CHAPTER III

RESEARCH METHODOLOGY

This chapter includes all the research design issues such as population and sample, variables and the measure used, data collection methods and the data analysis techniques to be used in the study.

RESEARCH DESIGN

The most basic aspects of research design, which involves a series of rational decision-making choices, are the purpose of the study, the types of investigation, the extent of researcher interference, the study setting, the unit of analysis, and the time horizon of the study. An exploratory study is undertaken when we do not know much about the situation at hand or when we have no information on how similar problems or research issues have been solved in the past. At present, researcher is curious to know if the work culture of Malay employees between gender would be different from those of Americans. There is very little information about the Malays, and since there is a lot of controversy about what work culture consists, the researcher's curiosity can only be addressed by an exploratory study of the Malay employees. Although there are very few exploratory studies currently undertaken, from time to time researchers do explore new grounds with the changing dynamics that occur at the workplace. The present study includes a well-measured religious education and understanding as a variable so that good theories about work culture can be evolved in future. Descriptive study is also undertaken to ascertain and to be able to describe

31

the characteristics of variables in a situation. Hypothesis testing is further conducted to offer an enhanced understanding of the relationships that exist among variables.

Since the researcher wants to identify the important factors "associated with" the problem or in other words, to establish the relationships between the independent variables and the dependent variables, then a correlational study is called for. This study is a non-contrived field study, which is done, in natural environment where events normally occur. Variables were neither controlled nor manipulated, and no artificial setting was created for the study.

The original data for this study were collected over a six-month period. It is a cross-sectional study because longitudinal study often takes more time and effort. For the purpose of this study, the unit analysis is at the individual level. Using questionnaires, researcher interferes minimally with the normal flow of events.

POPULATION AND SAMPLE

The population of the study consisted Malay Muslim employees aged between 20 and 55 years old and were either self employed or worked in the three main sectors in Malaysia. The area from which the data were collected was divided into five area zones; North, Middle, South, East and Sabah/Sarawak. The North zone includes Perlis, Kedah, Pulau Pinang and North Perak, the Middle zone consists of Selangor, Wilayah Persekutuan, Negeri Sembilan and South Perak, the South zone includes Johor and Melaka, the East zone includes Kelantan, Trengganu and Pahang

and finally Sabah/Sarawak. Three main sectors were agricultural, industrial and services. It was believed that, by studying a sample of Malay employees representing these three main sectors from the five area zones, generalization of findings to Malay employees are possible since all geographical regions were covered, as were the sectors. Respondents were randomly chosen throughout the fieldwork.

About 700 individuals comprised the sample from each of the five area zones totaling of 4200 respondents. Permission from the organizations involved (private companies and government agencies) was gained before the fieldwork. From the list of workers given by the Human Resource Department, researchers selected randomly respondents from each level of management. Since this is an on-going research, at the point of time, around 1500 questionnaires have been collected. Out of these questionnaires, 619 were randomly selected and coded for data analysis. By considering the myth of gender differences in work values, it differed from the original research.

DATA COLLECTION METHODS

The present study used secondary data, which was obtained from individuals surveyed as part of a larger on-going research project. Questionnaires were used as a means of data collection for the original research. The questionnaires were set up using simple Malay language to tap respondents' attitudes, perceptions and feelings from various educational levels. Three-point Likert scale questions were used to help the respondents to make quick decisions by making a choice among the several

alternatives that are provided. Positively and negatively worded questions were used to minimize the tendency for respondents to mechanically circle the points toward one end of the scale. Respondents did not report any difficulty in understanding and responding to the statements in the questionnaires. It took approximately 30 minutes, on average, to complete the questionnaires.

VARIABLES AND MEASURES

The instruments in this study were developed for two major purposes:

(1)   to measure the dependent variables; intrinsic work values, extrinsic work values, ethical work behavior, attitudes towards religious issues at work and overall job satisfaction.

(2)   to gather background information on the independent variables;

      i)   personal : gender, age, marital status, number of children, area zone, place of stay and education

      ii)   employment : job sector, job rank, job tenure and part time job

      iii)   financial : income, savings, land and shares

      iv)   religious : formal religious education, informal religious education, level of Islamic understanding *(amalan/Ibadah)*, Islamic courses and political/societal involvement

Measures of Dependent Variables

The dependent variables were measured from 50 out of 56 statements from the original questionnaires. The original questionnaires measure the overall work

34

value. This study modifies the accepted field instrument in order to fit with the researcher's attempt to analyze gender differences in work values among Malays. The intrinsic and extrinsic work values, which are crucial in gender analysis, are considered. At the same time, the researcher includes 'religious values' provided from the original questionnaires.

Coding and scores of dependent variables are shown in Table 1.

(i)   **Work values as preferences: intrinsic and extrinsic**

These two dimensions were tapped through fourteen statements, on a 3-point Likert type scale. Six statements (N1-N6) were on intrinsic work values and the other eight statements (K1-K8) were on extrinsic work values. One statement on intrinsic values and three statements on extrinsic values were negatively phrased and reverse scored in order to reduce bias. Value of 1 to 3 were assigned for each statement, giving 1 of having low intrinsic value, value 2 of having moderate intrinsic value and 3 of having high intrinsic value. This would apply the same for the extrinsic values. Higher score indicated higher intrinsic/extrinsic values.

(ii)   **Work values as ethical work behavior**

Nineteen statements were chosen to measure this variable. Nine items were negatively phrased and reverse scored. Value of 1 to 3 were assigned for each statement, giving 1 of showing low ethical work behavior, value 2 of showing

moderate ethical work behavior and 3 of showing high ethical work behavior

Higher score indicated higher ethical work behavior.

(iii)   Attitudes Toward Religious Issues at Work

Sixteen statements were purposely chosen to measure attitudes towards religious issues at work. Value of 1 to 3 was assigned to each statement. Higher score indicated positive attitudes toward the issues. Six items again, were negatively phrased and scored.

(iv)   Job Satisfaction

The overall job satisfaction as mentioned before was not a product of facets satisfaction by adding their scores, but rather a single question measure. Higher score indicated higher overall job satisfaction. However, in certain data analysis, respondents would be grouped as satisfied and dissatisfied. Those who answered not sure and disagree to the statement are considered dissatisfied respondents.

Measures of Independent Variables

Table 2 provides coding and measurement for independent variables used throughout analysis. The personal background examined in this study is respondents' gender, age, marital status, number of children, area zone, place of stay and education. Gender, marital status and place of stay were coded as dummy variables with 1 = male, 0 = female; 1 = married and 0 = others (single, separated or divorced) and 1 = urban, 0 = rural. Age and number of children were measured in years.

36

Respondents listed their cities, states and highest education which were grouped into categories of 1 = North, 2 = South, 3 = East, 4 = Middle, 5 = Sabah/Sarawak and 1 = no education received, 2 = primary/SRP, 3 = SPM/Cert/College, 4 = STPM/Diploma, 5 = Degree, 6 = Masters/PHD.

Employment background included job sector, job rank, job tenure and part time job. Respondents were asked to write their occupation, rank and part time job during the survey. However due to numerous answers, the researcher grouped them by several categories. Job sector was used to group various occupation; 1= agricultural, 2 = industrial, 3 = producer services, 4 = distributive services, 5 = personal services and 6 = social services. Producer services consist of business and professional services, financial and insurance services and real estate. Distributive services comprise wholesale or retail trade, transport, storage and communication. Personal services include hotels, restaurants, domestic and others, which are primarily determined by individual consumers. Social services include health, education, sanitation, defense and those largely provided both by government as well as non-profit voluntary organizations (Pramanik, 1994). Job rank was coded as dummy variable with 1 = officer and 0 = non-officer. Job tenure was measured in number of years working in existing job. Respondents who listed their part time job were coded as 1 and those who did not were coded as 0.

Financial background consists of income, savings, land and shares. Income, savings and shares were measured in actual ringgit Malaysia, whereas, land was measured in

37

acres. For simplicity, savings, land and shares are recoded as dummy variables, 0 = no, 1 = yes.

Religious background included highest formal religious education, informal religious education, level of understanding in *ibadah/amalan*, Islamic courses and political/societal involvement. Highest formal religious education was coded as 1 = none, 2 = *'pondok'* school, 3 = primary, 4 = secondary, 5 = Islamic university. Besides formal education, another question was asked to find out respondents' informal religious education received. Respondents answering any of the items (teachers, parents, learning on own, talks, Quranic teacher, Islamic society, mass media and mosque) will be given 1 score. The highest possible score would be 8.

For level of Islamic understanding, two questions were given to state respondents' understanding, one listing various activities (*ibadah*) and another showing different types of practices (*amalan*). Thirteen statements were given to state whether they are classified as *'ibadah khusus'*, *'ibadah umum'* or *'bukan ibadah'*. Each correct statement will be given one point. For example, the five daily prayers should be considered as *'ibadah khusus'*. Furthermore, sixteen types of practice were listed to state whether they are *'wajib'*, *'sunat'*, *'makruh'* or *'haram'*. Similarly, each correct statement will be given one point. For example, lying is considered *'haram'*

Lastly, respondents were asked whether they have attended courses on Islamic understanding. No score will be given for those who have not attend any course, 1 for seldom and 2 for often.

SAMPLE CHARACTERISTICS

Demographic characteristics of the sample are presented in Table 3. Missing cases are reported in the same table due to non-response and errors while the survey was conducted. Equivalence between the male and female samples was assessed through chi-square tests shown in Table 5 and independent samples test shown in Table 8. From the total of 619 respondents, 387 (62.5%) were male and 232 (37.5%) were female. With respect to age distribution, the male sample was relatively older than the female sample, χ^2 (3) = 12.323, p-value<0.01. This confirmed with independent sample test of value t = 4.20. On average, males (M = 36.26 years) were significantly (p<.01) older than females (M = 33.11 years). For male sample, 26.6% aged between 20-29 years compared with 38.7% of female sample, 39% between 30-39 years compared with 37.3% of female sample, 26.3% between 40-49 years compared with 20.3% of female sample and 8.1% between 50-60 years compared with 3.8% of female sample.

