

### **UNIVERSITI PUTRA MALAYSIA**

# RELATIONSHIPS BETWEEN EXTENSION COMPETENCIES, ORGANISATIONAL COMMITMENT AND JOB SATISFACTION WITH PERFORMANCE OF AGRICULTURAL EXTENSION WORKERS IN YEMEN

**ALI HASSAN OBAID KHALIL** 

FPP 2008 21



# RELATIONSHIPS BETWEEN EXTENSION COMPETENCIES, ORGANISATIONAL COMMITMENT AND JOB SATISFACTION WITH PERFORMANCE OF AGRICULTURAL EXTENSION WORKERS IN YEMEN

By

ALI HASSAN OBAID KHALIL

Thesis Submitted to the School of Graduates Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

August 2008



## **DEDICATION**

To my loved homeland the Republic of Yemen and every one who is honestly working to maintain Yemen united, peaceful and developed



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in Fulfilment of the requirement for the degree of Doctor of Philosophy

RELATIONSHIPS BETWEEN EXTENSION COMPETENCIES, ORGANISATIONAL COMMITMENT AND JOB SATISFACTION WITH PERFORMANCE OF AGRICULTURAL EXTENSION WORKERS IN YEMEN

BY

ALI HASSAN OBAID KHALIL

August 2008

Chairman: Professor Maimunah Ismail, PhD

**Faculty:** Educational Studies

This study aimed to determine the relationships between selected variables, namely extension competencies including human development competencies, leadership development, extension communication methods, programme development, programme implementation and programme evaluation; organisational commitment as well as job satisfaction and job performance of agriculture extension workers. The study also sought to identify the best predictors of job performance of the extension workers.

The total population of the extension workers was 1364. The sample size of this study was 300 which were determined by using Cochran's formula (1977). The study

UPM BR

used stratified random sampling technique in which 300 respondents from the agriculture extension services organisations in Yemen were chosen. A complete list of agriculture extension workers across the three agriculture regions, namely, coastal, highlands and desert regions was obtained. The research design of this study was a descriptive correlational study. Self-administered questionnaire was used as the research instrument to collect data from the respondents of this study. The quantitative data were analysed by using descriptive statistics such as mean and standards deviations. The parametric statistics such as Pearson correlation, multiple regression analyses, t-test and ANOVA also were used.

From the descriptive analysis, the result show that the overall extension workers performance illustrated with mean score (M = 2.88) and standard deviation (SD = 0.69), that more than a half (60.7 %) of the respondents experienced a moderate level of job performance, while 23.8 % of them indicated a low level of performance and 15.5% considered a high level of performance.

Furthermore, the findings from parametric analysis indicated that there were significant relationships between the independent variables and job performance of extension workers. The independent variables are as follows: extension programme implementation competencies, extension programme planning competencies, extension programme evaluation competencies, organisational commitment, and job satisfaction.

Multiple regression analysis was used to identify the best predictors of extension workers' performance. The variables according to descending order are job



satisfaction (Beta = 0.431), extension programme planning competencies (Beta = 0.239), extension programme implementation competencies (Beta = 0.147), extension programme evaluation competencies (Beta = 0.145), and organisational commitment (Beta = 0.102). The predictors explained 60.6 % variance (F = 54.008, p = 0.0001) of job performance.

The study is important as it would become a platform for future research to consider aspect of performance and its variants. The implementation of human resource development initiatives is very important to consider by the relevant agencies in order to improve extension workers' competencies and performance. This study also signals the importance of ensuring good and motivated work environment for extension workers for achieving a high performance. Extension services should also realise the various contributors of job performance, some of them are based on the individual factors as found in this study. By knowing these factors, they would be used as inputs in the recruitment, selection and succession planning processes in order to get the right extension workers. This will make extension workers know clearly their duties, tasks, and how to act in rural community. To support the findings of this study in the country, it is recommended that future studies are conducted across employees from other rural development organisations including agricultural and community development organisations by taking into considerations other work behaviour and social factors that might help more to understand the individual performance phenomenon.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

