CHAPTER THREE

RESEARCH METHODOLOGY

The main objective of this research project is to study the relationship between Rotter's internal or external locus of control and the intention of FDAM managers to become an entrepreneur. Researcher would like to study whether the FDAM managers have strong intention to become an entrepreneur and whether this intention relates to the external locus of control.

In this chapter, Research Methodology, researcher will explain in detail, the methodology used in measurement, sampling design, data collection procedure and data analysis techniques. Nevertheless, how the researcher formed the hypothesis will be described here as well. For the purpose of this research study, two kinds of data has been collected i.e. via primary data (survey questionnaire) and secondary data (researches by other researchers).

3.1 RESEARCH HYPOTHESIS

Based on the findings in Chapter 2, a few hypothesis have been developed to investigate the relationship between the variables. Personality traits of entrepreneurs are found to be a determinant as to which persons display initiative (Lachman 1980). Low and MacMillan (1988) concluded that entrepreneurs' personalities do not have important influences on the organizations they create. Therefore, we would like to investigate, whether there is significant relationship between Locus of Control and the intention of being an entrepreneur among FDAM managers.

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The Null Hypothesis, H_o, the hypotheses that this study would like to investigate is whether there is no significant relationship between Locus of Control and the Intention of Becoming an Entrepreneur among FDAM managers. The result of this study will allow the researcher to whether accept or reject the null hypotheses. If the null hypotheses, H_o, is rejected, then the alternative hypothesis, H_i is accepted, that is, there is asignificant relationship between Locus of Control and the Intention of Becoming an Entrepreneur among FDAM managers.

Hypothesis 1:

- Ho : There is no significant relationship between Locus of Control and the intention of being an entrepreneur among FDAM managers.
- Hi : There is significant relationship between Locus of Control and the Intention of being an entrepreneur among FDAM managers.

To further explore the relationship between Locus of Control and the Intention of Becoming an Entrepreneur, the researcher, investigate the responses on internal and external Locus of Control individual. This research also investigate whether there is a significant relationship between respondent's demographic profiles and locus of control and intention of becoming an entrepreneur among FDAM managers.

Hypothesis 2:

- Ho : An Internal Locus of Control individual has no relationship with the intention of being an entrepreneur among FDAM managers.
- Hi :An Internal Locus of Control individual has a significant relationship with the Intention of being an entrepreneur among FDAM managers.

Khan and Manopichetwattana (1989) finds that those headed by someone with an internal Locus of Control are more likely to engage in both planning and environment scanning. Wheatley, Anthony and Maddox (1991, 57) stated that internals are more likely to exhibit those entrepreneurial qualities that are necessary to enhance the strategic planning process than are externals.

Hypothesis 3:

- Ho :Ethnic Group does not give significant effect towards the intention of being an entrepreneur among FDAM managers.
- Hi : Ethnic Group gives significant effect towards the intention of being an entrepreneur among FDAM managers.

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Hypothesis 4:

- Ho : Gender does not give significant effect towards the intention of being an entrepreneur among FDAM managers.
- HI : Gender gives significant effect towards the intention of being an entrepreneur among FDAM managers.

Hypothesis 5:

- Ho : Education level does not give significant effect towards the intention of being an entrepreneur among FDAM managers.
- Hi : Education level gives significant effect towards the intention of being an entrepreneur among FDAM managers.

Hypothesis 6:

- Ho :Years of working experience does not give significant effect towards the intention of being an entrepreneur among FDAM managers.
- Hi :Years of working experience gives significant effect towards the intention of being an entrepreneur among FDAM managers.

3.2 RESEARCH MODEL

In this research model, the respondent is the individual who has the intention of becoming an entrepreneur. Figure 3.1 show how demographic factor (individual characteristic) may influenced the development process of an individual locus of control that path the way to intention of becoming an entrepreneur.

