**Black skin with golden text**

**FACTORS AFFECTING BEHAVIORAL INTENTIONS TOWARDS MOBILE LEARNING: MEDIATING ROLE OF ATTITUDE AND MODERATING ROLE OF SOCIAL INFLUENCE**

**By**

**KAMRAN KHAN**

**(0000000)**

**Supervisor**

**Dr. XXXXXX**

 

**SZABIST University, Islamabad**

**Month, Year**

**Factors Affecting Behavioral Intentions Towards Mobile Learning: Mediating Role of Attitude and Moderating Role of Social Influence**

**By**

**KAMRAN KHAN**

**(0000000)**

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

DOCTORATE OF PHILOSOPHY

IN MANAGEMENT SCIENCES

To

DEPARTMENT OF MANAGEMENT SCIENCES



**SZABIST University, Islamabad**

**Month, Year**

****

**DISSERTATION AND DEFENSE APPROVAL FORM**

**The undersigned certify that they have read the following thesis, examined the defense, are satisfied with the overall exam performance and recommend the thesis to the Department of Management Sciences SZABIST for acceptance:**

**Dissertation Title: Antecedents of the individual’s support for change: a proposed model with an empirical evidence**

**Submitted by:** Kamran khan **Registration #** 00000000

Doctorate of Philosophy

Department of Management Sciences

|  |
| --- |
| As supervisor, I endorse the transformative changes made by student in thesis incorporating the valuable comments of external/internal examiners which reflect the desired standards of academic writing and understanding of the subject matter. |
| **Dr. Aaaaaaaaaaaaaaaaa**  |  |  |
| Research supervisor |  | Signature of the research supervisor |

|  |
| --- |
| As Program Manager, I certify that the changes incorporated by the supervisor are satisfactory. |
| **Dr. Muhammad Asif Khan** |  |  |
| Program Manager |  | Signature of the Program Manager |

|  |
| --- |
| As Head of Department, I endorsed verification of Supervisor and Program Manager. |
| **Dr. Shazia Akhtar**  |  |  |
| Head of Department |  |  Signature of the Head of Department |

|  |
| --- |
| As Associate Dean, I endorsed the recommendation of Program Manager and HoD. |
| **Dr. Muhammad Asif Khan**  |  |  |
| Associate Dean-MS |  |  Signature of the Associate Dean |
| **Khusro Pervaiz Khan** |  |  |
| Head of Campus |  |  Signature of the Head of Campus |

# AUTHOR’S DECLARATION

I ***Farhina Hameed* (Reg. # 13)**hereby state that my PhD thesis titled, **“\_\_”** is my own work and has not been submitted previously by me for taking any degree from this University **(Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)** or anywhere else in the country world.

At any time if my statement is found to be incorrect even after my Graduate the university has the right to withdraw my PhD degree.

 Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Name of Student:

 Dated: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# PLAGIARISM UNDERTAKING

I solemnly declare that research work presented in the thesis titled, **“**\_\_**”** is solely my research work with no significant contribution from any other person. Small contribution/help wherever taken has been duly acknowledged and that complete thesis has been written by me.

I understand the zero-tolerance policy of the HEC and University **(Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)** towards plagiarism. Therefore, I as an Author of the above titled thesis declare that no portion of my thesis has been plagiarized and any material used as reference is properly referred/cited.

I undertake that if I am found guilty of any formal plagiarism in the above titled thesis even after award of PhD degree, the University reserves the rights to withdraw/revoke my PhD degree and that HEC and the University has the right to publish my name on the HEC/University Website on which names of students are placed who submitted plagiarized thesis.

 Student/Author Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_

 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_

 Registration #:

**Copyright © 2019 FARHINA HAMEED**

All rights reserved. No part of the publication may be reproduced in any form by print, photo print, microfilm or any means without written permission from the author.

# DEDICATION

I dedicate this thesis to my parents and siblings who always encourage me to prosper in life and career.