PERKAITAN ANTARA KOMPETENSI KERJA PENGEMBANGAN, KOMITMEN ORGANISASI SERTA KEPUASAN KERJA DAN PRESTASI PEKERJA PENGEMBANGAN PERTANIAN DI YEMEN

BY

ALI HASSAN OBAID KHALIL

**Ogos 2008** 

Pengerusi: Profesor Maimunah Ismail, PhD

Fakulti:

Pengajian Pendidikan

Kajian ini bertujuan untuk mengenal pasti perkaitan antara pembolehubah terpilih

iaitu kompetensi kerja pengembangan termasuk kompetensi pembangunan manusia,

pembangunan kepemimpinan, kaedah pengembangan, pembentukan program,

pelaksanaan dan penilaian program; komitmen organisasi; serta kepuasan kerja dan

prestasi kerja pekerja pengembangan pertanian. Kajian juga bertujuan untuk

mengenal pasti peramal prestasi kerja pekerja pengembangan tersebut.

Kajian menggunakan teknik persampelan rawak berstrata untuk mendapatkan 300

responden sebagai sampel kajian dari sektor perkhidmatan pengembangan pertanian

di Yemen. Satu senarai lengkap organisasi pengembangan pertanian diperolehi dari

setiap jabatan pengembangan dan setiap wilayah iaitu wilayah persisiran pantai,

tanah tinggi dan padang pasir. Data yang diperolehi dianalisis menggunakan statistik

deskriptif, korelasi Pearson, analisis regresi berganda, ujian-t dan ANOVA.

vi

Dapatan kajian menunjukkan terdapat perkaitan signifikan antara prestasi kerja pekerja pengembangan dan kompetensi dalam tugas berikut iaitu pelaksanaan program pengembangan, perancangan program pengembangan, penilaian program pengembangan, pembangunan kepemimpinan, kaedah dalam komunikasi pengembangan, dan pembangunan manusia. Juga terdapat perkaitan signifikan antara prestasi pekerja pengembangan dan kepuasan kerja serta komitmen organisasi.

Analisis regresi berganda menunjukkan lima peramal prestasi pekerja pengembangan. Peramal tersebut mengikut susunan menurun ialah kepuasan kerja (Beta = 0.431), kompetensi perancangan program pengembangan (Beta = 0.239), kompetensi pelaksanaan program pengembangan (Beta = 0.147), kompetensi penilaian program pengembangan (Beta = 0.145), dan komitmen organisasi (Beta = 0.102). Faktor peramal tersebut menerangkan 60.6 % varians (F = 54.008, p = 0.0001) prestasi pekerja pengembangan.

Kajian ini penting untuk dijadikan asas dalam meneruskan kajian akan datang tentang pembolehubah lain yang mempengaruhi prestasi pengembangan. Initiatif pembangunan sumber manusia adalah penting dilaksanakan untuk menigkatkan kompetensi pekerja pengembangan demi seterusnya memperbaiki prestasi mereka. Kajian juga menyarankan pentingnya mempastikan persekitaran kerja yang kondusif untuk memotivasikan pekerja pengembangan supaya berprestasi tinggi. Hasil kajian dijangkakan dapat dijadikan panduan oleh agensi pengembangan dalam melaksanakan inisiatif pembangunan sumber manusia seperti rekrutmen, pemilihan



dan perancangan pengambil-alihan staf. Ini untuk memastikan pekerja pengembangan memahami tanggung jawab, tugas dan bagaimana mendampingi masyarakat luar bandar.

Kajian ini mencadangkan supaya penyelidikan akan datang dijalankan dalam kalangan pekerja pengembangan dari organisasi luar bandar lain termasuk agensi pertanian dan pembangunan masyarakat dengan mengambil kira faktor sosial dan ekonomi untuk menyokong hasil kajian tentang peramal prestasi pekerja pengembangan dalam menjalankan tugas di negara tersebut.



