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CONVERGENCE OF MEDIA: A CASE STUDY OF MALL AND ATTITUDE OF EFL TEACHERS AND LEARNERS IN SIALKOT, PAKISTAN

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ABSTRACT
Mobile Assisted Language Learning MALL is an emerging area of study in the field of Applied Linguistics and English Language Teaching ELT. Latest mobile technologies are being exploited in English as a foreign language (EFL) pedagogy and learning at various levels. The said phenomenon made a strong case for the present case study to scrutinize the attitude of the modern day EFL learners and teachers in Sialkot, Pakistan. The study investigates their acceptance or rejection for the selected MALL technologies in EFL learning and teaching. For the said purpose Sixty EFL undergraduate and nine EFL teachers were randomly selected from three renowned institutes of the city for data collection. A three sectioned questionnaire was developed for EFL learners on Likert scale with a special reference to perceived usefulness PU and perceived ease of use PEOU of Technology Acceptance Model (TAM) prescribed by Davis (1989) as data collection tool. TAM measures the attitude of users for their acceptance or rejection for any new technology or system. For EFL teachers an interview questionnaire was developed comprising eight open ended questions to record (in audio) their spontaneous responses for the phenomenon. The results reflect that EFL learners show a positive attitude towards perceived usefulness (PU) and perceived ease of use (PEOU) for the use of smart phones than laptop computers for different EFL learning purposes. On the other hand, EFL teachers show their strong inclination towards the use of laptop computers rather than smart phones for EFL teaching and learning.

***Key Words**: Mobile Assisted Language Learning MALL, English Language Teaching ELT, English as a foreign language EFL pedagogy.*

Introduction

Learning and teaching English language is a challenge in most of the Asian countries (particularly in Pakistan), as in these countries a very limited exposure is given to English language in everyday life routines and in institutions as well (Shirai 2011). If the socio-cultural setting is observed, it can easily be realized that learners most of the times get exposure to their local languages. Even in their colleges and universities teachers and students tend to speak local languages more often rather than English language. It has been commonly noticed that even in the English language learning classrooms, teachers tend to use local language as the medium of instruction.

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It has been noted that in Western world numerous studies have been conducted with advanced initiatives about the usefulness of the mobile technologies in various fields of education. Mike Sharples et al (2005) and MacCarty et al (2017) have conducted some useful works in the said field such as "Towards a Theory of Mobile Learning" and "Implementing Mobile Language Learning Technologies in Japan" respectively to distinguish the role of mobile phones in language learning. The present study will explore like western countries, how latest methods of language learning can be introduced in Pakistan (particularly in Sialkot where the present case study was conducted).

MALL is structurally different from CALL, because by CALL the language learning is carried out with desktop or laptop computers inside the classrooms or by some extensions outside the classrooms (McCarty at al. 2017). Patchler, Bachmaire & Cook (2010) argue that laptop computers are not the mobile devices as in computer assisted instruction (CAI) or CALL the contents tend to be fixed to the laboratories and classrooms. However, mobile phones offer the liberty and possibility of different ways of learning since learners keep and carry their mobile phone devices all the time and everywhere. According to Sharples (2005) the mobile learning theory must take an account of the ubiquitous use of personal and shared technology. In the UK, over 75% of the general population and 90% of young adults own mobile phones (Crabtree, 2003). A survey in 2003 at the University of Birmingham found that 43% of students owned laptop computers. These facts and figures indicate the access to technology around the globe and personal ownership of the mobile technology including mobile phones, multimedia players, cameras, and easy internet access (Sharples 2005).

Mike Sharples, Taylor and Vovoula (2005) presented the theory of mobile learning, presenting mobile devices as useful and supportive learning tools. Due to the need and requirement of the age and time learning is needed to be reconceptualized in the present age of mobility, as evolutionary impacts of digital networks are supportive for breaking barriers of age and cultures, Sharples, Taylor and Vavoula (2005). Through analysis of mobility of the learning it can better be presented that how knowledge can be transferred beyond time and space with the support of new technologies (Sharples 2005). According to Sharples, Taylor and Vavoula (2005) every age and era presented the method and image of education in its own way. The future of education seems to be depending on these more ubiquitous, more personal, and more mobile devices by breaking the set norms and stereotypes in the all fields of education (Sharples, 2005), especially the methods of language learning in general and English Language Learning in particular (McCarty, Sato and Obari 2017). Now it is becoming a common practice of using mobile devices for academic purposes (Lan and Huang 2012).

