# Tutorial 7

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#### Display of the revised data tibble

```
## id Citizenship Location Gender happ_score df
## 1 1 Singaporean/PR Off campus F 3.241379 105
## 2 2 Foreigner On campus M 2.827586 105
```

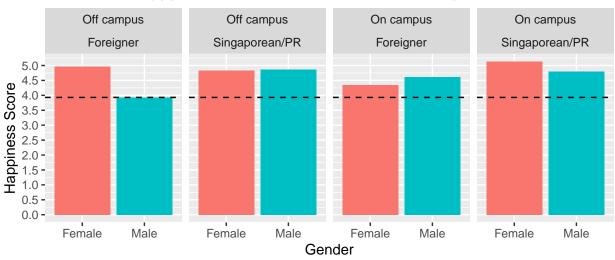
#### Raking of the data

```
## mean SE
## happ_score 3.6391 0.0436
```

#### Plot 1: Visualising happiness level of male and female from each combination category

- International, off-campus males have the lowest happiness level
- Singaporean/PR, on-campus females have the highest happiness level
- Singaporean/PR students overall seem to be more happier than foreigners (maybe due to homesickness and more responsibilities for foreigners)
- Location seems to be a less affecting variable as it has varying results for each combination

# Happpiness related to Location-Citizenship-Gender



Plot 2: Spread of happiness scores for every category with outlier

- Singaporean/PR have greater spread (variance)
- Off- campus for eigner students have the least spread (nearly none) but highest mean as coma pared to the rest

• Outlier for a foreigner female(ID No. 5) living on-campus with the lowest happiness level=1.551724

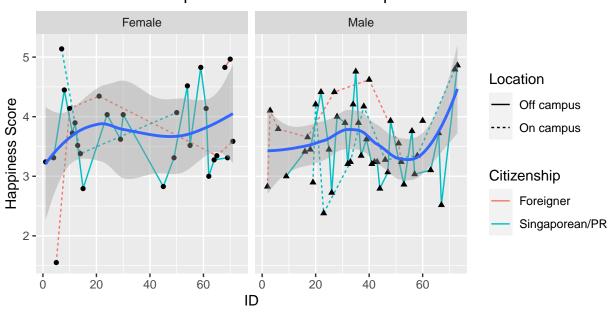
#### Off campus On campus Mean = 4.9Mean = 3.93Mean = 3.85Mean = 3.785.5 -Median = 4.9Median = 3.93Median = 3.86Median = 3.725.0 -4.5 **-**Foreigner 4.0 -3.5 **-**3.0 -Happiness Score 2.5 **-** 2.0 **-**1.5 -Mean = 3.51 Mean = 3.54Mean = 3.65Mean = 4.25.5 **-**Median = 3.52 Median = 3.41 Median = 4.07 Median = 3.31 5.0 -Singaporean/PR 4.5 -4.0 -3.5 -3.0 -2.5 -2.0 -1.5 -Female Female Male Male Gender

# Spread of happiness scores

Plot 3: Visualising Correlations

- The smooth line shows the pattern between the score and other variables
- Females has greater confidence region so the regression region lies within it
- Males have smaller region of confidence

# Correlation with respect to Gender-Citizenship-Location



Plot 4: Visualising based on every variable