#### ACKNOWLEDGEMENTS

First of all, praise is to "Allah" the cherisher, and the sustainer of the world for giving me strengths, health and determination to complete this thesis. Defiantly, completion of PhD thesis is never accomplished through the individual efforts of one person. There are many people, without whose involvement in the process, completion would not have been possible. Many people have helped me to make completion of this PhD thesis possible. Some by sharing their academic experience, providing guidance and fruitful critique, others by helping me to maintain my belief in myself in the face of the academic and personal difficulties that I have had to face over the years of my journey. Others have contributed by demonstrating great patience and forbearance as the journey has progressed. Distinguished Professor Dr. Maimunah Ismail as the chairman of my Doctoral Supervisory Committee stands out as having helped me in all of these ways.

I would like also to express my sincere gratitude to a wonderful, outstanding, distinguished Professor Dr. Turiman Suandi and Professor Dr. Abu Daud Silong who have been also enormously helpful as well as patience while we have worked through the process of the various stages of this study. I am indeed grateful for their constructive evaluations and for always being there when I needed them for their comments and suggestions. I wish to extend my gratitude to my pervious advisor Associate Professor Dr. Asma Ahmad for her guidance in the beginning of my research journey. I wish also to extend my sincere gratitude and thanks to distinguished Professor Dr. Rahim Md. Sail, Professor Dr. Azimi Hamzah, and Associate Professor Dr. Bahaman Abu Samah for their encouragement, guidance, expertise support and help.



To Associate Professor Dr. Jegak Uli, Dr. Khairuddin Idris, Dr. Shamsuddin Ahmad, Associate Professor Dr. Azahari Ismail, Associate Professor Dr. Azizan Asmuni and Professor Dr. Iraj Mohammadi for their moral encouragement and assistance's throughout my study. No word appreciation will be enough so please accept a simple

To the Department of Professional Development and Continuing Education staff my

sincere thanks for helping me with the administrative arrangements and unlimited

thank you.

cooperation. My warm thanks also go to the UPM Main Library honest and hardworking staff. I wish to extend my gratitude in general to the people of Malaysia and particular to UPM community, Malaysian brothers and sisters classmates for their kind hospitality and warm welcoming. Thank you UPM, Thank you Malaysia. Appreciation is extended to my friends Mr. Thach from Vietnam and Mr. Shanta from Sri Lanka for their kind company and cooperation. My appreciation is also directed to the Government of Yemen (Ibb University) for providing me financial support and granting me the permission and assistance to conduct the survey. Indeed, the research would not have been able to be conducted without involvement of the

collecting data. I wish to thank them all. Finally, I am very grateful to my mother,

sisters, bothers, my lovely wife and children Asma and Ibrahim for their love,

respondents to the study. I would like to thank them for their willingness to

contribute a little of their time to participate in this study. Many people of many

different places and organisations provided me assistance during my fieldwork of

patience and support during my study.

Ali Hassan Khalil; May, 2008 Serdang, Malaysia

UPM

I certify that an Examination Committee has met on 20<sup>th</sup> of August 2008 to conduct the final examination of Ali Hassan Obaid Khalil on his Doctor Philosophy thesis entitled "Relationships between Extension Competencies, Organisational Commitment and Job Satisfaction with Performance of Agricultural Extension Workers in Yemen" in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that candidate be awarded the relevant degree. Members Committee are as follows:

Shamusddin Ahmad, Ed.D Lecturer Faculty of Educational Studies Universiti Putra Malaysia (Chairman)

Azimi Hj. Hamzah, PhD Professor Faculty of Educational Studies Universiti Putra Malay (Internal Examiner)

Jegak Uli, PhD Associate Professor Faculty of Educational Studies Universiti Putra Malaysia (Internal Examiner)

Peter Songan, PhD Professor Faculty of Cognitive Science And Human Development University Malaysia Sarawak (External Examiner)



This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

#### Maimunah Ismail, PhD

Professor Faculty of Educational Studies Universiti Putra Malaysia (Chairman)

#### Turiman Suandi, PhD

Professor Faculty of Educational Studies Universiti Putra Malaysia (Member)

#### Abu Daud Silong, PhD

Professor Faculty of Educational Studies Universiti Putra Malaysia (Member)

AINI IDERIS, PhD

Professor and Dean School of Graduate Studies Universiti Putra Malaysia

Date: 13 November 2008



#### **DECLARATION**

I declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously and is not currently submitted for any other degree at University Putra Malaysia or at any other institution.

