MEDIATION EFFECT OF TRAINING MOTIVATION ON THE RELATIONSHIPS BETWEEN TRAINEE-, TRAINING PROGRAM-, AND ORGANIZATIONAL-CHARACTERISTIC SUPPORT AND OVERALL TRAINING EFFECTIVENESS

SITI FARDANIAH ABDUL AZIZ

FPP 2013 22
MEDIATION EFFECT OF TRAINING MOTIVATION ON THE RELATIONSHIPS BETWEEN TRAINEE-, TRAINING PROGRAM-, AND ORGANIZATIONAL-CHARACTERISTIC SUPPORT AND OVERALL TRAINING EFFECTIVENESS

SITI FARDANIAH ABDUL AZIZ

DOCTOR OF PHILOSOPHY
UNIVERSITI PUTRA MALAYSIA
2012
MEDIATION EFFECT OF TRAINING MOTIVATION ON THE
RELATIONSHIPS BETWEEN TRAINEE, TRAINING, ORGANIZATIONAL
CHARACTERISTIC SUPPORT, AND OVERALL TRAINING
EFFECTIVENESS

By

SITI FARDANIAH ABDUL AZIZ

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

June 2013
DEDICATION

Dedicated to my beloved family, my husband and my sons for their support and patience during my study
Abstract of thesis presented to the Senate of the Universiti Putra Malaysia in fulfilment of the requirement for the Degree of Doctor of Philosophy

MEDIATION EFFECT OF TRAINING MOTIVATION ON THE RELATIONSHIPS BETWEEN TRAINEE, TRAINING, ORGANIZATIONAL CHARACTERISTIC SUPPORT, AND OVERALL TRAINING EFFECTIVENESS

By

SITI FARDANIAH ABDUL AZIZ

June 2013

Chairman: Shamsuddin Ahmad, PhD.

Faculty: Educational Studies

Human resource development (HRD) field of study has emphasized the importance of training effectiveness; in which, training motivation is highlighted as an influential factor to determine training effectiveness. However, the existence of various types of training motivation makes it difficult to determine whether training motivation can play role as predictor and mediator. Therefore, the objective of the present research was to determine the prediction and mediation effect of comprehensive training motivation (CTM) on the relationships between trainee- (TCS), training program- (TPCS), and organizational- (OCS) characteristic support and overall training effectiveness (OTE) among academic staff in a public university in Malaysia.
A research framework was developed by adapting and integrating motivational theory, training motivation model, training effectiveness model and previous researches to achieve the research objective. The research framework explains that CTM partially mediates the relationships between independent variables and OTE. In addition, the research used quantitative, survey, and prediction study. Respondents involved were 281 academic staff attended 17 general training programs provided by Centre for Academic Advancement in Universiti Kebangsaan Malaysia between April and July 2011. The instrument used in this research was checked for face validity, content validity, and constructs validity, as well as reliability, and confirmatory factor analysis. Data were analysed using structural equation modelling through SPSS and AMOS software; wherein, an exploratory data analysis was done to make sure the compliance of multivariate analysis assumption.

Findings found some variations in the respondents’ background; in which, majority of respondents from various faculty/department have attended training as an option. Findings also found that the measurement and structural model to test for the research framework had sufficient goodness of fit; in which, the full was better than the partial mediation model. Majority of respondents perceived high level of OTE, CTM, OCS, TCS, and TPCS. In addition, OTE had a significant and positive relationship with independent variables. Further, it was found that CTM significantly mediated the relationship between TPCS and OTE with full mediation effect. However, CTM did not significantly mediate the relationship between TCS and OTE, and that between OCS and OTE. Additionally, CTM had a large effect on OTE ($\beta = 0.645$, $p = .0001$) and can explain 41% variance in OTE. Findings are consistent with some of previous research.
Findings of this research contributes to the HRD field of study by adding new findings to the body of knowledge and verifying similar findings as demonstrated in previous researches. This research is useful to inspire organization, future researcher, and the society to predict OTE by determining the level of CTM as an alternative of conducting rigorous training evaluation since the latter was expensive, complex, and time-consuming. Additionally, this research also offers a new perspective to improve training effectiveness by selecting the right TCS and TPCS, and providing the right OCS to stimulate training motivation that can be useful for future intervention. The research conclusion, implications, suggestions, and recommendations for future research are also discussed.
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

KESAN PERANTARA MOTIVASI LATIHAN DALAM HUBUNGAN DI ANTARA PELATIH, LATIHAN, KRITERIA SOKONGAN ORGANISASI DAN KEBERKESANAN LATIHAN MENYELURUH

Oleh

SITI FARDANIAH ABDUL AZIZ

Jun 2013

Pengerusi: Shamsuddin Ahmad, PhD.

