

procedure, data analysis and statistical analysis employed are provided. The next chapter will discuss the results of the empirical test.

CHAPTER 4

RESEARCH RESULTS

4.1 Introduction

In chapter 3, research hypotheses and research design are discussed. In this chapter, predictability of personal characteristics and work-related variables as antecedents and correlates to organizational commitment are explored. The focus on personal characteristics as predictors of organizational commitment, the possibility that personal characteristics such as age and gender may explain organizational commitment is explored. Firstly, the result of pilot study will be given. Then, sample of respondents profile is explained. It followed by factor validity and the internal reliability analysis of each of the two scales (organizational commitment and work-related variables). Thereafter, an attempt is made to explain organizational commitment in terms of personal characteristics and work-related variables. Finally, the chapter will conclude with a summary.

4.2 Preliminary Analysis – Pilot Study

A pilot study is carried out at sample of 50 respondents before questionnaires are distributed to 150 respondents. A reliability test is performed using Cronbach's alpha coefficient to determine the reliability of the major variables under study.

4.2.1 Results of construct validity and internal reliability test

As shown in Table 4.1, majority variables show quite a high reliability rate with Cronbach's alpha coefficient of more than 0.6. Thus, the data are deemed acceptable for further analysis. In organizational commitment construct, the pilot study results' supported Allen and Meyer's (1991) construct in measuring organizational commitment in which Cronbach's alpha coefficient of affective commitment, normative commitment and continuance commitment are average above 0.60.

Table 4.1
Reliability of dependent and independent variable measure

Construct	No. of items	Cronbach alpha
Dependent:		
<i>Organizational commitment</i>	24	0.774
Affective commitment	8	0.641
Continuance commitment	8	0.652
Normative commitment	8	0.688
Independent :		
<i>Work-related variables</i>		
Job satisfaction	3	0.775
Job involvement	3	0.213
Job autonomy	4	0.719
Job performance feedback	4	0.651
Role conflict	4	0.393

In six work-related variables constructs, result shows that four work-related variables have a high reliability rate with Cronbach's alpha coefficient of more than 0.7. There are job satisfaction, job autonomy, job performance feedback and role clarity. However, Cronbach's alpha coefficients of job involvement and role conflict were registered at low reliability, less than 0.35. Therefore, decision is made to drop these two work-related variables (job involvement and role conflict) from this study. After dropping these two work-related variables, Cronbach's alpha coefficients of work-related variables increase from 0.775 to 0.839.

As shown in Table 4.1, job involvement and role conflict have low reliability coefficients. Therefore, these two work-related variables are dropped. Hypotheses 7 and 10 will not be tested. The low reliability in job involvement and role conflict may be explained by Malaysian employees' culture; reluctance to express their needs and careful not to offend others. Malaysian employees' may not express their feeling when facing role conflict.

4.2.2 Multicollinearity

Collinearity diagnostics is part of the multiple regression procedure. Multicollinearity exists when between variables more than two independent variables are highly correlated. When this happens, it would lead to damaging effects on multiple regression (Donald and Pamela, 2006). Further, it is risky to interpret the coefficients as an indicator of the

relative importance of predictor variables. Table 4.2 shows the results of correlation and VIF of personal characteristics and work-related variables. All variables' correlation are less than 0.7 and VIF less than 10. So, there is no evidence of multicollinearity exists.

Table 4.2
Pearson's product moment correlation analysis

Model	Organizational commitment	VIF
(1) Personal characteristics		
Age	0.411** (0.000)	3.414
Gender	-0.174** (0.024)	1.375
Tenure	0.435** (0.000)	3.385
Marital status	0.420** (0.000)	1.325
Education	-0.011 (0.452)	1.058
(2) Work-related variables		
Job satisfaction	0.670** (0.000)	2.304
Job autonomy	0.773** (0.000)	2.404
Job performance feedback	0.720** (0.000)	2.564
Role clarity	0.284** (0.001)	1.286

** Correlation is significant at $p < 0.05$

4.3 Descriptive Statistics

In this section the following descriptive statistical analysis provides respondents' profile in term of demographic characteristics such as gender, marital status, age, race, and tenure years in current organization and education level. Descriptive statistics is used to give summary data of personal characteristics questionnaire.

