

CHAPTER 4 FINDINGS AND DATA ANALYSIS

4.0 Introduction

This chapter, according to the result of questionnaires, uses SPSS 16.0 software to analyze the data collected. It identifies the relationship between the research independent variables and dependent variables as well as the moderating variable.

4.1 Data Collection

A total of 250 questionnaires were distributed to the respondents who are working in the service industry of Malaysia. In this study, a total of 124 responses were received. The data were reviewed to filter out errors in the form of invalid data including blank questionnaires or missing value, up to the time of reviewing, no blank questionnaire was found. Then the questionnaires were finalized which indicated about 50 percent response rate.

4.2 Demographic Characteristics of the Participants

A total of 250 questionnaires were distributed, but only 124 were completed and returned resulting to only 124 valid data for analysis purposes. The population is distributed across a number of demographic variables involved in the study such as respondents' gender, age, ethnic group, religion as discussed in the following table 4.1:

Table 4.1: Characteristics of respondents (n=124)

Items	Demographic group	Frequency	Percent
Gender	Male	56	45.2
	Female	68	54.8
Age	30 years and below	69	55.6
	31-40 years	45	36.3
	41-50 years	9	7.3
	51-60 years	1	.8
Ethnic	Malay	54	43.5
	Chinese	13	10.5
	Indian	38	30.6
	Others	19	15.3
Religion	Muslim	83	66.9
	Hindu	9	7.3
	None	6	4.8
	Buddhist	13	10.5
	Christian	10	8.1
	Others	3	2.4

In total there were 124 respondents, 45.2% of the respondents were male and 54.8% were female. The total numbers of males are 56, female are 58. The majority of the respondents are within the age of 30 years old and below, scoring 55.6 %. The respondents who are within the age of 31- 40 years old scored 36.3%; only 7.3% and 8% of the respondents belong to the age of 41- 50 years old and above 51 years old respectively. Based on the survey data, the majority of the respondents are Malay with 43.5%, Indian respondents with 30.6%, Chinese and Others respondents are 10.5% and 15.3% respectively. On religion, most respondents are Muslim with 66.9% because the majority population in Malaysia is Muslim. The religion of Hindu and None religion are 7.3% 4.8% respectively; The Buddhist and Christian are 10.5% and 8.1% respectively; only 2.4% falls under the category of other religions.

As shown in Table 4.2, majority of the respondents have attained at least a Bachelor's degree making a total of 44.4% of the total respondents in this survey; The respondents who attained postgraduate degrees and Certificates or Diplomas are made up 24.2% and 21% respectively; The respondents with Secondary education is 4%; whilst respondents with both primary and professional qualifications are ,made up of 3.2%.

Table 4.2: Education Level of Respondents (Edu) (n=124)

Items	Frequency	Percent
primary education	4	3.2
Secondary Education	5	4.0
Certificate or Diploma	26	21.0
First Degree(Bachelor)	55	44.4
Postgraduate Degree	30	24.2
Professional Qualification	4	3.2
Total	124	100.0

Table 4.3. showed that the Majority of respondents are either support staff or are working in administration making a total 38.7% out of the total respondents; 25% of the respondents being in the professional position; followed by 21% who are first-line manager and 11.3% middle manager; Only 4% of the respondents belong to top manager level.

Table 4.3: Job Position (JP) of Respondents (n=124)

Items	Frequency	Percent
Top Manager	5	4.0
Middle manager	14	11.3
First-line manager	26	21.0
Administration/Support staff	48	38.7
professional	31	25.0
Total	124	100.0

Table 4.4. showed that the respondents were from different departments in the service industry. The majority of the respondents were from education background made up of 37.9% of total respondents; the percentage of respondents from other departments are as follows: banking & finance (16.9%); retail/own business (13.7%); both communication/advertising and pharmaceutical/healthcare are 2.4%; Engineering /construction is only 0.8% out of total respondents.

