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RESEARCH ARTICLE

Examining the Impact of MALL Activities on Affective Factors in Lower Secondary ESL Students' Spoken Language Proficiency

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ARTICLE INFO	ABSTRACT
	In the context of sustainable education, proficiency in English macro skills is of paramount importance for students, with the ability to articulate thoughts effectively in English being a crucial demonstration of this competency. Despite its significance, many ESL learners face challenges in mastering spoken language skills. Previous research has recognized Mobile-Assisted Language Learning (MALL) as a groundbreaking approach for acquiring English speaking skills. However, a notable gap exists in the literature concerning studies that specifically explore the impact of MALL on students' affective factors, particularly in the context of English speaking skills. This study seeks to address this gap by investigating the relationship between MALL activities and affective factors among Lower Secondary ESL students in the context of speaking skills. Using a survey design, questionnaires were administered to 210 Lower Secondary ESL students in a missionary secondary school located in a suburban area. The findings revealed a positive correlation between various MALL activities and students' affective factors related to speaking skills, highlighting the significant role of MALL in fostering positive emotional responses and engagement in speaking English. The study underscores the importance of integrating MALL activities at all educational levels to introduce innovative approaches to teaching and learning English. By illuminating the connection between MALL and affective factors in speaking skills, this research provides valuable insights into effective language education strategies and contributes to the broader discourse on enhancing ESL learning outcomes.

INTRODUCTION

In today's global education system, considerable efforts have been made by educators to equip English as a Second Language (ESL) learners with essential language skills (Ramalingam et al., 2022; Zhen & Hashim, 2022). Among these, productive skills, particularly speaking and writing, are crucial for target language development. Bashir (2011) highlights that improving ESL students' English speaking skills should be a primary focus, as it is often regarded as the most critical component in language learning. Similarly, Rubaai and Hashim (2019) assert that mastering a language is synonymous with becoming proficient in speaking it; the ability to communicate effectively in that language is the hallmark of true proficiency. In this context, it is imperative for ESL students to

develop strong English speaking skills to effectively navigate and communicate in an increasingly globalised and dynamic world (Nasir et al., 2021).

The COVID-19 pandemic has significantly accelerated the integration of information and communication technology in education, especially in the domain of language learning and instruction (Galarce-Miranda et al., 2022). Among the emerging trends, Mobile Assisted Language Learning (MALL) has gained considerable recognition as an innovative teaching approach that ehances the development of listening, speaking, reading, and writing skills in English. MALL leverages mobile devices to facilitate language activities, transcending the limitations of time, space, and location (Shavkatovna et al., 2024) and presenting unique characteristics such as portability, flexibility, connectivity, and interactivity (Dias & Victor, 2022; Lutfi, 2020; Raman et al., 2023; Zhang, 2022). Hence, MALL is established in the progress and development of the English language skills in the informal and formal instructions, with the assistance of mobile devices applications used in learning activities.

English speaking skills are usually prioritised by ESL students (Shahini & Shahamirian, 2017). Nonetheless, the inability to speak English is still a major concern in Malaysia as ESL students have difficulties achieving a good proficiency in the language (Boonkit, 2010). Within the context of Malaysian ESL students, speaking English usually happens within the boundaries of a classroom or during lessons. ESL students still have inhibitors in speaking English as they tend to lack confidence. The ability to acquire English speaking skills is still significant for the purpose of carrying out a lesson smoothly. According to Zhou (2021), speaking English has its complexities due to the skill being used for a plethora of purposes. Therefore, ESL students will face various challenges in the process of mastering their English speaking skills. On the other hand, the precondition to acquire speaking skills includes affective factors. The expertise in speaking English is crucially established by learners' affective circumstances that prepares them to speak in different social situations. As mentioned by Pale and Wisrance (2021), uncertainty to speak on the account of high affective filters will significantly obstruct improvements and advancements in speaking skills. Therefore, it seemed necessary to carry out a positive impression in the process of teaching and learning to support learners' involvement in the speaking process.

