CHAPTER 3

DEVELOPMENT OF HYPOTHESIS AND RESEARCH METHODOLOGY

3.1 Introduction

This chapter comprises two sections. The first section discusses the hypothesis development and describes the operationalization of variables in this study. The second section discusses the research methodology. Self-report questionnaire will be used to collect data as this is the most common method used in assessing personality (Quick & Nelson, 2006).

3.2 Hypothesis Development

The generation of the hypothesis of this study is based on deductive reasoning approach, which is based on the assumption that the constructs of the FFM are well defined and understood (Barrick, Mount & Gupta, 2003) as cited by Tichon (2005). The focus is on the personality dimensions and traits that are most likely to affect job performance. Nine hypothesis will be investigated by relating personality dimensions and traits and drivers’ job performance.

The work nature entails the truck drivers to meet and engage with various people in their work environment (both internal in the company and external outside the company). Drivers with high agreeable personality traits will be courteous, flexible, good natured, cooperative and tolerant. Motowildo, Brownlee and Schmit (2008) find that individuals who are highly agreeable have more knowledge about how to handle social situations in which, kind (as in kindness) and considerate responses are used by these individuals most appropriately than less-agreeable individuals. Mount, Barrick
and Stewart (1998) suggest that agreeableness is relevant to job performance in situations needing fairly high level of interpersonal interaction and collaboration which requires tolerance and flexibility. This may bring about support from the people whom come into contact with the drivers’ particularly the relationship with co-workers which may bring improved performance especially from physical work environment aspect. Based on the past literature the following hypothesis is proposed:

**Hypothesis 1: Agreeableness is positively correlated with the truck drivers’ relationships with co-workers.**

Attention to detail is closely associated with Saucier mini-marker of systematic which is a trait to conscientiousness. Individuals’ whom are high on attention to detail are organized (McCrae & John, 1992), instead of being negligent, sloppy and careless (Goldberg, 1993). Theoretically, drivers’ who have high level of attention to detail are less sloppy and they are less prone to make careless mistake. This characteristic will ensure a heightened sense attention on safety hazards when they drive. Based on Tichon (2005), prior empirical studies do not show a significant relationship between personality measure of attention to detail, a narrow trait of conscientiousness and safety. The drivers who are low on sloppy trait is believed to be more attentive and hence more safety conscious. Based on this assumption the following hypothesis is proposed:

**Hypothesis 2: Sloppiness is negatively correlated to safety aspect of truck drivers’ job performance.**

Barrick and Mount (1991) find that emotional stability is a good predictor of job performance. Meta-analysis by Berry, Ones and Sackett (2007) find that interpersonally directed counter productive work behavior and organizationally directed counter productive work behavior are strongly correlated with emotional stability. While in one study by Bilgic and Sumer (2009) find that emotional stability are significantly correlated with psychological well-being in which it has significant relationship with
organizational deviance in the Canadian Forces. High emotional stability may lead drivers to behave calmly in high stress situations in which will lead to improved contextual performance. Loveland, Gibson, Lounsbury and Huffstetler (2005) study on child care camp counselors, find that emotional stability is significantly related to task performance such as attendance, job knowledge, and task execution. Maslach and Leiter (1997) and Savicki (2002) as cited by Loveland et al. (2005) observe that the job of taking care of children is likely to be demanding that it discourages those who are less resilient from applying or returning in the following year. Likewise in the haulage industry, individuals who are less resilient may not want to stay in the industry. Consequently the following hypothesis is proposed:

**Hypothesis 3: Emotional stability is positively correlated with the drivers’ ability to work under stress.**

Beaty, Cleveland and Murphy (2001) find that personality dimension of extraversion is positively correlated with contextual performance. Motowildo, Brownlee and Schmit (2008) suggest that extraversion has the strongest effects on customer service knowledge. They find that extraversion explains incremental variance in knowledge about how to handle customers in a retail store. This relation is also important to drivers as they frequently meet and interact with customers or their agents when delivering the goods. Their work nature allows them to meet various people when they are out doing their delivery jobs. High extraversion may help drivers’ to meet and better socialize with people that they meet daily, which may lead to higher level of job satisfaction and this may lead to improved performance. Based on the past literature the following hypothesis is proposed:

**Hypothesis 4: Extraversion is positively correlated with truck drivers’ overall performance rating.**
Tyler and Newcombe (2006) find that the average of all performance scores of an employee has strong correlations with conscientiousness. Colquitt and Simmering (1998) find that highly conscientious individuals most often maintain self-discipline when tempted by reward in any nature. This trait is peculiar based on Murphy’s (1996) results that individuals who are high in conscientiousness are most often conventional, perfectionist, and rule-bound and these traits may become an obstacle to jobs that requires flexibility, tight deadlines, and quick action. Little (2007) show that as conscientiousness increases, performance decreases to a point and thereafter may rise.

The work nature of driver is usually dependent on environmental factors more often than other occupation as it is on public roads and customer premises. Unforeseen challenges will often spring up as these environmental factors are not in the control of the company. The uncontrollable environmental factors leads to variation in environment factor in which drivers will face different situation with each different day. Drivers’ who are careful, organized, pays attention to details and efficient may be better prepared to face the unforeseen challenges which may lead to high performance rating in highly dynamic work environment such as in the haulage industry. Consequently the following hypothesis is proposed:

*Hypothesis 5: Conscientiousness is positively related to truck drivers’ overall performance rating.*

According to Tyler and Newcombe (2006), there is a significant negative correlation between work quality and socially bold (a narrow trait of extraversion). They suggest that, those who are timid and hesitant in social settings may actually produce work of a better quality based on assumption that individuals would spend less time chatting and focus more on the work in hand; thus, leading to better quality of work. Being bold is closely associated with the word bold in Saucier’s mini-marker, which falls within the factor of extraversion. Truck driving is a lonely occupation as the
work nature requires drivers to work alone. Based on this fact, it can be deduced that individuals who have high degree of boldness may not be able to perform optimally as a driver. Consequently the following hypothesis is proposed:

**Hypothesis 6: Boldness is negatively correlated to truck drivers’ work quality.**

Cooperation is closely associated with the cooperative trait in Saucier’s mini-markers, which falls within the factor of agreeableness. Mount, Barrick, and Stewart (1998) suggest that agreeableness is relevant to job performance in situations needing fairly high level of interpersonal interaction and collaboration which requires tolerance and flexibility. Motowildo, Brownlee and Schmit (2008) find individuals’ who are highly agreeable have more knowledge about how to handle social situations. The delivery schedule in haulage is most often requiring group or team effort to complete all deliveries within a stipulated time frame. Drivers who have high cooperation trait will cooperate and support team effort into solving delivery and collection problems. Based on the past literature the following hypothesis is proposed:

**Hypothesis 7: Cooperation is positively correlated to drivers’ teamwork rating.**

Flexibility is a narrow trait for agreeableness dimension. Mount, Barrick, and Stewart (1998) suggest that agreeableness is relevant to job performance in situations needing fairly high level of interpersonal interaction and collaboration which requires tolerance and flexibility. Drivers’ who are high on flexibility trait will be able to complete given task more often than drivers who are low on flexibility. The successful completion of given delivery task is very much dependent on factor outside the company’s premises. High dependency to external environmental factors will lead to different situation with each different day. It is usually not the same environment day in day out and this brings to the variations in their work area. The narrow trait of flexibility in agreeableness dimension will make the drivers to be more acceptable to
these variations; hence, may lead to a more reliable performance. Based on the past literature the following hypothesis is proposed:

**Hypothesis 8: Agreeableness is positively related to drivers’ ability to learn.**

A study on military personnel’s by Bilgic and Sumer (2009) find that best predictor of commendations is emotional stability. Commendations signify that the members of the military forces are performing well and showing extraordinary task and citizenship behaviors. Scholtz (2003) as cited by Bilgic and Sumer (2009) observe that emotional stability is significantly correlated with psychological well-being. Saucier (1992) states that relaxed is a narrow trait of emotional stability. This trait would steer the driver to act in a relaxed manner even when the job requires longer working time and stressful. The drivers will be able to maintain composure; hence, will be able to be more productive. Based on the past literature the following hypothesis is proposed:

**Hypothesis 9: Relaxed is positively correlated to drivers’ productivity**

### 3.3 Sample and Data

The study population is all licensed haulier by Lembaga Pelesenan Kenderaan Perdagangan (LPKP), operating in Peninsular Malaysia. LPKP is a government agency that issues licenses to trucking companies for various types of lorries in Malaysia. The haulage industry is regulated by the way of licensing by LPKP. As of 2011, there are 213 companies licensed to operate container haulage. The license is required to operate container haulage. There are about 10500 drivers in this industry (Hanif, 2011). This study uses convenience sampling which allows data to be collected rapidly and inexpensively within a limited time frame within the population. A sample of ten companies will be chosen and with a target sample of 150 drivers.
3.4 Data Collection

Data gathering was done through self-administered questionnaire. The questionnaires were distributed to the sample company officers who later distributed to their respective drivers. A cover letter was attached stating the procedures to be followed together with responsibilities of the participant as to enhance respondent’s confidence in participating in this research. All distributed questionnaires were collected within two weeks from the date of distribution.

3.5 Definition of Research Variables

The independent variables of this study are FFM of personality, which are agreeableness, emotional stability, extraversion and conscientiousness and its narrow traits which are sloppy, boldness, team work or cooperation and relaxed. The dependent variable is the drivers’ job performance. The following section provides detailed descriptions of the research variables.

3.5.1 Independent Variables

The independent variable of this study is personality dimensions and traits. A cross comparison between Tichon’s and O*NET was conducted. Based upon the cross comparison, this study derives the following personality dimension and traits that are most likely to be required by a truck driver to perform on his/her given task. The personality dimensions are: 1) agreeableness, 2) emotional stability, 3) extraversion, 4) conscientiousness. The narrow traits are: 1) sloppiness (inverse trait to attention to detail), 2) boldness, 3) cooperation, 4) relaxed.
3.5.1.1 Personality Dimensions

**Agreeableness** is deemed to be an important dimension that affects truck drivers. Agreeableness narrow traits such as cooperative, kind, sympathetic and warm may lead to better performance. Motwildo, Brownlee and Schmit (2008) find individuals who are highly agreeable have more knowledge about how to handle social situations in which kind and considerate responses are required. Based on the job analysis by Tichon (2005), this personality dimension is deemed to have impact on performance on broad facets of truck driver job performance. This dimension is identified in the literature as consistently related to occupational performance (Barrick & Mount, 1991; Ones & Viswesvaran, 2001).

**Emotional Stability** is positively correlated with contextual performance (Beaty, Cleveland & Murphy, 2001). An emotional stability narrow trait includes anxiety and anger. A study on military personnel’s by Bilgic and Sumer (2009) find that emotional stability is the most significant predictor of commendations. Commendations signify that the members of the military forces are performing well and showing extraordinary task and citizenship behaviors. Literature findings on job analysis indicate that truck drivers’ job requires them to accept criticism and deal calmly and effectively in high stress situations. Hence, stable emotion may lead to drivers’ dealing calmly in high stress situations in which will lead to improved contextual performance.

**Extraversion** narrow traits include sociable, gregarious, assertive, introvert, bashful and active. Beaty, Cleveland and Murphy (2001) observe that personality dimension of extraversion is positively correlated with contextual performance in general, but not in specific to truck drivers. On the other hand, Tichon (2005) find that there is no relation between introversion and any of the job performance. The literature findings of job analysis in this study also do not indicate any traits of extraversion required in a driver
to perform his/her task. It is apparent that there are differing views of this dimension on its relationship to occupation and driver’s job performance.

