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"The Acceptance of Mobile Assisted Language Learning as primary learning tool for learners in COVID 19 situations."

**¹Muhammad Mooneeb Ali, ²Dr Muhammad Asim Mahmood,
³Muhammad Asif Ikram Anjum, ⁴Amna Shahid**

**¹Department of English Government College of Science Wahdat Road
Lahore/Department of Applied linguistics Government College University
Faisalabad**

²Dean Social sciences, Government College University Faisalabad

**³Lecturer Department of Humanities Comsats University Islamabad Lahore
Campus**

⁴Lecturer Kinnaird College for Woman University Lahore

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ABSTRACT

Mobile is one of the remarkable machines invented initially for connecting people but later on used for other purposes as well. Today Mobile phone users exist worldwide in millions and billions. Their utilization for learning purposes is considered as MALL (mobile assisted language learning). Surprisingly it is not utilized as learning tool in Pakistani educational contexts. Currently in COVID 19 situations the total shift of learning is towards online classes. This is identical for Pakistani educational situations as well. Therefore mobile phones, computers and other learning gadgets are used to fulfill the learning purposes. The current exploration attempts to investigate MALL's utility for learning languages amongst 100 post graduate English students of public sector universities of Punjab, Pakistan. The goal is to probe what is the frame of mind of private sector universities' students regarding the English language learning through MALL. The universities and students both were chosen by simple random sampling method. For the said reason an online survey was conducted in which a purposefully designed and organized questionnaire was distributed to 100 students. Results revealed that the students of public sector universities found themselves comfortable, energetic, and positive. They enjoyed learning English through MALL. Further the Learning of English through MALL helps them in improving their confidence in other fields as well. The conclusive element of this research is that if handled wisely MALL can be an affective technological integration in Pakistani private sector institutions and class rooms as

compared to other tools of technology.

1. Introduction

The invasion of multimedia, smart boards and other scientific technologies has changed the idea of conservative class rooms totally. There are many latest scientific inventions that are used in class rooms out of which one important component is Mobile. Mobile phones designed initially were quite big and only for communicative purposes but with the advancement in technology there are betterments in their sizes, designs, functionality and storage capacity as well. Also adding up are a lot of extra features that makes a mobile phone work like a computer. Evans-Cowley (2010) stated that having all these features in repertoire mobile technology is a pivotal aspect for society in today's living.

1.1. Mobile Learning

Mobile learning is also known as m learning. It is being done while using small and portable devices. These devices may vary from mini computers to android phones and IPODS and IPADS etc. which are wireless and portable. Generally all of these devices are connected with internet technology and thus helping the user to use it anywhere. Some examples are cellular phones, android phones, laptops; palm tops IPADS and IPODS (Kukulaska-Hulme & Shield, 2008). Initially mobile phones were used for calls and SMS, later with the development in the technical aspects through inventions in technology the introduction of MMS, GPRS and other features were introduced in mobile phones. The features like Wi-Fi connectivity, data connection and other applications make the mobile work like a computer. The Android and smart phones today are designed to work like a computer where they can perform every function asked by the user. From finding any particular information from the internet to calculating numbers, checking blood pressure, air pressure, temperature, weather updates and Google maps etc. The mobile phones are now the tendency of the world. All these features compelled the people to use it in different disciplines. Educational environments were also attracted by the important features a mobile phone offers. So the mobile phone entered as an entity in the class room and from here mobile assisted learning started. Polsani (2003) is of the view that mobile assisted learning can be taken as a method in education where the basic components like circulations, production and consumption depends upon the network. Pinkwert et al. (2003), says that mobile learning can be taken as E- learning in which the wireless transmission and mobile technology is used

1.2. MALL

Mobile assisted language learning commonly known as MALL is a new channel of learning language in the world of education. Especially if I ponder upon the utility and importance of English as a language I can say that with the emerging challenges and global trends the value of English is on the rise. So, the use of English language learning for native speakers is quite different from ESL and EFL learners. Teaching and learning English language through Mobile is a new and emerging way. MALL provides innovative methods to teach and learn English language with novelty. MALL has been defined as the use of "mobile technologies in language learning, especially in situations where device portability offers specific advantages" (Kukulaska-Hulme, 2013, p. 3701). It is the usage of mobile devices in the process of teaching and learning a language. This trend has opened up a new style of learning which is indifferent from already practiced methods. It is an approach

which elaborates the use of mobile devices for language learning purposes. MALL explains how mobile phones and devices can be helpful in language learning (Valamarthi, 2011). Beatty (2003) says that the use of the mobile devices for language learning purposes is called MALL. Miangah and Nezarat (2012) say that MALL is the utilization of mobile phones in language learning process. In contrast to classroom learning, in MALL there is no need for the learners to sit in a classroom all the time to get learning materials. In fact, MALL can be considered an ideal solution to language learning barriers in terms of time and place. Kukulska-Hulme and Shield (2008) say that any learning which is through portable type of devices is called MALL. Both teachers and students can find out ways to use MALL to assist them by eradicating old method of learning and teaching as MALL also assists in removing the complexities of language learning processes (Alexander, 2004).

MALL includes

- ❖ Mobile phones, PDAs,
- ❖ pads,
- ❖ pods as well as handheld/portable devices for making,
- ❖ voice calls,
- ❖ short messaging,
- ❖ video chats,
- ❖ Audio MP3, MP4,
- ❖ web surfing and Mpeg, and
- ❖ electronic dictionaries etc.

