

## Factors Influencing Learner's Motivation in Mobile Learning Environment: An Empirical Study on University EFL Learners

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### Abstract

International students have greater difficulties navigating a variety of academic and social contexts than host nationals. Language-related issues were among the most often cited difficulties by students studying abroad. Many students who study abroad and rely on language to navigate have a tough time learning a new language. If asked to identify the most significant influence on language learning, most teachers and students would likely name motivation. Teachers of foreign languages frequently use the term "motivation" when describing successful or failed students. Nonetheless, there is no doubt that motivation is the most complex and difficult challenge confronted by language learners, particularly in this digital age. Numerous research on the efficiency of computer-assisted language learning have been conducted in recent years, and the literature on the psychology of language learning is vast. Regarding the psychological aspect of a mobile-assisted language-learning environment, relatively little research has been undertaken. In addition, few research have directly examined the attitudes of international students regarding the usage of mobile devices to motivate their foreign language learning. The purpose of this article is to investigate Chinese over-seas university students' use of MALL applications to motivate foreign language learning in Germany. The study evaluated whether and how perceived tools or activities can affect learners' motivation to acquire foreign languages in informal settings. In addition, the reasons why mobile devices motivate language use and specific types of motivation are investigated.

**Keywords:** Motivation for foreign language learning; Social-psychological linguistic; Mobile assisted instruction; Self-efficacy; Overseas university students

### Motivation: One of the most influential factors in language learning

If asked to identify the most critical effects on learning, most teachers and students would likely place motivation near the top of their lists [1]. Numerous studies have determined that the aspect of motivation has the greatest effect on the achievement of pupils learning a second language. Attitude, motivation, and effort in mastering the target language are significant factors in determining language students' success [2]. More generally, research has consistently demonstrated that student motivation drives engagement [3]. According to a number of academics [4], passion is the most important ingredient in the production of motivation. In many instances, learners with adequate drive can acquire a working understanding of a foreign and second language despite their language aptitude or other cognitive characteristics [5]. Motivation remains an important consideration for all forms of learning.

### *Motivation defined*

Motivation refers to the decisions individuals make on which experiences or goals they will pursue or avoid, as well as the level of effort they exert in this regard [6]. In psychology, motivation encompasses a vast array of factors that encourage people to act. It is a notion that has been defined in many different ways and dimensions by psychologists and other scientists [7]. Therefore, the concept of motivation has a robust definition. According to the Longman Dictionary of Language Teaching and Applied Linguistics, motivation is the driving force in every circumstance that results in action. The term "motivation" is defined as the inner motor of humans that leads to behavior [8], a result of conscious and unconscious variables that motivate and energize people to continuously perform something in order to achieve a predetermined objective [9]. In a study [10], he once cited a finding from Keller's [6] research stating that motivation is an individual's choice based on experience, aim, and effort in accomplishing or avoiding a goal. However, motivation is more than just sparking interest - a desire to perform a task. In addition to sustaining interest, it devotes time and energy in putting forth the necessary effort to achieve the specific objectives [1]. Motivation is described as the impetus to take action and maintain the drive to achieve one's goals [11]. Williams and Burden [1] define general motivation as focusing on the initiation of motivation in three stages. 1) The reason for doing something, 2) The decision to do something, and 3) The effort's maintenance.

Motivation is difficult to identify when the objective of learning is the mastery of a foreign language. Motivation to acquire a second language is complex since it involves cognitive, affective, and behavioral factors, as well as external desires. Motivation cannot be measured by any metric [7]. General motivation in foreign and second language acquisition consists of three components that address the link between motivation and goals [10]: 1) Motivational intensity, 2) a desire to learn the language, and 3) attitudes about language acquisition.

