The Impact Of Mobile Assisted Language Learning (Mall) On The University Of Tabuk Learners' Autonomy Considering The Kingdom Of Saudi Arabia's Vision 2030

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Abstract:

Mobile-Assisted Language Learning (MALL) allows students to engage in new learning paradigms outside the traditional classroom setting. This increases their learning autonomy by giving them more flexibility and alternatives for language learning in terms of both language content and delivery methods. This research investigated the effect of Mobile-Assisted Language Learning (MALL) on the autonomy of the University of Tabuk Institute of Languages' Learners. To this aim, sixty learners from the University of Tabuk Institute of Languages in Tabuk were chosen. They were then randomized into two groups: experimental and control groups. Participants completed the Oxford Test of English (OTE) to ensure that all learners were homogenous. The implementation of the proficiency examination revealed that the two groups had equivalent general English knowledge. This study used a five-point Likert scale questionnaire, and data were collected and analyzed using ANCOVA in SPSS 18.0. This study adopted a quasi-experimental (Non-equivalent Comparison) design with a pre-and post-test. The same teacher taught the two groups and used identical materials over thirty-five sessions. The English learning software (Rosetta Stone) was introduced to the experimental group's resources after being installed on iPads and delivered to the experimental group. This research demonstrated that the implementation of MALL had a substantial impact on the enhancement of learners' autonomy. Therefore, MALL seemed beneficial for fostering English as a foreign language (EFL) students' autonomy in general and the University of Tabuk Institute of Languages' learners in particular. This study's findings have significant implications for foreign language curriculum designers and language teachers.

Keywords: Mobile-Assisted Language Learning (MALL), learning autonomy, English as a Foreign Language (EFL), University of Tabuk, Computer-Assisted Language Learning (CALL)

1. Introduction:

1.1. Background of the Study:

In a world where devices backed by developing technologies are expanding quickly, wireless communication technology is no exception. As high-capabilities mobile phones expand into all aspects of human life, it is anticipated that this wireless computing device will soon be available in each nation's urban and rural regions. Therefore, the ubiquitous availability of such a low-cost and powerful device has significantly altered the language acquisition and instruction landscape in several ways (Miangah & Nezarat, 2012).

There is no longer any debate about the importance of implementing modern technology in education.

Mobile-assisted language learning (MALL) has gained considerable attention recently. Mobile-assisted language learning has been used in various contexts and configurations to aid language learners. MALL is strongly connected to other fields of research in applied linguistics, including autonomy in language acquisition and the teaching of specific language skills (Viberg & Grönlund, 2012).

According to Lyddon (2016), autonomy is often connected with a technological viewpoint, such as mobile-assisted language learning (MALL) and self-access language centers. According to (Cotteral, 1998), technology is a crucial aspect in establishing learner autonomy. With particular reference to MALL, Hazae and Alzubi (2018) acknowledge that technology can provide learners

with the requisite autonomy-related abilities. Additionally, he cautions that much relies on how technology is made accessible to students and the kind of engagement that occurs around them.

According to Stockwell (2022), mobile-assisted language learning technology may allow students to regulate their own learning, generate meaning and assess and track their own performance. According to Chinnery (2006), MALL will change learning by placing more control in the hands of the student; in other words, it will become more learner-centred. According to Duman, Orhon, and Gedik (2015), one of the significant benefits of MALL is that it fosters independent learners. Students' specific requirements, learning styles, learning tactics, and even personalities may be accommodated via self-directed learning. Whenever feasible, the MALL mode promotes self-directed learning unquestionably.

In most teaching and learning contexts all over the Kingdom of Saudi Arabia, learners may not be able to guide their own learning, and most learners at all levels of school rely on instructors in the classroom (Alrabai, 2016). Rarely do students get knowledge on their own; most of the time, instructors offer all the information. Students must take on responsibility for their education. Therefore, it is essential to assist students in seeing the significance of autonomous learning outside the classroom so that they develop the habit of continuous learning after completing their official education (Alonazi, 2017).

1.2. Technology Implementation in the Saudi Educational System:

In the 1990s, the Saudi Arabian Ministry of Education initiated the incorporation of computer studies into the core curriculum. Consequently, computer literacy has become a required subject for most high school students (Alresheed et al., 2015). Additionally, the Saudi government established King Abdullah's Education Development Project (KAED) in 2007 to educate and certify instructors to use technology in education settings in accordance with applicable rules. This project's objective was to supply educational institutions with ICT resources such as laptops, PCs, projectors, and smart boards. Additionally, the program successfully certified 400,000 trainees in various academic sectors throughout Saudi Arabia (Alresheed et al., 2015).

Despite the advancements and efforts of the Saudi Ministry of Education, the adoption of technology in higher education is based on computer-assisted language learning (CALL) (Hashmi, 2016). While most higher education institutions have established teaching various topics using MALL. However, this practice is still not widespread.

1.3. Technology and Education considering the Saudi Kingdom's Vision 2030:

In terms of ensuring the Saudi Kingdom's Vision 2030 execution, it is also evident that the Ministry of Education places a great value on accountability. Education is a crucial component of the Vision as a whole, and its development will likely be closely monitored. Highlights include transitioning to digital education to promote teacher and student advancement and developing a national plan to enhance the teaching profession by increasing the professional level of teachers, enhancing the ecology of the profession, and enhancing the quality of services offered to teachers and students (Patalong, 2016).

Saudi Arabia's Kingdom maintains a strong digital infrastructure, hastening digital change. The Kingdom has been able to deal with disruptive crises in the public and private sector sectors because of this system, which also ensures business continuity, educational operations, citizen necessities, and regular resident lifestyles. Due to its strong digital infrastructure, the Kingdom has been named among the top ten developed nations worldwide (Unified National Platform, 2022).

Due to the extensive state funding for digital transformation in the Kingdom as part of Vision 2030, the Kingdom of Saudi Arabia was awarded the "Top Digital Riser" among the G20 countries (Unified National Platform, 2022).

Education is one of the primary pillars of Saudi Arabia's Vision 2030. The classroom environment is evolving. The effects of the digital revolution are visible. Currently, learning environments are training students for their future workplaces. The classroom atmosphere is moving from rows of desks to one that encourages cooperation among students, instructors, and learning technologies. Textbooks are being replaced with mobile devices that provide real-time, up-to-date material. Skype and Google Hangouts are fostering the formation of new study groups. Individualized learning programs are designed to fit each student's unique requirements. As such, classrooms facilitate accessibility, foster student participation, and prioritise essential learning applications such as online assessments (Arab News, 2019).

1.4. Research Purpose

The objective of this research is to investigate the impact that mobile-assisted language learning (MALL) has on the level of learner autonomy

displayed by students studying at the University of Tabuk in Saudi Arabia.

2. Literature Review:

In an environment where most students are used to the traditional manner of teaching, such as in an EFL setting, the application of technology in independent language learning may have some long-term implications (Kamilah, 2017). The topic of learner autonomy in English as a foreign language context has long been a favorite subject. Numerous studies have been conducted to support learner autonomy at various levels of foreign language instruction at multiple institutions and universities (Yagcioglu, 2015). Many linguists and educators define learner autonomy as follows: "It is learners' ability and willingness to make choices independently (Little, 1996, p. 97)." The goal of learner autonomy is to enable language students to assume greater responsibility for their own learning. Additionally, students have the freedom to choose for themselves what and how to study (Çakıcı, 2015). "It is the ability to take charge of one's own learning (Holec, 1981, p.3)." The fundamental idea behind each definition is the same. Each student applies in the target language their unique experiences and global knowledge to the task at hand as they create their own expertise (Godwin-Jones, 2019).

In a technology-integrated, third-year university Korean language class, Roh and Kim (2019) in their study investigated how (L2) learners perceive changes in their learning autonomy. Throughout the semester, students engaged in seven Padlet activities, eight VoiceThread speaking tasks, and frequent usage of the online Grammar/Spell checker. Data sources included post-semester surveys, one-hour interviews, and student work samples. The results showed that participants had varied experiences and perspectives on L2 learning that influenced how they chose to use the technology. While working on the four technological projects, the students reported their flexible approaches to the tools and improvements in their autonomous learning. The tools' varied applications immediately affected students' acquisition of Koreans in both the cognitive and affective domains. Finally, a strong feeling of e-learning community was developed by the students on their own.

In their study, Purwaningrum and Yusuf (2019) stated that their research aims to better understand how language learners interact with the mobile-assisted language learning (MALL) new technology integration in language learning. Thirty graduate students from an Indonesian state institution in Bandung participated in surveys and interviews to gather the data. According to this research, participants had a favorable opinion regarding incorporating MALL to promote independent language acquisition. It was also discovered that before putting MALL into practice, instructors need to be aware of several limitations. A study by Jaelani and Adung (2022) attempted to examine the effectiveness of mobile-assisted language learning in fostering learner autonomy and shed light on how EFL students felt about its application in speaking scenarios. A case study was used as the research design in this descriptive-qualitative investigation. Fifteen students from the English Education Department at an institution in Bogor were interviewed with open-ended questions using a google form by the researcher. The findings indicate that the use of MALL, which can support students in becoming independent learners, is well received by the students. Based on the findings of the study described above, MALL usage is crucial to learners' progress as they learn to speak English. In a review study, Yang (2013) focuses on researching newly developing mobile technologies and their pedagogical applications for language instructors and students. Recent studies or reviews on mobile-assisted language acquisition have tended to concentrate on specific uses of newly developing mobile technologies rather than on mobile device types in general. In his study, Yang (2013) examined current research and conference papers over the last ten years that made use of newly developing and integrated mobile technologies. Its educational advantages and difficulties are discussed.

Warni et al. (2018), in their study about the application of technology in EFL classrooms with a look at student autonomy, investigated the experiences of Indonesian students in utilizing technology to learn English outside of the classroom, with a focus on learner autonomy as a crucial skill for student learning success. The results of this research demonstrate that the use of technology to learn English outside of the classroom has facilitated the development of learner autonomy, including features of learning motivation, metacognitive awareness, self-confidence, and social skills. Utilizing a variety of information and communication technologies, the study is designed to assist English instructors in enhancing their students' English competence with a focus on learner autonomy.

While pointing to the benefits of MALL settings for promoting autonomy, several studies also highlighted some of its drawbacks or issues, as found in the study by Purwaningrum and Yusuf (2019).

2. Methodology

3.1. Participants:

This research included 60 male and female B1+ students from the University of Tabuk Institute of Languages. They had previously enrolled in the Institute of Languages, and participation was entirely voluntary. Their language and cultural backgrounds were similar. The participants who participated in this study spoke Arabic in their native language. To address the research question, a random sample of first-year students from the University of Tabuk Institute of Languages in Saudi Arabia was selected for this study. According to Sharma (2017), all members of the designated population have an equal and independent probability of selection.

3.2 Instruments:

Two instruments were used for conducting this study. The first instrument is the proficiency test Oxford Test of English (OTE), which assesses the participants' general English knowledge and assures the participants' homogeneity. A questionnaire was still another tool. The researchers used a Learner Autonomy Questionnaire (Zhang & Li, 2004, p. 23), which included 21 items, as a pre-and post-test. This was used to measure the students' autonomous learning.

3.3. Ethical Considerations:

Since the researchers are interfering with the individual's experiences, conducting a study necessitates resolving many ethical concerns, judgments, and choices (Beins, 2018). The following ethical considerations must be taken into account:
- Consent Form; it included information on the research aims and the research sample, which included learners participating in the study. The consent letter further stated that all information collected for this study would be treated as confidential upon completion of the research. All the information on the consent form informed participants of their rights and what to expect during and after their course of study.
- Students were also advised that they have the right to withdraw at any point over the course of this research. Students were assured that any data and statistics they gave would be kept in complete privacy and utilized only for research purposes.
- Information was kept anonymous and confidential throughout the data collecting phase of the research in order to secure the participants' identities.

3.4. Research Question:

The following research question was investigated in this study:
Does the use of MALL have any impact on the University of Tabuk's EFL learners' autonomy considering the Kingdom of Saudi Arabia's Vision 2030?