**Conscientiousness** has strong correlations with average of all performance scores of an employee (Tyler & Newcombe, 2006). Based on Murphy’s (1996) results individuals who are high in conscientiousness are most often conventional, perfectionist, and rule-bound. Further, these traits may become an obstacle to jobs that require flexibility, tight deadlines and dynamic. The work nature of driver is usually highly dependent on environmental factors. High disciplined and low flexibility may lead to low performance in highly dynamic work environment.

### 3.5.1.2 Personality Narrow Traits

**Sloppy** is a narrow trait of conscientiousness. Drivers’ job requires them to be careful about detail and thorough in completing work tasks. The lower this trait in a driver indicates the tendency to be alert on the road and focus on information accuracy in which drivers’ will be less in making careless errors. This trait has an inverse meaning and logically, negatively related to attention to detail trait found by Tichon (2005).

**Boldness** is a narrow trait of extraversion. The less bold a driver, the more timid the driver will be. Tyler and Newcombe (2006) find that there is a significant negative correlation between work quality and being socially bold. They suggest that those who are timid and hesitant in social settings may actually produce work of a better quality based on assumption that individuals would spend less time chatting and focus more on the work in hand, leading to better quality.

**Team work or cooperation** is a narrow trait of agreeableness. The job analysis finds that this factor requires employees to be pleasant with others on the job, display a good-
natured and cooperative attitude. The work nature of drivers is such that executing of delivery task will need the assistance of other co-drivers if the volume of shipment increases which most often do. Drivers having a high level of cooperation will tend to contribute to the team cohesion.

**Relaxed** trait should be high for drivers as their job requires maintaining composure, keeping emotions in check, controlling anger and avoiding aggressive behavior, even in very difficult situations. The word stress tolerance is very closely associated with the word imperturbable and relaxed under the emotional stability dimension on the 100 Big Five markers of Goldberg (Saucier, 1994). Amongst many other environmental challenges, traffic condition and long waiting time at customer premise are common problems faced by a driver daily. The high stress tolerance level would help driver perform better when faced with this kind of challenge.

### 3.5.2 Dependent Variable

Job performance dimensions are the independent variable of this study and are based primarily on 16 performance criteria of Tichon (2005). The 16 performance dimensions are ability to learn, reasoning ability, job skill competencies, openness to new learning, productivity, quality, safety, teamwork, relationships with associates, relationships with superiors, dependability/reliability, attendance and timeliness, functioning under stress, number of trips per month, revenue per month and overall performance rating. A brief description of these dimension are as follows;

**Ability to learn** means that the driver will be able to learn new job-related skills and practices quickly. He/she will also be able to learn instruction from written documentation and by observation. Reasoning ability means that the driver is able to reason through problems using job knowledge. He/she makes few errors in judgment
and demonstrates good reasoning whenever making an exception to a standard procedure. Job skill competencies, means that driver remembers how to perform tasks correctly. Understands the reasons for specific work procedures and follows them appropriately and makes very few mistakes.

**Openness** to new learning means that the driver is willingly tries out new procedures, practices, or equipment and does not show resistance, negativity, or opposition. The driver also tries to learn more than just the basic information about the equipment he/she is using and asks questions when he/she can’t figure out things. Productivity means that the driver achieves a high level of productivity on the job and does not often have lapses in performance. He/she also puts forth a lot of effort; accomplishes as much or more than what is expected and willing to work overtime when required.

**Quality** means that the driver is neat, orderly in his approach to tasks and is rarely sloppy or haphazard in approaching tasks. Safety means that the driver complies with safety rules. He/she does not act in an impulsive or rash manner which might lead to an accident. Teamwork means that the driver helps other people who may not know as much as he/she does. He/she also voluntarily assists others with their work when his/her work load permits. Relationships with associates, means that the driver relates to people at work in a friendly, cordial manner and most often acts in a tactful, courteous manner toward co-workers. Relationships with superiors, means the driver shows respect and consideration for supervisors and does not challenge the supervisor in a destructive manner.