#  ACKNOWLEDGEMENTS

First of all, I want to thank to Almighty Allah, who is the Most Beneficent and the Most Merciful. All praises are due to Him only, of Whose blessing nobody is left destitute, and Whose bounties nobody needs despair.

Secondly, I would like to express deep gratitude to my supervisor Associate Professor Dr. Abdul Qayyum for his continuous support during entire period of time. His patience, immense knowledge and encouragement motivated me throughout the journey. It was his kind guidance that made me work through all the difficulties during the course of my PhD thesis.

I can’t thank enough to Dr. Faheem A. Khan for his support and guidance. He was always available whenever needed and I am thankful for the excellent example he has provided as a successful teacher.

I am extremely thankful to my ever-loving parents, especially my mother who was always with me through thick and thin and encouraged me to complete my research in time. I am exceptionally grateful to my husband, M. Younus Awan who has such great confidence and trust in me, and who provided a carefree environment for me along with his willingness to support me in making important decisions. I am grateful to my children M. Hashir Awan and M. Muqtasid Awan, as all the time which should have been given to them, was invested in studies.

Lastly, I would say thanks to all my friends who supported me in completing the research work and remembered me in prayers, in this period of life.

Thank you

# ABSTRACT

Modern technologies and globalization have proved instrumental in bringing about drastic changes and mobile learning has expanded the horizons of electronic and distance learning. Various theories and models have been used previously in order to measure user adoption of technology but lacks empirical explanation thus there is a need to determine the factors that plays pivotal role in measuring behavioral intention towards mobile learning.

The purpose of the study is to measure the effect of factors (entertainment, informativeness, irritation, perceived trust, and perceived value) that have impact on behavioral intention towards mobile learning. Secondly, the study explores the direct as well as indirect effect of factors (entertainment, informativeness, irritation, perceived trust, and perceived value) on behavioral intention towards mobile learning. Thirdly, the study analyzes the mediating effects of attitude among the aforementioned variables and lastly, the study investigates the moderating effects of social influence.

The data is collected from the students of various public and private sector universities and convenience sampling technique is employed. 626 responses are used for the final analysis. Multiple regression analysis is employed to evaluate the results and method proposed by Baron & Kenny is applied for measuring mediation and moderation.

The findings suggest that entertainment, informativeness, perceived trust and perceived value have direct and significant effects on attitude towards mobile learning, whereas, irritation has negative effects. Moreover, entertainment, perceived trust and perceived value have direct and significant effects on behavioral intention towards mobile learning, whereas, irritation has negative effects and informativeness has insignificant effects on behavioral intention towards mobile learning. Furthermore, attitude towards mobile learning plays a partial mediating role in relationship between entertainment, informativeness, irritation, perceived trust and perceived value. Furthermore, social influence plays an insignificant moderating role in relationship between attitude towards mobile learning and behavioral intention towards mobile learning. The study contributes in the literature by measuring the mediating role of attitude and moderating role of social influence. Furthermore, the study provides significant implications for researchers, practitioners and policy makers.

**Keywords:** Attitude**,** Behavioral Intention, Entertainment, Informativeness, Irritation, Mobile learning, Pakistan**,** Perceived trust, Perceived value

# TABLE OF CONTENTS

[CERTIFICATE OF APPROVAL iii](#_Toc34907483)

[AUTHOR’S DECLARATION v](#_Toc34907484)

[PLAGIARISM UNDERTAKING vi](#_Toc34907485)

[DEDICATION viii](#_Toc34907486)

[ACKNOWLEDGEMENTS ix](#_Toc34907487)

[ABSTRACT x](#_Toc34907488)

[TABLE OF CONTENTS xii](#_Toc34907489)

[LIST OF APPENDICES xvi](#_Toc34907490)

[LIST OF TABLES xvii](#_Toc34907491)

[LIST OF FIGURES xix](#_Toc34907492)

[LIST OF ABBREVIATIONS xx](#_Toc34907493)

[1. INTRODUCTION 1](#_Toc34907494)

[1.1 Background of the Study **Error! Bookmark not defined.**](#_Toc34907495)