MALL has been the top trend for the researchers and language learners since 2000. A lot of research has been done in the western countries on different aspects of MALL (Burston, 2013). It is an area which is getting mature with the passage of time and now multiple dimensions related to MALL are being explored by the language researchers. There are works being done on the role of MALL and MALL tools i.e. mobile phones in and outside classroom, the authenticity of mobile devices, its pros and cons etc. The distinguished feature of MALL that it offers variety of learning methods to multiple difficult concept of learning. The latest softwares, mobile applications and purposefully deigned apps play a vital role in uplifting the performance of the learners. Islam, Islam and Mazumder (2010) stated that mobile applications are easy, user friendly, inexpensive, downloadable and easily processed. Mobile applications are connected with internet or are downloaded for the purpose of running on mobile phones and devices. This mobile app can be an email account or a gaming app or an educational app. Mobile applications are actually software types of programs which are tailor made for mobile phones. They make mobile phones into a hub of entertainment, education and infotainment. Some applications are built in whereas some are downloaded from the internet or any other app-store (Holla & katti, 2012).

Mobile assisted language learning (MALL) can be taken as the invasion of the mobile technology in the learning process of languages. The mobility, accessibility and the practicality of the mobile technology are the key component that can create this type of situation in class room for learning purposes. Huang et al. (as cited in Viberg and Gronlund, 2012) stated that the preference of Mobile phones is due to their cheapness in price, smaller size, attractiveness for user, user friendly, and quality of being flexible. Any learning of language that takes place under the

umbrella of these devices can be called mobile Assisted Language Learning (MALL)

MALL is quite different from CALL (computerized assisted language learning) in its usage i.e. either personal or public individual or collective which helps in opening new avenues of learning focusing upon the persistence and extempore of the accessibility and connectivity amongst multiple contextual usage (Gholami & Azarmi, 2012). One can say that in language learning process mobile technology can be a helpful tool (Rosell-Aguilar, 2007; Fallahkhair, Pemberton, & Griffiths, 2007), and others like (e.g., Chen & Chang, 2011; Chang & Hsu, 2011), says that these tools can help in motivating the learners for language learning. Similarly scholar like Huang, Huang, Huang, & Lin (2012), are of the view that MALL is supportive medium for language learning with technology. Another feature of MALL is that it also supports students in interacting with other learners by making collaborative groups and constructing different ways of learning (Joseph & Uther, 2009).

1.3. MALL in Pakistani Class room

In Pakistan the concept of learning and teaching is dependent upon conventional methods. Particularly if one talks about English language teaching the old methods are still implemented and utilized. The only technology tools vivid in universities are computers and laptops along with multimedia. The use of orthodox methodologies with the said technology tools are not giving desired results. Therefore learning English is still a problem in Pakistani education system. The teachers are using techniques which are older and are unable to create any significant difference in learning abilities of the Pakistani learners. Therefore English language learning is still a problem and an issue for Pakistani learners.

1.4. COVID 19 and Pakistan

COVID 19 (Corona virus) is regarded as the most influential and destructive pandemic of this century. It has not only changed the lives of the people but it has produced a new concept of social distancing, learning and living (Rafi, n.d.). It actually started from Wuhan in December 2019 and spread instantly around the globe. Till now it has taken millions of lives. The impact of COVID 19 is identical on the education and learning situations. Due to the intensity and quickness in transmission of this virus Pakistani government ordered a complete lock down since 14th march 2020 and educational institutions are closed till date. Now the mode of learning and teaching has been shifted totally to online classes. A country unaccustomed to use technology, latest educational tools, modern and inventive methods has to make itself adaptable to the new learning situations through various technological tools. Amongst these tools computers, laptops, palmtops, mobile phones, IPODs, Tablets and IPADs etc. are quite common around the world and now they are utilized in Pakistani society.

1.5. Statement of the problem

Concurred with local settings the present enquiry will attempt to concentrate on the acceptance of MALL in comparison with the other technology tools for Post graduate students of Public sector universities in Punjab. The major objective is to analyze the reception of MALL amongst learners in COVID 19 situations and to explore how they perceive MALL in comparison with computers, laptops, tablets

etc.

1.6. Research Objectives

1. To reconnoiter the views of public sector universities learners regarding the use of MALL for English language learning in COVID 19 situations.

1.7. Significance of the study

Technological invasion is limited in Pakistani education system. Here multimedia and computers are the only included technology inside private sector as well as public sector classrooms. However, after COVID 19 due to a shift to online classes the learners, teachers and the administrator has to use computers, tablets, laptops, palmtops, IPADS, IPODS and mobile phones for online formal classes.

MALL is an unheard and novel phenomenon in Pakistani educational settings. Here mobile technology and mobile phones are not used for teaching and learning. This study will be supportive in finding out that if MALL is acceptable and more preferred choice of learners in Pakistani class rooms or not? This study has a practical as well as contextual significance. The results of this study will be helpful in determining the line of action and direction for public sector universities and other institutions to introduce latest tools and trends in learning for Pakistani learners in post COVID 19 situations as well.

