

**Adult Learners' Attitudes toward the Use of Internet for Learning**

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**Abstract:**

Internet occupies a predominant role in the present education system. Irrespective of the level of education (primary, secondary or higher education) internet usage is inevitable for the student in their learning process. According to John Chambers (1999), there are two fundamental equalizers in life – the internet and education. It is true that the internet is partial part of the current teaching and learning process. Presently all the educational institutions (academic and research) provided the internet facilities to the students and teachers (Kaur, 2008). The objectives of the study are to investigate adult learners' attitudes toward the use of internet for learning and to identify the significant impact of demographic variables on adult learners' attitudes. The research is based on primary data were collected from 50 adult learners living in Miri, Malaysia but they are studying in different educational institutions located in all over the country. The data interpretation was made by mean, standard deviation and ordinary least squares (OLS) technique (regression) to test the hypothesis. The result of the research revealed that the internet was an important tool for adult learners, the adult learners have positive attitudes toward the use of internet for learning, and there was a positive and non-significant impact of demographic factor (study institution) on adult learners' attitude. Further the study revealed that there was a negative and non-significant impact of demographic factors (gender, age and program of study) of adult learners' in usage of internet for their learning.

**Keywords:** adult learners, internet, learning attitude.

**Introduction**

The internet is a partial part of today's educational system. Present day, most of the educational institutions depend on the internet for their normal operation of teaching and learning. It is difficult to define the term adult learner in one common definition, it is defined in different format from one country to another, but commonly accepted meaning is a person who is 25 years and up who is involved in forms of learning. The number of adult learners in participation of online learning through internet has highly increased in the last two decades due to the countless benefits provided by internet (Ji-Hye Park and Hee Jun Choi, (2009). The academic and research institutions provide the sufficient internet facilities to the students and teachers (Kaur, 2008). In recent years use of internet for education is inevitable. Many universities in the world are using the internet for easy and effective teaching and learning purposes (Usun, 2003).

Using internet by the educational institutions has created a positive value among the educators. As opined by Raghunadha and Krishna (2013) internet is playing a key role in learning process. The teaching community also uploaded the teaching materials and support resources through internet (Dede, 1999). Kashif (2010) conducted a research and concluded that the internet knowledge is essential for students and teachers. Further the internet is very helpful weapon for the teachers and students to communicate academic matters with each other (Chictering and Gamson, 1991). The teachers can collect the academic resources about their classes and also download the updated information on the subject. The teachers assign the students to find a topic and selected research on the internet. The internet enables the various scholars in any corner of the world can exchange the ideas in various fields of study. The students use the internet to accomplish a wide range of academic tasks and activities. With the help of internet many students prepares the course assignments, study notes, research reports etc.

The adoption of changes required lot of discovery of data; it is possible only through internet. The internet is the main stimuli for establishing new culture among societies because of effecting

education. The use of internet becomes a way of life for adult learners in particular and higher education sectors in general all around the world.

The term adult learners is a wide term and it is difficult to define, American Council on Education (ACE) defines adult learners are over the age of 25, and are often referred to as non-traditional student. The term non-traditional student is not an accurate terminology to define, although age and part-time status are the common determining factors (Bean and Metzner, 1985). The adult learners are come to the course (learning) with a variety and range of experiences both in terms of their working life and educational backgrounds. National Centre for Education Statistics (NCES, 2002) in USA explains, the adult learners as meeting at least one of the criteria are delay enrolment, attends part time, works full time, financially independent and has dependent (other than spouse). Andragogy (Adult learning theory by Nalcomim Knowles, 1970) denotes andragogy is art and science of helping adult learners.

The usage of internet for academic by adult learners has increased tremendously, and it is designed based on the needs of adult learners. Internet has also enabled the growth of the adult learners, it is for the benefit of adult learners, the academic institutions use internet as an important part of improving the quality education.

### **Literature Review:**

Internet occupies a pre dominant role in the educational institution activities, ranging from non-academic activities to research (Bell, 2000). In general the attitude of adult learners to use internet by gender classification provides differences. A study (Fomell and Larcker, 1987) revealed that statistically differences are found between the attitudes of men and woman towards the use of internet for their learning. Abedalaziz, Jamaluddin and Leng (2013) conducted a study measuring attitudes toward computer and internet usage among postgraduate students in Malaysia revealed that no significant differences were found between attitude of internet usage and gender.