Table 4.4 Current Types of Industry (TI) (n=124)

Items	Frequency	Percent
Banking/ Finance	21	16.9
Communications/ Advertising	3	2.4
Engineering/construction	1	.8
Education	47	37.9
Pharmaceutical/Healthcare	3	2.4
Retail/own business	17	13.7
Service/hospitality	6	4.8
Others	26	21.0
Total	124	100.0

As shown in Table 4.5, the result of employment period indicates that 41.9% of the respondents have been working with their present organizations ranging from one (1) to three (3) years. This is followed by 24.2% who work for less than 1 year; and 18.5% work between four (4) to six (6) years with the same organization; 10.5% respondents have been working for more than ten years and only 4.8% respondents have been working for the organization between seven (7) to nine (9) years.

Table 4.5: The Number of Working Years (NY) (n=124)

Items	Frequency	Percent
less than 1 year	30	24.2
1-3 years	52	41.9
4-6 years	23	18.5
7-9 years	6	4.8
More than 10 years	13	10.5
Total	124	100.0

4.3 Instrumentation Reliability Analysis

According to Sekaran (2000), the reliability of measure indicated the extent to which the measure is without bias (error free) and hence offered consistent measurement across time and across the various items in the instrument. Besides, the reliability of a measure indicates the stability and consistency with which the instrument measures the concept and helps to assess the goodness of a measure. Consistency indicates how well the items measuring a concept can be arranged together as a set.

Cronbach's Alpha (α) which measures the reliability coefficient indicates how well the items are positively correlated to one another. (Sekaran, 1999). It is used to compute

the reliability of the data for each item in this study. A coefficient alpha range in value from 0 to 1, and when more closer to 1 indicates a higher reliability. In general, reliabilities less than 0.60 are considered to be poor, those in the 0.70 range are acceptable and those over 0.80 are considered to be good.

The questionnaire used in this study was developed by other researchers (g.Liang A.H ,1997; Susan Koenigsnecht, 2002; Jones and Geoffrey C.Lloyed,2004, Fazila Banoo,2007; Sandra Lawrence and Peter Jordan, 2009) and then, it is assumed to have a high reliability and high validity content, therefore, the factor analysis was not conducted in this study again. However, the general reliability of all the 4 items for this study was analyzed.

The results of this study on the reliability analysis are shown in Table 4.6, Generally, the reliability of all the 4 items used for this study was 0.844, indicating that the data is good and reliable for analysis purposes. In detail, all of the Cronbach's alpha coefficients are above 0.6 after rounding that mean data is reliable. The Cronbach's alpha coefficients respectively are extrinsic motivation = 0.700, intrinsic motivation = 0.742, leadership= 0.903, job satisfaction = 0.814.

Table 4.6: Descriptive statistic of reliability

Reliability Statistics			
Construct	Cronbach's Alpha	Percentage	Number of Items
Extrinsic Motivation	.700	70	6
Intrinsic Motivation	.742	70	6
Leadership	.903	90	6
Job Satisfaction	.814	80	6

4.4 Testing of Hypothesis

The result of the hierarchical regression analysis is used in testing all the hypotheses as discussed in the following:

Table 4.7: Hierarchical regression analysis

Independent Variable	Std Beta Step 1	Std Beta Step 2	Std Beta Step 3
Model Variables			
Extrinsic Motivation	.219*	.121	.043
Intrinsic Motivation	.546**	.411	-.038
Moderating Variable			
Leadership		.330	-.470
Interaction Terms			
Extrinsic Motivation*Leadership			.202
Intrinsic Motivation*Leadership			.994
R Square	.483	.550	.565
Adjusted R Square	.475	.538	.546
R Square Change	.483	.066	.015
Sig. F Change	.000	.000	.136

