

3. RESEARCH METHODOLOGY

This chapter describes the development of the hypotheses and the research process, which includes sampling design, data collection and data analysis techniques.

3.1 Development of hypotheses

Based on the framework, the hypotheses are as follows.

- H1: Communications of Change have positive influence on Organisational Change Capacity (OCC)
- H2: Actions to expand business have positive influence on Organisational Change Capacity (OCC)
- H3: Financial strategies have positive influence on Organisational Change Capacity (OCC)
- H4: Inadequate communications and participation have negative influence on Organisational Change Capacity (OCC)
- H5: Bureaucratic resistance and favouritism have negative influence on Organisational Change Capacity (OCC)

3.2 Selection of measures

The questionnaire was adopted from exploratory studies by Szamosi and Duxburry (2002) and Judge and Douglas (2009). The measurement scale used for the independent variables – Supportive Behaviour and Non-Supportive Behaviour with 5-points Likert Scale from Szamosi and Duxburry (2002) and dependent variable – Organisational Change Capacity (OCC) with 10-points Likert Scale by Judge and Douglas (2009). The measurement scales used for this research paper has been standardised to a 7-points Likert Scale where “1” indicates “Strongly Disagree” and “7” indicates “Strongly Agree”. Colman, Noris and Preston (1997) through their research has concluded that 7-point scales has a higher R^2 as compared to 5-point scales. In this aspect, respondents need to provide their absolute input instead of having a neutral input.

The questionnaire consists of two (2) main section – Section A and Section B. Details are found in Appendix 1

Section A

This section consists of 53 questions with 21 questions being the independent variables (Supportive and Non-Supportive Behaviour) and 32 questions as the dependent variables (Organisational Change Capacity)

Questions	Independent Variables	Hypothesis
1 - 3	Supportive Behaviour – Communications of Change	H1
4 - 6	Supportive Behaviour – Actions to Expand Business	H2
7 – 9	Supportive Behaviour – Financial Strategies for Change	H3
10 – 16	Non Supportive Behaviour – Inadequate Communications and participation	H4
17 – 21	Non Supportive Behaviour – Bureaucratic resistance and favouritism	H5

Section B

This section captures the demographic information of the respondents.

Information captured is as follows:

- i. Gender
- ii. Age
- iii. Ethnic Group
- iv. Highest Level of Education
- v. Type of Organisation
- vi. Industry
- vii. Function / Job Specialisation
- viii. Position Level in Current Organisation
- ix. Number of employees in current organisation

3.3 Survey Instrument

Given time and reach of target are the main criteria; a self-administered survey was deployed leveraging the technology provided by Google – GoogleDocs, a free questionnaire tool which allows data to be stored and extracted for analysis. However, this mode has its disadvantage that is the risk of having low response rate (Saunders, Lewis & Thornhill, 2007). Hence, in order to gather more input from various types of organisation, this questionnaire handed out manually during a conference attended in March 2012. The participants of the conference mainly consist of Public Sectors, which provided a balance to the data collected electronically.

3.4 Sampling Design and Data Collection

A non-probability convenience sampling is been adopted for its convenience and its ability in gathering data quickly and efficiently. One hundred and twenty one (121) emails sent out to both MBA students and personal professional network, with a mail explaining the purpose of the questionnaire and a link to the questionnaire alongside with a dateline. Given that the unit of analysis will be at an organisation level, the mail clearly indicated that the respondents are not to forward the questionnaires to others. The selected 121 email recipients are from different type of organisation, industry and job function (refer to Section 4.1 for the demographics data).

During the course of data collection, two reminders issued to the same target group. At the end of the duration, 98 responses were gathered (83% responses) from the initial target of 120. A hardcopy questionnaire was circulated during a conference attended by the researcher, as an effort to improve the responses. 23 responses (46%) were collected from the 50 questionnaire distributed.

3.5 Data Analysis Method

Data collected from the two sources was analysed using SPSS version 16.

A reliability test was conducted to assess the degree of consistency between multiple measurements of a variable. For this, Cronbach's alpha will be used, with a general limit of 0.7. Before any detailed analysis to be carried out, there is a need to investigate on the coefficient of determination, R^2 in predicting the future outcomes on the basis of other related information or by the model. The acceptable R^2 should be more than 0.75 (except for Social Science of 0.5), as that will predict 75% of the population

The items within each variable – Independent and Dependent are subject to factor analysis using Principal Component Analysis (PCA) as the extraction method and Varimax rotation. Factors will be retained if eigenvalues more than 1.0.

In confirming the accuracy of items retained through PCA, an additional technique, Horn's Parallel Analysis is used (Pallant, 2011). This involves comparing the size of eigenvalue with the randomly generated dataset of the same size. Retaining factors are the factor with value exceeds the corresponding values of the dataset.

Besides factor analysis, the results will also subject for multiple regression of all the dependent variables, where to determine if the relationship of the variables.

Results will be examined on its validity and reliability. Three different validity to be considered will be content, construct and criterion validity.

Pallant (2011) outlined that the cut-off point in determining the presence of multicollinearity is where the tolerance value is less than 0.10 or a Variance inflation factor (VIF) value of above 10. Tolerance indicates how much a variability of the specified independent that is not explained by the other independent variables in the model. As such, if the value is small i.e. less than 0.10 and VIF is above 10, multiple correlations with other variables is high, hence multicollinearity exists.