Like computers, mobile devices have the capability to display all kinds of media and content on the same screen (Chun and Plass 1996; Lomicka 1998; Laufer and Hill 2000; Laufer and Hulstijn 2001; Yoshii and Fraitz 2002; Yeh and Wang 2003; Sato and Suzuki 2010, 2012; Sato, Matsunuma and Suzuki 2013). The other feature is that through internet connected mobile devices the learner is connected with the whole world of information, knowledge and people and such onscreen display makes the linguistic features and lexical items more vivid and salient which is another condition for the hypothesis of ideal L2 learning environment (Pachler 2001; Chapelle 1998).

Applied linguistics is defined as an interdisciplinary field having the tasks of identification, investigation and then offering the solutions to the issues interrelated to language and real life. Fries and Lado were the scholars who were first associated with the Applied Linguistics after the

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field was established (Khansir, 2013; Nordquist, 2017). Historical roots of ELT are linked with the development and establishment of many fields, especially with psychology of education and learning, linguistics and above all applied linguistics. That is why there is a decisive relationship between ELT and applied linguistics, as English language is taught as a largest second or foreign language all around the world to all levels of learners (Khansir, 2013).

Technology Convergence

Convergence in technology refers to the phenomenon where two different technologies combine and in information technology it is more prevalent (Rouse, 2016). It has also been observed that a considerable convergence of mobile technologies is taking place now, where we particularly observe that mobile phones are becoming more computer and computers are becoming more mobile. There is another coexisting convergence taking place and that is of new personal mobile technologies with new concepts of lifelong learning (Sharple, Taylor and Vavoula, 2005). Like computers, mobile devices have the capability to display all kinds of media and content on the same screen (Chun and Plass 1996; Lomicka 1998; Laufer and Hill 2000; Laufer and Hulstijn 2001; Yoshii and Fraitz 2002; Yeh and Wang 2003; Sato and Suzuki 2010, 2012; Sato, Matsunuma and Suzuki 2013). The other feature is that through internet connected mobile devices the learner are relates to the whole world of information, knowledge and people and such onscreen display makes the linguistic features and lexical items more vivid and salient which is another condition for the hypothesis of ideal L2 learning environment (Pachler 2001; Chapelle 1998).

Table 1: Convergence between learning and technology

New Learning	**New Technology**
Personalised	Personal
Learner centred	User centred
Situated	Mobile
Collaborative	Networked
Ubiquitous	Ubiquitous
Lifelong	Durable

Research Questions

- What is the attitude of EFL learners and teachers for the acceptance or rejection of MALL devices for language learning purposes?
- Do EFL learners and teachers find MALL devices as more convenient and supportive form of technology assisted language learning devices?
- Do smart phones have gained such trust of EFL learners and teachers to replace laptop computers as technology enhanced language learning devices?

Methodology

The present research is a case study conducted in Sialkot to investigate the attitude of EFL learners and teachers towards the use of MALL technologies e.g. smart phone and laptop computer inside and outside of an EFL classroom for different EFL purposes. It investigates the inclination of EFL learners and teachers for the use of these converging mobile technologies (as mobile phones are more computer and computers are more mobile now). The design of the research is both quantitative and qualitative as there is a four sectional questionnaire to collect data from the research participants (EFL learners and teachers).

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Theoretical Framework

Sharples' *Towards the Theory of Mobile Learning,* (2005) and McCarty's *Implementing Mobile Language Learning Technologies in Japan* (2017) is the theoretical background for the present study. Sharples provides a framework to formulate a theory for mobile learning, considering the vital role of mobility and communication for learning purposes. The study has been specifically conducted to explore the relationship between 'attitude and e-learning' on the Technology Acceptance Model (TAM) by Davis (1989). With a special reference to the Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) of the technology acceptance model (TAM) of Davis (1989) the attitude of EFL learners is measured. The technology acceptance model is a paradigm from the field of psychology, which is a frequently used theory for the assessment and evaluation of attitude for the acceptance or rejection of the use of technology in education. In this model the perceived usefulness (PU) is used to measure the level of trust of users for a particular system or technology, whereas perceived ease of use (PEOU) is a psychological tool for the assessment of the degree of believe of users that how do they find a certain technology or system convenient and free of mental and physical struggle.

Data Collection Procedure

For data collection sixty EFL students of undergraduate level are randomly selected as research participants, from three renowned universities of the city (from both private and public sectors); University of Management and Technology Sialkot, Government College University for Women of Sialkot and Government Murray Post Graduate College Sialkot. Likewise, nine English language teachers from the same institutes are selected as the research participants for the study. All research participants are selected from both male and female genders to control the factor of gender effect. All student participants are from the same education level which is BS English and age group of all learners is between 19-23 years.