[1.2 Mobile Learning Trends in Pakistan (Mobile Learning and Technology) **Error! Bookmark not defined.**](#_Toc34907496)

[1.3 Problem Statement **Error! Bookmark not defined.**](#_Toc34907497)

[1.3.1 Entertainment, Informativeness and Irritation **Error! Bookmark not defined.**](#_Toc34907498)

[1.3.2 Perceived Trust **Error! Bookmark not defined.**](#_Toc34907499)

[1.3.3 Perceived Value **Error! Bookmark not defined.**](#_Toc34907500)

[1.3.4 Attitude towards Mobile Learning **Error! Bookmark not defined.**](#_Toc34907501)

[1.3.5 Social Influence **Error! Bookmark not defined.**](#_Toc34907502)

[1.4 Aim of the Study **Error! Bookmark not defined.**](#_Toc34907503)

[1.5 Research Questions **Error! Bookmark not defined.**](#_Toc34907504)

[1.6 Research Objectives **Error! Bookmark not defined.**](#_Toc34907505)

[1.7 Significance of the Study **Error! Bookmark not defined.**](#_Toc34907506)

[1.7.1 Theoretical Significance **Error! Bookmark not defined.**](#_Toc34907507)

[1.7.2 Practical Significance **Error! Bookmark not defined.**](#_Toc34907508)

[1.8 Delimitations of the Study **Error! Bookmark not defined.**](#_Toc34907509)

[1.9 Definitions of Study Variables **Error! Bookmark not defined.**](#_Toc34907510)

[1.10 Organization and Structure of the Thesis **Error! Bookmark not defined.**](#_Toc34907511)

[2. LITERATURE REVIEW Error! Bookmark not defined.](#_Toc34907512)

[2.1 Scholastic Concept of Mobile Learning **Error! Bookmark not defined.**](#_Toc34907513)

[2.1.1 Mobile Learning Definitions **Error! Bookmark not defined.**](#_Toc34907514)

[2.1.2 Mobile Technology Development **Error! Bookmark not defined.**](#_Toc34907515)

[2.1.3 Activity Theory of Mobile Learning **Error! Bookmark not defined.**](#_Toc34907516)

[2.2 Scholastic Concept of Behavioral Intention **Error! Bookmark not defined.**](#_Toc34907517)

[2.2.1 Behavioral Intention towards Mobile Learning **Error! Bookmark not defined.**](#_Toc34907518)

[2.2.2 Theories Comprehend Behavioral Intention Phenomena in Previous Studies **Error! Bookmark not defined.**](#_Toc34907519)

[2.2.3 Theory used to draw relationship of BITML **Error! Bookmark not defined.**](#_Toc34907520)

[2.3 Scholastic Concept of Entertainment **Error! Bookmark not defined.**](#_Toc34907521)

[2.4 Scholastic Concept of Informativeness **Error! Bookmark not defined.**](#_Toc34907522)

[2.5 Scholastic Concept of Irritation **Error! Bookmark not defined.**](#_Toc34907523)

[2.5.1 Theory Comprehend Entertainment, Informativeness and Irritation **Error! Bookmark not defined.**](#_Toc34907524)

[2.5.2 Relationship of Entertainment with Attitude and Behavioral Intention **Error! Bookmark not defined.**](#_Toc34907525)

[2.5.3 Relationship of Informativeness with Attitude and Behavioral Intention **Error! Bookmark not defined.**](#_Toc34907526)

[2.5.4 Relationship of Irritation with Attitude and Behavioral Intention **Error! Bookmark not defined.**](#_Toc34907527)

[2.6 Scholastic Concept of Perceived Trust **Error! Bookmark not defined.**](#_Toc34907528)

[2.6.1 Relationship of Perceived Trust with Attitude and Behavioral Intention **Error! Bookmark not defined.**](#_Toc34907529)

[2.7 Scholastic Concept of Perceived Value **Error! Bookmark not defined.**](#_Toc34907530)