1.8. Population of the study

The population for the said exploration was chosen randomly from all the public sector universities of Punjab. From these universities only Post graduate program students (English only) were taken as sample. Confining for accuracy the other programs in public as well as other programs in private sector universities were ignored. The population comprised of 100 English students randomly selected from 10 public sector universities of Punjab.

1.9. Research Design

The Research design for the current study is survey which was conducted online due to the current situation in Pakistan, and the tool used for collection was questionnaire. A questionnaire can be known as instrument of research which comprises of sequence of questions for collecting specific information. The data was collected using simple random sampling technique. A simple random sample technique can be considered a subsection of the individuals (sample) which is taken from the big set of population. In random sampling technique each respondent is taken randomly and everyone has an equal chance of being selected during this sampling process.

1.10. Location of the study

The location for the current study comes from Punjab where 10 universities were chosen to be the part of this investigation. The sample and the participants of the research all were selected using simple random sampling technique.

Delimitations of current study

For the current exploration the only public sector universities were selected ignoring the private sector universities. From the public sector universities only Post graduate learners (English Majors) chosen and these 10 universities were randomly selected to delimit the research in order to make this research authentic and reliable.

2. Review of Literature

Mobile Learning is one of the key features of 21st century class room. Sharples (2005) stated that a learning that is the combination of technological interaction is

called mobile learning.

Li and Hegelheimer (2013) Mobile assisted language learning consists of different devices from Android phones. Smart phones, e books and palm tops etc. a lot of research has been done on mobile technologies since the start of 21st century. . Thomas & Munoz, (2016) are of the view that mobile assisted language learning is quite different from computerized assisted language because of the usage of portable, personal devices which helps in finding out new avenues and methods of learning focusing and stressing upon the contextual aspect focused on learning (Traxler, 2009).

Wagner al., (201) is of the observation that learning ambiance created through mobile technology can be done through different methods like one can have a face to face interaction while learning through mobile technology. Secondly distance learning through mobile technology can also be possible. Online learning is also an important method for learning through mobile. Mobile learning can be self -paced as well.

Mobile assisted Language learning is the process of in which mobile is used for the purpose of learning. Lee, Lee and Kweon (2013) stated that in class room the learners focused is usually on the text books and for ESL learners studying English in the class room is not an easy task. The attitude of the peers and individual confidence are the hindrances that affect the learning process of the learners. Kee and Samsudin (2014) are of the view that the invasion of Mobile technology for language learning purpose allows the users to not only use different methods for learning other subjects but also help to learn language willfully. The focus in this method is the students' role as the teacher worked as a mentor and the students have to perform every learning task. Teaching through Mobile technology is an approach which is student dominant not teachers dominant (Song, 2010).

2.1. Benefits of MALL

One of the major benefits of MALL is the use of internet that allows the learners to have learning without the restriction of time and place (Lenhart, 2015). Madden et al., (2013) stated that comparing with computers, palmtops, laptops and other tools MALL has proved to be more beneficial and attractive for learners. Looi et al., (2010) stated that numerous features of MALL have given learners attraction innovation and positivity for learners, instructors and administrators. Liu et al., (2015) said that MALL not only supports communication beyond place and time but also provide instant information and learning materials to the learners. Plester, Wood, and Joshi (2009) are of the view that MALL also is more convenient easy to handle and ubiquitous as compared to other technology tools used for educational needs. Particularly the features of texting and discussion through SMS are the key elements that are the major success of MALL. The use of Whatsapp and other text messages applications support flexibility in interaction. It also provides collaboration in learning. Most importantly MALL's hallmark is learning beyond the boundaries of formal classroom which has made MALL the most wanted tool in COVID 19 learning situations. In pre COVID scenarios, these features boost up the process of learning. Mitchell (2012) also supported this argument that MALL aids the learners to co up with anything that remains unclear or not covered can be discussed and comprehended by learners after the class

Considering this pandemic situation where every individual is stuck up in the house.

The other technological tools like computers and laptops do not provide flexibility and comfort as compared to MALL (Ali, 2020). Furthermore the frustration and psychological issues are creeping up due to the pandemic situation on learners studying in various grades (Rincon, 2020).

MALL has personalized learning and given a sense of relaxation and it has laid off the pressure for the educators, teachers, students and the parents regarding the accomplishment of their syllabus and their courses. It has eliminated the sense of time wastage as mobile phones are part and parcel of every house and as compared to computers and laptops they are cheaper in price. Hence two or three learners in a house can learn separately by using their own mobile phones. This is the flexibility of MALL that gives sense of independence to its users (Ali, Gulzar & Anwar, 2018).

2.2. MALL in Pakistani context

In Pakistan there is no concept of MALL for learning purposes. Here the environment of the class room is dominated by the teachers and even in big cities the use of scientific technology is not possible to use. It is strange fact that even in the boards and university examination a decade or two ago the students were not allowed to use scientific calculators. Similarly for language teaching the methods of teaching are still conventional and old. Teachers' students' interaction outside the class room is minimal. The learning processes are usually done inside the class room and whatever has to be done must be done in the class. This situation is extremely different in villages where the classroom buildings are not structured and students cannot study in a better place. It is also worthy to be mentioned that in the students understanding towards learning of English is quite low.

