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Comparing the Performance of Distance Education Based on the Combination of Mobile Phone Users Satisfaction

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ABSTRACT

In this research, "Performance comparison of distance education based on the combination of mobile phone users satisfaction" and explores the question thus raised is whether distance education based on the combination of mobile phone users is effective in satisfaction? The research, which was a semi-experimental pilot study in the area. The study population comprised all students of Payam Noor University undergraduate. Who are studying at the University of Payam Noor? In order to determine the sample size using random sampling, 120 patients (60 in the experimental group and 60 in the control group) were considered as the population of which, because of the inappropriate, n = 10 remove the test group and their number was reduced to 50 people. The samples of the test group, respectively, in five batches of 10 specimens were divided into any one of the groups of train by SMS, VOIC, PowerPoint, M-Book and Mix them were presented to the control group, none of Education these were applied. Finally, using a statistical model analysis of covariance, based on the effectiveness of distance education, and postpaid mobile data. It is essential that there be between 5 Training SMS, VOIC, PowerPoint, M-Book and Mix, Mix learn more from other training has been effective. Thus, the first focusing on the highest averages Mix, then VOIC, then SMS, the M-Book, and the final stage of satisfaction are PowerPoint.

Key words: Distance education, Mobile, Satisfaction

INTRODUCTION

Improving the quality of learning and teaching at the University is always important issues. To achieve this goal with the help of technology to support learning activities and teaching can be effective due to the shortcomings of the current system of education always accessible to students in a way that does not professors. Students cannot learn when it's needed in this particular area have been trained or get answers to your questions. Existing educational systems are based on a level of educational interactions can strengthen the remaining. In other words, no fusion between classroom learning and the external environment and the people are not only focused on classroom learning

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situations. Due to major changes in the areas of teaching and learning line with technology advances, traditional methods of training, reviewing their work and lose face to face training (lectures), despite the considerable range of learners trained but the pack is the ability to control every moment of the current major advances in technology has led. Methods of teaching students to quickly provide the information needed for a variety of conditions, they will not and cannot students are not flexible enough to motivate. Techniques students need to help them better understand the course and providing appropriate guidance given to them also. As a new hybrid learning mechanism for using variety of learning methods that emphasize using diverse tools and advanced technology to improve quality, expand and fill the vacuum has little educational activities. Scoserb and Graham (2003) for six main reasons training capacity, access to knowledge, social interaction, personal agency, cost effectiveness and ease of revision that investing in people and institutions can justify the use of hybrid learning, are discussed. The purpose of this study is that the combination of face to face teaching and learning, mobile (GSM) technology is an extract of the day, several features such as text messaging services, multimedia services, get the required information, records and playback conversations, I sought more player of training, time, calendar, downloads, TV programs, internet connection, search the web, and so on has to be experienced. Mobile (Cellular) from different perspectives can be investigated Planet (2000) pointed out that in this regard, mobile phone case study of the perspectives of biology, psychology, social psychology, sociology, anthropology, cultural studies and philosophy, but the phone is multifaceted and broad field of mobile social functions, consequences and implications of human, social, cultural, political and scientific opinion has not been extensively studied. Mobile wireless communication system provides access to a wide geography. Accordingly, the mobile phone is ubiquitous symbol associated to this option; the notion of mobile virtual community is nearly universal. The mobile phone as an attractive technology (charismatic) compared laptop computers and other mobile phones, car culture, and visualization is widely social life. Teachers with teaching's duties engage and challenge students face is what is granted; the concept of digital literacy in education programs targeted to be cooperative. So the question is what shape and form of education at university level is needed in the next decades? New generations have grown up in a world surrounded by the phone, perhaps, the fastest mobile technology in recent years as a growing global population of 6 billion over 1.5 billion mobile phones. So, given the various uncertainties surrounding the combination of distance learning, rapid technological advances and consequently instructional practices, technological tools requires that support electronic technology and information processing capabilities and the ability to respond to the needs of learners and learning providers. Despite decades based education to universities, government agencies, and finally ... Has promised to improve conditions and access to education resulting in the community but it is not approved for public transit everywhere. There was a time when people are trying to learn, trying to move faster and further in their attempt to achieve this through the vehicle when mobility through supersonic aircraft were provided for, but in the current era of technological advances, man has entered the virtual world and Cybernetics and to achieve this important human aspirations are realized, one after another.

Thus, the intelligence community needs to be an efficient and well always and everywhere to make education available to all, and let us be your learner's learning can always be associated with the backup. We support this new technology, but wireless technology is the mobile phone. Today, the development of IT and ICT development activities, medical, religious, political, social, economic, emotional and friendship is the TELE. So is the new generation of distance education but it is so new and little empirical experience it is known that various types of questions arise. Actually designed for PC multimedia and text content and text content, but also to take advantage of the mobile platform, there is an aura of uncertainty. A different mechanism of learning that combines academic learning enhances the overall educational solutions obtained. Whatever the type of training will help the audience learn better and skills can be used for applications such as multimedia, books, exercise books, etc. In 2007 research on mobile based education in India by Kummer and colleagues conducted their study suggests that 2.69% of mobile phones as a learning tool to help know immediately and 2.72% mobile learning is a new opportunity to help as well, and 2.66% of those to learn from your cell phone will charge as fast. 4.73% of those polled believed that mobile learning approach to help the flexibility of time and space, and has driven more inclusive and increase the satisfaction of mobiles. Another study shows that 62% of learners had expressed an interest in learning through mobile phone technology to communicate with each other in order to exchange experiences provide learners, as students are learning from their mobile phone to other students in the exam itself had more enthusiasm, and not worry about test anxiety and have more satisfaction.

