

**THE RELATIONSHIP BETWEEN HRM PRACTICES AND  
SERVICE QUALITY IN HIGHER EDUCATION IN YEMEN:  
ORGANIZATIONAL COMMITMENT, JOB SATISFACTION  
AND JOB INVOLVEMENT AS MEDIATING VARIABLES**

**Abd Al-Aziz Hamed Saaed Alrefaei**

Thesis submitted in partial fulfilment for the degree of  
DOCTOR OF PHILOSOPHY IN HUMAN RESOURCE MANAGEMENT

UNIVERSITY SAINS ISLAM MALAYSIA

OCTOBER 2021

## AUTHOR DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged.

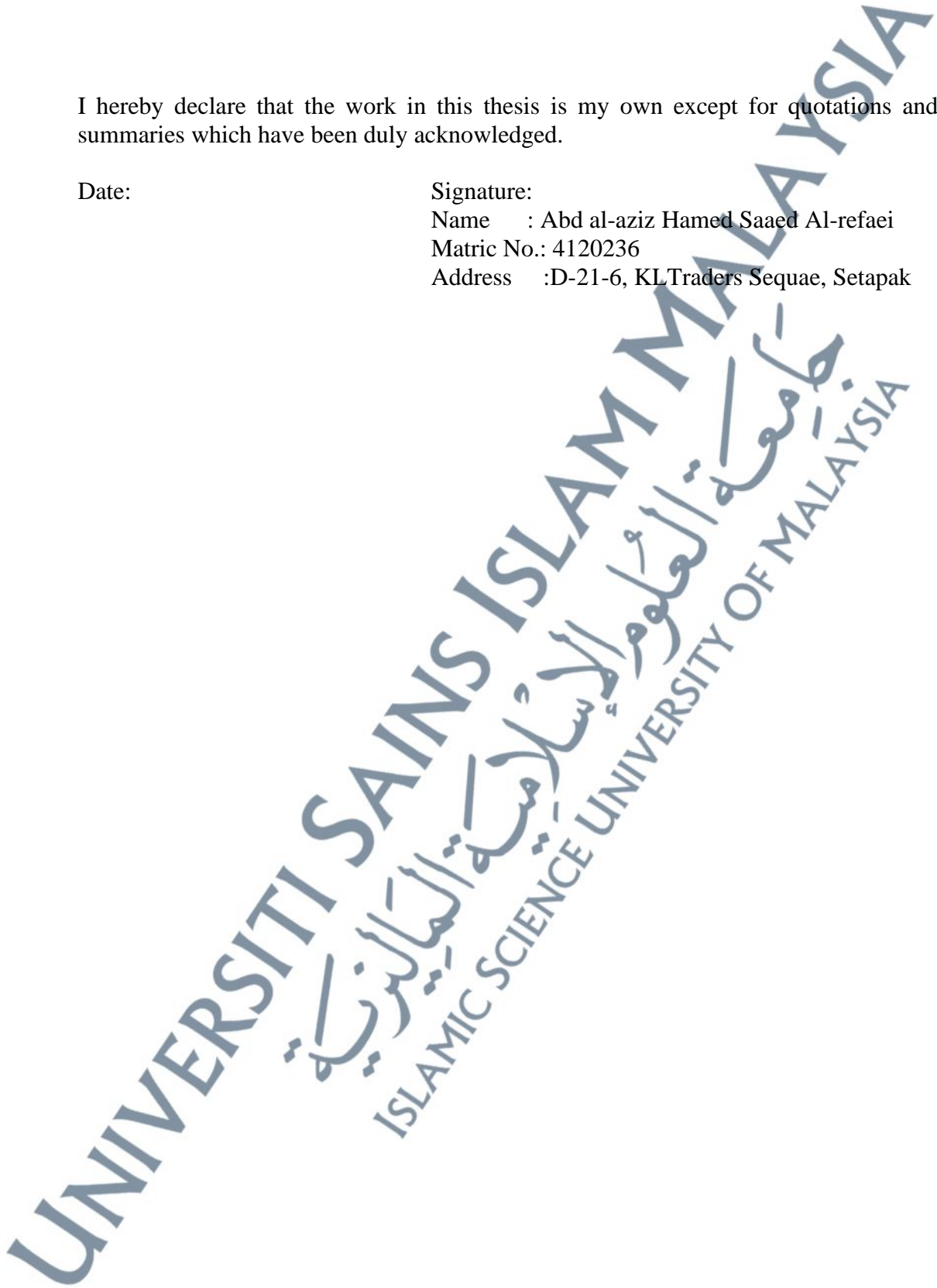
Date:

Signature:

Name : Abd al-aziz Hamed Saaed Al-refaei

Matric No.: 4120236

Address :D-21-6, KLTraders Sequeae, Setapak



## ACKNOWLEDGEMENTS

I would like to express my great thanks and appreciation to my supervisor, Associate Professor Dr. Abdul Rahim Bin Zumrah, for his great support, guidance and encouragement from the beginning of my PhD studies, until presenting this thesis in the current content and form. During this period, I learned a lot from him and I really appreciate trust, confidence and support he has always shown me.

Praise be Allah Almighty and thanks for the blessing of health which He bestowed on me until I complete this stage. I certify that the completion of this thesis is only a small part of his many blessings. I would like to take this opportunity to thank my mother for her prayers and prayers for me during my studies. I also do not forget who has supported and encouraged me to continue my studies. My father, I ask Allah for mercy and forgiveness him. I also thank my wife for her patience and support to me during the study period, as well as my brothers for their support and assistance. I would like to take the opportunity here to acknowledge those special people who assisted and provided me with all forms of support.

## ABSTRAK

Hubungan antara amalan Pengurusan Sumber Manusia (PSM) dan kualiti perkhidmatan masih kelihatan samar kerana kajian-kajian terdahulu kurang memberikan perhatian kepada mekanisme yang menerangkan tentang bagaimanakah amalan PSM ini memberi impak ke atas kualiti perkhidmatan, khususnya di dalam konteks negara membangun seperti Yemen. Justeru, kajian ini dijalankan untuk mengkaji kesan komitmen berorganisasi, kepuasan kerja dan keterlibatan kerja sebagai perantara di dalam hubungan antara amalan PSM dan kualiti perkhidmatan. Data kajian ini diperolehi melalui borang soal selidik. Responden kajian adalah 247 kakitangan akademik dan 1235 pelajar di Universiti Aden, Yemen. Data kajian ini telah dianalisis menggunakan kaedah Structural Equation Modeling (SEM). Hasil kajian menunjukkan bahawa amalan PSM mempunyai peranan yang penting terhadap kualiti perkhidmatan, komitmen berorganisasi, kepuasan kerja dan keterlibatan kerja. di samping itu, komitmen berorganisasi, kepuasan kerja, dan keterlibatan kerja mempunyai peranan penting dalam kualiti perkhidmatan, dan berperanan sebagai perantara dalam hubungan antara amalan PSM dan kualiti perkhidmatan. Kajian ini juga turut menyumbang implikasi, limitasi, cadangan, arah tuju secara teori dan praktikal untuk kajian akan datang.

## ABSTRACT

The relationship between HRM practices and service quality is still fuzzy as previous studies did not pay much attention to the mechanism that explain the relationship between HRM practices and service quality. This lack of attention makes the understanding of how HRM practices associate to service quality is limited, in particular in the underdeveloped countries such as Yemen. Therefore, the aim of this study was to examine the mediating effect of organizational commitment, job satisfaction, and job involvement in the relationship between HRM practices and service quality. The data for this study was collected through questionnaires. The sample was 247 academic staff and 1235 students in University of Aden, Yemen. The data of this study was analysed using a Structural Equation Modelling technique. The findings show that HRM practice has important role on service quality, organizational commitment, job satisfaction, and job involvement. In addition, organizational commitment, job satisfaction and job involvement play an important role in service quality, and partially mediate in the relationship between HRM practices and service quality. Theoretical and practical implications, limitation, suggested and directions for future research were included in this study.