[2.7.1 Theories Comprehend Perceived Value **Error! Bookmark not defined.**](#_Toc34907531)

[2.7.2 Relationship of Perceived Value with Attitude and Behavioral Intention **Error! Bookmark not defined.**](#_Toc34907532)

[2.8 Scholastic Concept of Attitude **Error! Bookmark not defined.**](#_Toc34907533)

[2.8.1 Theory Comprehend Attitude and Behavior **Error! Bookmark not defined.**](#_Toc34907534)

[2.8.2 Relationship of Attitude with Behavioral Intention **Error! Bookmark not defined.**](#_Toc34907535)

[2.8.3 Attitude as Mediating Variable **Error! Bookmark not defined.**](#_Toc34907536)

[2.9 Scholastic Concept of Social Influence **Error! Bookmark not defined.**](#_Toc34907537)

[2.9.1 Theory Comprehend Social Influence **Error! Bookmark not defined.**](#_Toc34907538)

[2.9.2 Relationship of Social Influence with Attitude and Behavioral Intention **Error! Bookmark not defined.**](#_Toc34907539)

[2.10 Gap Identification for Conceptual Framework of the Study **Error! Bookmark not defined.**](#_Toc34907540)

[2.10.1 Theoretical Gap **Error! Bookmark not defined.**](#_Toc34907541)

[2.10.2 Conceptual Framework of the Study **Error! Bookmark not defined.**](#_Toc34907542)

[2.10.3 Summary of Hypotheses **Error! Bookmark not defined.**](#_Toc34907543)

[3. RESEARCH METHODOLOGY Error! Bookmark not defined.](#_Toc34907544)

[3.1 Research Philosophy **Error! Bookmark not defined.**](#_Toc34907545)

[3.2 Research Approaches/Strategies **Error! Bookmark not defined.**](#_Toc34907546)

[3.3 Purpose of Research **Error! Bookmark not defined.**](#_Toc34907547)

[3.4 Nature of Investigation **Error! Bookmark not defined.**](#_Toc34907548)

[3.5 Extent of the Researcher’s Interference **Error! Bookmark not defined.**](#_Toc34907549)

[3.6 Study Setting **Error! Bookmark not defined.**](#_Toc34907550)

[3.7 Time Horizon **Error! Bookmark not defined.**](#_Toc34907551)

[3.8 Unit of Analysis **Error! Bookmark not defined.**](#_Toc34907552)

[3.9 Measurement and Operationalization of Variables **Error! Bookmark not defined.**](#_Toc34907553)

[3.10 Face Validity **Error! Bookmark not defined.**](#_Toc34907554)

[3.11 Population and Sampling **Error! Bookmark not defined.**](#_Toc34907555)

[3.12 Data Collection **Error! Bookmark not defined.**](#_Toc34907556)

[3.12.1 Data Collection Procedure **Error! Bookmark not defined.**](#_Toc34907557)

[3.12.2 Coding and Processing **Error! Bookmark not defined.**](#_Toc34907558)

[3.12.3 Data Analysis Techniques **Error! Bookmark not defined.**](#_Toc34907559)

[5. RESULTS AND ANALYSIS Error! Bookmark not defined.](#_Toc34907560)

[4.1 Descriptive of Demographics **Error! Bookmark not defined.**](#_Toc34907561)

[4.1.1 Descriptives of Gender **Error! Bookmark not defined.**](#_Toc34907562)

[4.1.2 Descriptives of Age **Error! Bookmark not defined.**](#_Toc34907563)

[4.1.3 Descriptives of Education **Error! Bookmark not defined.**](#_Toc34907564)

[4.1.4 Descriptives of Smart Phones **Error! Bookmark not defined.**](#_Toc34907565)

[4.1.5 Descriptives of Experience **Error! Bookmark not defined.**](#_Toc34907566)

[4.1.6 Descriptives of Mobile Devices **Error! Bookmark not defined.**](#_Toc34907567)

[4.2 Assumptions of Regression **Error! Bookmark not defined.**](#_Toc34907568)

[4.2.1 Linear Relationship **Error! Bookmark not defined.**](#_Toc34907569)

[4.2.2 Multivariate Normality **Error! Bookmark not defined.**](#_Toc34907570)

[4.2.3 Multicollinearity Statistics **Error! Bookmark not defined.**](#_Toc34907571)

[4.2.4 Autocorrelation **Error! Bookmark not defined.**](#_Toc34907572)

[4.2.5 Homoscedasticity **Error! Bookmark not defined.**](#_Toc34907573)

[4.3 Reliability **Error! Bookmark not defined.**](#_Toc34907574)

[4.4 Confirmatory Factor Analysis **Error! Bookmark not defined.**](#_Toc34907575)

[4.4.1 Fit Statistics (Goodness of Measures) **Error! Bookmark not defined.**](#_Toc34907576)

[4.5 Construct Validity **Error! Bookmark not defined.**](#_Toc34907577)

[4.5.1 Convergent Validity **Error! Bookmark not defined.**](#_Toc34907578)

[4.5.2 Discriminant Validity **Error! Bookmark not defined.**](#_Toc34907579)

[4.6 Descriptive of Study Variables and Assumption of Normality **Error! Bookmark not defined.**](#_Toc34907580)

[4.7 Inter-correlations Matrix **Error! Bookmark not defined.**](#_Toc34907581)

[4.8 Hypotheses Testing **Error! Bookmark not defined.**](#_Toc34907582)

[4.8.1 Direct Relations **Error! Bookmark not defined.**](#_Toc34907583)

[4.8.1.1 Regression Analysis of ATML w.r.t ENT, INF, IRR, PERT, and PERV (H1, 2, 3, 4, 5) **Error! Bookmark not defined.**](#_Toc34907584)

[4.8.1.2 Regression Analysis of BITML w.r.t ENT, INF, IRR, PERT, and PERV (H6, 7, 8, 9, 10) **Error! Bookmark not defined.**](#_Toc34907585)

[4.8.1.3 Regression Analysis of BITML w.r.t ATML **Error! Bookmark not defined.**](#_Toc34907586)

[4.8.2 Mediation Analysis **Error! Bookmark not defined.**](#_Toc34907587)

[4.8.2.1 Mediation Analysis of ATML between ENT and BITML **Error! Bookmark not defined.**](#_Toc34907588)

[4.8.2.2 Mediation Analysis of ATML between INF and BITML **Error! Bookmark not defined.**](#_Toc34907589)

[4.8.2.3 Mediation Analysis of ATML between IRR and BITML **Error! Bookmark not defined.**](#_Toc34907590)

[4.8.2.4 Mediation Analysis of ATML between PERT and BITML **Error! Bookmark not defined.**](#_Toc34907591)

[4.8.2.5 Mediation Analysis of ATML between PERV and BITML **Error! Bookmark not defined.**](#_Toc34907592)

[4.8.3 Moderation Analysis **Error! Bookmark not defined.**](#_Toc34907593)

[4.9 Result Summary of Hypotheses **Error! Bookmark not defined.**](#_Toc34907594)

[5. DISCUSSION, CONCLUSION AND RECOMENDATIONS Error! Bookmark not defined.](#_Toc34907595)

[5.1 Discussion **Error! Bookmark not defined.**](#_Toc34907596)

[5.1.1 Hypotheses 1 and 6 **Error! Bookmark not defined.**](#_Toc34907597)

[5.1.2 Hypotheses 2 and 7 **Error! Bookmark not defined.**](#_Toc34907598)

[5.1.3 Hypotheses 3 and 8 **Error! Bookmark not defined.**](#_Toc34907599)

[5.1.4 Hypotheses 4 and 9 **Error! Bookmark not defined.**](#_Toc34907600)

[5.1.5 Hypotheses 5 and 10 **Error! Bookmark not defined.**](#_Toc34907601)

[5.1.6 Hypotheses 11, 12, 13, 14, 15 **Error! Bookmark not defined.**](#_Toc34907602)