Since the breakout of the pandemic of COVID 19, the conventional learning and teaching has restricted all around the world. Like all the other fields of life educational world is facing identical issues. The modern and western world has turned over to online classes. Pakistani government and administrators of education has also followed and adapted the online classes. However, in these online classes situation there are various tools involved like computers, laptops, palmtops IPADs, and other gadgets

2.3. Previous researches on the acceptance of MALL

There are various studies that examined the attitudes, perceptions and utility of MALL from the learners before implementing it rigorously as a major method in ESL, EFL or native language learning situations.

Davie and Hilber (2015) performed a study to explore the perceptions of engineering learners in Westphalia regarding MALL as a method for learning English language. The data was collected through questionnaire and 68 learners were the part of the study. The results showed that the learners were keen to utilize MALL for language learning purpose. Furthermore the participants showed seriousness and were focused to use MALL for their learning endeavors. He concluded that MALL is an effective learning method.

Similarly another study performed by Azar and Nasiri (2014) explored the at learners' perceptions towards the effectiveness of MALL in listening. The data collected through questionnaire provided the results that MALL in EFL setting is welcomed by the learners and they prefer to use MALL as compared to other tools for their language learning.

Pourabad (2016) performed a study to investigate the ELT learners' attitudes

regarding MALL in EFL settings. The utility of MALL was explored through questionnaire. The outcomes of the investigation provided the result that ELT learners agreed that MALL and MALL methodology is much significant as compared to other devices and it provides wonderful chances for learning through trendy techniques.

Soleimani, Ismail and Mustaffa (2014) conducted a study on twenty five learners and concluded that MALL is practical, convenient and easy method for ESL learning. The acceptance of MALL by learners can make impactful learning. They also explored that the interaction and independence provided by MALL gives a sense of freedom and confidence to the learners and it urges them to achieve better. The results concluded that MALL can be a beneficial method for future situations. In Pakistan there are some studies related to exploring the attitudes but these were particular project as online learning has never been focused rigorously as it is being practiced now days. Ali et al., (2019) explored ESL learners’ attitudes where the population was 60 intermediate students in Pakistani students.

Keeping in view the current situations the focus point of this research is to view that in COVID 19 scenarios what are the view of learners regarding MALL. Can MALL provide comfort and affectivity in learning English? This investigation also ponders to examine if MALL provide innovative methods and develops the interest of local learners as well.

3. Data Analysis

In this section the analysis of the collected data has been discussed. As mentioned earlier the data has been collected through the 10 public sector universities in Punjab. From these 10 colleges 10 students each belonging to bachelors in science has been selected as a population. The data is collected using simple random sampling technique. Research design for the current study is survey and the tool used for data is questionnaire.

The following are the results against each question

1) I found MALL a unique phenomenon for learning for me in COVID 19 Conditions

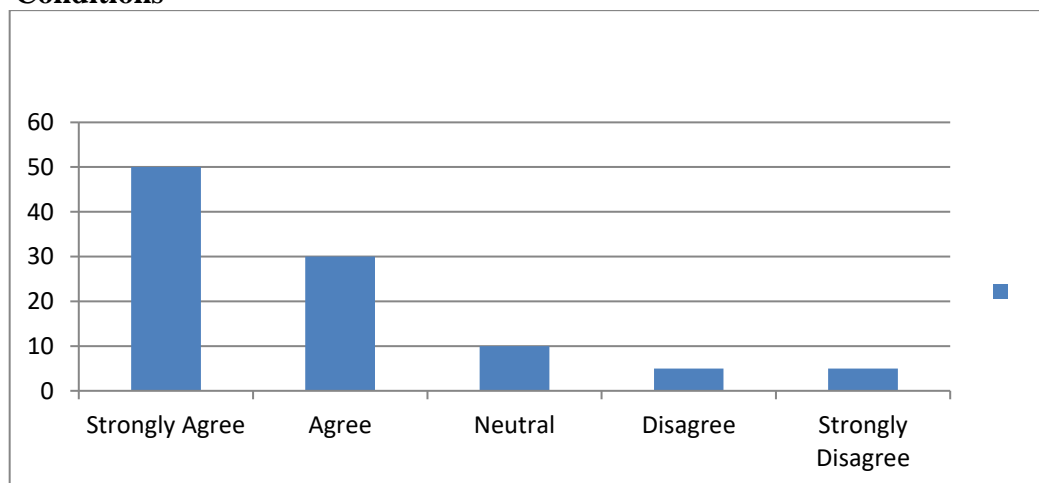


Figure 1 illustrates the opinions of the students. In the above figure 100 replies are recorded according to their pertinent group. Here one can see that there are five bars

and against each opinion there is a bar which shows the frequency of the reply. Out of 100 students 50% strongly agree to the question. 30% agree 10 are neutral and only 5 % students disagree and strongly disagree.