**ALI HASSAN OBAID KHALIL** 

Date: 14 October 2008



# TABLE OF CONTENTS

		Page	
<b>DEDICATIO</b>	ON	ii	
ABSTRACT			
ABSTRAK			
	EDGEMENTS	ix	
APPROVAL		xi	
DECLARAT		xiii	
	CONTENTS	xiv	
LIST OF TA		xvii	
LIST OF FIG		xviii •	
LIST OF AB	BBREVIATIONS	xix	
CHAPTER			
I	INTRODUCTION	1	
	Job Performance	4	
	Agricultural Extension Service in Yemen: the Local Scenario	14	
	Background to the Problem	24	
	Problem Statement	30	
	Objectives of the Study	33	
	Hypothesis of the Study	33	
	Assumptions of the Study	34	
	Significance of the Study	35	
	Scope and Limitations of the Study	37	
	Definition of Terms	38	
II	REVIEW OF LITERATURE	41	
	Concept of Agricultural Extension	41	
	Concept of Performance	43	
	Performance Measurement	45	
	The Level of Performance Measurement	48	
	Tasks of Extension Workers	50	
	Performance Dimensions	51	
	Factors Influencing Performance	60	
	Extension Competencies	61	
	Organisational Commitment	86	
	The Three-Component Model	92	
	Job Satisfaction	97	
	Job Satisfaction Dimensions	100	
	Job Satisfaction and its Theories	105	
	Theories and Models Described Job Performance and its		
	Relationships with Job Attitudes Variables	110	
	Theories on Competencies to Job Performance	111	
	Vrooms' Expectancy Theory	111	
	Lussier's Performance Mode	112	
	Theories on organisational Commitment to Job Performance	114	



	Suliman and Iles Model Mathieu and Zajacs' Model	114 116
	Theories on Job Satisfaction to Job Performance Integrative Model	121 121
	Porter-Lawler's Model of Expectancy Theory Summary	123 128
III	RESEARCH METHODOLOGY	129
	Research Design Research Framework	129
		131 133
	Population and Sampling Determining the Sample Size	133
	Sampling Techniques	134
	Instrument Development	138
	Development of Scales for Measuring the Extension Competencies, Organisational Commitment, Job	
	Satisfaction and Job Performance	139
	Measurement and Instrumentation of Job Performance	140
	Measurement of Extension Competencies	142
	Measurement of Organisational Commitment	145
	Measurement of Job Satisfaction	147
	The Socio- Demographic Characteristics  Translation of Research Overtinancia	148 148
	Translation of Research Questionnaire Validity of the Instrument	152
	Reliability of the Instrument	152
	Scoring Method	155
	Location of Study	158
	Data Collection	158
	Data Analysis	160
	Exploratory Data Analysis	163
	Summary	169
IV	FINDINGS AND DISCUSSION	170
	Introduction	170
	Profile of Respondents	170
	Demographic Characteristics Profile Job-Related Characteristics	172 172
	Job Performance and the Independent Variables	172
	Level of Job Performance	173
	Level of Extension Competencies	179
	Level of Organisational Commitment	183
	Level of Job Satisfaction	185
	Comparison among Extension Workers based on In-Service	105
	Training Attendance, Gender, Marital Status, Place of Residents	
	and Agriculture Region In terms of their job performance	187
	In-Service Training Participation	188
	Gender	190
	Marital Status	191
	Place of Residents	192



	Agriculture Region	193
	Extension Competencies and Job Performance Relationship	196
	Organisational Commitment and Job Performance Relationship	200
	Job Satisfaction and Job Performance Relationship	203
	Predictors of Extension Workers' Job Performance	206
	Summary	212
$\mathbf{V}$	SUMMARY, CONCLUSION	
	AND RECOMMENDATIONS	213
	Objectives	213
	Findings	215
	Socio-demographics factors	215
	The Level of Job Performance	217
	Extension Competencies and Job Performance Relationship	219
	Organisational Commitment and Job Performance	
	Relationship	221
	Job Satisfaction and Job Performance Relationship	221
	Performance of Extension Workers According to the Selected	
	Demographic Factors	222
	Predictors of Extension Workers' Job Performance	222
	Conclusion	223
	The Recommendations	226
	Recommendation for policy makers	226
	Recommendations for the Agricultural Extension Workers	232
	The Recommendations for Further Research	234