This model is divided into 3 section i.e. independent variable, which is the individual personal characteristics (demographic profile) like gender, ethnic group and education that determine whether the individual's orientation is toward internal or external locus of control. Locus of Control is the 'mediator' variable that has 2 components i.e. internal and external locus of control. Internal locus of control individual, believe in their powerful control of their own, where as external locus of control individual believe luck and outside forces determine their behaviors. Intention of becoming an entrepreneur is a dependent variable. There are several studies that relate Locus of Control with entrepreneurial activity and vice versa Shapero, 1975, Rupkey, 1978).

These research model show that there is a significant relationship between independent variable with "mediator' variable which then influenced the dependent variable.

Therefore, this research study would like to investigate;

 The relationship between internal and external locus of control and the intention of FDAM managers of being an entrepreneur.

Figure 3.1 Model for Formation of Intention of Being an Entrepreneur



 Has individual demographic differences contributed to the intention of being an entrepreneur.

Figure 3.2 Model for Effect of Demographic Differences Towards Intention of Being an Entrepreneur



3.3 SELECTIONS OF MEASURES

In order to collect data at hand for this research study, a survey research has been done. This research has the purpose to identify characteristic of FDAM managers towards Locus of control and intention to become an entrepreneur. Therefore, a survey research is most appropriate to describe the behavioral patterns.

The Survey Questionnaire has been attached in Appendix 1. This Survey Questionnaire has been divided into three sections. Part A is to investigate the Locus of Control of the respondents either internal or external. Part B is to describe the characteristics of the respondents towards their intention of being an entrepreneur. Finally, in Part C, respondents have to provide with their personal demographic profile.

3.3.1 Rotter's Internal-External Scale (RIES)

Sample of FDAM managers have been tasted using the Rotter's Internal-External Scale (1966) in a two dimensions, forced-choice format. Please find the Rotter's Internal-External Scale in Part A of the Survey Questionnaire attached in **Appendix 1**. The instrument has been used by many local researchers such as Enshah (1975), Chan (1986), Chang (1989), Omar (1991), Munira (1999) and Lam (2001)

This measurement tool consists of 29 groups of questions (forcedchoice). Twenty-three(23) of the questions is designed to measure the level of the locus of control, which will determine whether the respondent is controlled by himself/herself (internal locus of control) or effected by the environment (external locus of control). The other six (6) questions are filler question (question 1, 8, 14, 19, 24 and 27) which do not show whether the individual respondent is controlled by internal or external forces. Respondent is required to choose one alternative choice, which relates to internal or external locus of control. The respondent has to choose the most suitable answer to them. The total score of Locus of Control is obtained by adding alternative choice of locus of control the respondent chose (minimum 0 and maximum 23)

Procedure for Marking.

In this research, the researcher divides the respondent into internal locus of control orientation and external locus of control orientation based the mean total score.

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If the respondent chooses the answer, which relates to internal locus of control, zero (0) mark will be given. On the other hand, if the respondent chooses the answer which relates to external locus of control, "1" mark will be given. Respondents who scored 8 or less are considered have strong believed in they control themselves. These respondents have strong Internal Locus of Control.

If the respondents scored 9 and above, these respondents have strong External Locus of Control. They are more likely to follow the environment and less confidence in themselves. Therefore, the higher the Rotter's Internal-External Scales, the higher the External Locus of Control. Respondents with high Internal Locus of Control and Confidence will have low Rotter's Internal-External Scales. Rotter's Internal-External Scale marking system is as in Appendix 2.

Reliability of Measurement Tool

Reliability value obtained from the study using RIES is constant. Through test-retest of several types of different sample studied by Rotter (Phares, 1976), the reliability value is between 0.49 and 0.83. Several local researcher using the same scale (RIES) obtain the reliability value within the above range. The study by Habibah (1991) for 2 test on reliability obtained a value of 0.59 for pre-test and 0.73 for post-test.

3.3.2 Intention to Become an Entrepreneur

In Part B of the survey questionnaire, researcher used the Likert 5 scale to investigate the intention to become an entrepreneur among

FDAM managers. There are totally 9 questions in this Part. These questions are to investigate whether the respondents have intention to become entrepreneur and what is the level of commitment. Question 8 is to investigate the industry that the respondents are willing to venture into in near future. Question 9 is study the respondents' reasons to become an entrepreneur.