**Dependability** means that the driver keeps his/her word even when it is inconvenient to do so. He/she has the initiative to do things that need to be taken care of without waiting to be told. Attendance and timeliness means that the driver has a good attendance record and does not come in late except for rare circumstances. Functioning under stress, means that the driver maintains composure even under very demanding work conditions. When a conflict arises, does not lose control of his/her feelings. Number of
trips per month is the number of containers delivered and collected per month. Revenue per month is the total revenue generated by driver per month and lastly the overall performance rating indicates the general opinion of this driver and not an average rating of the driver. The following section will discuss on the instruments used to measure the variable.

3.6 Research Instrument

The research instrument in this study is a survey questionnaire. The survey questionnaire has two separate sections. The first section covers questions on truck drivers’ personality traits which will be administered to drivers which have two parts; the first part is pertaining to personality questions and the second part pertaining to demographic questions. The second section covers the performance measurement of drivers, which will be administered to the company’s supervisor/officer/manager. The following section will describe in detail of the measurements used in measuring the independent and dependent variables.

3.6.1 Personality Traits

Widiger and Trull (1997) find that among the available assessment of the FFM of personality, Goldberg’s (1992b) inventory is the most comprehensive in measuring the personality factors. Saucier (1994) reconfigured Goldberg’s scale and developed The Saucier Mini-Markers. The Saucier Mini-Markers has 40 items in the form of adjective, which represents personality markers designed to assess the FFM personality factors. These mini-markers designed by Saucier basing from Goldberg’s Uni polar Big Five 100 adjective markers (Saucier, 1994).
This Mini-Marker has comparable reliability, fewer difficult items and lower inter scale correlations compared to Goldberg’s original 100 markers (Poropat, 2004). Dwight, Cummings and Glenar (1997) cited by Poropat (2002) have independently confirmed and supported Saucier’s validation of the Mini-Markers. They also provide some evidence of criterion related validity. This instrument is shorter; hence, it is faster to administer and makes it a preferred choice in situation where assessment may be affected by fatigue or short attention span of the subjects (Saucier, 1994).

Narrow traits may be able to bring about additional variance compared to use of broad factors alone. Ashton (1998) finds that by using the broad factors, researchers may lose in finding out those narrower traits that have the strongest theoretical and empirical relationship with the variables of interest. Therefore, in this study, both narrow traits and broad dimensions will be combined to a single instrument on the basis from the findings by Schneider, Hough and Dunnette (1996) and Stewart (1999).

Saucier (1994) derived to 40 items in the form of adjectives on measuring an individual’s personality. In Saucier (1994), each of the five dimensions is further broken into ten traits or adjectives describing each dimension. Four adjectives describe on one side of the dimension continuum (the positive part) and another four adjectives describe on the other side of the continuum (the negative part). Except for the dimension of emotional stability which has two adjectives describing the positive part and six adjectives each describing the negative part and the dimension of intellect has six adjectives describing the positive part and two adjectives each describing the negative part.

The traits of extraversion are talkative, extroverted, bold and energetic on the positive trait continuum while shy, quiet, bashful and withdrawn on negative trait continuum. The traits of agreeableness are sympathetic, warm, kind and cooperative on
the positive trait continuum while cold, unsympathetic, rude and harsh on the negative trait continuum. The traits of conscientiousness are organized, efficient, systematic and practical on the positive trait continuum while disorganized, sloppy, inefficient and careless on the other end of the trait continuum. The traits of emotional stability are un-envious and relaxed on one end of the trait continuum while moody, jealous, temperamental, envious, touchy and fretful on the other end of the trait continuum. The traits of intellect are creative, imaginative, philosophical, intellectual, complex and deep on one end of the continuum while uncreative and unintellectual on the other end of the trait continuum.

Each trait is measured on a 5-point Likert scale as in Poropat (2002). Rating 1 indicates the trait is very inaccurate describing the respondent. Rating 2 indicates the trait moderately inaccurate in describing the respondent. Rating 3 indicates that the respondent is not sure and the trait is neither accurate nor inaccurate in describing them. Rating 4 indicates the trait is moderately accurate in describing the respondent. Rating 5 indicates the trait very accurately describes the respondent.