## ملخص

لا تزال العلاقة بين ممارسات إدارة الموارد البشرية وجودة الخدمة غامضة، بسبب الدراسات السابقة لا تولي مزيداً من الاهتمام للآلية التي تشرح العلاقة بين ممارسات إدارة الموارد البشرية وجودة الخدمة. هذا النقص في الاهتمام جعل فهم كيفية علاقة ممارسات إدارة الموارد البشرية بجودة الخدمة محدوداً، لا سيما في البلدان النامية مثل اليمن. لذلك، كان الهدف من هذه الدراسة هو دراسة التأثير الوسيط للالتزام التنظيمي والرضا الوظيفي والاستغراق الوظيفي في العلاقة بين ممارسات إدارة الموارد البشرية وجودة الخدمة. تم جمع بيانات هذه الدراسة من خلال الاستبيانات. وبلغت العينة ٢٤٧ عضو هيئة تدريس و١٢٣٥ طالباً في جامعة عدن باليمن. تم تحليل بيانات هذه الدراسة باستخدام تقنية نمذجة المعادلات الهيكلية. تظهر النتائج أن ممارسة إدارة الموارد البشرية لها دور مهم في جودة الخدمة والالتزام التنظيمي والرضا الوظيفي والاستغراق الوظيفي. بالإضافة إلى ذلك، يلعب الالتزام التنظيمي والرضا الوظيفي والمشاركة الوظيفية دوراً مهماً في جودة الخدمة، وتتوسط جزئياً العلاقة بين ممارسات إدارة الموارد البشرية وجودة الخدمة. تم تضمين الآثار النظرية والعملية، والمحددات، والمقترحات والاتجاهات للبحوث المستقبلية في هذه الدراسة.

## TABLE OF CONTENTS

CONTENT	PAGE
AUTHOR DECLARATION	i
ACKNOWLEDGEMENTS	ii
ABSTRAK	iii
ABSTRACT	iv
AL-MULAKHKHAS	v
TABLE OF CONTENTS	vi
LIST OF TABLES	xi
LIST OF FIGURES	xiv
LIST OF APPENDICES	xv
<b>CHAPTER ONE: INTRODUCTION</b>	1
1.1 Introduction	1
1.2 Higher Education in Yemen	4
1.3 Problem Statement	9
1.4 Research Questions	12
1.5 Research Objective	13
1.6 Significance of the Study	13
1.7 Scope of the study	15
1.8 Definitions of Concept	16
1.9 Structure of Thesis	20
<b>CHAPTER 2: LITERATURE REVIEW</b>	22
2.1 Introduction	22
2.2 The Concept of Human Resource Management (HRM)	23
2.2.1 Dimensions of HRM practices	23

2.2.1.1	Recruitment and Selection	24
2.2.1.2	Training and Development	25
2.2.1.3	Employee Participation	26
2.2.1.4	Performance Appraisal	38
2.2.1.5	Compensation	39
2.3	Theories of HRM	30
2.3.1	Human Capital Theory	30
2.3.2	Resource-Based View Theory	31
2.3.3	Ability, Motivation, Opportunity "AMO" Theory	31
2.3.4	Attribution Theory	32
2.3.5	Social Exchange Theory	33
2.3.6	Discussion about HRM theories	35
2.4	Consequences of HRM	38
2.4.1	HRM Practices and Service Quality	39
2.4.2	HRM Practices and Organizational Commitment	41
2.4.3	HRM Practices and Job Satisfaction	44
2.4.4	HRM Practices and Job Involvement	48
2.4.5	Discussion of the literature review about the consequences of HRM practices	50
2.5	The Concept of Service quality	53
2.5.1	Service Quality Models	55
2.5.2	Significant of Service Quality	56
2.6	Factors Influence Service Quality	58
2.6.1	Organizational Commitment	59

2.6.2	Job Satisfaction	63
2.6.3	Job involvement	65
2.7	The Mediating Effect of Organizational Commitment, Job Satisfaction and Job Involvement in the relationship between HRM Practices and Service Quality	67
2.7.1	Mediating effect of Organizational Commitment in the Relationship between HRM Practices and Service Quality	68
2.7.2	Mediating effect of Job Satisfaction in the Relationship between HRM Practices and Service Quality	70
2.7.3	Mediating effect of Job Involvement in the Relationship between HRM Practices and Service Quality	72
2.8	Summary of Hypotheses	73
2.9	Conceptual Framework of the Study	74
2.10	Chapter Summary	75
	<b>CHAPTER 3: METHODOLOGY</b>	76
3.1	Introduction	76
3.2	Research Philosophy	76
3.3	Research Design	79
3.4	Population and Sampling	81
3.4.1	Population	81
3.4.2	Sampling Technique	84
3.4.3	Sample Size	85
3.5	Data collection Method and Procedure	87
3.6	Questionnaire Development Process	89
3.7	Measure	94