For question 1 to 7, a five points Likert Scale was used to find out each FDAM managers intention to become entrepreneur.

1	= Strongly Disagree
2	= Disagree
3	= Not Sure
4	= Agree
5	= Strongly Agree

Respondent will have the choice to select the choice to select the questions based on their personal opinion towards the intention to become entrepreneur. Researcher will total up the scale, which the respondents had chosen for question 1 to 7. Researcher had decided to categorize the level of intention among the respondents into 3 levels:

Strong	 - 30 to 35 points
Moderate	- 22 to 29 points
Low	- 7 to 21 points
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This questionnaires have been introduced by Ajzen and Fishbein (1980) to study the role of attitudes influencing behaviors. Ajzen and Fishbein collaborated and developed the Theory of Reasoned Action and Theory of Planned behavior. Reitan (1996), adopted similar approach to study entrepreneurial intent. Local researchers, Munira (1999) and Lam (2001) used the questionnaires to measure the intention of being entrepreneur.

Respondents who have strong intention of being an entrepreneur will have a very positive attitude towards all the challenges. This person will not give up easily and they will continue their venture until they succeed. A study by Carter, Gartner, and Reynolds (1996) found a higher incidence of intention-initiated start-ups. In their study, 48% of the subjects with entrepreneurial intention actually started a business.

Respondents who have moderate intention of being an entrepreneur will give up easily because of all up easily because of all the obstacles they have to face, such as capital and risk.

Respondents with low intention of being an entrepreneur have no objective to become an entrepreneur. These people are mostly salary earner. They are satisfied with what they are having at the moment.

3.3.3 Personal Demographic Profile

The respondents' personal demographic is located at Part C of the survey questionnaire. Information that is required such as gender, age, ethnic group, year of working experience, location currently attached and income.

3.4 SAMPLING DESIGN

In order to study the relationship between internal and external locus of control and the intention of FDAM managers to become an entrepreneur, this study has done a Survey Questionnaire. The survey questionnaire was targeted to the FDAM managers with different ethnic group. Then, these 100 FDAM managers have been conveniently selected according to a appropriate of FDAM population. These respondents need to give their views and comments to the questions in the survey questionnaire attached in **Appendix 1**.

This study used quota sampling to plan the sample as in Table 3A. These respondents are FDAM managers located in FDAM Headquarters in Kuala Lumpur, State Office and in FDAM Project Centers throughout the country. Therefore, the sampling technique here is a mixture of appropriate quota sampling and convenient sampling.

Ethnic Group	Total	Male	Female
Malay	86	61	25
Indian & Others	8	6	2
Chinese	6	4	2
Total	100	71	29

Table 3A : Planned Sample of Survey – Ethnic Group

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The planned sample above is based on the ratio of FDAM organizational population of 1,065 employees of which 400 are grouped as managers. Thus the plannaed sample of respondent's constitute 33.33% the FDAM managers' population. This study would like to investigate whether ethnic group, education, income, and locations currently attached have relationship with the FDAM managers' intention to become entrepreneurs.

3.5 DATA COLLECTION PROCEDURE

The researcher used 3 types of tools in the survey questionnaires. Firstly, to test the respondents whether there are Internal and External Locus of Control based on Rotter's research. Secondly, in Part B of the questionnaires, respondents have been test for their intention to become an entrepreneur. Finally, in Part C, respondents have to fill in their personal demographic profiles.

3.5.1 Data Collection Techniques

In this research study, the researcher has based on two sources to collect data required. There are primary data and secondary data collection. Data on entrepreneurial research, definitions, intention and locus of control has been collected using these two sources.

Primary Data

The purpose of survey research is to collect primary data – data gathered and assembled specifically for the research project at hand. In this research project, responses from the 100 respondents are collected from the Survey Questionnaire. The questions in the Survey Questionnaire are very objective. Respondents just need to mark the most accurate answer to them from the list of possible answer provided. The questions in the Survey Questionnaire are quite

lengthy especially Part A on the Rotter's Internal-External Scale, therefore, simple answer would be comfortable to the respondents.