BIBLIOGRAPHY APPENDICES BIODATA OF STUDENT LIST OF PUBLICATION



#### LIST OF TABLES

Table		Page
1	Distribution of Population by Agricultural Climate Region	134
2	Number of Extension Workers by Region and Selected Sample For the Study	137
3	Measurement of Variables and its Resources	140
4	Cronbach's Alpha Reliability Test Result	154
5	Type of Analysis and the Main Statistical Test Used	161
6	Summary of Collinearity Statistics of Independent Variables in Multiple Regressions	168
7	Frequency Distribution of Respondents' Demographic and Job-Related Characteristics	173
8	Level of Job Performance of Extension Workers	176
9	Descriptive statistics of Job performance and Associated Variables	178
10	Respondents' Level of Extension Competencies	180
11	Respondents' Level of Organisational Commitment	183
12	Respondents' Level of Job Satisfaction	185
13	T-Test on Job Performance between Participant and Non-Participant Extension Workers	189
14	T-Test on Job Performance between Male and Female Extension Workers	191
15	T-Test on Job Performance between Single and Married Extension Workers	192
16	T-Test on Job Performance between Urban and Rural Place of Residents of Extension Workers	193
17	Summarized of ANOVA Result for Overall Performance by Agriculture Region	194
18	Result of Bonferroni Test for Respondents by their Region	



	Distributions	195
19	Correlation Coefficients Matrix of the Independent Variables and Job Performance	197
20	Multiple Linear Regressions between the Independent Variables and Extension Workers' Performance	208



# LIST OF FIGURES

Figure		Page
1	Institutional Structure of Extension Services in Yemen	17
2	Information Flow and Feedback in Agricultural Extension	57
3	Farmer's Satisfaction Indicator for Extension Agent Performance	59
4	Several Meanings for Competencies	63
5	The Competency Model as Proposed by Spencer and Spencer	64
6	The Relationships between Work Climate, Organisational Commitment and Job Performance	116
7	Classification of Antecedents, Correlates and Consequences of Organisational Commitment	118
8	Integrative Model of the Relationship between Job Satisfactions and Job performance	122
9	Revised Version of Porter-Lawler's Model of Expectancy Theory	125
10	Research Framework of the Study	132
11	Translation Process of Research Questionnaire	151
12	Normal P-P Plot of Regression Standardized Residuals for Performance Scores	166
13	Residual Scatterplot of Performance Scores	166
14	Overall Level of Job Performance According to Agricultural Region Relationship of Job Performance with Associated Variables	195



#### LIST OF ABBREVIATIONS

AEWs Agriculture Extension Workers

FAO Food and Agriculture Organisation

GDP General Domestics Production

GSYB General Statistics Year Book

HRD Human Resource Development

HRM Human Resource Management

IFAD International Fund for Agriculture Development

MAI Ministry of Agriculture and Irrigation

OC Organisational Commitment

ROY Republic of Yemen

SMSs Subject Mater Specialists

SPSS Statistical Packages for Social Sciences

T&V Training and Visit Extension System

TDA Tihama Development Authority

UAE United Arab Emirates

UNDP United Nation Development Programme



#### **CHAPTER I**

#### INTRODUCTION

Advancement in using agricultural technologies is rapidly altering the traditional face of agricultural extension organisations workplace. With the competition in global agribusiness environment, extension organisations are continuously searching for strategies and techniques to improve their extension workers' performance and delivering a good quality service to farmers. As the demands of the workplace continuously change, organisations are paying more attention to increased job satisfaction, increased organisational commitment and improving the employees' competencies. Nowadays, organisations consider that their employees are fundamental assets, and thus they try to leverage these assets to have greater ability and high performance (Cooke, 2001).