### *Motivation on foreign language learning*

Regarding language learning motivation, three aspects of the relationship between motivation and goals were discussed: degree of motivation, desire to learn, and learning attitudes. However, learning a foreign language involves much more than learning grammar or skills; it also involves a change in self-image that is social-psychologically oriented, the adoption of new social and cultural behaviors and ways of being, and consequently has a significant effect on the learner's social nature. Therefore, motivation to learn a foreign language is comprised of cognitive, affective, and behavioral aspects, as well as external wants, which corroborates the claim that motivation involves conscious and unconscious factors of human mental activities and is influenced by cognitive, affective, and behavioural processes [12].

Reviewing some of the most significant prior research, the researcher described the various forms, functions, and conditions of motivation, and then identified the most important motivational elements in language learning. It consists of both integrative and instrumental motivation [13]. Integrative motivation refers to a positive attitude toward the community or culture of the foreign language and the desire to communicate with them, which involves goal-oriented behaviors and attitudinal factors, whereas instrumental motivation refers to external or practical factors for language learning, such as good grades, passing exams, or furthering education. In addition, from the standpoint of cognitive psychology and the reasons why individuals choose to act in particular ways, motivation is classified as either intrinsic or extrinsic [1]. Intrinsic motivation is related with an individual's identity and refers to gratification resulting from the acquisition of knowledge, self-accomplishment, or the pursuit of thrilling experiences. Self-efficacy is crucial for fostering intrinsic motivation. In contrast, extrinsic motivation originates from outside the individual and the action and is motivated by rewards, degrees, occupations, and prizes. External rewards can either strengthen or weaken intrinsic drive. It is possible to improve the learner's intrinsic motivation by providing them with a learning experience that satisfies their demands for competence, relatedness, and enjoyment. Furthermore, based on the source of motivation, internal and external motivation can be distinguished [5]. Internal motivation implies that the job itself drives the student and is the desire to pursue something due to the learner's own desire. It contributes to the pleasures of learning, which are related to the learner's interests, enthusiasm, and self-esteem. External motivation, on the other hand, implies that the environment motivates the individual and refers to being motivated by incentives that come from the surrounding environment and the interaction of the individual with its environment. It is based on incentives, penalties,

and other stimuli that either directly influence or impede the action. Consequently, the multidimensional motivation construct was influenced by target language variables, such as CL facet, what the learner brings to the learning activity, such as cognitive features, and learning context perspectives, such as social constructivist characteristics.

### Mobile Assisted Language Learning environment

Recent technical breakthroughs in cloud computing and nanotechnology have permitted the miniaturization and enhancement of the functionality of computer devices, which is driving changes in the social and educational milieu. The analysis found that mobile devices are becoming increasingly prevalent for both personal and educational uses in today's society. In order to provide a general overview of the various stages of technology-enhanced language learning, particularly the flourishing of mobile language learning, [14] built four stages of CALL based on [15] three stages of CALL, proposing a fourth stage for the second decade of the new millennium: ecological CALL with a reflection of ecological perspective of second and foreign language learning [16], and with a language acquisition that extends beyond class-room boundaries, as well as a focus on intercultural communication. In addition, traditional definitions of literacy have been expanded to include digital literacy and multiple literacy [17]. The active development of digital artifacts, literacies, and multiliteracies should be incorporated into language teaching procedures [18]. The scope of language acquisition shifts from cognitive and sociocognitive to symbolic and intercultural competence, which is "the ability not only to approximate or appropriate for someone else's language, but also to change the context in which the language is learnt and utilized" [19]. From drill and practice and communicative exercises to actual dialogue and global communication, the primary usage of computers evolves.