A total of 150 questionnaires are stratified randomly distributed to respondents. Of this total, 142 questionnaires (94%) are returned. However, only 130 questionnaires (86%) are usable and interpreted in this study. The remaining 12 questionnaires contain missing values and incomplete response rendering them to be unusable.

Table 4.3
Demographic characteristics of respondents

Gender	Marital status	Age	Race	Employment Tenure	Education
M 45.4%	Single 27.7%	<25 0.8%	M 26.9%	< 1 3.1%	Phd 0.8%
F 54.6%	Married 72.3%	25-35 34.6%	C 62.3%	1-3 13.1%	Master 10.8%
		36-45 26.2%	I 10.8%	4-6 23.1%	Bachelor 49.2%
		46-55 30.8%		7-10 20.0%	Diploma 32.3%
		>55 7.7%		>10 40.8%	Others 6.9%

The gender group is fairly evenly spread, with females forming 54.6% (71 respondents) of the group and males 45.4% (59 respondents). It is clear from this analysis that married group form the largest percentage of the sample group with 72.3%. The unmarried respondents is 27.7%

The sample group comprises employees' age between below 25 years old and above 55 years old. There are employees' age within 25-35 years old (34.6%), followed by 46-55

years old with 30.8%, 36-45 years old with 26.2%, more than 55 years old with 7.7% and 0.8% respondents with age less than 25 years old.

The majority of respondents are Chinese. There are 62.3% respondents. Malays and Indians make up the other 37.7% of the race group. The sample collected represents race group in this organization in which majority of employees is consists of Chinese, follow by Malay and Indian ethnic group.

Most of the sample groups are respondent who has worked more than 10 years in current organization, namely 40.8%. The respondent who has worked within 4 to 6 working years in current organization record 23.1% and working within 7 to 10 years is record 20%. The respondents worked less than 3 working years in current organization record 16.2%.

4.4 Results of Personal Characteristics Predictors of Organizational Commitment

In this section, the focus is to determine which of the various personal characteristics factors correlate with organizational commitment. Pearsons's correlation analysis uses to test whether a statistically significant relationship would exist between each of personal characteristics with affective, continuance and normative commitment. Additionally, multiple linear regression analysis uses to examine whether the variables which have been identified as correlates are also predictors of affective, continuance and normative organizational commitment.

4.4.1 Results of Pearson's correlation analysis of personal characteristics with affective, continuance and normative organizational commitment

The result of running a Pearson's correlation analysis between age, gender, tenure, marital status and education level with affective, continuance and normative organizational commitment are presented in Table 4.4. A visual examination of Table 4.4 shows that age ($r = 0.439$, $p < 0.05$), marital status ($r = 0.354$, $p < 0.05$) and organization tenure ($r = 0.458$, $p < 0.05$) are significantly correlated with affective commitment. Age ($r = 0.295$, $p < 0.05$), gender ($r = -0.358$, $p < 0.05$), marital status ($r = 0.361$, $p < 0.05$) and organizational tenure ($r = 0.318$, $p < 0.05$) are significantly correlated with continuance commitment. Age ($r = 0.367$, $p < 0.05$), marital status ($r = 0.411$, $p < 0.05$) and organizational tenure ($r = 0.389$, $p < 0.05$) are significantly correlated with normative commitment.

Table 4.4
Pearson's correlation analysis on personal characteristics

Personal characteristics	Affective commitment	Continuance commitment	Normative commitment
Age	0.439** (0.000)	0.295** (0.001)	0.367** (0.000)
Gender	-0.051 (0.563)	-0.358** (0.000)	-0.113 (0.202)
Tenure	0.458** (0.000)	0.318** (0.000)	0.389** (0.000)
Marital status	0.354** (0.000)	0.361** (0.000)	0.411** (0.000)
Education level	-0.061 (0.494)	-0.006 (0.947)	0.028 (0.751)

** Correlation is significant at $p < 0.05$

Hypotheses 1 to 5 : Relationship between personal characteristics and organizational commitment

As shown in the correlation analysis in Table 4.4, age, gender, tenure and marital status are significantly related to organizational commitment. Hypotheses 1 - 4 support that age, gender, tenure and marital status have correlation with organizational commitment. However, education level is not significantly correlated with organization commitment. Hypothesis 5, which predicted that lower educated employees will score significantly higher in terms of their levels organizational commitment than more educated employees is not supported.

