

ASSESSING MOBILE LEARNING AMONG UNDERGRADUATE STUDENTS DURING SHORT TERM DISRUPTION: IN THE CONTEXT OF PAKISTAN-INDIA CONFLICT

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ABSTRACT

Today when world become a global village, there has been an explosion of knowledge across all walks of life. There are several learning modes to collect and process this information and these modes are no longer limited to four walls. The information today is spread over to anywhere and anytime through the most advance mode called mobile learning. With the initiation of globalization, Mobile Learning has talk of the town and it is the most achievable and feasible means of learning process. For students learning process has been improved by augmented virtual features are great aspects of mobile learning and this geofencing is giving them an easy access to information. Mobile learning is just-in-time process which means it helps the learner to acquire information when they want it. This study examined the effectiveness of learning through mobile during Pakistan-India conflict in May, 2025. The traditional educational systems were disrupted although for short period of time. In this abnormal situation mobile learning could be a flexible solution. The study deals with quantitative methodology and data was collected from online survey. Questionnaire with 25 items has four subscales or parameters: 1) Usage 2) Availability 3) Challenges and 4) Effectiveness. Participants from each gender comprises the population. Descriptive statistics were used to analyse the data and to analyse the significant difference between male and female student's perceptions, usage and satisfaction T-test was used. An analysis of online quantitative survey shows that 95% of respondent own the mobile devices and their attitude towards the availability, satisfaction and effectiveness of mobile learning is favourable. This paper also highlighted the benefits of mobile learning.

Keywords: Mobile Learning, conflict.

INTRODUCTION

Learning style describes the behaviour and attitudes through a prefer way of learning (Honey, 2001). Now a day's new approach has been developed for the learning. This is era of modern technology that changes the learning style (Dunn, 1978). This is the age of innovation and invention. As the world becomes more interconnected, new technologies are being developed daily. We see number of developments in technology. In the

field of education, learning process is continuously evolving and going to update day to day. Use of ICT in the education is not a new thing in the twenty first century. Burden & Aubusson, (2012) confirmed that our classrooms are change from black board to white board to multimedia everything is change. In the learning process it comes the innovation from d- learning to e- learning and now it is an age of m-learning. We see

the computer technology in education in different ways, but the mobile learning is dramatically increase with its more affections and intentions. It is considered as the most important part in learning. Number of previous studies elaborated the importance of mobile learning.

Frigid (2002), Miner (2004) and Timucuan (2006) they confirmed that the due to increase in the technology the learning has changed and the impact of mobile learning on student's performance is change. Diversity has shown in the skills, behaviour and students' performance.

Therefore, Lam & Lawrence (2002), Levin (2001) and Poorhouse Gilakjani (2013) in their research studies illustrate show the mobile learning in today's classroom they illustrated in their research that the mobile learning is much helping for today's pedagogy. Their research showed their benefits and positive effects.

Indeed, we cannot deny that in the future how people will get benefit in research from mobile learning. Computers change to smart phone and this innovation leads for very vast and wide variety of the content to the students. Students from everywhere can easily grasp the knowledge. Traxler, (2009) found rapid increase of innovation and day to day advancement change the learning style and learning habits of the students. In this time mobile learning is consider as the most rapidly increasing means in the education.

However, Traxler (2009) showed that in his research that how the mobile leaning influences the performance of the students. He noted that the students feel much happy and relax with their wen devices. This make the learning more excited. This study will add the information about the performance of the students using mobile in their learning.

Park (2012), showed that the mobile learning is the most significant tool of learning for easy approach to the students. it is a wireless device that can be use everywhere in any time. It is very effective for distance learning. Students any time anywhere can get the content, material and search the course and upload it and share it.

Moreover, Mobile learning allows the learners to do the study in any time an in any place. Hidayat and Utomo (2014) define mobile learning as the method that gives information electronically to

the students. It helps the students to get educational content at any location and time. This approach is particularly crucial during the time of emergencies and instabilities such as tension were rise between Pakistan and India on May, 2025. During this period of tensions traditional educational systems faced disruptions and university closure. The study aims whether the m-learning could serve as better substitute during this conflict. This study is limited to context of Pakistan administrative Jammu and Kashmir (AJK).