Hence, MALL activities can provide the suitable experiences in learning that can cater to students' learning needs. The experiences provided can create a comfortable and flexible environment to generate positive affective factors that includes motivation, self-confidence and lessen language anxiety during the process of learning to speak English (Alamer et al., 2022; Zhen & Hashim, 2022). MALL has the potential in stimulating the affective factors in English speaking skills. In fact, several studies had already established the approach of MALL and varying perceptions of its effects in enhancing speaking skills (Abdulaziz Al Fadda, 2020; Gkeka et al., 2020; Kartal, 2019; Mohammadi & Safdari, 2015). As a result, it was a necessity for students and teachers to collaborate with the facilitation of mobile devices especially in the development of the English language. Despite the major shift of research leaning towards speaking skills and MALL, many studies are still traditionally focused on the development of English speaking skills through the utilization of MALL (Abdulaziz Al Fadda, 2020; Rajendran & Md Yunus, 2021; Zhou, 2021). Hence, there is a gap because the studies that are mostly focused on the role of MALL in the effects of affective factors in English speaking skills are still scarce. The current study aims to investigate the relationship between MALL and Lower Secondary ESL students' affective factors in speaking skills with the research questions as follows:

RQ1: What are the types of MALL activities used?

RQ2: What are the affective factors in speaking skills of Lower Secondary ESL students?

RQ3: What is the relationship between the types of MALL activities used and Lower

Secondary ESL students affective factors in speaking skills.

LITERATURE REVIEW

Mobile Assisted Language Learning (MALL) in ESL Context

Researchers Twarog and Pereszlenyi (1988, as cited in Abusa'aleek, 2014) conducted a study on the use of telephones to assist language learning. At that time, telephones were primarily utilized for distance language learning. Since then, MALL has evolved and established itself as one of the most popular approaches in second language acquisition (SLA). MALL is defined as language learning carried out formally or informally via readily available and portable mobile devices, such as smartphones, tablets, laptops, PDAs, MP3 players, and game consoles. Most of these devices are equipped with wireless connectivity and internet capabilities. Valarmathi (2011) referred to MALL as an approach to language learning supported by handheld devices, making it a subset of both mobile learning (M-learning) and computer-assisted language learning (CALL).

MALL employs internet and information technology (IT) to enhance the teaching and learning process, providing ESL learners with improved SLA experiences (Dağdeler et al., 2020). By leveraging a range of mobile technologies, MALL facilitates language learning and promotes attainable SLA outcomes in ESL contexts. Numerous studies support its effectiveness in developing ESL (Shavkatovna et al., 2024; Wah & Hashim, 2021). MALL has transitioned from traditional approaches to using mobile technologies, accommodating the needs of ESL learners. It has gained widespread acceptance within the ESL community due to its pedagogical implications, fully utilizing mobile tools to encourage interactive English language learning and breaking down classroom boundaries (Wan Azli et al., 2018). In various studies, researchers found that most students had positive feelings about its implementation in ESL activities (Nuraeni et al., 2020; Shavkatovna et al., 2024; Thị et al., 2020). Similarly, ESL teachers expressed optimism about using MALL, particularly during the Covid-19 pandemic, citing its accessibility, portability, and interactivity as significant advantages in the English language learning process (Nuraeni, 2021).

MALL has demonstrated success in developing ESL macro skills. For instance, post-test results in a study on English reading skills showed that MALL materials improved reading comprehension (Keezhatta & Omar, 2019). Another study highlighted the use of MALL to enhance writing skills through smartphones, which facilitated writing assignments and boosted engagement (Al-Shehab, 2020). MALL has also been effectively employed in teaching grammar across all components (Rosita et al., 2019) and in receptive skills such as listening, where it alleviated English-listening anxiety and improved comprehension (Jung Kim, 2017). In speaking, MALL significantly improved students' accuracy and fluency, with tools such as oral English assessment applications using Automatic Speech Recognition Systems (ASR) proving particularly effective (Li, 2022).

Beyond pedagogy, MALL contributes to ESL students' readiness for SLA. For example, an experimental study on grammar learning showed that students using MALL performed significantly better than those in the control group, indicating increased motivation and self-confidence (Tajik, 2020; Mooneeb et al., 2020). Additionally, research by Shamsi et al. (2019) found that students experienced reduced language anxiety after participating in WhatsApp-based interactive speaking activities. The fear of feedback and misunderstanding English conversations diminished over four weeks of use. Furthermore, MALL fosters learner autonomy, a critical factor in SLA readiness. Numerous studies confirm that MALL supports independent learning, helping students take control of their language acquisition process (Behforouz & Frumuselu, 2020; Bhestari & Luthfiyyah, 2021; Lutfi, 2020). These findings underscore MALL's extensive benefits in both pedagogy and SLA readiness.

Types of MALL Activities

Recent research on MALL tends to emphasize the detailed application of mobile technologies. Activities derived from such applications are integrated into ESL practice, fostering student

engagement and lowering the affective filter in the acquisition of English-speaking skills. Most MALL activities for English-speaking skills fall into two main categories: social networking site (SNS) applications and language learning applications (LLA).

Several studies have supported the use of SNS in developing English-speaking skills. Pratiwi et al. (2021) demonstrated the effectiveness of an SNS platform on mobile devices, where students practiced authentic English communication by participating in the TikTok Duet Challenge. Similarly, studies by Hu and Du (2022) and Zaitun et al. (2021) utilized SNS applications for creating short clips involving storytelling on TikTok. These interventions boosted students' confidence in speaking English. Positive outcomes of SNS applications are further evident in the study by Nurazizah et al. (2019), where students used WhatsApp voice notes to send recorded narrations with social cues, motivating them to develop narrative speaking skills.

The second category, LLA, has also shown promise. Rajendran and Md Yunus (2021) conducted a study where participants snapped photos and recorded their voices to create interactive, talking images that delivered oral messages. This activity helped reduce fear and anxiety associated with speaking English. Similarly, Soparno and Trajana (2021) examined the use of a conversation application that connected students with others learning English, enabling them to practice speaking in real-time. This study reported positive outcomes, with participants gaining motivation and adopting a more favorable attitude toward learning to speak English. These findings highlight the potential of both SNS and Language Learning applications in enhancing English-speaking skills among ESL learners.

Affective Factors

Affective factors are challenging to measure due to their intangible nature in language learning. In the ESL context, interest in affective factors emerged with the realization that students' whole personalities need to be engaged in the learning process. Unlike intellectual development, emotional growth does not occur naturally. Therefore, affect is considered a major contributing component to the success of speaking skills (Fatima et al., 2020), with some researchers emphasizing that affect is even more critical than cognitive abilities. Without affect, students cannot fully engage in the cognitive processes required for learning. Affective factors include self-confidence, motivation, and anxiety.

Motivation, for instance, plays a pivotal role in learning. A study by Thao and Long (2021) revealed that English-major university students with higher motivation levels were more likely to employ metacognitive and cognitive strategies for learning English-speaking skills. Motivation drives the use of various learning styles and strategies. Similarly, Gonzalez and Rivas (2021) found a direct correlation between increased motivation and improved English oral skills. Anwar and Wardhono (2019) also highlighted that motivated learners are more likely to achieve their English-speaking goals, underscoring the importance of motivation in language acquisition.

Language anxiety, another critical affective factor, is closely linked to language teaching and learning. It is a type of situation-specific anxiety that arises only in the context of L2 learning. Students experiencing anxiety during L2 learning often display emotions intertwined with self-confidence, attitude, and motivation. English-speaking apprehension, a form of trait anxiety, is frequently associated with fear and shyness, particularly during public or group communication. Real communication scenarios tend to heighten anxiety levels. Guibangguibang (2020) reported that university students in the Philippines face high language anxiety when speaking English, though constant teacher corrections were found to have no significant impact on their anxiety. Similarly, Nilsson (2019) observed that Swedish students experience situation-specific anxiety related to oral performance in English classrooms. Yu and Thompson (2021) found that Chinese international

students often grapple with English-speaking apprehension due to low perceived self-efficacy and negative attitudes toward learning English.

Speaking Skills

Bashir (2011) established that speaking is a productive skill in the oral mode, akin to other language skills. However, it involves more than mere word pronunciation, as it is inherently complex and features a multifaceted structure. Speaking is widely regarded as an essential skill in the communication process (Hashim et al., 2019), contributing to success, opportunities, and numerous benefits for speakers. Shahini and Shahamirian (2017) noted that effective speaking skills often lead to significant achievements, particularly in acquiring the English language. Boonkit (2010) highlighted that mastering speaking skills enables individuals to gain forward-facing experiences, motivation, and academic accomplishments, serving as a criterion for various career opportunities. Consequently, speaking skills should be prioritized in language learning.

Moreover, Mansor (2016) emphasized the importance of accuracy and fluency in acquiring English, which are determined by components such as grammar, pronunciation, vocabulary, and comprehension (Kuśnierek, 2015). Thus, speaking skills are recognized as complex and challenging to develop in English language learning (Hu et al., 2023). To address this challenge, ESL learners should be consistently encouraged and motivated to practice speaking English both within and beyond the classroom. However, many ESL students struggle to internalize speaking skills when faced with real-life communication scenarios. In this context, their affective factors play a pivotal role in ensuring the success of English-speaking skill acquisition (Hu et al., 2022).

METHODOLOGY

This study utilised the survey research design of the quantitative approach to investigate the relationship between the types of MALL activities and lower secondary ESL students' affective factors in speaking skills. The study was carried out on 210 lower secondary school students from a missionary school in Tawau, Sabah, Malaysia. The researchers employed a non-random sampling method, selecting all the Form 1 to Form 3 classes from the school. The survey was used to identify students' perception on the types of MALL activities used in school as well as to investigate students' behavioural response in terms of affective factors, thus finding out if there are any significant relationship between the two constructs. The items in the survey were adapted from six previous studies (Gardner 1985; Horwitz et al. 1986; Park and Slater 2014; Lee & Drajati 2019; Weda et al. 2021; Metruk 2021). The first section focused on the types of MALL activities in two categories: the activities using learning applications and the activities using SNS and LLA. Then, the second section was about the students' affective factors. The pilot study was carried out on 53 students to test the reliability of the research instrument. The data obtained from the pilot study was analysed using the SPSS Software of which the construct of MALL Activities and Students' Affective Factors has the Cronbach alpha value of .897. Hence the research instrument was considered reliable to be utilised in this research. The researcher conducted descriptive analysis to answer research questions 1 and 2. The data was presented in terms of frequencies and percentages. As for research question 3, the researcher analysed the data using inferential statistics. With regards to the inferential statistics, the researcher used Pearson's correlation to correlate the relationship between the MALL activities used and students' affective factors in speaking skills.

FINDINGS AND DISCUSSION

Findings and Discussion

The study explores the relationship between types of MALL activities and students' affective factors in speaking skills. Specifically, it examines the types of MALL activities utilized by lower secondary ESL students. Table 1 presents the frequency, percentage, mean, and standard deviation of MALL

activities under two categories: LLA and SNS, addressing RQ1: What are the types of MALL activities used? The first category includes five items representing speaking activities conducted using LLA, while the second category highlights speaking activities carried out via SNS. A descriptive analysis was conducted to identify trends in LLA and SNS usage among the students.

Table 1 details the MALL activities commonly used by lower secondary ESL students. Among these, the SNS item "Learn how to speak in English by watching videos on YouTube" (Mean = 3.54, SD = 1.33) recorded the highest mean score. The second highest mean score was for the SNS item "I use Social Networking Sites such as WhatsApp and Telegram to connect with my English teacher" (Mean = 3.49, SD = 1.31). This was followed by the LLA item "Playing mobile language games in English (e.g., Minecraft, Scratch, BBC Learning English)" (Mean = 3.43, SD = 1.43). The analysis revealed that SNS-related MALL activities consistently achieved an average mean score of 3.00 and above, indicating a strong preference among students for social media or social networking platforms as alternatives for engaging in English language learning and acquiring speaking skills. Conversely, LLA activities were less popular, with the item "Using applications such as Babbel, Duolingo, and HelloTalk" (Mean = 2.45, SD = 1.33) recording the lowest mean score. This suggests that these applications were not the preferred tools for practicing English speaking skills among the students.