Japan Kato mobile technology in teaching through research that he believes that many people think learning from the Community of Hope is one of the programs. Now in Japan through mobile learning is developing in a powerful

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movement often, companies, schools, organizations and individuals to recognize their success depends on mobile learning. In 2006, the management strategy, planning, design and development Moomo founded the theory of mobile learning in Japan is responsible. Moomo be sent by content teachers can build on 98% of mobile learners. Moreover, experimental results suggest that training Maconothaetal and associates found mobile phone has had a significant positive effect on student learning. Also experimental results of Wang showed that most of the e-learning education via mobile phone has an impact on student learning. As noted above, the rapid advance of technology (ICT), unfortunately there are still inequalities in educational opportunities and the digital divide. Definitely distance education alone cannot be a substitute for actual classroom. It is believed that the completion of e-learning and traditional learning methods is developed. The research was conducted by IDC as the world's research has clearly shown that reflection and spending initiatives in the education market of e-learning (distance education) has been a lot of growth since 2001. Hence the need for such research at the university level seems to be more important to the consumer was changing. Despite the broad range of young people in the country and the demand for higher education and academic figures, as well as traditional teaching methods do not suffice in universities. The research also is trying to do it very much and is always available and not just look at it as a phone and large facilities in appropriate circumstances and there is no need or devices such as mouse, keyboard, and ... Be used and even seemingly small screen as a video camera, MP3 player, camera and more importantly looked Digital Library and this combined with the technological tools in the classroom as well as several hours of college students will be more powerful and It will also establish a basis for further research. Hence, this study looked at the design of mobile content based on a combination of distance education and basic research question is thus raised: Distance education based on the combination of mobile phone users satisfaction at work?

MATERIALS AND METHODS

The main emphasis of research on the comparative effectiveness of distance education based on the combination of mobile phone user's satisfaction, the semi-experimental research design was used and the main variable in the experimental group compared to the control group has been investigated. The semi-experimental research, some annoying uncontrolled variables such precision that cannot be replaced if random. However, since the independent variable is based on a combination of distance learning is applied directly to mobile, semi-experimental research assumptions are considered. Hence, the present research project entitled semi-experimental design "pretest - posttest control group" is intended to be general as follows:

Table 1. design of pretest - posttest control group

	Pre-test	Variable	Post- test
RE	T1	Х	T2
RC	T1		T2

Therefore, in this study a three-stage research process is considered. The process as phase three – semi-experimental design are discussed and described as follows:

Phase I - the pretest: the satisfaction of users of mobile phase, a questionnaire was administered to the students.

Phase II - a combination of distance education based on mobile: Mobile based hybrid distance education was conducted for 5 days and all through the training process with a hybrid approach based on a combination of remote mobile Payam Noor University was presented. Hybrid approach with an emphasis on the following points was raised in light of the message:

Table 2. Mo	bile based hvbri	d distance education	conducted for 5 days

Kind Of Training	Number Of Section	Number Of Presenting Training	Total Number Of Training
Test 1 (SMS)	5	6	30
Test 2 (VOIC)	5	6	30
Test 3 (Power Point)	5	6	30
Test 4 (M-Book)	5	6	30
Test 5 (Mix)	5	6	30

The third phase - the post-test: According to the experimental variable or a combination of distance learning based on the mobile and after training, the test is considered and experimental data related variables were collected in the process of psychological interventions. The population for this study was limited to communities located within the

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detailed list of members of the community there, because all students are Karaj Payam Noor University that as the population were defined. Thus, the population of the test and control groups was selected randomly by replacing the random variables subjected to the tests done. Thus the list of population of two groups of 60 randomly selected groups of 60 as a control group and a group of 60 people were selected as the experimental group. In this study the researcher made questionnaire measuring satisfaction with mobile users. The questionnaire consisted of 21 questions and the Likert type, for a five-item measure. The questionnaire is presented in which the use of exploratory factor analysis to assess construct validity (factor) of the questionnaire and the KMO = 0.83 and sphericity of α = 0.100 Significantly. Given that the share of the coefficients 0.64 and the load factor of each of the above questions, 0.04, the question which now includes an overall satisfaction of its mobile users. Also, the validity of the questionnaire using Cronbach's alpha reliability coefficient of congruence of internal questions 0.89 is obtained also, using a modified split-half test Spearman - Brown assessment of the stability and the reliability coefficient was 0.91, respectively, indicating the validity coefficient is desirable for. With emphasis on methods of data analysis will be discussed, since the study design assumptions the semi-Experimental deals and Variable as the dependent variable and the satisfaction of users of mobile phones based on a combination of distance education are considered as independent variables tested. Through a multivariate model analysis of covariance to test the research question has been addressed. To increase internal validity, in both test and control groups on pretest variables through this test can be increased. All calculations were performed in SPSS-20 software In addition to accuracy, further analysis of the general linear models done. Finally, the research process is in line with the importance of pilot projects, in the first study to identify the target population, the ruling draws two groups of 60 subjects was selected as a group, the control group and the experimental group were considered as one group and 5 days for the subjects were presented This variable can be a way to accurately test for the experimental group. Finally, after the training and after the training, the students were tested again and this compares to the satisfaction of the mobile users in both control and experimental groups were studied.