A study was conducted to explore the university students' attitudes towards the internet. The study was found that male students expressed more positive attitudes than females (Wu and Tsai, 2000). Another study examined the effect of daily internet use by elementary students on the attitude toward learning, the study found that positive effects on attitude towards learning (Reiko and Mieko, 2004).

Further, Cercone (2008) conducted a study titled as 'characteristics of adult learners with implications for online learning design'; the study mainly discussed the andragogy (Adult learning theory) and analyzed the characteristics of adult learners in online learning. The study recommended that formulation of design based on adult leaning theories.

Further a study (Jing Zhang, 2007) investigated, whether students attitude level differ significantly according to their gender, internet experience, institution etc. the study found that there were no gender differences on the practicability and communication subscales. The internet is a good communication tool among the students and teachers to share their academic matters (Applebome, 1999). There is a strong expression about the availability of internet in the institution 24/7 i.e. every hour of every day the students are availed the internet facilities (Gorman, 2003). The internet usage by students and teachers for their learning and teaching is having a negative correlation with each other (Oral, 2008). In USA the college students and teachers are find that internet to convenient and useful for education related matters (Jones, 2002). Mioduser and Shemla (2000) identified that gender differences in the use of internet identical and males usage more extensive and longer females. The online learning is quickly developed and the most cost-effective methods to educate the world's increasing work force (Mark Bonner, 1999).

### **Objectives of the Study:**

The basic objective of the study is to determine the adult learners' attitudes toward the use of internet for their learning. The specific objectives of the study are:

1. To explore the internet usage by the adult learners.
2. To examine the adult learners attitudes toward the use of internet.
3. To identify the significant impact of demographic variables on adult learners' attitudes toward the use of internet.

**Scope of the Study:**

The scope of the study is limited to analyze only the attitude of adult learners’ toward the use of internet for learning, the study is not includes any other type of learners those who are using internet for their studies. The present study is basically aimed at studying the demographic variables and adult learners’ attitudes.

**Hypotheses:**

Based on the previous studies, it is expected that to study the adult learners’ attitude is important; the adult learners’ attitude is differs and based on the demographic factors. Thus the following hypotheses were established to empirically explore in this study on the basis of above literature discussion.

H<sub>1</sub>: The adult learners have negative attitudes toward the use of internet for learning.

H<sub>2</sub>: There is no significant impact of demographic variables on adult learners’ attitude.

**Research Methodology:**

**Sample:**

The sample of this study consisted of 50 adult learners through snowball sampling from all the part time students living in Miri but studying in different educational institutions (private universities, public universities, private colleges, technical colleges etc.) located in all over Malaysia. Snowball sampling is a special nonprobability method for developing a research sample and the technique is often used in hidden populations which are difficult for researchers to access (Hagai Katz, 2006).

**Research Instrument:**

The research instrument in this study was a questionnaire divided in to two sections. The first section of the questionnaire contains the adult learners’ demographic variables, namely gender, age, program of study and study institution. The second section of the questionnaire includes Likert items, each with five choices of responses from ‘strongly agree to strongly disagree; this section of the questionnaire measured the adult learners’ attitudes toward the use of internet for learning. Sample statement for this section were, ‘internet is an integral part of education’, useful source for study related assignment and research etc. There were a total of 15 statements in this section.