2) I think MALL is an effective method to uplift my learning processes

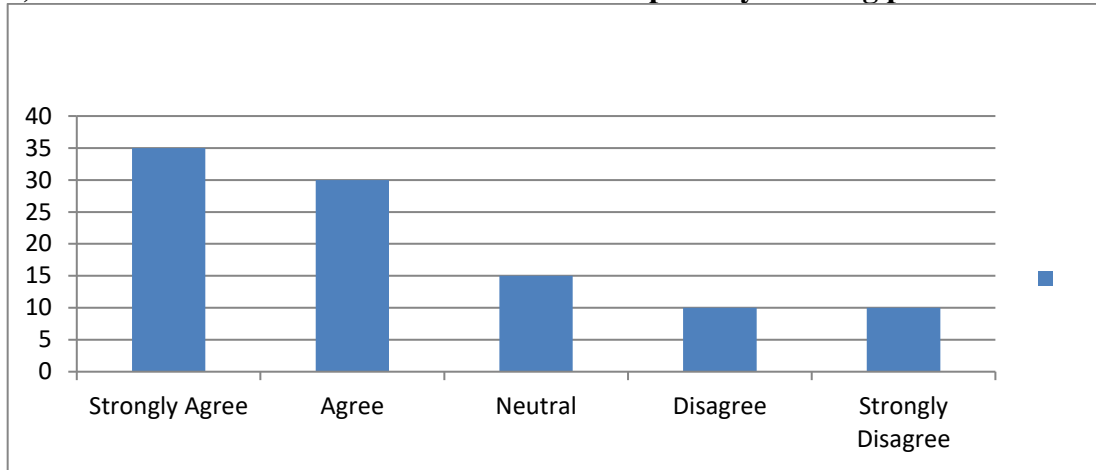
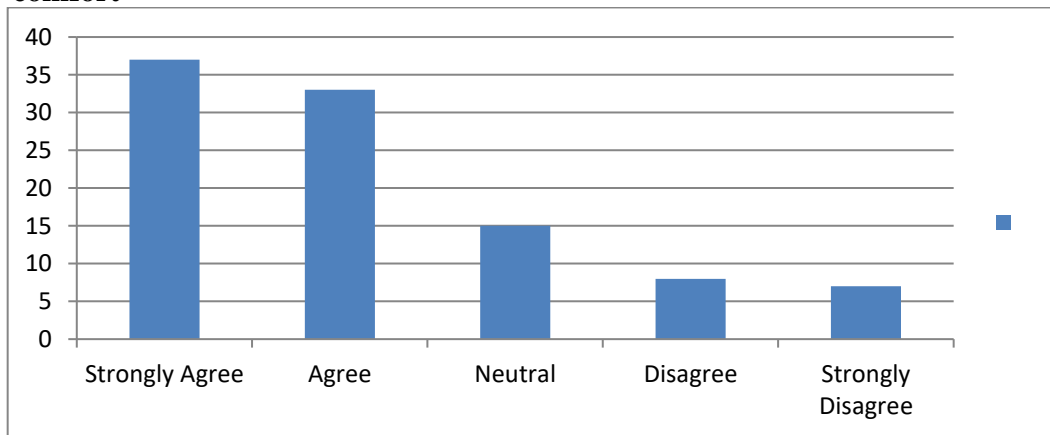


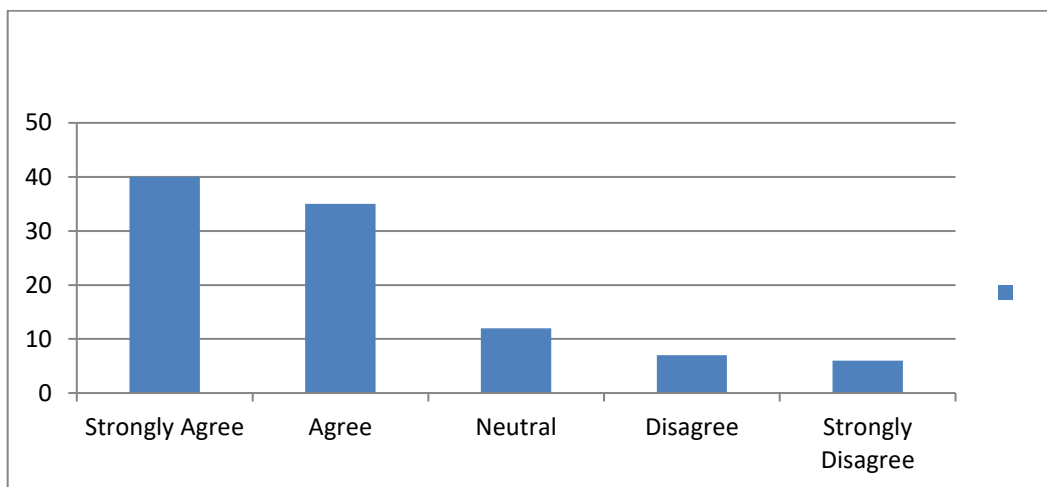
Figure 2 explains the responses of the students. In the diagram above one can see the diverse answers of the students. Most of the replies are in favor of the questions. The frequency against each set is vividly showing the output of the question. Out of 100 students 35% strongly agree to the question. 30% agree 15% are neutral and only 10 % students disagree and strongly disagree