Group	Stage	Diagram	Medial	Average	Changing	Variance	Deviance Criterion	Criterion	Slope	Sketch
				-	Domain		CILIEIIOII	гаин	Coefficient	Coefficient
Test 1	Pre- test	24	24	23.30	5	12.3	76.1	55.0	870	410
(SMS)	Post test	26	25.50	25.20	6	28.3	811.	57.0	360	230
Test 2	Pre- test	25	24.50	24.20	8	84.4	2.20	690.	310	84.0
(VOI	Post test	25	26	26	6	66.2	1.63	510.	01.0	81.0
Test 3	Pre- test	22	23	23.10	6	65.3	1.91	600.	050	870
(Power Point)	Post test	26	25.50	24.90	5	65.3	1.91	600.	650	100
Test 4	Pre- test	21	23.50	23.40	8	26.6	2.50	790.	44.0	420
(M- Book)	Post test	26	25.50	25	6	77.3	1.94	610.	110	060
Test 5	Pre- test	21	22.50	22.70	6	56.3	1.88	/590.	41.0	560
(Mix)	Post test	30	30	29.80	1	17.0	0.42	130.	770	40.0
certificate	Pre- test	23	23	25.55	19	72.32	5.72	730.	39.0	.460
	Post test	22	23	25.50	19	13.33	5.75	740.	380.	0.44

According to the above table and emphasized that the small difference between the placebo, the median and mean and since the rate of deviation and coefficient of slenderness ratio less than 1, distribution can be raised above the normal assumption and it has a tendency to use the mean as the index representing and use of parametric statistics models.

Table 3. Tendency to use the mean as the index representing and use of parametric statistics models

resource	Total of quadrate	Freedom degree	Average of quadrate	Rate of F	Significant level	Effect of Intensity
Pre- test	2008.46	1	2008.46	3014.04	0.001	
Group	425.34	5	85.06	127.66	0.001	0.86
fault	68.63	103	0.66			
Total	75533	110				

According to the above table, with the emphasis on the F values were obtained, suggesting that the relationship between the dependent variable (satisfaction with mobile users) and the scattering variable (pretest), the $\alpha_{=0.01}$ there. Thus, given the significant effect of pre-test variables, the variance is used as a control variable, the effects of

experimental variables can be based on a combination of distance education as a supplier of mobile phones based on a combination of distance education, he emphasized.

Significant level	Test 1 (SMS)	TEST 2 (VOIC)	TEST 3 (POWER POINT)	TEST 4 (M-BOOK)	TEST 5 (MIX	CONTROL
Test 1 (SMS)		0.07	0.10	0.29	-5.18	1.88
TEST 2 (VOIC)	1		0.03	0.22	-5.25	1.81
TEST 3 (POWERPOINT)	1	1		0.19	-5.28	1.78
TEST 4 (M-BOOK)	1	1	1		-5.48	1.59
TEST 5 (MIX	0.001	0.001	0.001	0.001		7.07
CONTROL	0.001	0.001	0.001	0.001	0.001	

Table 3. Combination of distance education as a supplier of mobile phones

Finally, with respect to the rate of F = 127.66 at the source based on a combination of distance education in order to identify the impact of mobile learning based on the combination of mobile 'use and satisfaction of mobile users' deals and Level $\alpha = 0.01$ is significant, it is suggested that distance education based on the combination of mobile 'phone users satisfaction "is effective. Since the intensity of the 0.86, suggesting that the combination of distance education based on a mobile 'phone users satisfaction "is desirable.vAccording to the above table and the values obtained with the emphasis on the training samples by means of SMS, VOIC, PowerPoint, M-Book and Mix, arises the significant difference between the satisfaction of users of mobile SMS methods and Mix, VOIC and Mix, PowerPoint and Mix and M-Book and Mix. It should be noted that among all the five test groups with the control group, a significant difference is observed.





CONCLUSION

According to the study "to compare the performance of distance education based on the combination of mobile phone users satisfaction" and In this regard, the two groups were tested using to examine the effectiveness of distance learning is based on the satisfaction of users of mobile phones have effort, hence, the research data collection, statistical model analysis of covariance was used and the results showed that distance education based on the combination of mobile phone users is effective in satisfaction levels with emphasis on the impact severity index of 0/86. As noted above, the post hoc test was found dead Interferon that no significant difference between effectiveness of distance education based on the combination of mobile phone users satisfaction in ways SMS and Mix, VOIC and Mix, PowerPoint and Mix and M-Book and Mix, is different.

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