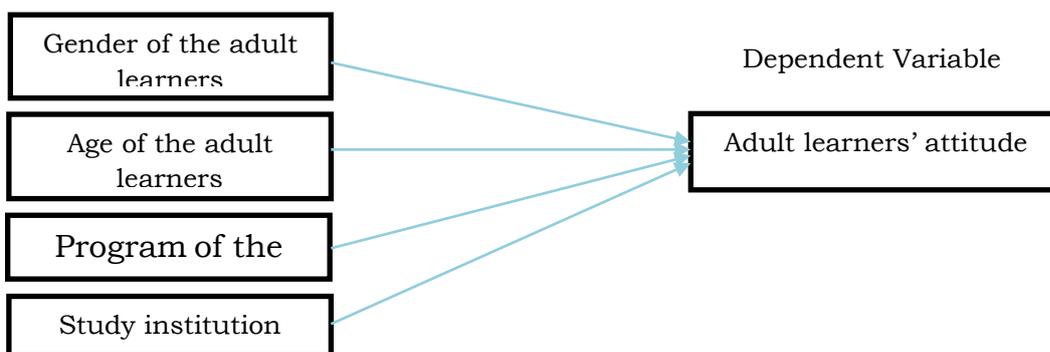
**Procedure:**

The questionnaire was self-administered and distributed among the 50 respondents by through mail. There is no specific identification of population of the study and difficult to distribute the large number of respondents due to time constraints, therefore, snow ball sampling method was used.

**Variables of the Study:**

The dependent variable of the study is adult learners’ attitude toward the use of internet for learning. The independent variables of the study are demographical factors of the adult learners’ viz. gender, age, program of study and study institution.

Independent Variables



The data interpretation was made by mean and standard deviation. The study applied ordinary least squares (OLS) technique to test the hypothesis. The adult learners’ attitude and the demographic factors are demonstrated in the following regression model. The adult learners’ attitude is included in the analysis as the dependent variable and the independent variable is denoted as adult learners’ demographic factors. The regression model is specified below and the following symbols were used to identify the respective variables. The general model is as follows

$$Y_1 = \alpha_1 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \tag{1}$$

Where

$Y_1$  = Adult Learners Attitude;  $\beta_1 X_1$  = Gender of the adult learners;  $\beta_2 X_2$  = Age of the adult learners;  $\beta_3 X_3$  = Program of the study;  $\beta_4 X_4$  = Study institution;  $\alpha_1$  Intercept;  $\varepsilon$  = Error term

**Analysis and Interpretation:**

**Descriptive Statistics – Demographic Factors:**

The collected information about the demographic variables of the study has been presented in the descriptive statistics format in the Table 1 for further analysis.

**Table 1: Descriptive Statistics of Demographic Variables**

SN	Demographic Variables	Mean	Standard Deviation
1	Gender	1.50	0.505
2	Age	3.18	0.661
3	Program of study	2.44	0.929
4	Study Institution	1.74	0.527

It is clear that the overall averages of demographic variables are moderate and the standard deviation for the ‘program of the study’ is the highest value than all other variables. In general low standard deviation specifies that the data facts tend to be very close to the mean; a high standard deviation shows that the data points are spread out over a large range of values. Higher value of standard deviation implies greater spread of data, smaller the standard deviation shows the data is concentrated around mean. Here all the variables had high standard deviation, therefore the study conclude that there is a greater spread of data around the mean.

**Descriptive Statistics – Adult Learners’ Attitudes toward the Use of Internet:**

There were 15 statements measuring student attitudes toward the use of internet for learning. For each statement responses were coded 1 for strongly disagree to 5 for strongly agree. The details of respondents opinion has been presented in the Table 2.

**Table 2: Descriptive Statistics of Adult Learners’ Attitudes toward the Use of Internet for Learning**

Items	Frequency distribution with respect to adult learners’ attitude toward the use of internet for their learning						
	5	4	3	2	1	Mean	SD
Internet is an integral part of education	11	38	1	-	-	4.20	0.452
Internet is useful source for study related assignments	28	22	-	-	-	3.10	1.074
Internet is useful source for study related research	5	37	8	-	-	4.56	0.501
Students can take classes online	7	12	11	20	-	3.94	0.512
Teacher –student can communicate via internet	4	25	5	16	-	3.34	1.022
Getting information through internet is easier than the written material (books)	20	16	14	-	-	4.12	0.824
Internet is informative as teachers	25	16	9	-	-	4.32	0.768
Internet is easier to use than library	6	41	3	-	-	4.06	0.424
Student can interact with each other and share ideas via internet	17	14	18	1	-	3.94	0.890
Institution’s teaching materials can access via internet	5	44	1	-	-	4.08	0.340
Units (subjects) can register via internet	35	13	2	-	-	4.62	0.667
Examination results can access via internet	13	28	9	-	-	4.08	0.665
Learning through internet is comfortable	11	27	5	7	-	3.84	0.934
Learning through internet is time saving	10	35	3	2	-	4.06	0.652
Learning through internet is economy	7	25	17	1	-	3.76	0.716

