# AN ADOPTION OF THE TAM MODEL TO DETERMINE FACTORS AFFECTING STUDENTS' ACCEPTANCE OF E-LEARNING IN INSTITUTIONS OF HIGHER EDUCATION IN SAUDI ARABIA

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By

Abdulhameed Rakan Alenezi

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# ABSTRAK

Kajian ini bertujuan untuk menyiasat pengaruh faktor psikologi, sosial, teknikal, budaya dan institusi dengan penerimaan E-pembelajaran pelajar di institusi pengajian tinggi Arab Saudi. Data dikumpul daripada 480 pelajar di lima buah universiti Arab Saudi dengan menggunakan sampel rawak strata berganda. Soal selidik kajian ini di adaptasi terutamanya daripada kajian Pituch dan  Lee (2006), Curtis dan Payne (2008), dan  Ngai, Poon dan Chan (2007). Beberapa ujian statistik digunakan termasuk ujian-t, ANOVA satu hala, korelasi *bivariate* dan regresi berganda. Keputusan ujian-t menunjukkan perbezaan yang signifikan antara pengkhususan utama dan pengalaman internet manakala jantina, komputer dan pengalaman tidak signifikan dengan penerimaan E-pembelajaran. Analisis korelasi menunjukkan terdapat hubungan yang signifikan antara faktor psikologi, sosial, teknikal, budaya dan institusi. Analisis regresi linear menunjukkan faktor teknologi, sosial, psikologi merupakan penyumbang kepada penerimaan E-pembelajaran manakala faktor budaya tidak. Keputusan regresi *stepwise* menunjukkan semua faktor psikologi menyumbang kepada penerimaan E-pembelajaran. Bagi faktor sosial, hanya imej dan identiti kendiri menyumbang secara signifikan kepada penerimaan E-pembelajaran pelajar. Berkaitan dengan faktor teknologi, tiga variabel iaitu respons sistem, fungsi sistem dan interaksi sistem menyumbang secara signifikan kepada penerimaan E-pembelajaran tetapi prestasi sistem tidak menyumbang. Akhir sekali semua faktor institutsi menyumbang secara signifikan kepada penerimaan E-pembelajaran pelajar. Keputusan regresi *hierarchical* menunjukkan sikap sebagai pengantara yang signifikan antara faktor utama TAM dan penerimaan E-pembelajaran pelajar. Faktor-faktor  penentu merupakan penyumbang yang signifikan dalam pembinaan dan penambahbaikan masa depan penerimaan dan penggunaan E-pembelajaran. Berdasarkan dapatan kajian ini, adalah dicadangkan antara lain, institusi pengajian tinggi mengambilkira faktor teknikal, institusi, sosial dan psikologi semasa proses mengimplementasi E-pembelajaran.


Katakunci:  E-pembelajaran, Penerimaan, Model Penerimaan Teknologi (TAM), Pengajian Tinggi, Arab Saudi.

# ABSTRACT

The purpose of this study was to investigate the influence of psychological, social, technical, cultural and institutional factors on the students' acceptance of E-learning in institutions of higher education in Saudi Arabia. Data was collected from 480 students at five universities in Saudi Arabia by using multi stage stratified random sampling. The questionnaire for this study was adapted from Pituch and Lee (2006), Curtis and Payne (2008), and Ngai, Poon and Chan (2007). Several statistical techniques were used including t-tests, one-way ANOVA, bivariate correlation, and multiple regression analyses. The t-test results showed statistically significant differences in students' E-learning acceptance based on their major and internet experience while students' gender, computer and E-learning experience did not indicate any significant differences. The correlation analysis indicated that the relationships between the psychological, social, technological, cultural and institutional factors were significant. The simple linear regression revealed that, technological, social and psychological factors significantly contributed to the students' acceptance of E-learning while the cultural factor did not. The results of the stepwise regression showed that the variables related to the psychological factor all significantly contributed to the students' E-learning acceptance. As for the social factors, only image and self-identity significantly contributed to students' E-learning acceptance. With regards to the technological factor, three variables namely system response, system functionality and system interactivity significantly contributed to students' E-learning acceptance while system performance did not. Finally, all the institutional factor variables significantly contributed to students' E-learning acceptance. Hierarchical regression results indicated that attitude significantly mediated the relationship between the TAM main constructs and the students' E-learning acceptance. Based on the findings, it is suggested that, among others, higher educational institutions should take into consideration the influence of technological, institutional, social and psychological factors in the process of implementing E-learning.


**Keywords:**  E-learning Acceptance, Technology Acceptance Model (TAM), Higher Education, Saudi Arabia.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 The Background of the Study

E-learning has been used in education as early as the 1950's. At that time E-learning was referred to as distance learning (Clark, 2000). The term E-learning refers to the learning methods which use electronic channels to deliver the instructional content. Moreover, E-learning is also referred to as web-based learning; technology based learning; online learning; networked learning and so on (Gotschall, 2000; Trombley & Lee, 2002). This way of learning gained its popularity just a decade ago according to Rosenberg (2001). Due to a broad global Intention given to e-Learning, various reports and studies have been conducted by educational institutions, different organizations as well as the governments of various nations (Rosenberg, 2001).

The Saudi Ministry of Higher Education is among those educational organizations that proposed the use of E-learning in Saudi Arabia. The Saudi Ministry of Higher Education recognised the need of integrating Information and Communication Technology (ICT) in various universities in Saudi Arabia. The Saudi Gazette (2008) by Madar Research reported that "the Saudi Arabian E-learning industry is projected to reach USD 125 million in 2008 and is set to grow at a compound annual rate of 33 per cent over the next five years". The increased projection shows vital focus on the advantages of E-learning in Saudi Arabia's modern education. Among the E-learning advantages mentioned are meeting the needs of learning through technology; fostering rapid learning cycles with the use of technological solutions in education; increasing easy access to information with cheaper cost and helping "organizations

The contents of the thesis is for internal user only

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