

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Research Description

This research was conducted using quantitative method. According to Bergin (2018) quantitative method uses numerical data to understand relationships between variables in order to explain a certain cause. Statistical methods are used to analyze and process data to obtain results. A quantitative research is limited to a particular setting set by the researcher. Questionnaires are primarily used to collect data on this research.

#### 3.2 Population and Sample

According to Bairagi & Munot (2019) a population is the whole group of objects that is narrowed down in numbers based on the fitting criteria. A population acts as a representative of the group of objects that is going to be researched. The population of this research was Ciputra University students from the 2015 to 2017 batch who have a successful business. Total population of this research was 242 students. Sampling is the process of selecting objects from a population as the core representatives that would provide the information needed (Ranjit, 2018). Sampling method used for this research was purposive sampling. According to Ranjit (2018) purposive sampling means using samples that the researcher is sure would be able to give the information needed, fitting the criteria set. Using purposive sampling would allow the researcher to accomplish the objectives of the research. In respect to the theory above, the researcher narrowed down the sample number to fit the criteria below:

1. Is a student in Ciputra University from batch 2015-2017.
2. Student's business has lasted for at least 2 years.
3. Student is not the CEO of the business

By using the Slovin formula with 5% margin of error, it was found that the total sample needed for this research was 149 samples

### **3.3 Data Collection Methods**

#### **3.3.1 Literature**

Past literatures are used by the researcher to support the topic of this research. Past literatures such as books, journals, seminars, and other sources of knowledge were used to gain information needed to reach the research objective.

This would act as a secondary data for the researcher.

#### **3.3.2 Questionnaire**

A questionnaire is a list of questions by the researcher which would be answered by respondents to be recorded and used (Ranjit, 2018). Questionnaire would be the researcher primary data. The questionnaire used a five Likert scale. According to Ranjit (2018) "Likert scale is one of the attitudinal scales designed to measure attitudes" meaning every statement has a value to it.

### **3.4 Validity and Reliability**

#### **3.4.1 Validity**

Validity refers to the trustworthiness and accuracy of tools, data, and findings (Bernard, 2017). Pearson correlation coefficient scale was used. If the correlation coefficient is  $< 0.05$  then the item is valid with a confidence level of 95%. (Finch *et al.*, 2016).

### 3.4.2 Reliability

Reliability refers to the precision or stability of using the tools available multiple times (Bernard, 2017). Cronbach alpha was used to test reliability. A coefficient of  $\geq 0.6$  means the tool is reliable while a coefficient of  $< 0.6$  means the tool is unreliable (Dempster & Hanna, 2015).

### 3.5 Data Analysis Method

#### 3.5.1 Operational Definition of Variables

**Table 3.1 Operational Definition of Variables**

<u>Variables</u>	<u>Definition</u>	<u>Indicator</u>
<u>Emotional Intelligence</u>	According to Salovey and Mayer (1990) in Cooper (2018) Emotional Intelligence is defined as “The ability to accurately perceive emotions and emotional knowledge and to reflectively regulate emotions so as to promote emotional and intellectual growth	According to Boyatzis (2016) in Cooper (2018) the indicators for emotional intelligence are: 1. Relationship Management 2. Self-Management 3. Social Awareness 4. Self-Awareness
<u>Transformational Leadership</u>	According to Bass (1985) in Hoch et al. (2018) Transformational leadership meant the ability “to achieve follower performance beyond ordinary limits”	According to Bass (1985) in Hoc et al. (2018) the indicators for transformational leaderships are: 1. Idealized Influence 2. Inspirational Motivation 3. Intellectual Motivation 4. Individualized Consideration
<u>Success of MSME</u>	According to Ahmad et al. (2011) in Rahman et al. (2016) There are two indicators to a business success; Financial and non-financial performance	According to Ahmad et al. (2011) in Rahman et al. (2016) the indicators for the success of MSME are: 1. Sales turnover 2. Sales Growth 3. Return on Investment 4. Self-Satisfaction 5. Employee Satisfaction 6. Good Workplace Relation

**SOURCE: PROCESSED DATA**

## **3.5.2 Classical Assumption Test**

### **3.5.2.1 Normality Test**

According to Santoso (2010) in Nur *et al*, (2016) Normality test is used to determine that the data that is spread evenly and is not skewed. Kolmogorov-Smirnov test will be used to test normality. If the value of sig > 0.05 then residual distribution is normal.

### **3.5.2.2 Heteroscedasticity Test**

Heteroscedasticity test is used to observe whether or not there are inequality variance from one observation with others. If there are residual remains then it is called heteroscedasticity, otherwise it is called homoscedasticity. A good model does not have residual remains or is homoscedasticity. Glejser test will be used to test Heteroscedasticity. If the value of sig > 0.05 then there is no residual variance (Ainiyah *et al.*2016).

### **3.5.2.3 Multicollinearity Test**

Multicollinearity test is used to find out whether or not there are correlations between independent variables. A good model should not have a perfect or near perfect correlation between independent variables. Tolerance and Inflation Factor (VIF) method will be used to test multicollinearity. If VIF value is < 10 and tolerance is > 0.1 then there is no multicollinearity (Ainiyah *et al.* 2016).

## **3.5.3 Hypotheses Tests**

### **3.5.3.1 Model Fit Test (F)**

F test is performed in order to find whether or not independent variables are significantly and simultaneously affecting dependent variables. If the value of sig

$F \leq 0.05$  then dependent are influenced significantly and simultaneously by independent variables (Sutanto, 2017).

#### **3.5.3.2 Partial Significance (*t* test)**

In order to find whether or not independent variables significantly affect dependent variables, *t* test is performed. If the value of sig  $t \leq 0.05$ , it means the independent variables are individually significantly affecting dependent variables.

#### **3.5.3.3 Coefficient Correlation Test (R)**

In order to measure the strength of the correlation of dependent variable and independent variables, coefficient correlation test is used. The value range of this test is from 0 to 1. The closer the value to 1, the stronger the correlation (Chin *et al.* 2017).

#### **3.5.3.4 Coefficient of Determination Test ( $R^2$ )**

Coefficient of Determination Test is used to measure how much the independent variables affect dependent variables, with a value of  $R^2$  within the range of 0-1. The closer the value is to 1, the bigger independent variables role towards dependent variables (Chin *et al.* 2017).