Instrument

A three sectioned questionnaire is developed on Likert Scale with a special reference to technology acceptance model (TAM) for data collection from the students. The first section of the questionnaire has six items with Yes/No options to response for the ownership of any one or both devices, frequency of use of any one or both devices and ceaseless internet availability on any one or both devices. Second section of the questionnaire carries 8 Likert scale items to check the perceived usefulness (PU) of smart phone Vs laptop computer as MALL technologies for EFL purposes. The third section of the questionnaire deals with perceived ease of use (PEOU) of the said MALL technologies for EFL purposes carrying 8 Likert scale items. On the other hand, eight open ended interview questions are developed to record the responses of EFL teachers for their preference for mobile phones or laptop computers as MALL technologies for EFL purposes. Interviews were recorded with the help of voice recorder of a smart phone Samsung J7 Prime (2017 model). Questionnaires developed for the data collection are attached in appendix.

Data Analysis

In the first part of the data analysis the gathered data from EFL learners was analyzed statistically. The questionnaire carries three sections; first section (Section A) of the questionnaire has six entries with Yes/No responses, and deal with three variables. This section of the questionnaire is created to collect the general information about the ownership of personal devices e.g. smart phone and laptop computer, internet access and frequency of the use of devices by the students.

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The second and third sections (Section B and Section C respectively) of the questionnaire are developed on Likert Scale, carrying five options to response, from strongly agree, agree, neither disagree nor agree, disagree to strongly disagree. The second section (Section B) of the questionnaire has eight Likert scale items dealing with four variables to investigate the students' perceived usefulness (PU) for the use of MALL technologies (smart phone and laptop computer).

The third section (Section C) of the questionnaire has also been developed on likert scale to record five possible responses of EFL learners for their perceived ease of use (PEOU) for the MALL technologies (smart phone and laptop computer) for EFL purposes. Again, there are eight Likert scale items in this section of questionnaire dealing with four variables to check the students' perceived ease of usefulness (PEOU) for the use of MALL technologies (smart phone and laptop computer) for EFL purposes.

Section (A) of Questionnaire

Table: 2 Personal Ownership of Smart Phone Vs Laptop Computer

		Yes	**No**
Availability of Device	I do have my own laptop computer	73.3%	26.7 %
	I do have my own smart phone	100%	0%
Internet Access	I have my laptop computer with all-time internet access	38.3%	61.7 %
	I have my smart phone with all-time internet access	85.0%	15%
Frequency of Use of Device	I use my laptop computer more often for English language learning purposes inside and outside of classroom	28.3%	71.7 %
	I use my smart phone more often for English language learning purposes inside and outside of classroom	86.7%	13.3 %

Overall aggregate of results clearly suggests a rather higher availability/personal ownership of smart phone for EFL learners at 100% against laptop computer which is 73.3%. Moreover, a clearly higher degree of the access of internet to smart phone suggests the easy and convenient internet access.

Section (B) of Questionnaire

Table: 3 perceived usefulness (PU)

	Strongly Agree	Agree	Neither Agree nor disagree	Dis-agree	Strongly Disagree

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I like using my laptop computer for English language learning purposes	15.0%	48.3%	16.7%	16.7 %	3.3%
I like using my smart phone for English language learning purposes	36.7%	48.3%	5.0%	8.3%	1.7%
Normally I download my study content from internet on my laptop computer	15.0%	41.7%	15.0%	21.7 %	6.7%
Normally I download my study content from internet on my smart phone	41.7%	36.7%	6.7%	11.7 %	3.3%
I use my laptop computer more often to search, browse and use dictionary and other language learning contents	8.3%	31.7%	23.3%	26.7 %	10.0%
I use my smart phone more often to search, browse and use dictionary and other language learning contents	55.0%	36.7%	1.7%	5.0%	1.7%
I feel laptop computers should be preferred on smart phones as technology enhanced devices in EFL learning	16.7%	38.3%	28.3%	15.0 %	1.7%
I feel smart phones should be preferred on laptop computers as technology enhanced devices in EFL learning	33.3%	48.3%	10.0%	6.7%	1.7%

Overall results for the perceived usefulness (PU) of smart phone Vs laptop computer provide a clear outlook of a comparatively positive attitude of EFL Learners for the use of smart phone as more useful MALL device for EFL learning purposes.

