CHAPTER 3: RESEARCH METHODOLOGY

3.0 Chapter Overview

This chapter will discuss the research model, research design as well as the methodology adopted to conduct the research. The hypotheses of this study will also be discussed, including the research instrument, sampling design, data collection procedure and data analysis methods.

3.1 Development of Hypotheses

Talent is a combination of high performance and high-potential (Lewis & Heckman, 2006; Ashton & Morton, 2005); with performance representing the past and present and potential representing the future (Ashton & Morton, 2005). However, managers often confuse assessment of potential with assessment of performance (Silzer & Church, 2009; Rogers & Smith, 2007). Companies tend to assume that strong past performance is equivalent to high potential for the future (Arthur, 2011; Silzer & Church, 2009). Although performance is an essential factor in Talent identification, it is not an adequate predictor of potential (Silzer & Church, 2009; Robinson et al., 2009). Therefore, performance should only be used as an initial qualifier or prerequisite for high-talent potential consideration but never as the sole criteria (Rogers & Smith, 2007).

Past researches has revealed numerous different predictors of high-potential Talents including Proactive Problem Solving, Personal Growth, Individuality, Organisational Savvy, Adaptability, and Analytical. Proactive Problem Solving includes proactivity and creative problem solving. Covey (2004) had identified being proactive as one of the habits of highly effective people. McClelland (1961) also revealed that achievement-motivated people are proactive. Being effective and achievement-motivated are important criteria for executive success. Furthermore, the capability of creative problem solving has long been regarded as the power of talented people and the
source of innovation. According to Mumford (1991), creative problem solving contributes to leader performance. Therefore, Proactive Problem Solving was identified as a predictor of potential and the following hypothesis was developed:

H1. There is a positive relationship between Proactive Problem Solving and Talents

Personal Growth encompasses an individual’s learning agility, motivation and achievement orientation. Many researches have acknowledged learning agility as a key predictor of high-potential (Eichinger & Lombardo, 2004; Spreitzer et al., 1997). The ability to learn from experience is the differentiating factor between successful and unsuccessful executives, and between average and superior performance (Charan et al., 2001). However, motivation is the driving force for humans to advance and to learn new things. Furthermore, achievement motivation is linked to potential as this characteristic is associated with initiative, setting ambitious goals, and mastering new skills and areas of the business. It has been found that achievement motivation is strongly linked to successful performance of entrepreneurs (Collins et al., 2004). Therefore, Personal Growth was identified as a predictor of potential and the following hypothesis was developed:

H2. There is a positive relationship between Personal Growth and Talents

Key elements of high-potential’s Individuality include drive and persistence and high level of self-assurance (Rowe, 2007). Highly driven and persistent individuals are seen to do their jobs better (Everly et al., 2008) and appear to have successful performance in highly demanding occupations (Bartone et al., 2008). In addition, self-assurance is important for executive success (McCall, 1994) and a prerequisite for high
performance (Eyring et al., 1993; Zhong, 2007)). Therefore, Individuality was identified as a predictor of potential and the following hypothesis was developed:

H3. There is a positive relationship between Individuality and Talents

Organisational Savvy refers to the awareness and understanding of the structure, politics and objectives of the organisation, and involves elements of Emotional Intelligence (EI) and Cultural Intelligence (CQ). Brandon and Seldman’s (2004) notion of Organisational Savvy describes “how various issues including politics, perception, ego, hidden agenda, self-promotion, ‘managing the airwaves’, and trust all play out at the higher levels of organisations in either productive or destructive ways”. According to their theory the Organisational Savvy is important for executive success. Furthermore, EI have been found to be related to success in a wide range of business contexts (Cherniss, 1999) and CQ has become more and more crucial for executive success in the global context (McCall, 1994). Therefore Organisational Savvy is a predictor of potential and the following hypothesis was developed:

H4. There is a positive relationship between Organisational Savvy and Talents

Adaptability refers to the ability to adapt to changes and to tolerate uncertainty. Open to change and tolerating ambiguity have been found to be critical for high achievement and work success. Furthermore, Silzer and Church (2010) found that adaptability in the form of flexibility, mobility and fungibility are factors used by organisations to identify high-potential. In is further supported by Spreitzer et al. (1997) which found flexibility as another underlying theme for executive success. Therefore Adaptability was identified as a predictor of potential and the following hypothesis was developed:

H5. There is a positive relationship between Adaptability and Talents
Analytical encompasses an individual’s intelligence and general mental ability. Analytical ability is highlighted as a key component of intelligence (Sternberg, 1985) which enables individuals to evaluate, critique and utilise information effectively to achieve key business goals. Schmidt and Hunter (2003) asserted that “intelligence is the major determinant of job performance” (p. 3) and general mental ability is acknowledged as valid predictor of future job performance (Bertua et al., 2005; Salgado et al., 2003; Schmidt & Hunter, 1998). Intelligence or analytical agility has also been identified as a key distinguishing factor of successful executives (Kotter, 1988). Furthermore, Borman et al. (1993) found that cognitive ability is important for performance in first-line supervisors, while Dreher and Bretz (1991) found general cognitive ability as a predictor of later career advancement. Therefore Analytical was identified as a predictor of potential and the following hypothesis was developed:

H6. There is a positive relationship between Analytical and Talents

As the past researches has found Proactive Problem Solving, Personal Growth, Individuality, Organisational Savvy, Adaptability, and Analytical as predictors of potential, it is important to know if Potential would be able to predict Talents. As companies still view age as a factor in Talent identification, it would also be necessary to know if age will affect the model’s predictability. Therefore, age will be a control variable in the model.

3.2 Data Collection Method

This research employs a self-developed questionnaire that was administered online. A cover letter for the purpose of explaining the nature of the study to the targeted respondents was attached to the questionnaire. The questionnaire was designed
to evaluate a participant through self-assessment. The participants were asked to evaluate their own work behaviours around the area of Proactive Problem Solving, Personal Growth, Individuality, Organisational Savvy, Adaptability, Analytical, and Talents. The questionnaire on Talents was developed based on the Integrated Model of Potential by Silzer and Church (2009) to determine if the participant or sample is indeed a Talent. This area is measured by 7 questionnaire statements. The questionnaire contains a total of 47 questionnaire statements. Each questionnaire statement is rated using measured using a 5-point Likert Scale; from Never to Always.

3.3 Sampling Design

The source of primary data was obtained from the respondents via online questionnaires. The targeted population consists of Malaysian adults who are currently working and has experienced at least one performance appraisal process. A snowballing sampling method was employed where respondents helps in referring other members within their network. The benefits of adopting this sampling method are that it enables a wider spread and is a less expensive method to conduct survey. The targeted sample size is between 100-150 Malaysian employees.

3.4 Data Collection Procedure

The data collection process was started by sending the online questionnaire to contacts within my network. The questionnaire was then forwarded to my contacts’ network and from there it snowballed. Using this method, a total of 170 respondents were invited to complete the online questionnaire but only 120 completed responses were collected during a 3-week period.
3.5 Data Analysis Techniques

3.5.1 Test of Normality

An assessment of the normality of data is a prerequisite for many statistical tests as normal data is an underlying assumption in parametric testing. The Shapiro-Wilk test was used to determine whether a random sample comes from a normal distribution. It can be concluded that the data are not from a normally distributed population if the p-value is significant (Pallant, 2007).

3.5.2 Reliability

The reliability test of Cronbach's alpha was performed to examine the internal consistency of the items used in questionnaire. According to Hair, Black, Anderson, and Tatham (2006), the data is reliable and acceptable if the alpha coefficient value is more than 0.7. Nunnally (1978) added that an alpha coefficient below 0.3 indicates the items have little commonalities.

3.5.3 Factor Analysis

Factor analysis is usually used to reduce large number of related variables into smaller number, prior to other analysis. The principal component analysis (PCA) was recommend by Stevens (1996) as it is psychometrically sound, simpler mathematically and avoids some potential problems with factor indeterminacy. The Kaiser’s criterion is used to determine the number of components to retain. According to Pallant (2007), only components with eigenvalue of 1.0 or more are retained.
3.5.4 **Descriptive Statistic**

The descriptive statistics analysis was used to summarise the data collected, to check for error in the results and to address specific research question. The demographic characteristics of the sample were tabulated in the form of crosstabulation frequency tables and pie charts.

3.5.5 **Correlation**

Pearson’s correlation analysis was used to describe the direction and strength of the linear relationship between two variables. In this research, to examine whether there is a positive relationship between Proactive Problem Solving, Personal Growth, Individuality, Organisational Savvy, Adaptability, and Analytical, with Talents.

3.5.6 **Multiple Regression**

The purpose multiple regression analysis is to explore the relationship between the several independent variables and a dependent variable (Pallant, 2007). Multiple regression can be used to determine the predictive ability of the model. Standard multiple regression is used when there is no control variable and hierarchical multiple regression is used when there are control variables.