Research Objectives:

- To investigate the use of mobile for learning by undergraduate students during conflict.
- To assess the effectiveness of Mobile Learning during conflict.
- To find out the availability of digital devices among undergraduate students during instability in country.
- To find out the challenges faced by undergraduate students while using Mobile learning during tension.

REVIEW OF LITERATURE

What is mobile learning?

From the starting of the 2000, the mobile phones were carried by number of people. It is very fast and cheap devices to inform, in touch and communicate with people easily from one corner of earth to the other corner. Statics clarify by Gartner in 2013 that tablets sales in the number of 206.8 million and in the year 2014 their numbers were climbed to 256.3 million. The numbers of cell phone devices that were sold in 2013 were 1.807.0. It was climbed to 1.862.8 billion. It was dramatically increase amount of cell phone devices. A research has been done by Portio in 2012. That in 2012 the 1.2 million people use applications on the cell phone devices on the whole globe.

However, Traxler (2005) define mobile learning as the small learning device for the learner. Mobile learning is a new source in learning environment. Cronje (2010) illustrates that it has very different style because it gives a chance to students and

teacher to access the content and material of their courses. It is method between the mobile computing and electronic learning that develop numerous technologies includes software and hardware applications of multimedia.

Comparatively, Park (2012) define it as the mobile learning is the most significant tool of learning for easy approach to the students. it is a wireless device that can be use everywhere in any time. It is very effective for distance learning. Students any time anywhere can get the content, material and search the course and upload it and share it.

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Same as Yamamoto (2013), define it as it is a small tool that is emerging in our learning process. It is huge advancement in the learning that is very beneficial for the learner. For her it is not a device to get the information or content on time, but it also gives a lightened that a learner presented. Learner cannot get break due to this tool. She not only considers it as content supplier, but it is also a process that give strength to knowledge of learner without a short or long break he can involve in the learning process. UNESCO in 2013 also considers all the tools of mobile phone like smart phone, tablets as the teaching and learning tools. These tools enable the learning and the teaching process. The report declared that all the tools and application that the learner uses are the most significant mobile learning tools.

Benefits of Mobile Learning

Wu (2012), discussed that the out 164 mobile learning studies 86% give a positive outcome. Mobile learning gives pedagogical innovation. It motivates the students. it encourages the learner.it deals with effective communication skills. It gives a constant feed back to the students. no one can deny that it can build a strong interaction between students and teachers.it support the environment.it allows learners to get the relevant contents. Learner can use best of his spare time with mobile learning. Learner show flexibility in this process. It has wide access. It increases the

collaborative learning. GARY (2011) in his book writes that the mobile learning increases the learning performance and the learning outcomes. Similarly, McGuigan (2015) illustrates that if your device a connection to internet it allows the use to approach to the contents that a learner demands. Learner who live far of colleges or university and cannot take the classes regularly and cannot manage to come daily. Mobile learning welcomes them to check contents and stay in touch with their course.

Comparatively, Viborg, 2015 describe that the learning styles can be best presented by the mobile learning. It increases the learning outcomes. It is attractive among the students of all level. Most probably it is more significant for the higher studies. It creates a sustainable environment of learning. Learner has increased the motivation and get the constant feedback in a very few minutes Herrington, Herrington, & Ferry (2009) & Peters (2007) in their research showed that the benefits of mobile learning they confirmed that the learner can choose his own settings and increase the thinking and virtual setting that elaborate him. It gives a clear and visual path to learning. It shows the flexibility among the learner.

It increases the better performance of learner.

One of the most significance of mobile learning is the number of applications on cell phone devices for learner o follow and use them it skips the distance and learner can get involve with rest of the world to deal with it and get the proper reflexivity in the learning process and increase collaborative learning. Mehdi pour, & Zerehkafi (2013) and Wang (2009) admired the importance of m-learning and their research find out that how the mobile learning gives benefits to the learning.

Learning Environment

Orr, (2010) describes that the mobile learning could involve in four types of learning environment. It could be "Behaviourism". The next one could be "Constructivism", "Informal or Situated learning" and fourth type of learning environment could be a "Collaborative learning. Janet (2010) in his book elaborate that the mobile learning has discussed how the mobile learning increase the collaborative learning.

Potential in Mobile Learning

Shuler, (2009) told that many of the features that can support the collaborative activities. It can relate to the heavy broad range of internet. It may be wireless. It can be a broadband or wi-Fi. The hardware that we can use in mobile learning like tablets, android and smart are not massive. They are very light in weight. These types of features allow students to access in a variety of situation. Its durability and lightweight allow students from across the world to get involved in it, (Klapfer & Squire, 2008)

For example, iPad that is fully charged. It will remain in active state for ten hours. Another feature is touching the screen. It is most delight as compared to mouse and keyboard. Some of the people still don't like this because for them its typing is much difficult. The reason is the small size of screen (Sharples & Vavoula, 2005, October)

However, Ozdamli, & Cavus, (2011) describes that the Mobile learning gives a chance to learner to get involve in computer-based learning anywhere and anytime. Some time it has overcome with a low signal or poor internet services and sometime low battery or lack of this type of facilities disturb the learning process. Most probably in the remote areas and in the rural areas these things are commonly happen. As Traxler, (2007) discussed that it can disturb the learning somehow in the rural areas and remote areas.

Adverse Effect

The mobile learning has the positive effects, and no one can deny the importance and benefits of this process. However, it is also mostly argued that the students' performance may be negatively affect the students learning process and achievement. It may be disappointing that the student's performance may be negatively effect through continuous usage of digital devices for learning.

Sung & Mayer (2013) in research showed that Indeed, Mobile learning is new tool or process in learning. It is a method that involve in the gaining knowledge through many resources at the sometime. Without the proper support it may harm the student's performance. It may be complicated for some learner.

However, Winters, (2007) and Park, (2011) in their research find out that the learning strategies through the mobile learning is very effective. Tools of mobile learning are the easy way to gain the positive outcome. Learner can get the positive performance but it can be worse if the proper educational tool does not use. However, some findings declare some unexpected results as previous studies report the adverse effects. Chu, (2014) declared the adverse effects that it causes the unfavourable effects for the course of social studies. It will lead cognitive load. It may spoil the performance so it is very compulsory to add the effective methodology that can improve the cognitive domain and affective domain of learning.

Mobile Learning during conflict:

Is emerging trend during emergency situation, conflict and security challenges in any countries. Previous studies show how traditional class room shifts to online or mobile learning during such times. A study shows by (Ciobanu, 2024) that more than 50% students shifted to online learning during Ukraine and Russia war from specific period. During the period of pandemic COVID - 19 in situation of lock down every academic activity was transferred to online. This pandemic changes the learning style and shifted educational activities online. However, the long term effectiveness of mobile learning could be a challenge in different disciplines.

Another research by (Holubnycha, Besarab, & Alpatova, 2022), that in the time of conflicts because of the portability and accessibility learning through mobile which offers unique opportunities and advantages. In the unstable environment of world such innovation helps the students to connect with their peers and teachers and exchange learning materials. Although it has many challenges and its long term effectiveness is still very low. Like the remote area of Jammu and Kashmir especially the areas that are near to border areas face low and limited internet facilities during such conflicts.

Methodology:

This study adapted a quantitative research design. A cross sectional survey design was involved as it permitted for the collection of data from specific population at a single point in time. Data was collected through online questionnaire to find out the effectiveness of learning through digital devices like mobile. It is also helpful to check the

trends. The target population of this study consisted of undergraduate students of kotli Azad Jammu and Kashmir. The areas of kotli are close to the conflict affected regions, where troubles towards traditional education system are supplementary. The sample consisted of university students who belong to different disciplines by using convenient sampling technique.