Section (C) of Questionnaire

Table: 4 perceived ease of use (PEOU)

	Strongly Agree	Agree	Neither agree nor disagree	Dis-agree	Strongly dis-agreed
I find laptop computer as a more convenient device to share and receive course contents and information from my peers and teachers	13.3%	41.7%	28.3%	13.3 %	3.3%
I find smart phone as a more convenient device to share and receive course contents and information from my peers and teachers	56.7%	33.3%	5.0%	3.3%	1.7%
I feel laptop computer as an easy device to carry and use anywhere inside or outside of my classroom	1.7%	18.3%	25.0%	43.3 %	11.7%
I feel smart phone as an easy device to carry and use anywhere inside or outside of my classroom	75.0%	18.3%	1.7%	5.0%	0.0%
Using laptop computer is easier and convenient to study course contents and notes	30.0%	41.7%	13.3%	15.0 %	0.0%
Using smart phone is easier and convenient to study course contents and notes	18.3%	41.7%	28.3%	11.7 %	0.0%

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I prefer using laptop computer for reading and learning purposes because of its big screen	26.7%	48.3%	16.7%	8.3%	0.0%
I prefer using my smart phone for reading and learning purposes because its small screen is not an issue for me	15.0%	53.3%	18.3%	11.7 %	1.7%

The results suggest that for receiving and sharing course contents and for the ubiquitous use and mobility, EFL learns show a rather positive attitude for smart phone as technology supported and user-friendly MALL device. Whereas for the purposes of reading/studying notes and other course contents in respect of the screen size of both devices, EFL learners show a slightly positive attitude towards laptop computer as technology supported MALL device.

Analysis of Interview Responses of EFL Teachers

For the first question 100% EFL teachers opined that they observe their students using smart phone more often inside and outside of classroom. For the second question probably 33.3% EFL teachers responded that they use smart phones more often for sharing and receiving study related information and different contents, while equally 33.3% EFL teachers expressed that they rather prefer using laptop computer for the mentioned purposes and feel more satisfied for using laptop computer, while on the other hand remaining 33.3% EFL teachers showed a mixed response for using and preferring both devices according to situation, task and easy availability of internet. To the response of third question probably 77.7% EFL teachers strongly discouraged to allow the use of smart phones by students inside the classroom while only 33.3% EFL teachers showed their trust for allowing students to use smart phone inside the classroom, even they encourage them to use smart phone for different EFL learning purposes for a better technology assisted learning atmosphere. For the idea of replacement of laptop by smart phone was strongly discouraged by most of EFL teachers while responding to the question four. Probably 44.3% EFL teachers completely rejected the idea, while other 4.3% expressed a flexible and mixed attitude by highlighting some limitations of the use of smart phone and by appreciating the idea equally. On the other end of the scale only one EFL teachers positively appreciated the idea. For the fifth question about which device is more supportive for enhancing their teaching experience, probably 88.7% EFL teachers strongly supported laptop computer for the said phenomenon while only one EFL teacher (probably 11.3%) expressed that instant availability of the internet and appropriate use of the device matters more than device itself. To the question six probably 77.7% EFL teachers opined that laptop computer is a more reliable device than smart phone to be allowed to use inside the classroom, whereas only two (probably 22.3%) EFL teachers gave a mixed opinion for allowing and relying on both devices inside the classroom. For question seven most of EFL teachers (66.7%) supported laptop computer for ensuring more concentrated learning atmosphere. While remaining 33.3% EFL teachers showed a mixed attitude for both devices for the said reason. In response to question eight, 100% EFL teachers stated that small screen of smart should not be used for reading purposes as it may affect the eyesight of the users. Overall results clearly suggest that EFL teachers show a more positive attitude for using laptop computer rather than smart phone as technology enhanced MALL device.

Results and Findings

The results suggest that students have a higher access to smart phones, they have more feasible and frequent internet access to their smart phones than laptop computers and they are more

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inclined towards using their smart phone for EFL purposes. On the other hand, according to the data and results nine out nine (100%) EFL teachers opined that they have observed students using their smart phones more often for EFL purposes than laptop computers.

For perceived usefulness (PU) of smart phone Vs. laptop computer as useful MALL devices for EFL learning and teaching purposes, the results suggest that EFL learners are more inclined towards the use of smart phones for sharing, downloading, and browsing content whereas EFL teachers strongly support laptop computer as more useful MALL device.

According to the results regarding perceived ease of use (PEOU) of smart phones Vs. laptop computers as supportive devices with respect of feasibility of reading, screen size, uninterrupted functioning and portability; a high inclination for the use of smart phones has been recorded from EFL learners. On the other end of the scale, 3 out of 9 EFL teachers (33.3%) stated that they find smart phone as a convenient device for sharing and receiving information with students and 3 EFL teachers (33.3%) opined that they prefer laptop for the said purpose, which suggests a mixed attitude of EFL teachers for feasible use of both devices for the said purpose. Moreover, nine out of nine (100%) EFL teachers did not support smart phone for its small screen as a non-supportive feature for EFL learning purposes. Overall results show that EFL learners are more inclined towards use of smart phone as feasible MALL technology whereas EFL teachers strongly support laptop computers as more feasible and supportive MALL technology for most of EFL purposes.

