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How Do Mobile Technologies Affect the Motivation of Chinese Students at UK Universities to Learn English?

Jijie Zhang

University of Leeds, Leeds, UK.

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***Corresponding author:** Jijie Zhang, University of Leeds, Leeds, UK.

Abstract

Numerous studies have explored how mobile devices affect motivation to learn a second language. However, most current studies focus on native students from Arabic, Filipino, and Hong Kong, and there is a lack of research data on Chinese students in UK universities. Therefore, the aim of this study was to explore how mobile devices influence the motivation of Chinese students at UK universities to learn English. A combined qualitative and quantitative methodological approach was used to examine what and how mobile technologies motivate or demotivate individuals in learning a foreign language. The results indicate that a significant number of Chinese students in UK universities prefer using mobile devices to engage with social platforms like WhatsApp and Instagram, as well as video-sharing websites such as YouTube and Bilibili. They use these platforms to learn English and integrate into the local English-speaking community. While most participants were motivated to learn English by the convenience of mobile devices and the ability to easily access materials that meet their personal interests, mobile devices can also hinder students' ability to focus on learning due to the plethora of resource choices and unpredictable distractions. This research not only has the potential to address the gaps that exist in the literature but could also provide practical guidance to Chinese students studying in UK universities. This guidance aims to help them effectively utilize mobile technology to enhance their motivation to learn English while minimizing the potential drawbacks associated with such technology.

Keywords

Mobile technology, motivation, mobile-assisted language learning (MALL)

1. Introduction

With the ongoing development of science and technology, people are increasingly depending on the convenience of portable and mobile technologies. They find that mobile technology can bring comfort to life and make learning more efficient (Mengorio T M & Dumlao R, 2019). The role of mobile technologies in language learning has received increased attention across many disciplines in recent years. Yu Z (2019) observed that research interest in this field commenced in 2008, followed by a boom in related research and publications that continued until 2017, which suggests that subsequent years will see the appearance of more publications and papers.

Mobile technology has certainly played a vital role in second language motivation. It helps learners break away from traditional classroom learning and enhance their language skills through immersive learning (Mengorio T M & Dumlao R, 2019). However, there are also challenges reported by learners, such as low-quality learning materials, breaches of privacy, and diversions by digital games, etc. (Elaish M M., Shuib L., & Ghani N A, 2017).

Recent studies have found mixed results on whether mobile technologies increase language learners' motivation during the learning process (Yang K, 2020). However, most of the studies were conducted on native-born language learners resident in their own countries. For example, Chang C., Chang C K., and Shih J L (2016) investigated how mobile inquiry-based learning influenced the learning motivation of native students in Taiwan. Mengorio and Dumlao's (2019) research aimed to explore the efficacy of mobile devices used in daily classroom activities of native high school students in the Philippines. Few studies have focused on the motivation of students who choose to study abroad, particularly Chinese students in UK universities. Therefore, this study investigates the impact of mobile technologies on the motivation of Chinese students studying in UK universities to learn English. In this context, the term mobile technologies can be understood as mobile devices such as mobile phones, iPads, tablets, laptops, and MP3 players (Pegrum M, 2019).

2. Literature review

This review will examine the current literature available on the way in which digital technology impacts the motivation of second language learners, with the view that there has been very little academic research concerning how digital technology influences the motivation of Chinese students in UK universities to learn English. The review is comprised of three parts. The first focuses on the concept of mobile technology and its history. The second focuses on how mobile technology improves the motivation of second language learners and its drawbacks. Finally, the research gap will be considered, and the research questions will be proposed.

2.1 Mobile technology and its history

With the continuous development of mobile-assisted language learning (MALL), this approach to language learning has been applied more and more frequently in the field of education (Gutiérrez-Colón M, Frumuselu A D., & Curell H, 2020). Although some controversy exists about the precise meaning of mobile technology, it typically refers to the actual devices that students use, such as tablets, smartphones, MP3 players, electronic dictionaries, laptops, and so on (Pegrum M, 2019; Zhao Y, 2005). These have evolved into a teaching resource with enormous potential for both indoor and outdoor learning (Sung Y T., Chang K E, & Liu T C., 2016).

The application of technology to language education is not new. Tape recorders and videos have been used in many classrooms since the 1960s and 1970s (Dudeney G. & Hockly N, 2007). At that time, these techniques were used in language teaching to capture language samples (e.g., reel-to-reel, VCRS) and obtain real speech samples (e.g., phonographs, radio, television) (Chinnery G.M, 2006). However, the emergence of small handheld devices such as MP3 players and mobile phones really awoke the interest of both language teachers and students (Farr, F. & Liam M, 2016). These can be used not only in classrooms and lecture halls, but also at home, in cafes, and on the way to school (Dudeney G. & Hockly N, 2007). However, the limited functionalities of many early mobile devices meant that learners might have listened to music and played games on one mobile device and accessed social networking on another (Squire K, 2009). This meant that if learners needed to complete a comprehensive task, they needed to carry multiple mobile devices at the same time, which greatly reduced the portability of mobile devices (Farr, F. & Liam M, 2016).

As the functions of smartphones and laptops continued to increase, many functions were integrated into one device, and learners could access the Internet and social networking, play video games, and listen to music using just one device, making mobile devices more widely used (Farr, F. & Liam M, 2016). Pegrum's (2019) research revealed that thanks to the cloud-based system, learners can now receive activities and resources provided by teachers at different locations through their mobile devices.

Up to the present time, several studies have proved that the use of mobile technology can enhance the learning motivation of language learners. For example, Ciampa K (2014) examined the perceptions of a sixth-grade teacher and her students in Canada of the impact of using tablets in the classroom on learning motivation. The study found that the challenges students faced while using tablets and the immediate feedback features played an important role in improving their motivation. As students completed tasks on their tablets, the level of difficulty they faced increased as well. This made the students more eager to get more marks and move to higher grades (Malone T W & Lepper M R, 1987). However, Ciampa K (2014) noted that when the novelty of technology wore off, students were not as motivated to learn as before (Ciampa K, 2014). Instant feedback, however, allowed the students to track their progress, which motivated them to keep learning to some degree (Malone T W & Lepper M R, 1987).

2.2 Mobile technology and motivation for English learning

Malone T W. and Lepper M R (1987) argued that motivation is not only a prerequisite for students to carry out any learning activities but also affects the content and efficiency of their learning. