PERCEPTION TOWARDS MOBILE LEARNING ACTIVITIES AMONG POST GRADUATE STUDENTS

By

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ABSTRACT

M-learning is learning supported by mobile devices and intelligent user interfaces. Compared to the prior generation a few years ago, storage capacity and screen size of mobile devices as well as transfer speed of wireless connections have significantly increased. Equipped with mobile devices, learners can conduct learning activities at anytime anywhere. M-learning is learning that is not constrained to a physical space or specific time and learning that is supported by communication with embedded computing elements in the environment on every move of the learner (Thiyagu, K, 2009). The main aim of the study is to assess the perception towards mobile learning activities among post graduate students in Viruudhunagar district. Survey method is employed for this study. The investigator has chosen 230 post graduate students as a sample for the study in a random sampling technique. Finally the investigator concludes; (i) There is no significant difference in perception towards mobile learning activities among the post graduate students with respect to their course in terms (ii) There is no significant difference in perception towards mobile learning activities among the post graduate students with respect to their Father's Educational Qualifications and father's occupation.

Key words: Perception, Mobile Learning, Activities, PG Students.

INTRODUCTION

The traditional education is made in classrooms where the teacher presents the learning material to a group of students. The educational technology depends mainly of teacher and the students must physically participate in the learning process. E-learning is growing very fast and many Universities and companies are already supporting in some way an e-learning solution (Bassoppo-Moyo, Temba C, 2006). The rush in the field of wireless and mobile technologies creates opportunity for new field of research - so called 'mobile learning'. The domain of mobile learning can include a wide variety of applications and new teaching and learning techniques (Keegan and Desmond, 2002). Mobile phones are a part of the daily culture of almost every student and teacher. They introduce new types of communication styles that remove spatial and temporal complexities. Handheld devices can improve classroom dynamics owing to their computation and communication capabilities, which augment face-to-face interactions and can support collaborative learning scenarios (Lam, Paul, Mc Naught and Carmel, 2007). Mobile learning is defined as "the provision of education and training on mobile devices: Personal Digital Assistants (PDAs), palmtops and handhelds and on smart phones and mobile phones." Actually now a days most of them having negative attitude towards using mobile phone. But in a mobile devices having a lot of facilities to improve of our knowledge and skills. So the investigator can select the topic "Perception towards Mobile Learning Activities among Post Graduate Students in Virudhunagar District".

Operational Definition of Key Terms

The investigator wants to give explanations for the terms used in the title of the study.

Perception

Perception presents individual feeling or against something. In other words the degree of feeling of favourableness or unfavourableness towards some objects, person, groups, and ideas is called perception.

Mobile Learning Activities

By the term, 'Mobile Learning Activities' the investigator means, the knowledge and application of mobile devices,

basic computing skills and the skills required by the learner for integrating mobile devices into his/her learning.

Post Graduate Students

Those who are studying post graduate course in Arts and Science College in Virudhunagar Educational district.

Objectives of the Study

- To find out the level of experience in mobile phone, frequency usage of mobile phone and purpose for use of mobile phone.
- To find out whether there is any significant difference in the mean scores of perception towards mobile learning activities among the post graduate students with respect to their gender.
- To find out where there is any significant difference in the mean scores of perception towards mobile learning activities among the post graduate students with respect to their Father's educational qualification and father's occupation.

Hypotheses of the Study

The hypotheses of the present study formulated is as follows

- There is no significant difference in the mean scores of perception towards mobile learning activities among the post graduate students with respect to their gender.
- There is no significant difference in the mean scores of perception towards mobile learning activities among the post graduate students with respect to their Father's educational qualification.
- There is no significant difference in the mean scores of perception towards mobile learning activities among the post graduate students with respect to their Father's occupation.

Method Adopted in the Present Study

In the present study, the investigator has employed the 'survey method'. Survey method is a method for collecting and analyzing data, obtained from large number of respondents representing a specific population collected through highly structured and detailed questionnaire or other techniques (Best, J.W., 1983).

Population and Sample of the Study

The population under investigation included students whose are students at post graduate in Virudhunagar district. It means that, all the students studying in Post Graduate at various colleges irrespective of the nature of management and other criteria but located in Virudhunagar District, Tamil Nadu have been taken as the population for the study. A good sample must be representative of the entire population for this study, Sample selected by the method of random sampling was two hundred and thirty post graduate students of Virudhunagar District.

Instrument

As there is no suitable tool available for the present study, the investigator has constructed and validated a scale to measure perception towards M-Learning Activities of post graduate students'. In order to achieve the objectives of the study, the investigators used a self-prepared questionnaire (PMLA = Perception towards Mobile Learning Activities). The investigator referred various books and Journals to have clarity of concept and in addition to their information he consulted some subject experts about the content for the development of the tool. Finally the investigator has decided and selected only seven important dimensions related to m-learning activities, the dimensions are as follows: Messaging, Contacts, Organizer, Settings, Gallery, Mobile Internet and Mobile Applications. Final draft of the questionnaire consisted of two parts. First part consist of 7 items related with personal information, and second part consist of 75 items related with mobile learning. Perceptions are on a series fives point scale.

Reliability and Validity of the Tool

To find out the reliability of the tool, test and retest method was used. The reliability of the test has been calculated by using Pearson's product-moment correlation coefficient formula. The value obtained was 0.84. In this investigation the tool was submitted to the panel of experts. They scrutinized the developed tool and their suggestions were incorporated. Thus the validity of the tool is established by using content validity.

Data Collection

In Virudhunagar District, a two hundred and thirty post graduate students' perceptions were analysed through the prepared questionnaire about mobile phone activities.

Students' response to the questionnaire were statistically analysed according to gender, education level of their father's and their father's occupation, having mobile at their own, length of experience in mobile phone, frequency of use in mobile phone and purpose for use of mobile phone.

Data Analysis Procedures

In this study, quantitative research method like frequencies, t-test and ANOVA (Aggarwal, Y.R., 1986) were used in order to investigate the research problem that is effects on mobile phone in learning. Questionnaire as survey was designed to get the perception of post graduate students towards mobile devices and its effects to learning.

Data Analysis and Presentation of Findings

The main purpose of this study was to investigate post graduate students' perceptions towards mobile learning activities based on their gender, education level of their father's and occupation of father's. Having mobile at their own, length of experience in mobile phone, Frequency of use in mobile phone and purpose for use of mobile phone with relating statement type question by the support of statistical analysis and evaluation that questionnaire results are the basis of these evaluations. The light of quantitative data analysis examines demographic data and frequencies for all items in the survey.

Demographic Data

The first seven items of survey asked for 'Personal Data', including the variable of gender (Table. 1), education level of their fathers (Table. 2), occupation of fathers (Table. 3), having mobile at own (Table. 4), length of experience in mobile (Table. 5), frequency of mobile use (Table. 6), and purpose for use of mobile (Table. 7). The following table shows the demographic data of students.

An analysis of the characteristics of the target population for the study, indicated that 35.7% of the respondents were male and 64.3% of were female. Similarly, 43.9% of the respondents' fathers' education level were School Level, 44.3% were Degree level, 11.7% were Post Graduate level. About 62.2% of the respondents' father's occupations were Daily wages, 20.9% were business, 17% were in government job. About 91.3% of the respondents have an own mobile phone and 8.7% of them don't have mobile phone at own.

Gender	Responses	Percentage
Male	82	35.7
Female	148	64.3

Table 1. Gender

Father Education	Responses	Percentage
School Level (Up to SSLC)	101	43.9
Degree Level	102	44.3
Post Graduate Level	27	11.7

Table 2. Father's Education

Table. 5 presents the analysis of sample in terms of the length of experience with mobile. As seen from the above table, 25 Students (10.9%) have less than one year experience with the, 37 Students (16.1%) have 1 to 2 years of experience with the mobile, 81 Students (35.2%) have 2 to 4 years of experience with the mobile; 60 Students (26.1%) have 4 to 6 years of experience with the mobile and 27 Students (11.7%) has 6 years and above experience with mobile.

Table. 6 presents the analysis of sample in terms of the frequency of mobile use. As seen from the above table, 144 Students (62.6%) use the mobile every day; 23 Students (10.0%) use the mobile on alternate days; 27 Students (11.7%) use the mobile once in a week; 5 Students

Father occupation	Responses	Percentage
Daily Wages	143	62.2
Business	48	20.9
Government	39	17.0

Table 3. Father's Occupation

Do you have mobile phone at own?	Responses	Percentage
Yes	210	91.3
No	20	8.7

Table 4. Having Own Mobile

Length of Experience with Mobile	Responses	Percentage
Below 1 year	25	10.9
1-2 years	37	16.1
2-4 years	81	35.2
4-6 years	60	26.1
6 year & above	27	11.7

Table 5. Length of Experience with the Mobile

Frequency of Mobile use	Responses	Percentage
Daily	144	62.6
on alternate days	23	10.0
Once in a week	27	11.7
Once in a fortnight or so	05	2.2
Once in a month or so	10	4.3
Never	21	9.1

Table 6. Frequency of the Mobile Use

(2.2%) use the mobile Once in a fortnight or so; 10 Students (4.3%) use the mobile once in a month or so and only 21 Students (9.1%) do not use mobile at all.

Table. 7 presents the analysis of sample in terms of the purpose use of the mobile. As seen from the above table, 169 Students (73.5%) use the mobile for Communication, 27 Students (11.7%) use the mobile for entertainment; 12 Students (5.2%) use the mobile for downloading academic materials for self development; 10 Students (4.3%) use the mobile for learning purpose and 12 Students (5.2%) use the mobile for updating knowledge.

Hypotheses Testing

Null Hypothesis – 1

There is no significant difference in the mean scores of perception towards mobile learning activities among the post graduate students with respect to their gender.

From Table. 8 it is inferred that there is significant difference in Perception towards mobile learning activities among the post graduate students with respect to their gender in terms of messaging, contacts, organizer, settings, gallery, mobile internet and total, but no significant difference is found in mobile learning activities among the post graduate students with respect to their gender in terms of mobile applications.

Purpose for use of Mobile	Responses	Percentage
Communication	169	73.5
Entertainment	27	11.7
Downloading	12	5.2
Learning	10	4.3
Update knowledge	12	5.2

Table 7. Purpose for Use of Mobile

Dimensions	Category				't' value	Remarks at 5% level
	Male (N = 82)		Female (N = 148)			
	Mean	SD	Mean	SD		
Messaging	22.90	5.29	18.27	5.06	6.54	S
Contacts	32.20	4.99	29.93	6.23	2.80	S
Organizer	30.10	6.23	26.61	7.0	3.77	S
Settings	43.82	7.63	38.66	8.82	4.46	S
Gallery	31.12	5.91	28.44	7.11	2.90	S
Mobile internet	21.68	9.98	15.90	8.84	4.53	S
Mobile application	53.52	21.92	49.09	23.44	1.41	NS
Total	235.38	44.16	206.59	50.73	4.31	S

(At 5% level of significance for 228 df, the table value of 't' is 1.97)

Table 8. Difference between the mean scores of PG Students in their Perception towards mobile learning with respect to gender

Null Hypothesis - 2

There is no significant difference in the mean scores of perception towards mobile learning activities among the post graduate students with respect to their Father's educational qualification.

From (Table. 9) it is inferred that there is no significant difference in mobile learning activities among the post graduate students with respect to their Father's Educational Qualifications in terms of messaging, contacts, organizer, settings, gallery, mobile internet, mobile application and total.

Null Hypothesis -3

There is no significant difference in the mean scores of perception towards mobile learning activities among the post graduate students with respect to their Father's occupation.

From Table. 10 it is inferred that there is no significant difference in mobile learning activities among the post graduate students with respect to their Father's occupation in terms of messaging, contacts, organizer, settings, gallery, mobile internet, mobile application and total.

Interpretations

According to the 't' test Results

Gender

The 't' test result shows that, males are better than the

Dimensions	Sources of Variation	Sum of squares	Df	Mean square variance	Calculated 'F' value	Remarks at 5% level
Messaging	Between	98.83	2	49.42	1.57	NS
	Within	7069.76	227	31.14		
Contacts	Between	124.38	2	62.19	1.76	NS
	Within	8039.00	227	35.41		
Organizer	Between	178.24	2	89.12	1.87	NS
	Within	10829.31	227	47.71		
Settings	Between	155.91	2	77.96	1.02	NS
	Within	17421.59	227	76.75		
Gallery	Between	77.48	2	38.74	0.83	NS
	Within	10561.72	227	46.53		
Mobile internet	Between	500.90	2	250.45	2.74	NS
	Within	20779.82	227	91.54		
Mobile application	Between	2680.44	2	1340	2.60	NS
	Within	116298.65	227	514.60		
Total	Between	11678.86	2	5839.43	2.36	NS
	Within	561228.12	227	2472.37		

(At 5% level of significance for 2,227 df, the table value of 'F' is 2.99)

Table 9. Difference among father's education qualification and Perception Towards Mobile Learning Activities of P.G. Students

female post graduate students in their perception towards mobile learning activities by messaging, contact, organizer, settings, Gallery, mobile internet and total mobile learning activities. This may be due their curiosity to know the innovative and new things and their environments and also their keen watch about the update and day-to-day information of new fashion than the female post graduate students. Males have confidence to face the new things in life.

According to 'F' test Results

Father's Education Qualification and Occupation

There is no significant difference in the mean scores of perception towards mobile learning activities among the post graduate students with respect to their Father's educational qualification and father's occupation. This may be due to fact that mostly fathers are engaged in various household and office works. Also it is a fact that fathers find it difficult to spend sufficient time with their children. So father's education and father's occupation did not affect their children's perception towards mobile learning.

Recommendations

All reflection about the study that is "Perception of students towards mobile learning activities" concluded that because of living in a technology based and knowledge based century, adaptation to technology is inevitable. As known mobile internet is great option for us to catch information anytime we want. There is a consensus that mobile internet provides huge alternatives with its advantages but also it includes different dimensions as a shortcoming (Littlejohn, Allison., et al. 2009. In addition to this, research results represent that high percentages concentrated on negative consciousness about mobile. M-learning is learning supported by mobile devices and intelligent user interfaces. M-learning is learning that is not constrained to a physical space or specific time and learning that is supported by communication with embedded computing elements in the environment on every move of the learner (Morice, Jenny, 2002).

Dimensions	Sources of Variation	Sum of squares	Df	Mean square variance	Calculated 'F' value	Remarks at 5% level
Messaging	Between	151.35	2	75.68	2.45	NS
	Within	7017.24	227	30.91		
Contacts	Between	10.36	2	5.18	0.14	NS
	Within	8153.01	227	35.92		
Organizer	Between	70.59	2	35.30	0.73	NS
	Within	10936.96	227	48.18		
Settings	Between	299.41	2	149.70	1.97	NS
	Within	17278.09	227	76.12		
Gallery	Between	18.52	2	9.26	0.20	NS
	Within	10620.68	227	46.79		
Mobile internet	Between	398.73	2	199.37	2.18	NS
	Within	20730.99	227	91.33		
Mobile application	Between	2514.22	2	1257.0	2.49	NS
	Within	113673.87	227	502.98		
Total	Between	12808.21	2	6404.11	2.60	NS
	Within	559098.76	227	2462.99		

(At 5% level of significance for 2,227 df, the table value of 'F' is 2.99)

Table 10. Difference among father's occupation and Perception Towards Mobile Learning Activities of P.g. Students

Our shared belief is that in the future mobile phones will be a powerful learning tool integrated in the learning process. Meanwhile, mobile phones are used to communicate, take pictures and video clips, send e-mails, texts and graphics, browse the Web, play games and download programs (Peak, Berge, and Zane, L, 2006).

Conclusion

According to some of the research report on researching mobile learning as valued by students', employment of mobile device include.

- Facilitates individual, co-operative and interactive work in class (Starkman, Neal. 2007)
- Enables the sharing of ideas and responses and the building of knowledge
- Increases participation in whole-class settings
- Enables learners to revisit areas for consolidation and reflection out of the classroom – this helps to increase understanding
- provides opportunities for autonomy and independence (Rachna Rathore 2009).
- Alleviates pressure on the computer rooms and makes learning more flexible.

Mobile devices have become tools to serve simultaneously teaching and learning alongside with work and leisure, in both formal and informal settings; the investigator found out that mobile phones were generally used for contact, coordination, interviews, thus motivating

learners; while mobile devices are presented as enormously resourceful tools that enabled access to a wide range of information.

The emergence of new technological environment may revolutionize the teaching learning process (Sanjaya Mishra and Rames C.Sharma 2005). The role of the teacher will be different from the traditional classroom teaching. The teacher could be a manager, monitor, role model, counselor, facilitator and a social worker. Teaching methodology will shift from teacher-centered education to learner-centered education. Teacher's dominance will be replaced by the knowledge dominance. So students now learn through computer teacher, television teacher, internet teacher and mobile teacher. In future, teacher who applies these technologies in the classrooms will replace a teacher who does not apply these technologies. The investigation and its findings will help educational experts, thinkers, teachers and all those who are interested in the field of education to focus their attention on the present problems. This findings and results are not the end of the problem, but just a beginning of the search for innovation. By applying these results, the quality of teaching learning process will improve.

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