There was a significant difference with respect to the marital status ratio; χ^2(3) = 11.748, p-value<0.01; married respondents were the majority (80%) in the male sample, which is higher by 10% than the married respondents in the female sample. 17.6% of the men were single compared with 29.3% of the women, 80.4% of men were married compared with 68.6% of the women, 1.8% of the men were divorced compared with 1.7% of the women and 0.3% of the men and 0.4% of the women were separated.

39

The men and women differed significantly in the number of children, χ^2 (3) = 18.783, p-value<0.001, whereby, more than 50% of the male sample had more than three children. Since women were younger in age, most of female sample had less than three children. For the male sample, 22.5% had no children compared with 36.5% of female sample, 22.7% less than 3 compared with 24.8% of female sample, 43.9% between 3 and 5 compared with 32.6% of female sample and 10.9% more than 5 compared with 6.1% of female sample.

The proportion of respondents for male and female in area zone and residence was almost similar. No significant difference was found in both variables. For male sample, 69% came from North, 0.3% from South, 17.6% from East, 12.1% from Middle and 1% from Sabah/Sarawak. 61.9% stayed in urban area, whereas, the rest in the rural area. Similarly, for female sample, 61.3% came from North, none from South, 21.3% from East, 14.8% from Middle and 2.6% from Sabah/Sarawak. 60.4% stayed in urban area and the rest in the rural area.

Regarding the educational attainment and occupation background, male and female samples show no significant differences in education, formal religious education, job rank and part time work. However job sector and job tenure were found to be significant. Chi-square test for job sector was χ^2 (5) = 10.561, p-value<.10. Independent samples test for job tenure showed t = 3.372, p <.01. On average, job tenure of males (M = 9.83 years) was significantly higher than females (M = 7.81 years). For male sample, 3.4% had never received any education, 14.2% had primary/SRP, 48% SPM/Certificate/College, 19.4% STPM/Diploma, 13.1% degree

and 1.8% masters/PHD. With respect to formal religious education, 63.8% had never received, 3.4% from *pondok* school, 21.2% primary, 9.3% secondary and 2.3% Islamic university. Majority of the male sample (63.8%) were non-officers. However, 15.6% of the male respondents worked in the agricultural and industrial sectors, which was twice larger than the female respondents. Around 40% of them worked in the social services compared to almost half of the female worked there. 83.7% of them did not work in any part time job.

For female sample, 0.9% had never received any education, 11.6% had primary/SRP, 50.7% SPM/Certificate/College, 18.7% STPM/Diploma, 17.3% degree and 0.9% masters/PHD. With respect to formal religious education, 69.1% had never received, 2.2% from *pondok* school, 17% primary, 9.6% secondary and 2.2% Islamic university. Similarly, majority of the female sample (67.8%) were non-officer and more than 90% of them worked in various services sectors rather than agricultural/industrial sectors. 91.3% of them did not work in any part time job.

Interesting to note that even though educational attainment, job rank and part time work were not found significant between the two samples, the chi-square test showed a very large significance in income group, χ^2 (3) = 15.744, p < 0.005. The male sample received relatively higher pay than the female sample. Nearly 40% of male sample received income between RM 1000-1999 compared to more than half of the female sample received less than RM 1000. Thus, there is an indication of differential wages between gender.

For male sample, 38.2% received pay less than RM 1000, 39.5% between RM 1000 and RM 1999, 17.6% between RM 2000 and RM 3999 and 4.7% more than RM 4000. However, for female sample, 53% received pay less than RM 1000, 33.9% between RM 1000 and RM 1999, 9.1% between RM 2000 and RM 3999 and 3.9% more than RM 4000.

In terms of financial background, both samples show no significant differences in savings, land and share owned. Majority of the respondents had some savings but did not possess any land or shares.

No significant difference was found in informal religious education between the two samples. Nearly 60% of the male and female samples scored above average in the understanding level of *Ibadah/amalan* and almost 60% also of the male and female samples seldom attended Islamic course. However, in terms of political/societal involvement, significant differences exist, whereby, 70% of the female sample did not involved at all but nearly half of the male sample was involved; χ^2 (3) = 20.023, $p < 0.001$.

DATA ANALYSIS METHODS

Basically, descriptive and the inferential statistical procedures were performed during analyses. The descriptive analyses included frequencies and central tendencies measures such as mean and standard deviation. Different inferential statistics were used for different purposes, which include t-test, chi-square, one way

and two-way ANOVA where appropriate. Pearson correlation matrix was done to identify correlation among variables.

The researcher conducted analyses of covariance (ANCOVA) to handle significant differences in the demographic characteristics between the samples. The correlation coefficient indicates the strength of relationship between two variables but does not indicate how much of the variance in the dependent variables will be explained when several independent variables are theorized to simultaneously influence it. Thus, multiple regressions on full model and gender specific model were done. Finally, discriminant analysis techniques were used to classify respondents into two groups; satisfied and dissatisfied on the basis of several variables and further, identified which variables contribute to making the classification.