4.4.2 Multiple regression analysis of personal characteristics on organizational commitment

Table 4.5, model (1) displays the results of multiple regressions analysis of the personal characteristics on organizational commitment. Of all the predictor variables enter, only tenure (Beta = 5.156, $p < 0.05$) and marital status (Beta = 13.272, $p < 0.05$) record a significant t -value. Overall, the personal variables explain about 25% of variations in organizational commitment (Adjusted r-square, 0.257). The complete equation is highly significant ($F = 9.930$).

Model (2), (3) and (4) display the results of personal characteristics on the three dimensions of organization commitment. Tenure and marital status record a significant t -

value at affective and normative commitment dimension. Further, gender and marital status record a significant *t*-value at continuance commitment dimension.

Table 4.5

Multiple regression analysis on the influence of personal characteristics with organizational commitment

Model	Standardised beta	<i>t</i> -value	Significance level
(1)Dependent variable : organizational commitment			
Age	0.047	0.344	0.731
Gender	-0.045	-0.562	0.575
Tenure	0.307**	2.350	0.020
Marital status	0.298**	3.566	0.001
Education level	-0.041	-0.532	0.595
Adjusted R ² =0.257	F-value =9.930	Significance =0.000	
(2)Dependent variable : affective commitment			
Age	0.140	1.030	0.305
Gender	0.090	1.126	0.262
Tenure	0.301**	2.303	0.023
Marital status	0.232**	2.766	0.006
Education level	-0.124	-1.595	0.113
Adjusted R ² =0.255	F-value =9.853	Significance =0.000	
(3)Dependent variable : continuance commitment			
Age	-0.058	-0.418	0.677
Gender	-0.280**	-3.410	0.001
Tenure	0.258	1.928	0.056

Marital status	0.235**	2.747	0.007
Education level	0.018	0.223	0.824
Adjusted R ² =0.220	F-value =8.272	Significance =0.000	

(4)**Dependent variable** : normative commitment

Age	0.029	0.207	0.837
Gender	0.008	0.098	0.922
Tenure	0.271**	2.020	0.045
Marital status	0.321**	3.734	0.000
Education level	-0.004	-0.050	0.961
Adjusted R ² =0.216	F-value =8.119	Significance =0.000	

** Significant at $p < 0.05$

The model equation can be summarized as below equation.

<p>Model (1) Organizational Commitment = 0.307Tenure + 0.298Marital status + e</p> <p>Model (2) Affective Commitment = 0.301Tenure + 0.232Marital status + e</p> <p>Model (3) Continuance Commitment = -0.280Gender + 0.235Marital status + e</p> <p>Model (4) Normative Commitment = 0.271Tenure + 0.321Marital status + e</p>

Hypotheses 1 - 5 : Relationship between personal characteristics and organizational commitment.

Hypotheses 3 and 4, which predicted that tenure and marital status would significantly explain variance in organizational commitment, is supported. However, Model (1) presents that age and education level is not related to organizational commitment. So, Hypothesis 1, which predicted that the older employees will score significantly higher in term of their levels of organizational commitment than younger employees is not supported. At the same time, Hypothesis 5, which predicted that lower educated employees will score significantly higher in terms of their levels organizational

commitment than more educated employees is not supported too. Hypothesis 2, which predicted that gender would have relationship with organizational commitment, is supported on continuance commitment dimension only (refer Model (2)).

4.4.3 Results of t-test and One-way Anova

The result from multiple regression analysis indicated that selected personal characteristics are explained variance in affective, continuance and normative commitment. There are gender, marital status and tenure.

Result of t-test

Gender has relationship with continuance commitment dimension only and marital status has significant relationship with affective, continuance and normative commitment dimensions. So, *t*-test is used to determine whether gender and marital status have any significant difference between mean scores in relation to organizational commitment. *t*-test is a parametric test to determine the statistical significance between a sample distribution mean.

Table 4.6, model (1) shows the results of the *t*-test for gender samples indicate that there is significant difference between male ($M = 40.50$) and female ($M = 36.35$) in relation to

continuance commitment. Male employees have higher mean score in continuance commitment.

Model (2), (3) and (4) show the results of the t-test for marital status samples indicate that there is significant difference between unmarried and married employees in relation to affective, continuance and normative commitment. In affective, continuance and normative commitment, mean scores for married employees are higher than unmarried/single employees.