3) As compared to other tools MALL helps me in learning English with comfort



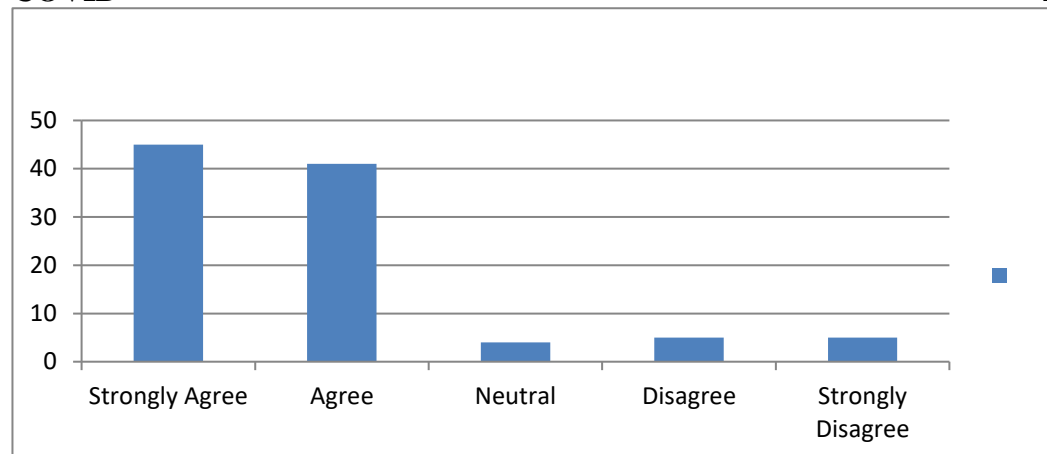
Question 3 Fig 3 is showing the replies against the question that MALL helps me in learning English easily or not. The above figure shows the clear replies of the respondents against the question. One can view, 37% students strongly agree, 33% agree 15% students remain neutral 8% disagree and 7% are strongly agree. The overall replies are explained in the form of bars

4) MALL psychologically attracts me for learning in these COVID 19 circumstances



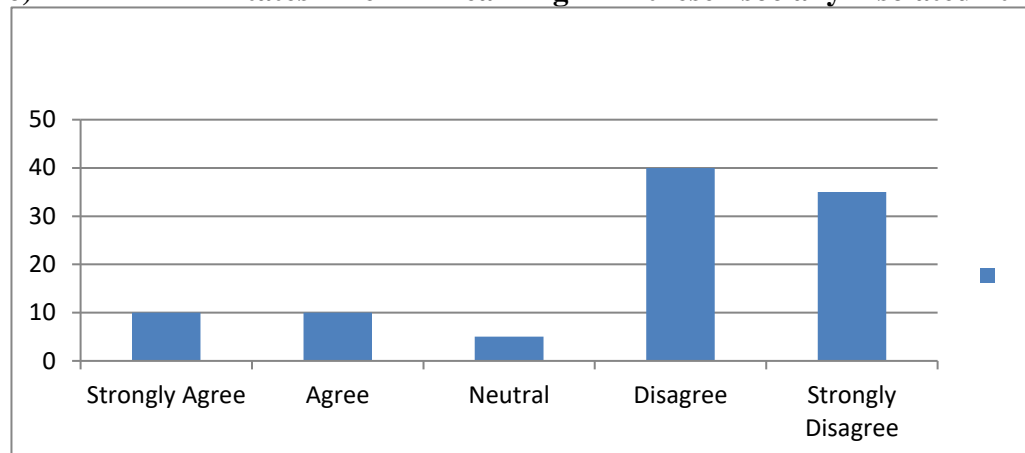
The figure explains the answers of the learners here we can see that students have given their verdict in a clear manner. The replies are strongly in favor of the statement of the question here we can see that 40% students strongly agree to the statement of the question 35% agree 12% are neutral 7% disagree and 6% strongly disagree to the statement of the question.

5) Through MALL I feel I am not lacking behind in the lock down of COVID 19



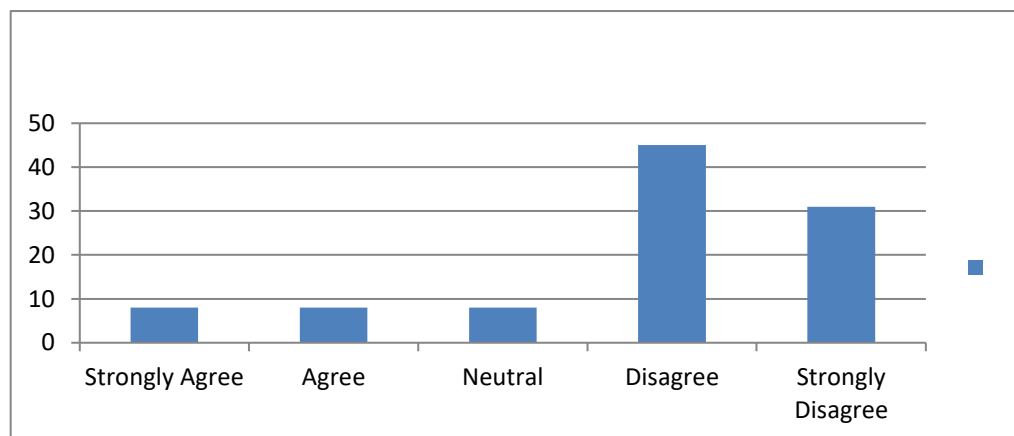
The above seen figure explains the replies of the students against the statement of the question. One can view that students’ replies show their clarity of mind against the inner concept of the question. 45% students strongly agree to the statement, 41% agree, only 4% are neutral and 5 % disagree and strongly disagree respectively.

6) MALL irritates me in learning in these socially isolated times



The above figure shows the replies of the question that MALL is difficult to be absorbed in the science class room. Each bar is showing the frequency of replies of the students. Above in figure we can see that only 10% students strongly agree to the question 10% agree, 5% are neutral 40% disagree and 35% strongly disagree.