3.7.1	HRM practices	94
3.7.2	Organizational commitment	95
3.7.3	Job satisfaction	96
3.7.4	Job involvement	96
3.7.5	Service quality	97
3.8	Data Analysis	97
3.8.1	Data Preparation	97
3.8.2	Analysis the Data	98
3.8.3	Exploratory Factor Analysis	99
3.8.4	Structural Equation Modelling	99
3.8.4.1	The Assessment of Measurement Model	100
3.8.4.2	The Assessment of Structural Model	102
3.9	Chapter Summary	103
	<b>CHAPTER 4: DATA ANALYSIS RESULTS</b>	104
4.1	Introduction	104
4.2	Response Rate	104
4.3	Demographic and Profile of the Respondents	106
4.3.1	Demographic and Profile Details of Academic Staff	106
4.3.2	Demographic and Profile Details of Students (Customer)	108
4.4	Analysis of the Statistical Assumptions	109
4.4.1	Outliers	109
4.4.2	Normality	110
4.5	Exploratory Factor Analysis	111
4.5.1	Human Resource Management Practices	112

4.5.2	Organizational Commitment	116
4.5.3	Job Satisfaction	120
4.5.4	Job involvement	123
4.5.5	Service Quality	125
4.5.6	Conclusion of Exploratory factor analysis (EFA)	129
4.6	Confirmatory Factor Analysis	130
4.6.1	CFA Results for HRM Practices	131
4.6.2	CFA Results for Organizational Commitment	133
4.6.3	CFA Results for Job Satisfaction	135
4.6.4	CFA Results for Job Involvement	137
4.6.5	CFA Results for Service Quality	139
4.6.6	CFA Results for Overall (HRM Practices, Organizational Commitment, Job Satisfaction, Job Involvement, Service Quality)	141
4.7	Structure Equation Modelling (SEM)	145
4.7.1	Hypothesis Testing and Results (Direct Relationships)	147
4.7.2	Bootstrapping method (Indirect Effect)	149
4.7.2.1	Proportion of Mediation	150
4.8	Final Structural Model	152
4.9	Chapter Summary	154
	<b>CHAPTER5: DISCUSSION RECOMMENDATION AND CONCLUSION</b>	155
5.1	Introduction	155
5.2	Background Context	155

5.3	Discussion of Findings	157
5.3.1	HRM practices effect higher education service quality	157
5.3.2	HRM practices and organizational commitment	158
5.3.3	HRM practices and job satisfaction	159
5.3.4	HRM practices and job involvement	160
5.3.5	Organizational Commitment and Service Quality	161
5.3.6	Job satisfaction and service quality	162
5.3.7	Job involvement and service quality	163
5.3.8	The mediating effect of organizational commitment, job satisfaction and job involvement in the relationship between HRM practices and service quality	163
5.4	Theoretical Implications	165
5.5.	Practical Implications	167
5.6.	Limitations and suggestions for future studies	168
5.7	Conclusion	170
	<b>References</b>	172
	<b>Appendices</b>	211

## LIST OF TABLES

Table		Page
Table 2.1	Summary of Hypotheses	73
Table 3.1	Distribution of Academic Staff in Faculties in Aden University	82
Table 3.2	Distribution of Students in Faculties in Aden University	83
Table 3.3	Sample Size Based on the Faculty/Center	86
Table 3.4	Reliability of HRM Practices	92
Table 3.5	Reliability of Organizational Commitment	92
Table 3.6	Reliability of Job Satisfaction	93
Table 3.7	Reliability of Job Involvement	93
Table 3.8	Reliability of Service Quality	93
Table 3.9	Goodness-of-Fit Indices and Their Thresholds Adopted in Current Study	101
Table 4.1	Demographic and Profile Details of Academic Staff	107
Table 4-2	Demographic and Profile of The Students (Customers)	108
Table 4-3	The KMO And Bartlett'S Test For HRM Practices	113
Table 4-4	Total Variance Explained for HRM Practices	113
Table 4-5	Comparison of Eigenvalues That Obtained from Principal Component Analysis and Criterion Values That Obtained from Parallel Analysis for HRM Practices	114
Table 4-6	Factor Loading, Communalities and Cronbach Alpha for HRM Practices	115
Table 4-7	Factors and Item's Loading	116
Table 4-8	The KMO And Bartlett'S Test For Organizational Commitment	117
Table 4-9	Total Variance Explained for Organizational Commitment	117
Table 4-10	Comparison of Eigenvalues That Obtained from Principal Component Analysis and Criterion Values That Obtained from Parallel Analysis For OC	118
Table 4-11	Factor Loading, Communalities and Cronbach Alpha For OC	119
Table 4-12	Varimax Rotation for Organizational Commitment	119
Table 4-13	The KMO And Bartlett'S Test For Job Satisfaction	120