With the increasing development of mobile technology such as cellphones, personal digital assistants (PDA), laptops, and Tablets, mobile learning would play a key role in education, considering that 98% of university students own cell phones [20]. Mobile learning refers to the educational usage of mobile devices with an emphasis on supporting and expanding learning and teaching [21]. Mobile learning has been recognized as an effective method for language training, especially for English as a Foreign Language (EFL) students [21]. Specifically, the ecological system of college English education was integrated with mobile learning, and the results demonstrated the viability and applicability of applying mobile learning to college English education and provide guidelines for building the ecological system of college English education. Similarly, the attitudes and self-efficacy of college students using mobile learning devices in a language class are explored using task-based training. The results indicated that the majority of students agreed that their English-learning motivation was increased and had good attitudes about mobile learning. In a separate study, the Mobile-Assisted Seamless Chinese Learning Questionnaire [22] is used to assess students' motivation and learning strategies in a seamless learning environment. Confirmatory Factor Analyses (CFA) were performed to validate the psychometric features of the instrument, and the results indicated that students' motivation predicted the learning approach they employed in a seamless learning environment. Despite the proliferation of research on seamless language learning, there are no tools intended to test students' motivation and learning strategy in these technology-enhanced contexts [23]. Mobile technology provides comprehensive and perpetual learning experiences that span multiple locations, times, technologies, and social contexts.

The following difficulties must be addressed in future studies on foreign and second language learning, based on what has been discovered in the literature. 1) Existing research on language learning uptake has primarily concentrated on technological aspects. However, few studies have investigated this topic from the users' motivation perspective and even fewer from the oversea university learner perspective; 2) More research needs to be conducted in the less explored language skills areas such as speaking, listening, and culture rather than imbalanced studies on writing, reading, and vocabulary acquisition; 3) Computer technologies, apps need to be based on relevant language pedagogical or design principles for more effective. Computer technologies, apps need to be based on relevant language pedagogical or design principles for greater efficacy.

### Problems met by oversea university students

With the advancement of economy and globalization, an increasing number of students are able to study abroad. Learning a new language is difficult, particularly for international students. When applying to a foreign university, they are typically required to obtain

a language certification such as IELTS. They also rely heavily on language to navigate their environment. As a result, they devoted a great deal of time to language acquisition in order to satisfy the linguistic requirements for studying and living abroad.

International students view their time abroad as a unique opportunity to improve their oral fluency, and they seek interactions with native speakers. However, they struggle more than host nationals to adapt to a variety of academic and social contexts. Language, including the technical aspects of language, speaking and listening, insufficient involvement in tutorial group discussion, and feelings of ethnocentrism were the most often cited obstacles [24]. They expressed particular challenges in dealing with tutorials, including not knowing how to behave and a lack of confidence in their English proficiency. In this view, learning is not merely a cognitive activity or something that only occurs in a classroom; it is a process by which humans survive in a volatile and ever-changing world, which is frequently filled with emotionally unsettling experiences. This diversity of perspectives may prompt students to rethink who they are and how they must behave to participate with peers in local host communities.

Furthermore, international students want to substantially enhance their listening and speaking skills, but lose interest due to their weak grammar and lack of procedural knowledge [25]. They frequently focus on their verbal deficiencies rather than their triumphs and are frequently unable to recognize themselves as anything other than weak communicators [26]. Therefore, the worry of not being able to generate native-like language can inhibit their use of the language and prevent them from becoming significant local players. In this technological era, the new communication and entertainment methods that allow international students to stay in touch with their social networks may account for a significant portion of the seeming low level of motivation among international students. It appears to have diminished the effort they expended to maximize their foreign study in terms of language acquisition. Immersion is increasingly a matter of choice and, in certain situations, a source of conflict due to globalization and new electronic communication technologies. Language learning in study-abroad contexts requires a deeper and longer-lasting commitment than in the past' [26]. The significance of researching the role of motivation and planned language learning effort in study abroad environments is highlighted by these findings.

## Issues encountered by overseas university students

### Research questions

The primary objective is to determine how MALL environments stimulate Chinese university students studying abroad in Germany to learn a foreign language. The purpose of this investigation is to determine how their perceptions of MALL influence their motivation to learn language hearing, speaking, reading, and vocabulary. The purpose of investigating students' motivation and its source is to enable stakeholders in language learning better comprehend how affective experiences influence how students construct and engage with the learning context, and when and how educators and teachers should intervene. The purpose of the study is to investigate three research questions:

- Do Chinese overseas university students view MALL as affecting their motivation of learning foreign languages (including listening, speaking, reading, writing, and vocabulary acquisition) in informal settings?
- What activities do Chinese overseas university students consider MALL to affect their motivation to practice specific language skills?
- What types of motivation do Chinese overseas university students view as motivating them to study foreign languages in the MALL?