3.5. Research Design:

The research used a quantitative methodology and included both an independent and a dependent variable. The participants' autonomy was the dependent variable, while MALL was the independent variable. Non-equivalent Comparison Groups with Pre-test and Post-test were the particular design used for this study's quasi-experimental methodology (Stangor, 2022). The following is a schematic illustration of the design:

O1 = Pre-test	X = Treatment	O2 = Post Test

3.6. Procedure:

The participants in this research were initially given the Oxford Test of English (OTE) at an approved OTE test center at the University of Tabuk to ascertain their homogeneity at the B1+ level before the study could begin. Then, the participants were split into the experimental and control groups. Before the study starts, a questionnaire was distributed to the participants in both groups as a pre-test. The experimental group received treatment that included English language learning software (Rosetta Stone), whereas the control group received no such treatment. The control group employed the conventional approach, including classroom activities, face-to-face instruction, classroom discussions, and a course book. Both groups received the post-test questionnaire (The same questionnaire used for the pre-test stage) during the last session. Thirty-five sessions were executed to conduct the research.

3.7. Data Analysis:

The data were gathered using a questionnaire designed to examine learners' autonomy. The researchers employed the Likert scale to interpret the responses provided by the participants on the questionnaire into scores. The scores from A to E were 1, 2, 3, 4, and 5, respectively. A descriptive analysis of the data was performed using the mean and standard deviation. The researchers used ANCOVA to test whether the null hypothesis was

true or false. The study used the SPSS software to carry out the statistical analysis.

3.8. Findings:

This section comprises the descriptive statistics and analysis of the questionnaire findings. The 21-question Learner Autonomy Questionnaire created by Zhang and Li (2004, p.23) was made available to participants. As stated in table 1, the reliability of this questionnaire was established.

Cronbach Alpha	0.792
Mean	3.398

Table 1. Reliability of the Questionnaire

Value Label/Between Subject Factors	
Experimental	30
Control	30

Table 2. Between Subjects Factors

The statistical description of the scores was computed here by the researchers, as shown in Table 3.

Post-Test (Dependent Variable)			
Group	Mean	Std. Deviation	NO.
Experimental	38.7596	2.86587	30
Control	35.4156	3.45698	30
Total	37.0876	3.16142	60

Table 3 demonstrates that the experimental group's mean score (38.7596) is greater than that of the control group's mean score, which is (35.4156).

Tests of Between Subjects Effects					
ANCOVA Comparison/ Two Groups Scores Post-test /Dependent Variable:					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1129.651 a	2	566.770	66.528	.000
Intercept	39.26	1	39.262	4.784	.045
Pre-test	988.253	1	988.253	119.278	.000
Group	99.643	1	99.643	11.962	.001
Error	378.032	47	8.167		
Total	60158.893	50			
Corrected Total	1510.652	49			
a. R Squared = .752 (Adjusted R Squared = .741)					

Table 4. Tests of Between Subjects Effects

4. Discussion:
4.1. Discussion of the Research Question:

To address the research question: 'Does the use of MALL have any impact on the University of Tabuk's EFL learners' autonomy considering the Kingdom of Saudi Arabia's Vision 2030?', an ANCOVA analysis was performed. Table 4

presents the findings. As you can see from Table 4, performing ANCOVA demonstrated that the improvement for the experimental group was statistically significant.

The analysis findings showed that the improvement of learners' autonomy was significantly impacted by the implementation of MALL (F= 11.96, df=1, A<0.05). The conduct of the pre-test had a significant minor impact on enhancing students' autonomy, according to the results (F= 119.278, df=1, A<0. 05).

The difference between the experimental and control groups' responses to the questionnaire served as the primary determinant of the treatment's success in this study (as a post-test). The experimental group outperformed the control group according to the results, with a mean of 38.7596 compared to 35.4156 for the control group. One may draw the conclusion that the treatment provided to the experimental group improved the learners' autonomy. Table 4 demonstrates unequivocally how the application of MALL enhances learners' autonomy in language learning. According to the above-mentioned analysis, MALL may have a favorable effect on learner autonomy. The results show that learner autonomy enhances language learning and has a significant beneficial impact on EFL students.

4.2. Pedagogical Implications:

The results of this study suggest that the implementation of MALL has an effect on the learner's autonomy and, thus, enhances and progresses the EFL learning process. To attain a high degree of learner autonomy, teachers and students may adopt MALL activities to provide educational material in the classroom.

In addition, this study's findings urge instructors and students to seek more professional and effective training on the usage of MALL to promote learner autonomy. In addition, having the requisite knowledge about the benefits of MALL may also increase the interest demonstrated by EFL instructors and students in this study about the feasibility and attainment of MALL and learner autonomy.

Therefore, it is suggested that instructors of English as a foreign language take into consideration the implementation and usage of MALL tools in instruction in order to foster learner autonomy in their EFL classes. Furthermore, implementing MALL exercises in EFL classes seems to be enjoyable for students. Thus, this innovative use of MALL fostered learner autonomy and enabled students to complete their tasks outside of the classroom at any time and in any location.

Another implication of this research is the potential for simple storing and retrieval of learning data, which would benefit both instructors and students, leading to promoting autonomous learning. In addition, the simple sharing and recycling of materials enable instructors and students to readily develop, update, and share learning resources, giving them more control over the resources they use. The use of MALL activities may also boost cost-effectiveness, particularly for learners who can access resources and study outside of paid formal education more readily. Pedagogical benefits include learners' access to genuine materials as well as possibilities for engagement in the target language and thus, fostering learner autonomy, as mentioned in the study by Reinders (2018).

Support for students' learner autonomy must involve monitoring and assisting learners' abilities to make choices about their own learning while doing MALL activities and feedback on language performance. When unclear on how to handle the learning process represented by MALL tools on their own, learners gain from the opportunity available to seek assistance. Over time, the amount of assistance may be lessened, and the variety of options might expand.

MALL settings must include mechanisms to encourage reflection; MALL activities must encourage, if not require, language learners to engage in their own planning, monitoring, and assessment. This is still likely the most challenging and crucial aspect of learner autonomy, as Pegrum (2014) suggested.

4.3. The Study Contributions:

This study's findings provide a remarkable contribution to local and global body knowledge in the area of E-learning, autonomous learning, and MALL applications in EFL classes.

This research resulted in a more thorough conception of MALL activities and learner autonomy in the Saudi EFL context. It emphasized the need to explore elements that influence MALL activities and learner autonomy in order to get a more profound knowledge of the relationship between the implementation of MALL activities and learner autonomy in the English as a foreign language classroom, rather than limiting it to social functions (Lenkaitis, (2020).

In addition, this study includes both internal and outside elements of complexity. Contextual and cultural factors may influence students' and instructors' implementation of MALL activities and have an impact on students' autonomy.

To address learners' demands for autonomy, it was required to provide learners with the foundations for autonomy. Self-directed and independent learning led to enhanced academic performance. Students must be technologically competent if they are to develop into independent learners. Therefore, it is essential for teachers to determine whether or not their students are prepared to implement MALL activities in order to foster their autonomous learning. Autonomous learning varies from standard foreign language instruction in that it emphasizes the learner's independent understanding of the learning process and its technology implications. Therefore, it would be advantageous for curriculum centers and units at EFL institutions to review course goals and establish MALL classroom activities that encourage learner autonomy.

4.4. Limitations of the Study:

Clearly, this research had certain limitations, and one of these limitations is the small sample size and scope of this study. Due to this limitation, more research with further groups of EFL learners is highly advised to enhance the generalizability of the results. In addition, a single extensive semester was insufficient to accurately investigate the causal link between the implementation of MALL activities and learner autonomy in the Saudi English as a foreign language context.

5. Conclusion

The following null hypothesis was developed in order to address the study's research topic.

The use of MALL has no impact on the autonomy of the student's English language learning.

Based on the abovementioned data, the effectiveness of the treatment was validated. The post-test results showed that the experimental group outperformed the control one. As a result, the hypothesis that there is no discernible difference between the mean scores of the group taught using MALL-based methods, and the group taught using conventional methods is disproved. The implementation of mobile-assisted language learning improved the experimental group's autonomy better than that of the control group.

Learners who have access to additional language knowledge sources, such as MALL materials, become more self-reliant. Teachers in this context must re-evaluate their linguistic approaches and fearlessly descend from the podium to the students' mobile stations. They must provide students with helpful self-directed learning advice, aid in creating self-directed learning practices, and prepare them

to function as true independent learners. To properly use the opportunity presented by the rapid advancement of computer technology, educators should fully explore MALL's potential to improve self-directed learning settings and strengthen student autonomy.

Conflict of Interest Statement

All authors declare that they have no conflicts of interest.
The authors report there are no competing interests to declare

Funding Statement

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