Table 4.6
Results of *t*-test on gender and marital status with organizational commitment

Model	Mean	Significance level
(1)Dependent variable : continuance commitment		
<i>Gender</i>		
Male	40.50	0.000**
Female	36.35	
(2)Dependent variable : affective commitment		
<i>Marital status</i>		
Single	35.86	0.000**
Married	41.54	
(3)Dependent variable : continuance commitment		
<i>Marital status</i>		
Single	34.86	0.000**
Married	39.53	
(4)Dependent variable : normative commitment		
<i>Marital status</i>		
Single	31.25	0.000**
Married	39.57	

** Significant at $p < 0.05$

Hypothesis 2: Female employees will score significantly higher in terms of their levels of organizational commitment than male employees.

The *t*-test result model (1) indicates that male mean score is higher than female mean score in relation to continuance commitment only. So, Hypothesis 2 states that female employees are higher organizational commitment compared to male employees is not supported.

Hypothesis 4: Married employees will score significantly higher in terms of their levels organizational commitment than unmarried employees.

From *t*-test results model (2), (3) and (4), hypothesis 5 which predict married employees have higher organizational commitment than unmarried employees is supported. The results support three dimensions of organizational commitment. There are affective, continuance and normative commitment.

Result of One-way Anova

One-way Anova is a parametric test for more than two groups from the sample. Tenure has been identified has significant relationship with affective, continuance and normative commitment. The purpose of One-way Anova is used to determine tenure has any significant different between mean scores in relation to organizational commitment.

Table 4.7 shows One-way Anova results that there is significant difference between long term tenure employees with short term tenured employees. Employees who have worked more than 7 years in the organization have higher mean score compared with employees work less than three years in the organization in relation to affective, continuance and

normative commitment. It is surprisingly that mean score for employees who have worked less than 1 year is higher than mean score for employees who have worked within 1 to 6 years.

Table 4.7
Results of One-way Anova on tenure with organizational commitment

Model	Mean	Significance level
(1)Dependent variable : affective commitment		
<i>Tenure</i>		
< 1 year	36.75	0.000**
1-3 years	34.41	
4-6 years	36.36	
7-10 years	41.65	
10 years	43.20	
(2)Dependent variable : continuance commitment		
<i>Tenure</i>		
< 1 year	37.75	0.000**
1-3 years	33.64	
4-6 years	37.13	
7-10 years	39.80	
10 years	39.67	
(3)Dependent variable : normative commitment		
<i>Tenure</i>		
< 1 year	35.75	0.000**
1-3 years	30.58	
4-6 years	32.76	
7-10 years	40.76	
10 years	40.35	

** Significant at $p < 0.05$

Hypothesis 3: Long term tenured employees will score significantly higher in terms of their levels of organizational commitment than short term tenured employees.

From Table 4.7 One-way Anova's results, Hypothesis 3 is partly supported. The reason is because only employees who have worked more than 7 years in the organization have higher mean score in organizational commitment. At the same time, employees who have worked less than 1 year shows higher mean score than employees who have worked in the organization within 1 to 6 years.

4.5 Results of Work-Related Variables as Predictors of Organizational Commitment

The hypotheses of this research concern the relationship of work-related variables with organizational commitment. It is previously shown that personal characteristics such as gender, tenure and marital status are related to organizational commitment. It is thus necessary to consider these personal characteristics variables effect, and their possible interaction effect, on organizational commitment when exploring work related variables relationship to organizational commitment.

In this study, it is hypothesized that job satisfaction, job autonomy, job performance feedback and role clarity are correlate significantly with organizational commitment. In testing these hypotheses, Pearson's correlation analysis is examined. Further, regressing

all the significant work-related variables on organizational commitment to determine how much of the variance in organizational commitment.

4.5.1 Results of Pearson’s correlation analysis of work-related variables with organizational commitment

The result of running a Pearson’s correlation analysis between job satisfaction, job autonomy, job performance feedback and role clarity with organizational commitment are presented in Table 4.8. A visual inspection of Table 4.8 shows that all work-related variables (job satisfaction, job autonomy, job performance feedback and role clarity) are significantly correlated with organizational commitment.