Fakulti: Pengajian Pendidikan

Bidang pembangunan sumber manusia (HRD) telah menekankan kepentingan keberkesanan latihan di mana motivasi latihan di utarakan sebagai salah satu faktor yang berpengaruh dalam menentukan keberkesanan latihan. Namun, kewujudan pelbagai jenis motivasi latihan telah menyebabkan kesulitan dalam menentukan sama ada motivasi latihan benar-benar boleh berperanan sebagai peramal dan perantara. Oleh itu, objektif kajian ini adalah untuk menentukan kesan peramal dan perantara motivasi latihan yang komprehensif (CTM) di antara hubungan kriteria sokongan pelatih (TCS), program latihan (TPCS), dan organisasi (OCS) dengan keseluruhan keberkesanan latihan (OTE) dalam kalangan staf akademik di sebuah universiti awam di Malaysia.
Satu rangka kajian telah dibangunkan dengan mengadaptasi dan mengintegrasikan teori motivasi, model motivasi latihan, model keberkesanan latihan, serta dapatan kajian-kajian lepas bagi mencapai objektif kajian ini. Rangka kajian tersebut menjelaskan bahawa CTM merupakan perantara separa di antara hubungan pemboleh ubah bebas dengan OTE. Selain itu, kajian ini juga menggunakan pendekatan kuantitatif, kaedah tinjauan, dan teknik ramalan. Responden yang terlibat merupakan staf akademik yang telah menghadiri 17 program latihan anjuran Pusat Pembangunan Akademik di Universiti Kebangsaan Malaysia, iaitu dari April hingga Julai 2011. Instrumen yang digunakan dalam kajian ini telah disemak dari segi kesahan muka, kesahan kandungan dan kesahan gagasan, di samping ujian kebolehpercayaan dan analisis pengesahan faktor. Data telah dianalisis menggunakan pemodelan struktur persamaan melalui perisian SPSS dan AMOS; di mana, analisis pemeriksaan data telah dijalankan untuk memastikan pematuhan prasyarat analisis multivariat.

Kajian ini mendapati bahawa terdapat kepelbagaian dalam latar belakang responden; di mana, majoriti responden dari pelbagai fakulti/ jabatan berlainan telah menghadiri latihan sebagai satu pilihan. Hasil kajian ini juga mendapati bahawa model pengukuran dan model struktur untuk menguji rangka kajian mempunyai tahap kebagusan sesuai (GOF) yang mencukupi; di mana, model perantara penuh adalah lebih baik berbanding model perantara separa. Majoriti responden mempersepsikan tahap yang tinggi bagi OTE, CTM, OCS, TCS, dan TPCS. Sebagai tambahan, OTE mempunyai hubungan yang signifikan dan positif dengan pemboleh ubah bebas. Selain itu, CTM merupakan perantara penuh yang signifikan dalam hubungan di antara TPCS dan OTE. Namun, CTM bukanlah perantara yang signifikan di antara
hubungan TCS dan OTE, serta di antara OCS dan OTE. Tambahan pula, CTM boleh meramalkan OTE dengan kesan yang besar \( \beta = .64, p = .0001 \), di mana CTM boleh menerangkan sehingga 41% varian di dalam OTE. Dapatan kajian ini adalah konsisten dengan beberapa kajian lepas.

Hasil kajian ini dapat menyumbang kepada bidang HRD dengan memberikan penemuan baru serta mengesahkan hasil kajian yang serupa sebagaimana yang digambarkan oleh kajian-kajian lepas. Kajian ini juga berguna sebagai inspirasi kepada organisasi, penyelidik akan datang, serta masyarakat untuk meramalkan OTE dengan menentukan tahap CTM sebagai alternatif kepada proses penilaian latihan yang ketat memandangkan penilaian latihan tersebut adalah sulit, kompleks dan mengambil masa yang lama. Sebagai tambahan, kajian ini juga menawarkan satu perspektif baru untuk meningkatkan keberkesanan latihan dengan memilih TCS dan TPCS yang sesuai, serta menyediakan OCS yang sesuai bagi merangsang motivasi latihan. Kesimpulan, implikasi dan cadangan untuk kajian akan datang juga dibincangkan.
ACKNOWLEDGEMENTS

First of all, I praise to Allah for his almighty of giving me the strength, health, and capability to complete this thesis. I would also like to acknowledge my appreciation to my sincere supervisor, Dr. Shamsuddin Ahmad for his advice and support that have motivated me to do the thesis. I am also grateful for the advice and guidance from my committee members, Assoc. Prof. Dr. Bahaman Abu Samah, Assoc. Prof. Dr. Sidek Mohd Noah, and Assoc. Prof. Dr. Norhasni Zainal Abiddin. Without their help and bless, I would not have completed the research. I also thank to all lecturers and peers for their help and support during my study at Universiti Putra Malaysia (UPM), especially to Prof. Dr. Abu Daud Silong, Prof. Dr. Turiman Suandi, and Assoc. Prof. Dr. Azahari Ismail for their kindness help as juries in content validity process. Additionally, thank you to UPM for giving me the opportunity to further my doctoral degree in the field of Human Resource Development.