Table 1. Frequency/ Percentage/Mean/Standard Deviation of the types of MALL Activities

No.	Item	Never	Rarely	Sometimes	Often	Always	Mean	SD
LLA1	I play mobile language games in English (e.g., Minecraft, Scratch, BBC Learning English).	27 (12.9%)	32 (15.2%)	49 (23.3%)	27 (12.9%)	75 (35.7%)	3.43	1.43
LLA2	I listen to audio English conversations in language learning applications (e.g., Google Meet, Google Classroom, Zoom, Voice Memo, Powtoon, Duolingo)	17 (8.1%)	31 (14.8%)	75 (35.7%)	42 (20.0%)	45 (21.4%)	3.32	1.20
LLA3	I send completed English speaking tasks on Google Classroom application.	44 (21.0%)	51 (24.3%)	63 (30.0%)	28 (13.3%)	24 (11.4%)	2.70	1.26
LLA4	I do presentations in English using Canva, Powtoon and Google Classroom	59 (28.1%)	47 (22.4%)	59 (28.1%)	23 (11.0%)	22 (10.5%)	2.53	1.29

LLA5	I practise speaking English with my peers using the learning application (e.g., Babbel, Duolingo, HelloTalk).	66 (31.4%)	54 (25.7%)	44 (21.0%)	22 (10.5%)	24 (11.4%)	2.45	1.33
SNS6	I chat in English via Social Networking Sites (e.g., Facebook, KaKaoTalk, Line, WeChat, WhatsApp).	20 (9.5%)	38 (18.1%)	55 (26.2%)	33 (15.7%)	54 (30.5%)	3.39	1.34
SNS7	I use Social Networking Sites such as WhatsApp and Telegram to connect with my English teacher	16 (7.6%)	40 (19.0%)	43 (20.5%)	46 (21.9%)	65 (31.0%)	3.49	1.31
SNS8	I make video calls to my friends and family in English using Social Network Sites such as WhatsApp, Telegram, Facebook Messenger and Instagram.	48 (22.9%)	37 (17.6%)	53 (25.2%)	26 (12.4%)	46 (21.9%)	2.92	1.45
SNS9	I create and respond to English contents on Social Networking Sites such as TikTok, Facebook and Instagram.	32 (15.2%)	34 (16.2%)	52 (24.8%)	34 (16.2%)	58 (27.6%)	3.24	1.41
SNS10	I learn how to speak in English by watching videos on YouTube.	21 (10.0%)	26 (12.4%)	53 (25.2%)	39 (18.6%)	71 (33.8%)	3.54	1.33

The preference for SNS in MALL activities among students can be attributed to its ability to disseminate bite-sized, easily accessible content. Additionally, MALL activities utilizing SNS create a positive learning environment that encourages students to be more proactive in practicing the language in a relatable context. This is supported by previous studies focusing on the implications of SNS in speaking skills. For instance, Pratiwi et al. (2021) demonstrated that the use of SNS in mobile-based English speaking activities enabled students to interact with peers and engage in authentic English conversations through daily interactions. Similarly, Zaitun et al. (2021) explored the use of SNS applications, such as TikTok, to create short storytelling clips. This intervention fostered a positive, pressure-free learning environment, reducing students' anxiety about presenting in perfect English. Furthermore, Nurazizah et al. (2019) highlighted the benefits of using WhatsApp voice notes, where students recorded and sent voice narrations with the help of social cues. This approach allowed students to share concise and informal content, making learning more manageable and less intimidating.

