**Task: making a line chart to present the results of sensitivity analysis on effects of healthy lifestyle on longevity by different age cutoffs in model 3**

Hi, I would like to express my thanks again to your interest in our group’s projects and thanks for taking out time participating in the arranged interview. We are thinking about implicating this short task in the interview for you to know that what your work might be like in the SRS project and for us to better know you, so please take it easy. There are no strict requirements on what coding language to use.

Background

* Researchers in our group are conducting an analysis on the association of healthy lifestyle and longevity.
* The analysis is based on Chinese Longitudinal Healthy Longevity Surveys (CLHLS). Healthy lifestyle of each participant is calculated by a combined healthy lifestyle (CHL) index (range from 0 to 4) with 0 indicates the participant meets no healthy lifestyle, and 4 indicates the participant meets all healthy lifestyle.
* As part of the analysis, we would like to conduct a sensitivity analysis on the effects of healthy lifestyle on longevity by different age cutoffs.
* The dataset you get shows the results of the sensitivity analysis. Model 1 to 4 are different models which implicate different demographic factors. In each age group, odds ratio (OR) and p-value are calculated for each CHL group (CHL = 1 - 4) while CHL = 0 group is used as reference.
* To visually present the results, researchers made a line chart using age groups as x-axis and odds ratio as y-axis, grouped by CHL index in model 2.



Task

* Please visually present the results of model 3 using a line chart of similar format with age groups as x-axis and odds ratio as y-axis, grouped by CHL. (Please disregard the number of NA value and results of p-value in the dataset)
* The time limit is 25 minutes. You need to send back your code file and outputted figure (PDF/TIFF format) for our reference.

Note

* Please note that the dataset provided is an unpublished dataset, so please do help to keep it confidential. Thanks much.