[5.1.7 Hypothesis 16 **Error! Bookmark not defined.**](#_Toc34907603)

[5.1.8 Hypothesis 17 **Error! Bookmark not defined.**](#_Toc34907604)

[5.2 Summary of Whole Thesis **Error! Bookmark not defined.**](#_Toc34907605)

[5.3 Limitations of the Study **Error! Bookmark not defined.**](#_Toc34907606)

[5.4 Implications of the Study **Error! Bookmark not defined.**](#_Toc34907607)

[5.4.1 Theoretical Implications **Error! Bookmark not defined.**](#_Toc34907608)

[5.4.2 Practical Implications **Error! Bookmark not defined.**](#_Toc34907609)

[5.5 Future Recommendations **Error! Bookmark not defined.**](#_Toc34907610)

[5.6 Conclusion **Error! Bookmark not defined.**](#_Toc34907611)

[REFERENCES Error! Bookmark not defined.](#_Toc34907612)

[APPENDICIES Error! Bookmark not defined.](#_Toc34907613)

[Annexure A **Error! Bookmark not defined.**](#_Toc34907614)

[Annexure B **Error! Bookmark not defined.**](#_Toc34907615)

[Annexure C **Error! Bookmark not defined.**](#_Toc34907616)

[Annexure D **Error! Bookmark not defined.**](#_Toc34907617)

[Annexure E **Error! Bookmark not defined.**](#_Toc34907618)

[Annexure F **Error! Bookmark not defined.**](#_Toc34907619)

[Annexure G **Error! Bookmark not defined.**](#_Toc34907620)

[Annexure H **Error! Bookmark not defined.**](#_Toc34907621)

# LIST OF APPENDICES

Appendix A Mobile Learning Trends 244

Appendix B Tele density 246

Appendix C List of Universities/Campuses 250

Appendix D Scatter Plot 251

Appendix E Normality Graphs 253

Appendix F Standard Regression Weights 261

Appendix G Questionnaire 266

Appendix H Permission Letter of Data Collection 269

# LIST OF TABLES

**TABLE NO TABLE DESCRIPTIONS Page #**

Table 1.1 Structure and Organization of Dissertation……………………………….….33

Table 2.1 Summary of theories used in previous behavioral intention and mobile learning studies………………………………………………………………………..….…..64

Table 2.2 Summary of U&G Typologies……………………..………..………….……71

Table 2.3 Related Theories and their Definitions…………………………………....….98

Table 3.1 Summary of Scales used in the Study…………………………….…….…..117

Table 3.2 Coding and Recording of Responses…………..……………………...…….123

Table 3.3 Summary of Technical Details of the Study……………………………..…124

Table 4.1.1 Gender Descriptive...………………………………...………………….…..127

Table 4.1.2 Age Descriptive ………………..……………………...……..……………..128

Table 4.1.3 Education Descriptive..……………………………………..………………129

Table 4.1.4 Smart Phones Descriptive..…………………………………………………129

Table 4.1.5 Experience Descriptive..………………………….………………..……….130

Table 4.1.6 Mobile Devices Descriptive...…………………...………………...………..131

Table 4.2 Tolerance and Variance Inflation factor…………………………..…….….133

Table 4.3 Summary of Goodness of Fit Statistics………………………………….…137

Table 4.4 Eight Factor Nested CFA Results…………………………………………..141

Table 4.5 Comparison of squared AVE and Inter-Construct correlation……………..144

Table 4.6 Divergent validity of the measurement scale.……………………………...145

Table 4.7 Study Variables Descriptive …………………...……………………....…...148

Table 4.8 Inter-correlations …………………………………………………………...151

Table 4.9 Regression Analysis of ATML w.r.t ENT, INF, IRR, PERT, and PERV…..155

Table 4.10 Regression Analysis of BITML w.r.t ENT, INF, IRR, PERT, and PERV....156