Table 4-14	Total Variance Explained for Job Satisfaction	120
Table 4-15	Comparison of Eigenvalues that obtained from PCA and Parallel Analysis for Job satisfaction	121
Table 4-16	Factor Loading, Communalities and Cronbach Alpha for Job Satisfaction	122
Table 4-17	Varimax Rotation for Job Satisfaction	122
Table 4-18	The KMO And Bartlett'S Test For Job Involvement	123
Table 4-19	Total Variance Explained for Job Involvement	124
Table 4-20	Comparison of Eigenvalues that obtained from PCA and Parallel Analysis for Job Involvement	124
Table 4-21	Factor Loading, Communalities and Cronbach Alpha for Job Involvement	125
Table 4-22	The KMO And Bartlett'S Test For Service Quality	126
Table 4-23	Total Variance Explained for Service Quality	126
Table 4-24	Comparison of Eigenvalues that obtained from PCA and Parallel Analysis for Service Quality	127
Table 4-25	Factor Loading, Communalities and Cronbach Alpha for Service Quality	128
Table 4-26	Factors and Item's Loading	129
Table 4.27	Result of Goodness of fit of Measurement Model for HRM Practices	132
Table 4.28	Composite Reliability, Average Variance Extracted, Square Root of Average Variance Extracted and Correlation for HRM Practices	133
Table 4.29	Result of Goodness of fit of Measurement Model for Organizational Commitment	134
Table 4.30	Composite Reliability, Average Variance Extracted, Square Root of Average Variance Extracted and Correlation for Organizational Commitment	135
Table 4.31	Goodness of Fit of Measurement Model for Job Satisfaction	136
Table 4.32	Composite Reliability, Average Variance Extracted, Square Root of Average Variance Extracted and Correlation for Job Satisfaction	137

Table 4.33	The Goodness of Fit of Measurement Model for Job Involvement	138
Table 4.34	Composite Reliability, Average Variance Extracted for Job Involvement	139
Table 4.35	The Goodness of Fit of Measurement Model for Service Quality	140
Table 4.36	Composite Reliability, Average Variance Extracted, Square Root of Average Variance Extracted and Correlation for Service Quality	141
Table 4.37	Goodness of Fit for the Overall Measurement Model	143
Table 4.38	Composite Reliability, Average Variance Extracted, Square Root of Average Variance Extracted and Correlation for All Construct	144
Table 4.39	The Goodness of Fit for Structural Model	147
Table 4.40	The Results of Hypotheses Testing	149
Table 4.41	Bootstrap Results: Standardized Indirect Effect	150
Table 4.42	Proportion of Mediation Effect of Organizational Commitment, Job Satisfaction and Job Involvement Between HRM Practices and Service Quality	152
Table 4.43	The Results of Hypotheses Testing	154

## LIST OF FIGURES

<b>Figures</b>	<b>Page</b>
Figure 2.1: Conceptual Framework	74
Figure 4.1 The Measurement Model for HRM Practices	131
Figure 4.2 The Measurement Model for Organizational Commitment	134
Figure 4.3 Measurement Model for Job Satisfaction	136
Figure 4.4 The Measurement Model for Job Involvement	138
Figure 4.5 The Measurement Model for Service Quality	139
Figure 4.6 The Overall Measurement Model	142
Figure 4.7 Structural Model	146
Figure 4.8 The Final Structural Model with Standardized Paths Estimates	153

UNIVERSITI SAINS ISLAM MALAYSIA  
جامعة العلوم الإسلامية  
ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA

## LIST OF APPENDICES

Appendices	Page
Appendix A: Approval for distribution the questionnaire Aden University	211
Appendix B: Questionnaire to the Academic Staff (English versions)	212
Appendix C: Questionnaire to the Students (English versions)	217
Appendix D: Questionnaire to the Academic Staff (Arabic versions)	219
Appendix E: Questionnaire to the Students (Arabic versions)	225
Appendix F: Result of Raosoft Sample Size Calculator	227
Appendix G: Table of Calculate the Sample Size by Krejcie and Morgan	228
Appendix H: Descriptive Statistics for Standardized Z Scores	229
Appendix I: Observations the Mahalanobis distance	230
Appendix K: Extreme Values for Mahalanobis Distances	230
Appendix L: Mahalanobis D2 verified by Cook's distance	231
Appendix M: Descriptive Statistics: Skewness and Kurtosis for Observed Variables	232