### Research methods

This study intends to investigate how the MALL influences the motivation of Chinese overseas university students to learn a foreign language in casual contexts. The study employed quantitative methodologies to conduct a survey designed to investigate the primarily quantitative research topics of whether and why respondents believe MALL influences their language learning motivation.

*Sample.* The population consists of Chinese international college students studying in Germany. When applying to the university, the majority must take an authorized language examination (e.g., IELTS, TestDaf) and submit the results. It implies that individuals must invest a large deal of time and effort to acquire a foreign language such as German or English, necessitating strong incentive to study. As a member of numerous online communities for Chinese students in Berlin, I want formal permission to respond to the questionnaire by forwarding a message including the link to the questionnaire to these students. In addition, I requested that they introduce their classmates and/or friends. Students from other German universities who have experience using mobile technology to learn a foreign language in an informal setting are welcomed. The students are selected through a volunteer effort. They are informed that they have the right to decline participation or withdraw agreement at any moment.

*Quantitative technique.* Since Dornyei asserted that “motivation is abstract and not directly observable,” observation is not a suitable method for measuring, evaluating, or documenting motivation. Thus, the survey included a questionnaire to collect student experiences and perspectives. Utilizing formal and organized surveys, quantitative procedures are research strategies used to collect quantitative data dealing with numbers and anything else that can be measured. Using a questionnaire offers some advantages. First, the required knowledge is dictated by the questions, which allows for a great deal of precision and clarity [27]. Second, the questionnaire is a practical device for collecting survey data, particularly numerical data.

## Research findings

### *The participants' background*

There are 394 valid surveys to be evaluated, 179 from male students and 215 from female students. 42.39 percent are between the ages of 26 and 29, 25.13 percent are between the ages of 22 and 25, and 18.78 percent are between the ages of 30 and 33. In addition, 61 respondents (15.48%) read language-related topics such as German language and literature, English language and literature, etc., whereas 333 participants (84.52%) read non-language related topics. More over half of them are proficient in German (62.19%) and English (74.39%) at the B2 or higher level.

### *The preference of mobile devices use*

Comparing traditional desktop computer-assisted language learning to notebook computer-assisted language learning, an overwhelming 82.23 percent of participants utilizing notebook computers supported foreign language learning, including listening, speaking, reading, and writing. In addition, 89.09% of respondents indicated that they use their smartphone to assist with foreign language study, which is the largest group. Smartphones, rather than laptops, are the preferred method of foreign language study for international students.

### *MALL motive specific language skill learning*

*MALL inspired diverse language skill learning.* First, in response to research question 1, the majority of students (73.86%) indicated that they were motivated to acquire foreign language vocabulary by participation in activities. In addition, 69.29% of learners were encouraged to study listening while conducting tasks, followed by around 64.45% for reading. With the use of MALL, a smaller number of respondents develop motivation for speaking (38.58%) and writing (29.19%) than for language vocabulary, listening, and reading.

*Different student groups possess varying levels of drive to acquire particular language skills.* The Independent T-test reveals a statistically significant difference between the proportion of language-related and non-language-related research subjects whose listening activities affected their learning motivation ( $t=4.350$ ,  $p=0.00000.01$ ). The average (4.39) of language-related majors is much greater than that of non-language-related ones (3.88). In contrast, there is no substantial difference between subject groups in terms of desire for speaking, reading, writing, and vocabulary acquisition. According to the sample variance analysis, there was no significant difference in the proportions of gender and age in regards to whether MALL activities focusing on listening, speaking, reading, and writing can affect the motivation to learn.