Table 4.8
Pearson’s correlation analysis on work-related variables

Work-related variables	Organizational commitment
Job satisfaction	0.670** (0.000)
Job autonomy	0.773** (0.000)
Job performance feedback	0.720** (0.000)
Role clarity	0.248** (0.001)

** Correlation is significant at $p < 0.05$

4.5.2 Multiple regression analysis of work-related variables on organizational commitment

Table 4.9 indicates regressing the four significant correlates on organizational commitment results in three of work-related variables having predictive relationships with organizational commitment: job satisfaction (Beta = 0.600, $p < 0.05$), job autonomy (Beta = 0.720, $p < 0.05$) and job performance feedback (Beta = 0.643, $p < 0.05$). Collectively these three predictors explain about 67.6% of the variance in organizational commitment.

Table 4.9
Multiple regression analysis on the influence of work-related variables with organizational commitment

Model	Standardised beta	<i>t</i> -value	Significance level
Dependent variable : organizational commitment			
Job satisfaction	0.151**	2.027	0.045
Job autonomy	0.473**	6.498	0.000
Job performance feedback	0.280**	3.629	0.000
Role clarity	0.061	1.138	0.257
Adjusted R ² =0.676	F-value =68.208	Significance =0.000	

** Significant at $p < 0.05$

The model equation can be summarized as below equation.

$\text{Organizational Commitment} = 0.151\text{Job satisfaction} + 0.473\text{Job autonomy} + 0.280\text{Job performance feedback} + e$

Hypotheses 6, 8, 9 and 11: Relationship between work-related variables and organizational commitment

As shown in the regression analysis in Table 4.9, the results reveal that job satisfaction, job autonomy and job performance feedback are significant predictors of organizational commitment. The value of R^2 shows that selected work-related variables explain 68% of the variation in organizational commitment (adjusted $R^2 = .676$). The significant Fvalue ($F = 68.208$) indicates that selected work-related variables explain a significant amount of variance in organizational commitment. Thus, Hypotheses 6, 8 and 9 are supported. However, role clarity has been found to correlate significantly but not a significant predictor of organizational commitment. So, Hypothesis 11 is not supported.

4.6 Multiple Regression Analysis of Personal Characteristics and Work-Related Variables with Organizational Commitment

Table 4.10 shows regressing of personal characteristics (5 variables) and work-related variables (4 variables) on organizational commitment. The result is four variables having significant predictive relationships with organizational commitment. There are gender, marital status, job autonomy and job performance feedback. Marital status and job autonomy are the most significant predictors of organizational commitment for personal characteristics and work-related variables respectively. Collectively, personal characteristics and work-related variables explain 73% of variance in employee's organizational.

Table 4.10
Multiple regression analysis on the influence of personal characteristics and work-related variables with organizational commitment

Model	Standardised beta	t-value	Significance level
Dependent variable : organizational commitment			
<i>Personal characteristics</i>			
Age	0.042	0.500	0.618
Gender	-0.115**	-2.233	0.027
Tenure	0.017	0.204	0.839
Marital status	0.182**	3.525	0.001
Education level	0.021	0.438	0.662
<i>Work-related variable</i>			
Job satisfaction	0.134	1.926	0.057
Job autonomy	0.493**	7.012	0.000
Job performance feedback	0.211**	2.883	0.005
Role clarity	0.010	0.192	0.848
Adjusted R ² =0.727	F-value =39.147	Significance =0.000	

** Significant at $p < 0.05$

The model equation can be summarized as below equation.

$$\text{Organizational Commitment} = -0.115\text{Gender} + 0.182\text{Marital status} + 0.493\text{Job autonomy} + 0.211\text{Job performance feedback} + e$$

4.7 Chapter summary

In this chapter, the results from the study are reported. The composition of the sample and the factorial validity and the internal consistency reliability item analysis of each of the two scales (work related variables and organizational commitment) are set out in table form and interpreted. Thereafter organizational commitment is explained in terms of personal characteristics and finally, the predictive of work-related variable to organizational commitment is explored. From the regression analysis results, it indicates that out of 5 personal characteristics only tenure and marital status are significant predictor of organizational commitment. Next, regression analysis result shows only three work-related variables (job satisfaction, job autonomy and job performance feedback) are significant predictors of organizational commitment. In summary, the findings of research found partial support for the hypotheses posited. Gender, marital status, job autonomy and job performance feedback are personal characteristics and work-related variables found to correlate significantly and predictive of organizational commitment.

In chapter 5, the conclusion on the research will be discussed, the shortcomings of the research will be pointed out and recommendations for future research will be provided.