Internationally, in the context of agricultural extension organisations several studies have examined the performance through concentration on appraising the effectiveness of agricultural extension organisations from economical perspectives. For example, Owens, Hoddinott and Kinsey (2001) and Dinar, Karagiannis and Tzouvelekas (2007) focused on assessing the impact of agricultural extension on farm production, and farmers' adoption rate of the new technology disseminated by extension workers. Another study was conducted by Vogt and Tilburg (1988) to determine the level of satisfaction of cooperative extension workers. In the study the performance rating methodology was used to evaluate extension workers' performance.



In Yemen, the agricultural extension services have been still largely the responsibility of the government through the ministry of agriculture. Over the last decade, extension service started experiencing some challenges due to socio-economic changes and agricultural sector reforms taking place in the country. The extension services were blamed for not having a clear performance evaluation for its extension workers (Al-Sharjabi and Vogelzang, 2000). In addition, agricultural extension leaders are actually aware of the difficulties and limitations of the agricultural extension system in adapting to change the agricultural and rural economy and rely on performance evaluation to guide the programme and personnel improvement.

As a result, an institutional analysis should assess the existing agricultural extension system and design improvements. Among other areas, attention should be paid performance of extension workers; mechanisms for improving work conditions and job satisfaction; identification of competencies and the reinforcement of commitment towards extension professions and organisations. Investigating relationships of these variables with performance will help in studying this phenomenon from being person-oriented where the main emphasises on the person, through focus on the job to being behaviour oriented where the main emphasises covers the job itself and the dimensions of work behaviour that were associated with given job as well (Welbourne, Johnson and Erez, 1998). In the recent past many studies have been dedicated to the exploration of work behaviours termed citizenship behaviour, job performance, job satisfaction, commitment and extra role behaviours in business and commercial organisations rather than agricultural extension and non-profit



organisations. Saari and Judge (2004) stated that linking statistically employee's work behaviour and attitudes to business measures outcomes is one of the newest areas of research that assists with identifying important areas for survey action. In addition, McCaslin and Mwangi (1994) emphasised that continued and accurate staff evaluation is essential in improving extension workers' performance, productivity and job satisfaction. Yusof (2003) quoted the former National Chief Secretary of Malaysia Tan Sri Dato' Ahmad Sarji Abdul Hamid (1992) who cited that there are five main reasons behind assessing the employee's performance. These are 1) to acknowledge employee's successes and motivate them further; 2) to identify problem areas and find ways to solve personnel difficulties; 3) to reconcile employee's ambitions with their potential; and 4) to help employees sort their priorities within the job so that they will concentrate their efforts where they are most needed.

However, in complex organisations it has often been difficult to measure individual performance, as work outcomes are a result of multiple interdependent work process (Borman, 1991). Consequently, job performance has been conceptualised as performance on specific dimensions such as the quality and the quantity of work (Meyer, Paunonen, Gellatly, Goffin and Jackson, 1989). In that sense, there is a need for carefully establishing a group of performance dimensions that might be used as parameters for extension worker's performance measurement. Therefore, for the purpose of this study, the measurement of performance focused on the individual level which is represented by extension workers at this level through adapting and establishing a group of performance dimensions.



#### Job Performance

The term performance has been used with reference to individuals, groups, and organisations. According to Williams (1998), performance has been used as a synonym for output, efficiency, motivation individual productivity, organisational effectiveness, production, profitability, cost effectiveness, competitiveness and work quality. For example, Bernardin, Kane, Ross, and Johnson (1995) define performance as the record of outcomes produced on a specified job functions or activity during a specified time period. Bernardin et al. (1995) and Bernardin (1992) argue that a focus on results should be the preferred approach to performance management as it takes the customer perspective and enables employees' efforts to be linked to organisational goals. Viswesvaran and Ones (2002) assert that the assessment of job performance dimensions has primarily relied either on objectives of specified acts, output maintained in organisational records or subjective judgement from ratters. The job dimension should be always as a part of a performance scale (Welbourne et al., 1998).

Welbourne et al. (1998, pg.541) argued that one of the major limitations of existing models of job performance is that they "lack a unifying theoretical framework" and that "without a theoretical underpinning, there is little guidance for choosing which dimensions of performance ...to include or exclude from a model". Therefore, the choice of performance measure has long been a difficult issue facing researchers within the organisational field (Schoenberg, 2006).