Secondary data

Secondary Data are mainly from the researcher done by previous researcher on topics such as entrepreneurship, intentions and locus of control. Books on various topics on entrepreneurship are also used as reference. There are also many articles on the current development on entrepreneurship as reference for this research study. The list of references can be found at the end of the book, bibliography.

3.6 DATA ANALYSIS TECHNIQUES

The statistics program SPSS (Statistical Package for The Social Sciences) will be used to analyze the data from the Survey Questionnaire. The answers from 100 Survey Questionnaire has to be first coded in numerical number and then key in into the statistical program. The answers have to be well organized by Part A, B and C.

Hypothesis 1:

- Ho : There is no significant relationship between Locus of Control and the intention of being an entrepreneur among FDAM managers.
- HI : There is significant relationship between Locus of Control and the Intention of being an entrepreneur among FDAM managers.

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Hypothesis 2:

- Ho : An Internal Locus of Control individual has no relationship with the intention of being an entrepreneur among FDAM managers.
- HI :An Internal Locus of Control individual has a significant relationship with the Intention of being an entrepreneur among FDAM managers.

Hypothesis 3:

- Ho :Ethnic Group does not give significant effect towards the intention of being an entrepreneur among FDAM managers.
- Hi : Ethnic Group gives significant effect towards the intention of being an entrepreneur among FDAM managers.

Hypothesis 4:

- Ho : Gender does not give significant effect towards the intention of being an entrepreneur among FDAM managers.
- Hi : Gender gives significant effect towards the intention of being an entrepreneur among FDAM managers.

Hypothesis 5:

- Ho : Education level does not give significant effect towards the intention of being an entrepreneur among FDAM managers.
- Hi : Education level gives significant effect towards the intention of being an entrepreneur among FDAM managers.

Hypothesis 6:

- Ho :Years of working experience does not give significant effect towards the intention of being an entrepreneur among FDAM managers.
- Hi :Years of working experience gives significant effect towards the intention of being an entrepreneur among FDAM managers.

To analyze the relationship between Locus of Control and the intention of being an entrepreneur, One Way ANOVA test to compare the means is used.

Correlation Analysis will be conducted to test the relationship between Locus of Control and the intention of being an entrepreneur. The correlation analysis is used to measure the strength or degree of linear association between two variables. The correlation coefficient (r) or correlation matrix showed the correlation between each independent variable towards the dependent variables. R will fall between negative one and positive one (-1 r 1) with r equals to one showed a perfect positive correlation between the two variables, whereas r equals to negative one indicated a perfect negative

relation. r equals to zero showed no correlation between the two variables at both 1% or 5% significant levels.

This study need to further investigate whether Internal Locus of control would has significant relationship with the intention of being an entrepreneur among FDAM managers. Therefore a T-test is conducted to run on the Internal and External Locus of Control and compare intention to become an entrepreneurs' mean value.

Next, the researcher needs to see the ethnic group differences with respect to the intention to become an entrepreneur among FDAM managers. Since we need to compare the means of 3 ethnic groups, i.e. Malay, Indian & others and Chinese, one-way Analysis of Variance, ANOVA is the most suitable analysis used.

Secondly, Chi-Square tests was conducted. This measurement was done by using the chi-square test and run the cross tabulation analysis on the ethnic group. For academic analysis, the alpha value is always 0.05. Then, this alpha value will be compared with the significance value from the test result.

To analyze whether gender, education background and income level gives significant effect towards intention to become an entrepreneur, chi-square tests is conducted. The result of the significance value will be used to compare with the alpha value to see whether gender, education and income level gives significant effect towards intention of being an entrepreneur.

The ANOVA testing will run on the gender, education level and income level and the first 7 questions on Part B and compare the male and female's mean value, education level and income level mean value . We will see from the results whether there is significant difference on gender, education

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level and income level with respect to all the items Part B (intention of being an entrepreneur). Then conclusion will be made based on the results of the test whether there is significant difference between gender or income level or education level and the intention of being an entrepreneur among FDAM managers.