* $P < 0.05$, ** $P < 0.01$

In the hierarchical regression analysis table 4.7, the R-square shows how much of variance in the dependent variable is explained by the model (predictor variables), the beta value is the significance of each independent variable (in the model) in predicting the dependent variable. Both the R-square and beta value range between 0 and 1.0, the more closer the value is to 1.0 the better it is; A high variance indicates a high level of success of the model, and the adjusted R-square value provides a more correct estimate measure of the success of the model. Looking at Table 4.7 the results of the regression the all independent and moderating variables against job satisfaction

together with the hierarchical regression analysis was carried out. The Figure 4.1 shows the $R = 0.695$ of two independent variables, which is the correlation of the two independent variables (extrinsic motivation and intrinsic motivation) with the dependent variable job satisfaction. The R-square is 0.483, what the results mean is that the hypotheses are substantiated with 48.3% of variance in job satisfaction has been significantly explained by both of the independent variables and actually by the square of the multiple $R(0.695)^2$. The result of Figure 4.1 also shows that the F value of 56.609 is significant at the 0.001 level ($p < 0.05$). That mean is the independent variables (extrinsic motivation and intrinsic motivation) which explain the significant amount of the variation in the dependent variable – that is, job satisfaction.

Pallant (2001) indicated that the variables involved in the regression analysis are ranked according to the beta value of the standardized coefficients at an acceptable level of significance. This value indicates that the unique contribution of each independent variable to the model when other predictor variables are under controlled. A large value implies that the underlying variable made a significant contribution to the model. Based on this information, referring to Table 4.7, both extrinsic motivation and intrinsic motivation are significant predictors of job satisfaction. The higher number in the beta value is .546 for intrinsic motivation, which is at 0.001 level of significance is ranked higher. The lower rank is .219 for extrinsic motivation, which is significant at the 0.007 level; it is also another factor that is significant (ie. $P < 0.05$). In conclusion, intrinsic motivation makes more contribution than extrinsic motivation to job satisfaction. Therefore, Hypothesis 1 and 2 are supported.

In order to examine the moderating variable, Conen (1998) proposed that the F-value change (f^2) need to be conducted. The F-value change = 0.02 be considered small effect; F-value change = 0.15 be considered moderate effect; F-value change = 0.35 be considered large effect. Referring to the statistical analysis as shown in Table 4.7 showed, it was found that a small significant effect was determined (F-value change = 0.136, $P > 0.05$), therefore, f^2 was not referred and Hypothesis3 and 4 are not supported

To conclude the analysis results and statement, and an outcome table of the hypotheses tests is established in order to explain clearly. As the Table 4.8 showed that hypothesis 1 and hypothesis 2 are accepted, which means both of the two independent variables (extrinsic motivation and intrinsic motivation) are positively increasing the employee's job satisfaction. However, hypothesis 3 and hypothesis 4 are rejected, which means Leadership does not have a moderating effect on the relationship between extrinsic motivation or intrinsic motivation and job satisfaction.

Table 4.8: The outcomes of the hypotheses tests

Hypotheses	Test	Results	Variable Relationship
H1-Extrinsic motivation has a significant relationship with job satisfaction.	Hierarchical regression	$p < 0.05$	Significant
H2- Intrinsic motivation has a significant relationship with job satisfaction.	Hierarchical regression	$P < 0.05$	Significant
H3- Leadership has a significant moderating effect on the relationship between extrinsic motivation and job satisfaction	Hierarchical Regression	$f^2 < 0.15$ $P > 0.05$	Not Significant
H4- Leadership has a significant moderating effect on the relationship between intrinsic motivation and job satisfaction	Hierarchical Regression	$f^2 < 0.15$ $P > 0.05$	Not Significant

4.5 Summary

This chapter presents the findings based on the research data that has been conducted using SPSS analysis. Overall, the results of the hierarchical regression analysis between extrinsic/intrinsic motivation and job satisfaction showed that extrinsic motivation is positively increasing the employee's job satisfaction and intrinsic motivation is also positively increasing the employee's job satisfaction, thus, Hypothesis1 and 2 are supported. On the other hand, the results of hierarchical regression analysis indicate that leadership does not have a moderating effect on the relationship between extrinsic/intrinsic motivation and job satisfaction, therefore, Hypothesis3 and 4 are not supported