7) MALL is a useless activity and does not create any impact on learning in COVID 19 pandemic.

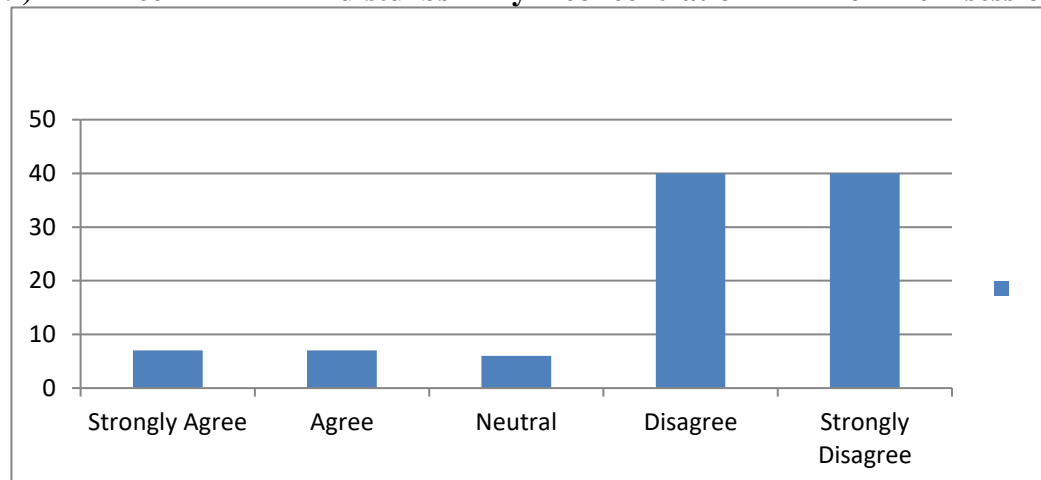


The above figure demonstrates the replies of the learners. The respondents have given their answers in a vivid manner. There are only 8% replies which are strongly agreeing to the statement, whereas 8% agree; only 8% are neutral and the percentage disagreeing to the statement is 45%. However the strongly disagree respondents' percentage is 31.

8) As compared to computers and other gadgets MALL is ineffective

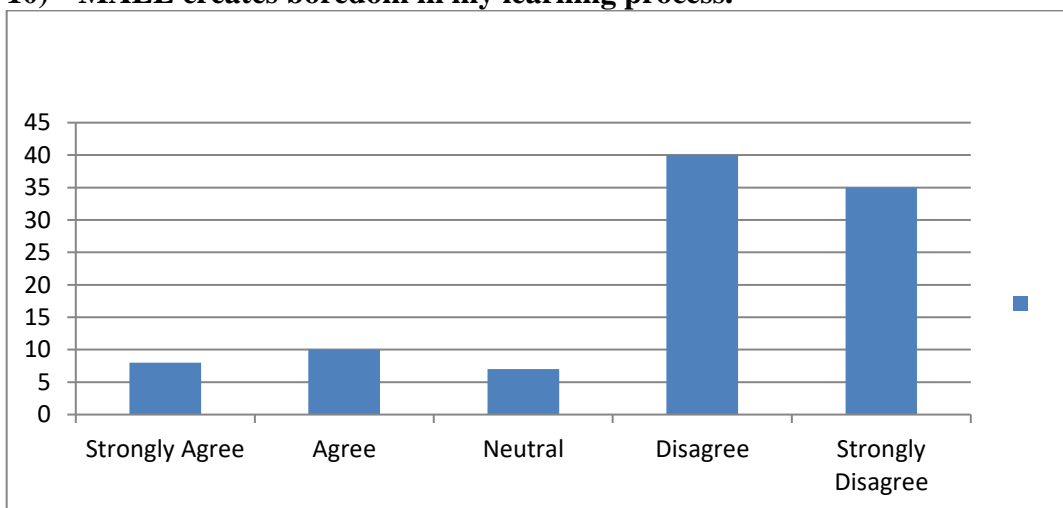
The above figure elucidates the replies of the students against the statement of the question. The percentage against each set of likert scale is mentioned separately to understand the learners' answers. The replies of the students show their clarity towards question. In the figure shown above 10% students strongly agree to the statement of the question. 10% agree. 5% are neutral 37% agree, and 38% strongly agree.

9) I feel MALL disturbs my concentration in online sessions



The above figure 9 shows that only 14% students are in line with question. the figure explicates that only 7% students strongly agree to the question, 7% agree, 6% are neutral. Whereas the combination of disagree and strongly disagree is 80% totally in which 40% is the given percentage of each bar i.e. strongly disagree and disagree

10) MALL creates boredom in my learning process.



The above figure shows the answers of the students. One can see clearly that the students have given their replies after clear understanding of the question as we cannot see the highest percentage of neutral students which might be because of lack of understanding of the question. In the above figure 8% students strongly agree 10% agree 7% are neutral 40% disagree and 35% strongly disagree to the statement

4. Findings

The current study was constructed with an idea of understanding if the new phenomenon of MALL can be helpful for the students of Public sector universities in this pandemic situation for learning English language or not. If we analyze the answers of different question we see that the respondents have a good idea about Mobile assisted language learning as a new phenomenon in Pakistani class room. If we look at question 1 we see that 80% students are in favor of the question whereas the opposition is quite a few in percentages i.e. only 10. This explicitly elucidates the point that students do believe that learning through MALL is a new aspect of

learning which is interesting and unorthodox especially in this COVID 19 situation where mental frustration has pressurized human beings. An invasion of new form of technology is appreciated by learners. They not only find uniqueness in it but also take keen interest in this new aspect of learning. Likewise if we randomly look at question no 3 we see that 70% students are inclined towards this question. Only 15% are against it which clearly reflects the minds of the Pakistani learners. They are of the view that while studying English through computers and other gadgets they are uncomfortable as computers are not portable. MALL depends upon mobile phones which are portable and can be easily managed. Particularly in this pandemic scenario MALL is more serene tool as it supports informal learning situations.