The main medium of language for drivers’ is Bahasa Malaysia, the native language in Malaysia. The questionnaire for part 1 which is to measure the respondents’ personality was translated from English to Bahasa Malaysia language. The translation was completed by two educationists, Chanderasana Gamini with a master degree in linguistics from Universiti Sains Malaysia, Malaysia and Vasugi Kulaendran with a master degree in educational psychology from University Malaya, Malaysia respectively.

3.6.2 Job Performance dimension

Drivers’ job performance is measured based primarily on a set of criteria used by Tichon (2005) in measuring delivery driver’s job performance. In this study a
performance rating form is used to record supervisors rating of the driver’s job performance. The evaluator (supervisor, officer or manager) was asked to rate each driver’s on the 16 job performance criteria. Each criterion is measured on an 8-point Likert type scale as in Loveland, Gibson, Lounsbury and Huffstetler (2005).

Rating 1 indicates that the drivers’ performance does not meet or rarely meets minimum job standards. Rating 2 signifies performance is less than satisfactory in many respects. Rating 3 indicates performance is satisfactory in most respects but not all. Rating 4 for performance is satisfactory in all respects. Rating 5 indicates that the performance is above average but not superior. Rating 6 is for superior performance in almost all respects. Rating 7 indicates that the performance is definitely superior in all respect. Rating 8 is the single best performances an appraiser have ever observed or even hope to observe. The questionnaire measuring the drivers’ performance contains in Part 2 and the questions are in English as the respondents are assumed to be well versed in this language.

3.7 Data Analysis

3.7.1 Preliminary Test

A pilot test was conducted prior to the actual survey. This pilot study was conducted to find out whether (1) the items in the questionnaire that measure the drivers’ personality reliable and (2) whether there is any errors on the translation from English language to Bahasa Malaysia. A total of 20 questionnaires were distributed and all questionnaires were collected within a week.

A reliability test was conducted which measures the consistencies of the respondent feedback on the items in the questionnaire. Reliability test was done by computing for Cronbach Alpha. Poropat (2004) indicate that Cronbach Alpha value
above 0.69 is acceptable though less than ideal in the studies relating to personalities. Details of the Cronbach Alpha value of clustered item can be referred in Table 3.1.

Table 3.1
Reliability Test Results – Pilot Study

<table>
<thead>
<tr>
<th>FFM Dimension</th>
<th>Variables</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion Positive</td>
<td>talkative/bold/energetic/extraverted</td>
<td>0.74</td>
<td>4</td>
</tr>
<tr>
<td>Extraversion Negative</td>
<td>quite/shy/bashful/withdrawn</td>
<td>0.8</td>
<td>4</td>
</tr>
<tr>
<td>Agreeableness Negative</td>
<td>cold/harsh/unsympathetic/rude</td>
<td>0.8</td>
<td>4</td>
</tr>
<tr>
<td>Agreeableness Positive</td>
<td>sympathetic/kind/warm/cooperative</td>
<td>0.83</td>
<td>4</td>
</tr>
<tr>
<td>Conscientiousness Negative</td>
<td>careless/disorganized/sloppy/inefficient</td>
<td>0.8</td>
<td>4</td>
</tr>
<tr>
<td>Conscientiousness Positive</td>
<td>organized/practical/efficient/systematic</td>
<td>0.57</td>
<td>4</td>
</tr>
<tr>
<td>Emotional Stability Negative</td>
<td>envious/fretful/jealous/moody/touchy/temperamental</td>
<td>0.77</td>
<td>6</td>
</tr>
<tr>
<td>Emotional Stability Positive</td>
<td>relaxed/un-envious</td>
<td>0.45</td>
<td>2</td>
</tr>
<tr>
<td>Intelligence Positive</td>
<td>complex/creative/deep/imaginative/intellectual/philosophical</td>
<td>0.8</td>
<td>6</td>
</tr>
<tr>
<td>Intelligence Negative</td>
<td>uncreative/unintellectual</td>
<td>0.55</td>
<td>2</td>
</tr>
<tr>
<td>All Positive continuum of FFM dimension</td>
<td>talkative/bold/energetic/extraverted/sympathetic/kind/warm/cooperative/organized/practical/efficient/systematic/relaxed/unenvious/complex/creative/deep/imaginative/intellectual/philosophical</td>
<td>0.87</td>
<td>20</td>
</tr>
<tr>
<td>All Negative continuum of FFM dimension</td>
<td>quite/shy/bashful/withdrawn/cold/harsh/unsympathetic/rude/careless/disorganized/sloppy/inefficient/envious/fretful/jealous/moody/touchy/temperamental/uncreative/unintellectual</td>
<td>0.97</td>
<td>20</td>
</tr>
</tbody>
</table>