In another part of the survey, students were asked to respond to items related to affective factors in English speaking skills, which were categorized into Motivation (M), Self-Confidence (SC), and Language Anxiety (LA). Table 2 addresses RQ2: What are the affective factors in speaking skills of lower secondary ESL students? According to Table 2, the highest mean score was observed in item M12, under the Motivation category, where students indicated they tried to learn English with the help of MALL activities (M = 4.26, SD = 0.91). The second highest mean score was item M15 (M = 4.05, SD = 0.93), which revealed that students found learning English enjoyable after engaging in MALL activities. Notably, items related to Motivation consistently achieved higher mean scores compared to those under Self-Confidence and Language Anxiety. The lowest mean score was recorded for item SC20, with a mean of 3.07 (SD = 1.17). While the average mean scores for Self-Confidence and Language Anxiety were generally above 3.00, they did not approach the levels observed in the Motivation category, which frequently exceeded a mean of 4.00.

Table 2. Frequencies/Percentage/ Mean/Standard deviation of Affective Factors

No.	Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
M11	I am excited to learn English.	3 (1.4%)	16 (7.6%)	49 (23.3%)	71 (33.8%)	71 (33.8%)	3.91	1.00
M12	I really try to learn English.	3 (1.4%)	6 (2.9%)	30 (14.3%)	65 (31.0%)	106 (50.5%)	4.26	0.91
M13	I have no desire to learn English.	124 (59.0%)	31 (14.8%)	30 (14.3%)	17 (8.1%)	8 (3.8%)	1.83	1.17
M14	During English class, I will try to speak in English.	9 (4.3%)	23 (11.0%)	50 (23.8%)	75 (35.7%)	53 (25.2%)	3.67	1.11
M15	I find learning English enjoyable.	2 (1.0%)	12 (5.7%)	41 (19.5%)	74 (35.2%)	81 (38.6%)	4.05	0.93
SC16	I am confident I can ask and answer various questions in	5 (2.4%)	26 (12.4%)	79 (37.6%)	58 (27.6%)	42 (20.0%)	3.50	1.07

	English language.						
SC17	I am confident I can talk about myself in English language.	8 (3.8%)	23 (11.0%)	68 (32.4%)	64 (30.5%)	47 (22.4%)	3.57	1.07
SC18	I am confident I can talk about what I did last weekend using English language.	25 (11.9%)	43 (20.5%)	64 (30.5%)	40 (19.0%)	38 (18.1%)	3.11	1.26
SC19	I am confident to place a meal order in English language.	26 (11.9%)	38 (20.5%)	64 (30.5%)	44 (19.0%)	38 (18.1%)	3.14	1.26
SC20	I am confident I can ask for and give directions for location in English.	24 (11.4%)	27 (12.9%)	66 (31.4%)	57 (27.1%)	36 (17.1%)	3.07	1.17
A21	I panic when I speak without any preparation in my English language class.	24 (11.4%)	27 (12.9%)	66 (31.4%)	57 (27.1%)	36 (17.1%)	3.26	1.22
A22	I feel like the others speak better English than I do.	13 (6.2%)	21 (10.0%)	50 (23.8%)	63 (30.0%)	63 (30.0%)	3.68	1.18
A23	I feel my heart pounding when I have to answer the teacher's questions in English.	24 (11.4%)	33 (15.7%)	50 (23.8%)	53 (25.2%)	50 (23.8%)	3.34	1.31
A24	I get nervous and I forget what I wanted to say in English.	21 (10.0%)	27 (12.9%)	51 (24.3%)	65 (31.0%)	46 (21.9%)	3.42	1.24

A25	I am afraid that the others will laugh at me when I speak English in class.	26 (12.4%)	33 (15.7%)	55 (26.2%)	38 (18.1%)	58 (27.6%)	3.33	1.36

This indicates that after the intervention or treatment involving MALL activities, students' motivation towards learning English speaking skills significantly increased. Within the ESL context, students' personalities developed positively as they actively participated in the learning process. Consequently, motivation is regarded as a key contributing factor to the success of speaking skills (Fatima et al., 2020). Without MALL activities, students may not fully engage in the cognitive processes necessary for learning. A study conducted by Thao and Long (2021) supports this, revealing that English-major university students with higher motivation levels were more likely to employ metacognitive and cognitive strategies in learning English speaking skills. In other words, motivation generates the drive to learn using various learning styles and strategies (Thao & Long, 2021). Similarly, Gonzalez and Rivas (2021) demonstrated that an increase in students' motivation directly correlates with improved achievement in English oral skills. Moreover, Anwar and Wardhono (2019) found that participants with strong motivation were highly committed to achieving their English-speaking goals, underscoring the significant role of motivation in learning outcomes.