### *What activities do students perceive motivate them to learn*

The research elucidates in detail which unique learning activities in the MALL inspired students to practice their respective language abilities. These questions connect to the second study question, which asks, "How do international students view MALL's ability to help them practice certain language skills?" They provide additional insight into how motivated international students feel to learn foreign languages in MALL.

First, more than 87 percent of participants reported that watching authentic foreign language films and television programs encourages them to develop their language listening. Over sixty-five percent of students reported that listening to foreign music and audio clips motivates them to practice listening. Approximately half of them reported that synchronous communication (e.g. video conferencing) encourages them to practice listening. Some respondents (44.67%) were encouraged to exercise listening via social media (e.g. Facebook). Second, considering language speaking, the majority of respondents (64.97%) believed that watching authentic foreign films or television programs stimulates them to practice speaking, which is the same as motivation for listening. Nearly 60% of participants are motivated to practice language speaking through synchronous communication (e.g. video chatting). In addition, more than a third of respondents were driven to practice their public speaking by using social media.

Thirdly, approximately four-fifths of participants indicated that reading authentic materials (such as an online newspaper) encouraged them to practice reading. More than sixty-five percent of pupils believe that having access to multimedia reading tools helps them develop the drive to practice reading. Approximately fifty percent of respondents indicated that the usage of electronic dictionaries or translation applications encourages them to practice reading. Almost one-third of respondents were inspired to practice their reading via synchronous or asynchronous communication with others. More than half of respondents believed that reading authentic materials motivated them to practice writing in their target language. Nearly half of them said that receiving instant feedback after writing, such as corrections from software or a response from an online instructor, is beneficial for obtaining desire to practice writing. In addition, more than one-third of respondents felt motivated to practice their writing through asynchronous communication with others and access to multimedia reading materials. Fifthly, approximately four-fifths of participants indicated that watching authentic films or television programs stimulates them to practice language. More than 67% of students suggested that reading authentic resources (e.g., an online newspaper) aids in building reading motivation. More than half of the participants indicated that listening to foreign music, podcasts, and authentic audio snippets stimulates them to practice language.

### *The specific motivation in the MALL*

In general, the majority of respondents concur that the MALL environment encouraged their foreign language acquisition. To be more precise, kids can be inspired to learn as a result of the numerous features that MALL offers. The majority of them (80.46%) felt driven to learn because they could do it at any time and in any location. Having the opportunity to engage asynchronously with native speakers or other learners (e.g., via email) inspired the majority of participants (77.41%). Overseas students (73.35%) were encouraged to study by synchronously communicating with native speakers or other learners (e.g., via WhatsApp and WeChat). It implies that both synchronous and asynchronous communication motivates participants to learn. The majority of respondents (75.38%) felt motivated to learn since they could pick what to learn, and many students (71.58%) believe that learning a foreign language is beneficial in a real-world setting (e.g., when travelling in other countries). Furthermore, more than 70% of students felt driven to learn because they could learn more about the cultures of nations where the target language is spoken. Additionally, approximately 70% of participants felt driven to study as a result of their ability to select their own learning objectives and pace. More than two-thirds of respondents felt motivated to study as a result of their belief that a large number of valuable websites are published in target languages, including mobile versions. Some students (62.19%) felt driven to learn since they were able to emulate the native accent and sound more and more like a native speaker. Nearly three-fifths of participants are motivated to learn as a result of the availability of authentic or similar to real-world learning materials on mobile devices, with the same proportion of participants motivated by the abundance of interesting learning resources.

## Research findings

By focusing on the perceptions and preferences of Chinese university students studying abroad in the MALL, this study investigated whether and with what tools or activities these students perceive can influence their motivation to learn foreign languages, including listening, speaking, reading, and writing, in informal settings. During the learning activities, the reasons why mobile devices encourage language use and the emotions experienced by the students are also investigated. The primary objective of this study was to survey the foreign language learning experiences of Chinese over-seas university students at the MALL, including their motivation for specific language skills and motivational activities. It also sought to assist foreign language learning stakeholders and decision-makers in determining which mobile device uses were most effective in engaging and motivating students and learners, and in shaping future mobile technology initiatives for university students, particularly international university students. In the MALL environment, the research findings demonstrate a rich and diverse learner-initiated learning experience, learner perspectives, and solid evidence. The attitudes of overseas university students studying a foreign language about the use of mobile devices were overwhelmingly positive, and mobile technology are becoming a vital social, cultural artifact and instrument for language learners' education.

