularly evident as the pandemic went on. To analyse this, we needed to gather our data from different resources. We accessed the happiness data from the open-source platforms Kaggle and GitHub which was made available by a research group that collected this data for the World-Happiness reports from 2019-2022. Happiness ratings are the composite score of several indicators of happiness, such as freedom-to-make choices, health expectancy and others. The data on Covid was drawn from OurWorldInData.org, of which we used unique cases/deaths per million to account for population differences. The stringency data was provided by the Oxford University, which was the composite measure of nine stringency indicators, including restrictions to movement, physical social gatherings and other stay-at-home requirements. In total, we obtained data for 115 countries.

As happiness was presented as a single measure for one year, we computed one single variable per year for the other variables at question. These were total death rates per million and the average stringency measures for each country per year.

Our outcome was happiness ratings for each country and our predictor was the stringency measure. We analysed this relationship for each year between 2020 and 2022. To account for countries being inherently “less happy” than others even before the pandemic, we calculated the average happiness pre-pandemic and analysed the change in from pre to during the pandemic across countries worldwide. Thus our final visual output consisted of three sets of graphs, one for each year, for the relationship between happiness and stringency. You will see that happiness ratings centre around 0. Countries above 0 mean that they were happier during the pandemic than before the pandemic and vice versa when happiness is below 0. For the stringency variable, the higher the score, the higher the stringency measures were.