Introduction

Assumptions on commuters’ travel satisfaction levels:

- Null hypothesis: Hypothesis 1 of differences of travel satisfaction levels among boat users and non-boat users
- Alternative hypothesis: Commuters on boat rate their travel satisfaction more favourably than non-boat users

Hypothesis 2: Understanding different transport modes’ characteristics:

- There will be a further differentiation of satisfaction levels among non-boat users depending on socio-demographics and travel characteristics such as age, gender, stress level, and level of travel satisfaction and life evaluation.

Hypothesis 3: The impact of life evaluation on travel satisfaction:

- There is a significant effect of life satisfaction variables to travel satisfaction.

Objective measures of wellbeing: StressDots © and Facial emotion recognition

Survey is a self-reported measurement, which is not accurate sometimes because passengers tend to have wrong feelings. Based on that, I consider an objective measurement of wellbeing, which is to use StressDots © for capturing passengers’ stress level and to use an Application for facial recognition. For ethical consideration, Mr. Terry Brett and I design a mobile application to save data to University OneDrive when capturing passengers’ facial images. From these pictures, I will then use facial emotion recognition techniques to predict participants’ stress level, which supports the validity of this study.

Hypothesis testing: Exploring the links between boat commuting & wellbeing

There are very few empirical studies on the differences between various modes of commute on commuters stress and mood. (Reardon, 2013). StressDots © a galvanic skin response sticker which reveals participants’ stress level by helper electrodes and changes of changes of muscle tension and blood vessels.

First hypothesis testing

- Null hypothesis: No boat users are tested by using exploratory factor analysis. Means and Cronbach’s Alphas for each index are tested by using independent t tests. Null hypothesis is accepted.
- Alternative hypothesis: Hypothesis 2 of different measures of wellbeing and stress will be accepted by using Structural Equation Modelling.