On the one hand, the majority of university students felt motivated to acquire vocabulary, listening, and reading in informal MALL situations. In contrast, fewer pupils were enthusiastic about learning speaking and writing. According to the findings of studies, the majority of the MALL's language learners are motivated to learn a foreign language. Furthermore, children are more motivated to engage in input and receptive learning activities (reading, listening, and vocabulary) than output and productive learning activities (speaking and writing). However, there is a relationship between the intake and output of language. The four skills are interconnected to facilitate the interlanguage development of the learner. Input alone is insufficient for foreign language acquisition; the Output Hypothesis is also required [28, 29]. Language learners are encouraged to develop coherent language so that they can identify "gaps" in their language understanding and be motivated to improve. Since fewer students are motivated to engage in speaking and writing activities than in hearing, reading, and vocabulary, the MALL is not a robust setting for Chinese university students studying abroad to develop their speaking and writing.

On the other side, the study examined what activities or tools drive learners to improve particular abilities in this age of digitalization. First, the majority of students believed that watching authentic films or television encourages them to practice listening, speaking, and vocabulary acquisition. The rich linguistic setting provided by authentic video with an engaging and unfolding storyline and embedded target language patterns could create real-world communicative contexts for language learning and a rich learning environment comparable to when a child receives authentic input from adult speakers. The intercultural course that used actual foreign video materials could be used as a teaching tool, and students' intercultural motivation, attitudes, knowledge, and awareness improved significantly [30]. Numerous students are driven to practice their listening and speaking skills by listening to their favorite music and podcasts and conversing synchronously with unique emotions and voices. Reading authentic resources inspired language learners to practice reading, writing, and vocabulary. The platforms with social features contribute to the formation of a learning community for students with similar or complementary objectives, and they benefit students by encouraging them to engage in authentic projects and read and write for a real audience, as opposed to composing solely for the teacher. In addition to promoting reading and writing, the learning process could foster a strong sense of user engagement with multimodal materials. Thus, the numerous applications and activities encourage the development of specific language abilities in learners, echoing the statement of Motiwalla [31], who proposed two sorts of mechanisms in mobile learning, namely push and pull mechanisms. The two processes have various crucial capabilities that might be applied to mobile learning in order to provide tailored content and facilitate collaborative learning and peer interaction. Motiwalla said that the size of the screen and keypad made it difficult for most students to read, type, and navigate pages. In addition, certain developing technologies could increase metalinguistic awareness to evaluate word selection and sentence building by exposing users to authentic instances in a rich linguistic environment. However, traditional drill and practice programs lacked sufficient authentic multimedia content and authentic communication channels to be of significant use. In contrast, a significant number of students are motivated to practice writing by communicating asynchronously and receiving timely feedback through their engagement in more accurate, sophisticated, formal, and longer utterances communicative practice to improve learners' grammatical, lexical, and

syntactical competence in comparison to synchronous interactions. The research highlights a crucial aspect that motivates students to use mobile technologies: individualized learning help. The characteristics of the learners (including motivation, learning styles, beliefs, and strategic knowledge) are considered. Thus, the conscious, individualized preference of the student regarding what and how to learn might be satisfied. The developer of learning applications should concentrate on enhancing these major motivators for promoting the acquisition of specific language skills in the MALL. It is predicted that the mobility of mobile devices would introduce new approaches that can personalize learning styles and allow learners to learn on the go [32]. Nonetheless, the most important aspect is to comprehend the positive and negative characteristics of a given program or activity while employing the most suitable instructional strategies to attain certain learning objectives.

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