Data analysis

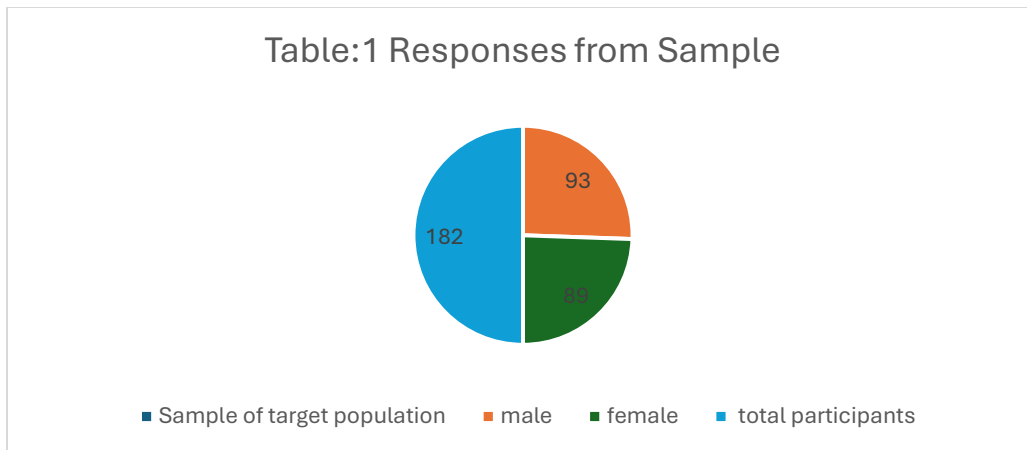
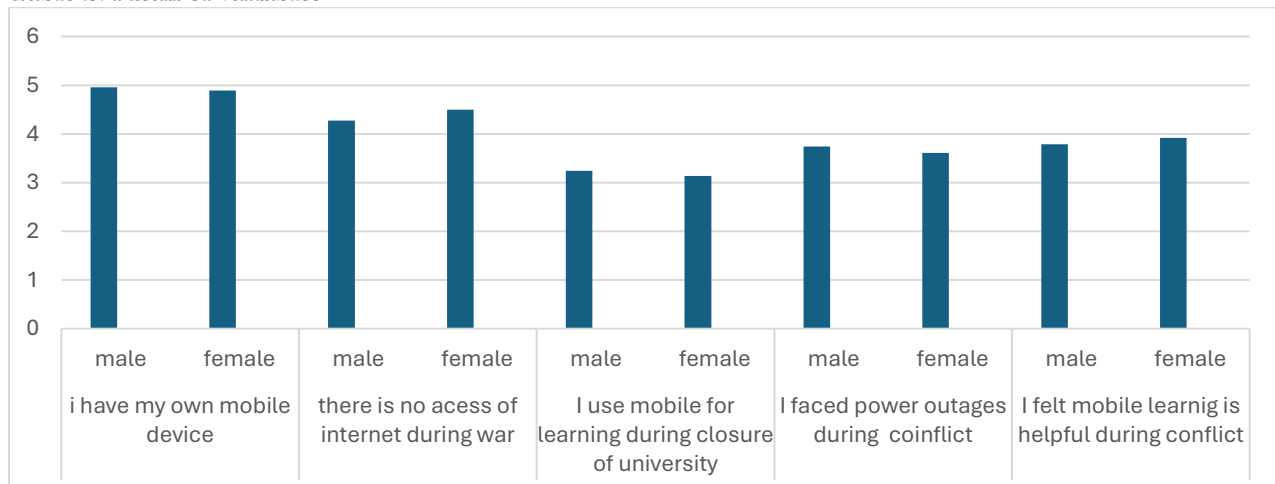


Table shows number of participants of online survey, total responses from the sample are 182 which comprises of 93 male undergraduate students and 89 undergraduate female students.

Table 2: Mean of variables



In table two clustered column chart compares the mean scores of the sample. Data was collected through online survey and was analysed in SPSS. First Variable shows that male students reportedly

slightly higher mean score than female students. Second variable shows that male students have more access towards internet than female. In the next subscales both gender is equally participated

in using mobile learning with slight difference. Both male and female students faced power outages during the Pakistan India conflict. Overall, the female students have less engagements with mobile learning than male students. In conclusion in that recent conflict both gender actively use mobile learning but they faced power outages so its availability remained lower. However, the data shows that the use of mobile for learning is favourable.

Conclusion

The survey results of this research study shows that m-learning has become the important tool for the undergraduate students during short term educational disruption caused by Pakistan India conflict. Particularly, both male and female students actively use mobile for educational engagements. It is a practical solution during period of conflict. Additionally, the study shows significant numbers of students participated in survey relied on that mobile application that have low data and where the internet bandwidth is very limited low data tools (e.g., audio lessons, WhatsApp) have been used. Despite these barriers the study shows students demonstrated considerable adaptation and intervention in sustaining their educational engagements and exchange learning materials through mobile applications. Study also shows that mobile learning helps as an effective complementary tool during short term educational formal closure of educational institute.

In conclusion, there is a need to give priority to educational technologies and enlarge device accessibility. Findings also suggested that educational policy makers need more attention to improve digital access and certify the equal resources to enrich learning during emergencies.

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