The table 2 demonstrates that with respect to ‘internet is an integral part of education’, 49 respondents agreed with the statement, whereas 1 is neutral and no respondent disagree the statement, (Mean=4.20) (SD=0.452). It is evident from analysis that almost all the adult learners are accepted the internet as an integral part of education. Further the study response to ‘internet is useful source for study related assignments’, out of 50 respondents 28 of them strongly agreed and 22 respondents agreed the statement, therefore the adult learners mainly use the internet for their assignment preparation (Mean = 3.10) (SD = 1.074). In response to ‘internet is useful source for study related research’, data descripts that 5 respondents strongly agree the concept, 37 adult learners agree the concept and the remaining 8 are neutral and there is no response supported to disagree the statement (Mean = 3.94) (SD = 0.512). On the same way all other questions are asked to the respondents’ for recording their opinion, almost all the responses are supporting to the use of internet for their education except question number 4 i.e. ‘students can take classes online’ out of 50, 20 respondents disagree the statement, 19 respondents agree the statement and 11 are neutral, here the adult learners attitude is not supporting to the concept of students can take classes online.

The present study in line with various other studies (Rahman, Hunjra, Satwar and Ahamad, 2010), (Slate et al, 2002) (Selwyn et al, 2000) and conclude with remarkable consistencies. All the previous studies and the present research agreed that the internet was important tool for education. Further the hypothesis ‘adult learners have negative attitude toward the use of internet for learning’ has been rejected.

**Regression Analysis**

The equation 1 is analyzed through linear regression technique. The regression coefficients are analyzed the independent and dependent variables and identify both magnitude and the direction of impact. The analyses have been done by case to case and determine the impact of demographic factors on adult learners’ attitude towards use of internet for their learning. An attempt is made to compute the regression and resultant figures are presented in Table 3.

**Table 3: Regression Results on Impact of Demographic Factors on Adult Learners’ Attitude to use Internet for Learning**

Demographic factors	R	R square	Adjusted R Square	Standard Coefficients		Sig.
				Beta	t value	
Gender	0.005 <sup>a</sup>	0.000	-0.021	-0.005	-0.032	0.975
Age	0.483 <sup>a</sup>	0.233	0.217	-0.483	-3.818	0.000
Program of study	0.213 <sup>a</sup>	0.045	0.026	-0.213	-1.512	0.137
Study Institution	0.493 <sup>a</sup>	0.243	0.227	0.493	3.926	0.000

It is clear that, if the firms had higher value of R indicates high correlation between the observed and predicted value of the dependent variable. The table 3 shows the individual value of R for the selected factors. It shows that that the age had second highest value of R (age = 0.483) and study institution had highest R value among the factors (study institution = 0.493) and other two factors gender and program of study had low value of R (gender = 0.005 and program of study = 0.213).

All the four selected demographic variables (R value) are less than 0.5; therefore there is no impact of demographic variables on adult learners’ attitude. Further the hypothesis ‘there is no significant impact of demographic variables on adult learners attitude’ has been accepted. R square represents the proportion of variance in the dependent variable (adult learners’ attitude) which can be explained by independent variable (respondent demographic factors). Here the R square had been less than 0.5 for the all the factors. The present study revealed that there was a positive and non-significant impact of demographic factor (study institution - t value = 3.926) of the respondent on adult learners’ attitude towards use of internet for learning. Further the study revealed that there was a negative and non-significant impact of demographic factors (gender, age and program of study) on adult learners’ attitude.

**Conclusion:**

The present study is an attempt to investigate the adult learners’ attitudes toward the use of internet for learning and analyze the significant impact of demographic variables on adult learners’ attitude indicates that the adult learners have positive attitudes toward the use of internet for learning, the adult learners are accepted the internet is an integral part of education, the internet is useful source for study related research and assignment, learning through internet is comfortable, time saving and economy. The demographic variable ‘study institution’ had positive and non-significant impact on adult learners’ attitude, the other demographic factors (gender, age and program of study) had negative and non-significant impact of demographic factors on adult learners’ attitude.

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