Table 3 illustrates the correlation between Language Learning Applications (LLA) and Social Network Sites (SNS) in MALL activities with students' affective factors in speaking skills, addressing RQ3: What is the relationship between the types of MALL activities used and lower secondary ESL students' affective factors in speaking skills? Based on Table 3, Pearson's correlation coefficient was used to identify the relationship between the constructs. The analysis revealed a significant correlation between LLA and students' affective factors, with a Pearson's r value of .399 and a p-value less than .05. Since r exceeds the critical value, the null hypothesis that the types of MALL activities are not related to students' affective factors in English speaking is rejected. Additionally, Table 3 showed a stronger significant correlation between SNS and students' affective factors, with a Pearson's r value of .509 and a p-value less than .05 (r = .509, p = .000). This indicates that SNS has a stronger and more positive impact on students' affective factors in speaking skills compared to LLA.

Table 3 Pearson's Correlation between the types of Mall activities used and Lower Secondary ESL students affective factors in speaking skills

Correlation	MALL activities (Language Learning Applications)		Interpretation
	Pearson Correlation	Sig	
Affective Factors	.399	.000	Moderate
Correlation	MALL activities (Social Network Site)		Interpretation
	Pearson Correlation	Sig	
Affective Factors	.509	.00	Strong

Hence, MALL activities play a significant role in influencing students' affective factors, such as motivation, self-confidence, and language anxiety. This impact is evident in numerous studies where MALL is recognized for its pervasive effectiveness in achieving learning outcomes, both psychologically and cognitively. For instance, a study investigating students' English reading skills, as measured by post-test results, identified effective MALL materials that not only improved reading comprehension but also boosted students' self-confidence in participating in classroom reading activities (Keezhatta & Omar, 2019). Similarly, another study highlighted MALL's role in developing ESL students' macro English skills and motivation for writing, with the researcher using

questionnaires and observation notes to demonstrate the effectiveness of smartphones as a teaching tool for writing assignments (Al-Shehab, 2020). Beyond reading and writing, MALL has also been suggested for use in grammar teaching, as it positively influenced students' affective factors and enhanced their learning abilities (Rosita et al., 2019). Additionally, MALL has proven effective in receptive skills, particularly in teaching and learning ESL listening skills. It has been shown to help students with English-listening anxiety improve their listening comprehension (Jung Kim, 2017).

CONCLUSION

This study employed a survey research design within the quantitative method to investigate the relationship between types of MALL activities and lower secondary ESL students' affective factors in speaking skills. The findings revealed that SNS-based MALL activities were more popular than LLA-based ones, with students showing a stronger preference for social media as a medium for practicing English speaking skills. This preference is likely due to SNS's ability to deliver bite-sized, easily accessible content, creating a positive and relatable learning environment that encourages students to be more proactive in language practice. Additionally, MALL activities were found to have the most significant impact on motivation among affective factors, compared to self-confidence and language anxiety, suggesting that participation in MALL activities positively influences students' engagement and overall learning experience. Motivation emerged as a critical psychological factor contributing to the success of speaking skills. Furthermore, SNS-based MALL activities showed a stronger positive correlation with students' affective factors than LLA-based activities, likely due to their higher frequency of use during school language lessons.

This study helps address the research gap concerning the relationship between types of MALL activities and students' affective factors in speaking skills. However, future research could expand its scope to examine the impact of MALL on other English language skills, such as vocabulary, writing, and grammar. Additionally, including students with diverse language proficiency levels and educational backgrounds could offer a broader perspective, as this study focused exclusively on lower secondary school students. The findings underscore the importance of incorporating MALL into teaching pedagogy to enhance the learning experience. By integrating MALL, educators can make English language learning more engaging, meaningful, and better aligned with students' technological preferences and needs.

CONFLICTS OF INTEREST

The authors declared no conflicts of interest.

ETHICAL CONSIERATIONS

Informed consent was obtained from all participants of the study.

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