3.7.2 Main Analyses

The analyses that will be conducted in this study will include;

Descriptive analysis is to describe the characteristics of the sample. The following summaries will be generated and interpreted from the demographic data’s,
which are the frequency distributions and the measures of central tendency (median, mode and mean).

**Reliability analysis** for a measure indicates to what extent the measure is without bias and thus provides consistent measurement across time and across various items in the instrument. It is an indication of the stability and consistency of the instrument. The internal consistency of measure indicates the homogeneity of items in the instrument that measures the concept (Sekaran, 2003). Inter item consistence reliability is a test of consistency of respondents answering to all the items in a measure. The degree that items are independent measures of the same concept will be correlated with one another. Sekaran (2003) indicates that for a multi-point scaled item, the most well-known inter-item consistency is the Cronbach coefficient alpha. According to Hair, Babin, Rolph, Anderson and Tatham (2006) as cited by Vignaswaran (2008) indicate that a reliability coefficient of 0.70 or more is considered adequate.

**A correlation study** is conducted to clarify and strengthen the understanding of important phenomena by identifying the relationship among the variable. The correlation measures the degree to which the two variables are related. Higher the correlation value the stronger the relationship. Correlation is most often used in psychology studies where experimental studies are difficult to design. When a correlation value 0.20 or below is found, it can be concluded that the variables consend are found not to be related or only slightly related and these variables can be dropped from the said study. While those correlations value which are +0.40 or -0.40, this often serves as a lead to additional research by using and experimental design to check whether there is cause and effect relationship between these (Fraenkel & Norman, 2006). The value of +1 or -1 in correlation indicates a perfectly linear relationship and the value of 0 indicates that there is no relationship between the two variables.
Multiple regression analysis is similar to basic correlation study but more complex correlation techniques. This technique enables the researcher to determine the correlation between a criterion variable and the combination of two or more independent variable (Fraenkel & Norman, 2006). The coefficient of multiple regression is symbolized by $R$ and it indicates the strength of the correlation between the combination of the independent variables and the dependent variable.

Pearson correlation coefficient is used to determine the strength of correlation between variables. Yong (2005), quoted by Narendran (2008), indicate that 1) value of less than 0.20 as no correlation, 2) value of less than 0.40 as weak correlation, 3) value of less than 0.70 as moderate correlation, 4) value of less than 0.90 as strong correlation and 5) value of above 0.90 as very strong correlation. The test of significance at 1-tailed (p-value) should be below 0.05.

All statistical analyses will be carried out using the SPSS software, version 17.0.

3.8 Conclusion

Based from the literature findings, a total of nine hypothesis were developed. Four hypothesis test the relationship of personality dimension and respective job performance and four hypothesis testing personality traits and the respective job performance. Two separate instruments were used to measure the variables, one for the independent variables of personality and the other for the dependent variables of job performance.

A pilot test was conducted with a sample size of 20 respondents were conducted to test the reliability of the personality measure, in which the results have shown high reliability (Cronbach alpha > 0.70). A total of 147 respondents’ completed the
questionnaires’ from nine different haulage companies whereby in the following chapter the results of the study is discussed.