I would also like to thank my employer, Universiti Kebangsaan Malaysia and the Malaysia’s Ministry of Higher Education for their generousity to sponsor my doctoral degree study. For all top managements and colleagues at School of Psychology and Human Development, Faculty of Social Sciences, Human Resource Development Unit, and Registrar, thank you so much for your support. In addition, I would also like to thank to the Academic Development Centre, especially to Pn. Zaharah Zainal for her kindness help in data collection.

Finally, I would like to express my grateful to my beloved husband, sons, and family for their support during my study; thank you so much, I love you all.
I certify that a Thesis Examination Committee has met on **17 June 2013** to conduct the final examination of Siti Fardaniah Abdul Aziz on his (or her) thesis entitled "**Mediation Effect of Training Motivation on the Relationships between Trainee, Training, Organizational Characteristic Support, and Overall Training Effectiveness**" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Doctor of Philosophy.

Members of the Thesis Examination Committee were as follows:

**Ismi Arif Ismail, PhD**  
Associate Professor  
Faculty of Educational Studies  
Universiti Putra Malaysia  
(Chairman)

**Abu Daud Silong, PhD**  
Professor  
Faculty of Educational Studies  
Universiti Putra Malaysia  
(Internal Examiner)

**Khairuddin Idris, PhD**  
Associate Professor  
Faculty of Educational Studies  
Universiti Putra Malaysia  
(Internal Examiner)

**John Bruce Tracey, PhD**  
Professor  
School of Hotel Administration  
Cornell University at New York  
United State of America  
(External Examiner)

---

**NORITAH OMAR, PhD**  
Assoc. Professor and Deputy Dean  
School of Graduate Studies  
Universiti Putra Malaysia  

Date: 16 August 2013
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:

**Shamsuddin Ahmad, PhD**  
Lecturer  
Faculty of Educational Studies  
Universiti Putra Malaysia  
(Chairman)

**Bahaman Abu Samah, PhD**  
Associate Professor  
Institute for Social Science Studies  
Universiti Putra Malaysia  
(Member)

**Sidek Mohd Noah, PhD**  
Associate Professor  
Faculty of Educational Studies  
Universiti Putra Malaysia  
(Member)

**Norhasni Zainal Abiddin, PhD**  
Associate Professor  
Faculty of Educational Studies  
Universiti Putra Malaysia  
(Member)

__________________________________________

BUJANG BIN KIM HUAT, PHD  
Professor and Dean  
School of Graduate Studies  
Universiti Putra Malaysia  

Date:
DECLARATION

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

______________________________
SITI FARDANIAH ABDUL AZIZ

Date: 17 June 2013.
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEDICATION</td>
<td>ii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td>vi</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ix</td>
</tr>
<tr>
<td>APPROVAL</td>
<td>x</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>xii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xvii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xix</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xxi</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>I INTRODUCTION</td>
<td></td>
</tr>
<tr>
<td>Background of Study</td>
<td>1</td>
</tr>
<tr>
<td>Training in Universiti Kebangsaan Malaysia</td>
<td>7</td>
</tr>
<tr>
<td>Problem Statement</td>
<td>11</td>
</tr>
<tr>
<td>Research Questions</td>
<td>14</td>
</tr>
<tr>
<td>Research Objective</td>
<td>15</td>
</tr>
<tr>
<td>General Objective</td>
<td>15</td>
</tr>
<tr>
<td>Specific Objectives</td>
<td>15</td>
</tr>
<tr>
<td>Research Hypotheses</td>
<td>16</td>
</tr>
<tr>
<td>Significance of the Research</td>
<td>17</td>
</tr>
<tr>
<td>Scope of the Research</td>
<td>19</td>
</tr>
<tr>
<td>Limitation of the Research</td>
<td>20</td>
</tr>
<tr>
<td>Operational Definitions</td>
<td>22</td>
</tr>
<tr>
<td>Organization of the Dissertation</td>
<td>27</td>
</tr>
<tr>
<td>Chapter Summary</td>
<td>28</td>
</tr>
<tr>
<td>II LITERATURE REVIEW</td>
<td>29</td>
</tr>
<tr>
<td>Motivation Theories</td>
<td>29</td>
</tr>
<tr>
<td>Force Field Theory by Lewin (1938)</td>
<td>29</td>
</tr>
<tr>
<td>Expectancy Theory by Vroom (1964)</td>
<td>31</td>
</tr>
<tr>
<td>Theory of Planned Behaviour by Ajzen (1991)</td>
<td>33</td>
</tr>
<tr>
<td>Training Effectiveness Models</td>
<td>35</td>
</tr>
<tr>
<td>Four Levels of Training Evaluation by Kirkpatrick (1959)</td>
<td>36</td>
</tr>
<tr>
<td>Cervero’s Continuing Profesional Education Evaluation (1988)</td>
<td>37</td>
</tr>
<tr>
<td>The Influence of Trainee Attitudes on Training Effectiveness by Noe and Schmitt (1986)</td>
<td>40</td>
</tr>
<tr>
<td>Cognitive, Skill-based, and Affective Outcomes of Training Evaluation by Kraiger et al. (1993)</td>
<td>41</td>
</tr>
<tr>
<td>Comprehensive Model of Training Effectiveness by Cannon-Bowers et al. (1995)</td>
<td>44</td>
</tr>
<tr>
<td>Return on Investment (ROI) by Phillips (1997)</td>
<td>46</td>
</tr>
</tbody>
</table>