Table 4.11 Regression Analysis of BITML w.r.t ATML ………………….……….…..158

Table 4.12 Mediation Analysis of ATML between ENT and BITML …………………161

Table 4.13 Mediation Analysis of ATML between INF and BITML …………….…....163

Table 4.14 Mediation Analysis of ATML between IRR and BITML……………..…....166

Table 4.15 Mediation Analysis of ATML between PERT and BITML………….......…168

Table 4.16 Mediation Analysis of ATML between PERV and BITML ……………….171

Table 4.17 Hierarchical Regression Analysis for the moderating effect of SI on the relationship between ATML and BITML…………………………………………………..174

# LIST OF FIGURES

**FIGURE NO FIGURE DESCRIPTIONS Page #**

Figure 1.1 Flow chart of mobile learning………………………………………. 4

Figure 2.1 Activity Theory……………………………………………………… 44

Figure 2.2 Theory of Reasoned Action………………………………. ……….. 56

Figure 2.3 Theory of Planned Behavior………………………………………….58

Figure 2.4 Technology Acceptance Model………………………………………60

Figure 2.5 Unified Theory of Acceptance and Use of Technology…………….. 62

Figure 2.6 Social Cognitive Theory…………………………………………….. 64

Figure 2.7 Conceptual Model…………………………………………………..104

Figure 4.1 Measurement Model 1………………………….………………….. 139

Figure 4.2 Measurement Model 2…………………………………………….. 140

Figure 4.3 Results of Multiple Regression Analysis……………... ……………159

Figure 4.4 Statistical Mediation Model of ATML between ENT and BITML…162

Figure 4.5 Statistical Mediated Model of ATML between INF and BITML...…165

Figure 4.6 Statistical Mediated Model of ATML between IRR and BITML…. 167

Figure 4.7 Statistical Mediated Model of ATML between PERT and BITML...170

Figure 4.8 Statistical Mediated Model of ATML between PERV and BITML..172

Figure 4.9 Statistical Moderated Graph………………………………………...175

# LIST OF ABBREVIATIONS

**ABBREVIATIONS TERMS USED**

BITML Behavioral Intention towards Mobile Learning

ATML Attitude towards Mobile Learning

ENT Entertainment

INF Informativeness

IRR Irritation

PERT Perceived Trust

PERV Perceived Value

SI Social Influence

U&G Uses & Gratification

TRA Theory of Reasoned Action

TPB Theory of Planned Behavior

TAM Technology Acceptance Model

UTAUT Unified Theory of Acceptance and Use of Technology

SCT Social Cognitive Theory

3G Third Generation of Wireless Technology

4G Fourth Generation of Wireless Technology

**CHAPTER 1**

# INTRODUCTION

The modern technologies and globalization has proved instrumental in bringing about revolution in human lives. However, the flow of information and the ongoing development on daily basis in different walks of life requires knowledge and expertise. The modern education should be made widely available across the board to everyone. The learning process is generally associated with school. But nonetheless, outside the class, learning is based on appropriate delivery of information for the progress of new information and opportunities. Therefore, computer and internet is extensively used around the globe for information delivery (Milosevic, Zivkovic, Manasijevic, & Nikolic, 2015).

Advancement in information age has strong impact on the field of education and this impact leads to new paradigms in the process of education learning. There are two ways of education i.e. distance learning and traditional learning in which distance learning is further divided into electronic learning which leads to online learning and mobile learning. Among the various means used in the past, to deliver information, the mobile learning is established form nowadays (learning via portable computers and mobile devices) (Abu-Al-Aish & Love, 2013). Mobile learning is at the novel stage however, it is different from electronic learning because internet connection is required for learning along with the mobile devices. Mobile learning concentrates on a profound comprehension of how students utilize cell phones as learning devices outside the classroom. In addition, in the last few decades, the studies have verified the benefits of web-based learning and various methodological tools that have been established to enhance the effectiveness of web-based learning (Hsu, Hwang, & Chang, 2010; Hwang, Chu, Yin, & Lin, 2008). Mobile learning has significantly paid attention by many