Thus during these testing times where mentally and psychologically learners are terrified, MALL has given them confidence and motivation to learn in an easier manner and they feel less pressurized. Similarly if we look at question 7 we see that 76% students are against the statement of the question. This shows that the students have taken the statement negatively and they denied that MALL cannot help them. Rather they are of the view that at their houses MALL has created an impactful learning that has urged them to learn English. If we look at question 10 we see that 75% students are against the statement. They rejected the concept of boredom by using MALL for learning purposes. This validates the fact that though MALL aids in developing a student-centered classrooms and the learner controls their learning pace and techniques. Furthermore the ownership of learning also allows the learners to be more keen in learning procedures.

5. Discussion

The core objective was to find the attitudes of students of the public sector colleges in Lahore regarding the incorporation of MALL in ESL classrooms. This was explored through the questionnaire and the data was acquired from 100 different students. The students agreed mutually that they viewed MALL an attractive and easy handling tool. Students stated collectively that MALL provides the opportunity to learn beyond the limitations of place as well as time. They also have this facility of accessing internet anywhere which makes MALL more efficient and effective regarding its integration in ESL classrooms. The students are of the view that incorporating MALL can help to uplift their English language skills and they stressed upon that the features of MALL are quite productive both in and out of their classrooms. The outcomes of the particular study are in line with the study conducted by Connaway and Dickey's (2010) who found out that the MALL has a positive influence on their learning abilities. This study is also identical with the study by Barnhart & Pierce, (2011) who supported that MALL attracts students through innovative methods and different convenient features of mobile devices.

Lawrence (2015) in a research had same findings like this particular study where the students reflected a positive attitude towards MALL's incorporation. So, the presence of MALL creates a positive ambiance amongst the students and teachers as well

The utmost significant conclusion of this particular study is that against each statement of the question there are a huge percentage of students who have shown their strong inclination regarding convenience of MALL. This is a clear reflection of positive perception of students towards MALL's role in increasing the English

language learning performance. Traxler (2009) pointed out that MALL is a promising method as using MALL changes the process of language learning and it elevates the process of learning by making it personalized, situated and more viable as well.

The important findings of this exploration are also identical by the research conducted by Sung and Mayer (2013) who said that the capability flexibility of interaction and communication amongst students and also with their teachers makes MALL the most pivotal method applied for learning. This study ties its similarities with the study performed by by Azar and Nasiri (2014) in which the perceptions regarding the efficacy of MALL was explored and conclusively presented that MALL is an impactful method for language learning purposes

The results concluded from this particular study are also similar with the research conducted by Pourabad (2016) for the investigation to explore MALL's affectivity on English language teaching learners. He also came up with similar conclusion that MALL provides new and up-to-the-minute methods for language learning and it gives comfort and easy to learners. Finally this research also ties its similarities with the investigation done by Soleimani, Ismail and Mustaffa (2014) which was conducted to explore ESL learners' attitudes and came up with the opinion that MALL integration is beneficial, advantageous and perfect in modern era. It also ascertained that MALL is the most pivotal and effective methods that can satiate the modern learning needs.

The overall results of this phase 2 also relates with the studies performed by (Azli, Shah and Mohamad 2018; Kim, Ruecker & Kim;2017; Saidouni & Bahloul 2016; Niño, 2015; Chiu et al., 2015) in which the conclusive point was that MALL stimulates the learning process and encourages learners to learn efficiently. Finally it can be said that the perceptions of the learners connects with their performance in the experimental procedure, as comparing their performance with their opinions provides us with an idea that as learners were motivated, positive and happy to use MALL in their learning domains and learning practices, so their performance and scores in their post-test as compared to the controlled group validates this fact too. The opinions of the learner also justifies that through the eye of TAM, the Pakistani learners accepted and participated actively in learning through MALL and their better performance in post-test also supported this opinion.

6. Conclusions

The current study was explored keeping in mind the current innovativeness of mobile technology which has peeped into the class room 2 decades ago in western education system. In Pakistan where the class room still follow conventions. There are strong apprehensions from the policy makes and institutional heads to invade mobile technology in class rooms. If we talk about science class room where a lot has been taught on the basis of examine and test phenomenon there is a staunch need of including mobile technology as a regular feature so that students can learn multiple view points of the same theories. Not only this but they can add comment ask and enquire about whatever they feel to any related science specialist in the world. Similarly, for English language learning the science students can learn innovatively through mobile technology which can help them build their personality confidence as English will not only help them to make their expression explicit but

it will also help to learn scientific concept as the core language of the world in English itself. The replies and responses of the current pilot study of the students validates that mobile technology is helpful for the science students in learning English language.

7. References

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