xiii
Influence of Contextual Factors on Training
Effectiveness by Quinones (1997) 48
HRD Evaluation Research and Measurement Model by
Holton (2005) 50
Systematic Model of Learning Transfer by
Kontoghiorghes (2004) 52
Training Motivation Model 54
Previous Research
  Overall Training Effectiveness and the Four Dimensions 57
  Independent Variables Related to Training Effectiveness
    Interaction between independent variables 83
  Comprehensive Training Motivation and the Four Dimensions 87
    Mediation Effect of Training Motivation 101
Theoretical Framework for the Mediation Effect of Comprehensive Training Motivation 106
Chapter Summary 115

III METHODOLOGY
  Research Design 117
  Research Framework 118
  Population and Sampling
    Sample Size 125
  Instrument Development
    Scale Development Process 130
      Jury Validation for Content Validity 132
      Pilot Study 133
  Validity 134
  Reliability 135
  Procedures 137
  Data Analysis
    Descriptive Statistics 140
    Multiple Linear Regressions 141
    Structural Equation Modelling 141
      Confirmatory factor analysis and construct validity 143
      Correlation coefficient analysis 144
      Regression coefficient analysis 145
      Mediation test 145
  Confirmatory Factor Analysis for Individual Constructs 147
  Exploratory Data Analysis
    Normality Test 151
    Outliers 152
    Linearity Test 153
    Heteroscedasticity of Errors 154
    Independent or Errors 155
    Multicolinearity Test 156
  Chapter Summary 157
IV FINDINGS AND DISCUSSIONS 158
Demographic Profile of Respondents 158
  Gender and Faculty 158
  Position, Income Level, Qualification, Tenure, Age,
  Race, and Religion 160
  Training Program and Training Compliance 163
Measurement Model Validity 165
  Model Fit 166
  Construct Validity 166
  The Level of OTE, CTM, TCS, OCS, and TPCS
  (Objective 1) 168
  Correlation Coefficient Analysis Using SEM
  (Objective 2) 170
Structural Model Validity 178
  Regression Coefficient Analysis Using SEM
  (Objective 3) 181
  Mediation Test Using SEM (Objective 4) 185
  H3-1: CTM mediates the relationship between
  OCS and OTE 188
  H3-2: CTM mediates the relationship between
  TCS and OTE 188
  H3-3: CTM mediates the relationship between
  TPCS and OTE 189
  Conclusion for Hypotheses 3 190
  Discussion 192

Chapter Summary 200

V SUMMARY, CONCLUSION, IMPLICATIONS, AND RECOMMENDATIONS 201
Summary 202
  Summary of the Overall Research 202
  Summary of Findings 203
Conclusion 206
Implications for Human Resource Development Field of Study 209
  Theoretical Contribution 210
  Practical contribution 212
Recommendations 215
  Recommendations for HRD Practitioners 215
  Recommendations for Future Researchers 219
Chapter Summary 222

REFERENCES

APPENDICES
A Professional Development Policy for Academic Staff,
Universiti Kebangsaan Malaysia
B Internal Audit Report for MS ISO 9001:2008
C Tables and Figures
D Letter of acceptance for data collection from Academic
  Development Centre, Universiti Kebangsaan Malaysia (Malay
  Version)
E Consent forms as a juries for content validation process (Malay Version)
F Instrument/ Questionnaires (Malay Version)

BIODATA OF STUDENT
LIST OF PUBLICATIONS