# A Study on Emigration Attitudes of Young Singaporeans (2010)

## Interpreting Results from the Cluster Analysis

Cluster analysis is a statistical technique that categorises respondents according to certain shared attributes. The primary purpose of this technique is to reduce large quantity of data into smaller and conceptually more meaningful subsets of observations. This analysis enables the investigator to formulate preliminary hypotheses on the categories that emerge and the relationship with the research variables.

This approach, as opposed to other data reduction techniques, is appropriate when there is limited prior information regarding the number or types of cluster categories. In light of the limited research on outflow migration in Singapore, this instrument is a suitable strategy for analysing emigration attitudes.

Eight socio-psychological constructs were deployed for the analysis. It was performed using the K-means method. The 8 factors include intention to emigrate, emigration attitude, self-rated ability to migrate, perceived relative deprivation, sense of national pride, subjective well-being, perceived Singapore economic future, and the strength of family ties. In a nutshell, the clustering process aims to minimise within-cluster variations and maximise between-cluster differences based on the scores from the eight dimensions.

Overall, the results suggested that a four-cluster model offered the most convincing solution. Each of the four clusters has a unique socio-psychological and demographic profile. On the basis of their demographic background and the shared socio-psychological attributes, the four clusters are labelled as the **Heartland Stayers**, the **Cosmopolitan Stayers**, the **Disengaged**, and the **Explorers**.

The schematic overview on the four clusters and their shared characteristics can be found in the diagram below. The 8 socio-psychological factors used in the analysis are laid out in an octagon, with each axis representing one of the 8 dimensions. Points that are located closer to the centre of the octagon indicate a lower score on that particular dimension, whereas those situated further away from the centre represent a higher score.

Each of the four coloured shapes in the diagram (yellow, green, red, and blue) represents a distinct category or cluster of participants. The colours yellow, green, red, and blue correspond to the Heartland Stayers, the Cosmopolitan Stayers, the Disengaged, and the Explorers, respectively.

#### Heartland Stayers

The results showed that the Heartland Stayers (26.5% of the sample) were not keen to relocate (i.e., close to the centre of the octagon), did not view emigration as a socially acceptable behaviour, reported strong family ties and national pride, and were optimistic about the long-term economic prospects of Singapore (i.e., furthest away from the

centre of the octagon). This group has disproportionately more non-English speakers, females, people from middle income families and those who endorsed communal values.

### Cosmopolitan Stayers

Like the Heartland Stayers, the Cosmopolitan Stayers (26.7% of the sample) expressed little intention to relocate overseas, indicated strong ties to the family and to the country, and they held communal values. They reported a high level of well-being and believed that the economic future of Singapore was promising. But unlike the previous cluster, the Cosmopolitan Stayers viewed emigration as socially acceptable and considered themselves competent enough to leave if they wished to do so. Compared to the Heartland Stayers and the Disengaged, the Cosmopolitan Stayers have disproportionately more English speakers, they were better educated, and said to be more affected by the presence of foreign talent in Singapore.

#### Disengaged

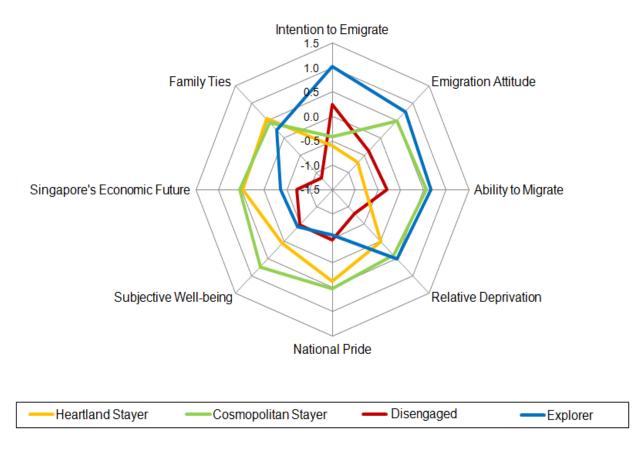
Among the four clusters, the Disengaged (26.5% of the sample) expressed the least positive experience on their personal well-being, were most pessimistic about Singapore's economic future, and reported weakest family bonding and sense of national pride. The people in this group had no inclination to relocate abroad and did not feel disadvantaged by the presence of foreign talent. Disproportionately more respondents in this category came from middle to high income families and stayed in bigger dwelling types. Further analysis found this cluster to have a lower rating on social mobility, and a stronger endorsement for openness and self-enhancement values.

#### Explorers

Lastly, the Explorers (20.2% of the sample) reported a keen interest to relocate, perceived emigration as socially acceptable, and believed they have the relevant skills and networks to do so. They were dissatisfied with their personal lives, did not feel proud of Singapore and were not optimistic about the city-state's economic future, although they still enjoyed strong family bonding. Like the Cosmopolitan Stayers, they felt that Singaporeans were short-changed by foreign talent. This cluster had disproportionately more respondents who were male, English speakers, and better educated. Not surprisingly, the Explorers would more likely embrace values associated with openness, perceived that emigrants enjoy higher social status, and viewed emigration as a means to achieving greater socio-economic security.

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Heartland Stayer: 26.5% Cosmopolitan Stayer: 26.7% Disengaged: 26.5% Explorer: 20.2%