Recommendations for Future Studies

Although MALL is considered to be an emerging filed in the paradigm of EFL learning and teaching across the globe, but there are many potential uses of mobile devices e.g. smart phone are yet to be explored in Pakistan. The usefulness of different applications may be introduced, and their potential use may be investigated for EFL learners. Teacher and parents' attitude may be investigated as the role of teachers and parents is absolute for a positive and fruitful use of the technology by learners. Cross gender and socio-economic variables may be checked for a deep analysis of the phenomenon as well. The role of MALL technologies at intermediate and secondary levels should be investigated to know the impacts of these devices.

Conclusion

Broadly speaking every age and era presented the method and image of education in its own way, in print era paper and text was the medium of instruction and in computer era during past half of the century education was broadly re-modified in terms of information modeling, interaction and processing. Now since we have landed into the mobile era we need to accept and re-conceptualize it as the latest technological medium for a contextual interactive and personalized learning (Sharples 2005). Recent studies offer a broader and freer paradigm taking mobile devices into account as learning tools which provide a more ubiquitous, collaborative, restriction free and community-based learning environment (McCarty 2017). In a nutshell, we need to explore and exploit the potentials of the technology for language pedagogy and language learning for the technology-oriented age. The present study was not an exception to this purpose. The study explored that EFL teachers are keener and confident about the use of laptop computer whereas EFL learners are more interested in the use of smart phone as a technology enhanced MALL device.

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Appendix 1: Questionnaire for EFL Learners

Age _____ Designation _____ Level of Education _____

Section (A)

Table 1.1: Availability, use & access of internet on laptop computers Vs smart phones.

		Yes	No
Availability of Device	I do have my own laptop computer		
	I do have my own smart phone		
Internet Access	I have my laptop computer with all-time internet access		
	I have my smart phone with all-time internet access		
Frequency of Use of Device	I use my laptop computer more often for English language learning purposes inside and outside of classroom		
	I use my smart phone more often for English language learning purposes inside and outside of classroom		

Section (B)

Table: 1.2 Perceived Usefulness (PU) of Smart Phone Vs Laptop Computer

	Strongly Agree	Agree	Neither Agree nor disagree	Disagree	Strongly Disagree
I like using my laptop computer for English language learning purposes					
I like using my smart phone for English language learning purposes					
Normally I download my study content from internet on my laptop computer					

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Normally I download my study content from internet on my smart phone					
I use my laptop computer more often to search, browse and use dictionary and other language learning contents					
I use my smart phone more often to search, browse and use dictionary and other language learning contents					
I feel laptop computers should be preferred on smart phones as technology enhanced devices in EFL learning					
I feel smart phones should be preferred on laptop computers as technology enhanced devices in EFL learning					

Section (C)

Table 1.3 Perceived Ease of Use (PEOU) of Smart Phone Vs Laptop Computer

	Strongly Agree	Agree	Neither agree nor dis-agree	Dis-agree	Strongly disagreed
I find laptop computer as a more convenient device to share and receive course contents and information from my peers and teachers					
I find smart phone as a more convenient device to share and receive course contents and information from my peers and teachers					
I feel laptop computer as an easy device to carry and use anywhere inside or outside of my classroom					
I feel smart phone as an easy device to carry and use anywhere inside or outside of my classroom					
Using laptop computer is easier and convenient to study course contents and notes					
Using smart phone is easier and convenient to study course contents and notes					
I prefer using laptop computer for reading and learning purposes because of its big screen					
I prefer using my smart phone for reading and learning purposes because its small screen is not an issue for me					

Appendix 2: Interview questions for EFL teachers

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i. Among laptop computers and smart phone usually which device students tend to use more often in an EFL classroom?
ii. According to your personal experience, smart phone or laptop computer, which device is used more frequently for sharing contents and information with students?
iii. How far do you encourage/allow your students to use smart phones inside the classroom?
iv. Do you appreciate the idea if smart phones replace the laptop computers as technology enhanced learning devices?
v. As an EFL teacher which device is more supportive in enhancing your teaching experience?
vi. Between laptop computer and smart phone, which device is more trustworthy to be allowed to students to use inside an EFL classroom?
vii. According to your experience which device ensures more concentrated learning atmosphere inside the classroom?
viii. To what extent small screens of smart phones are a real issue to be avoided for reading contents on it?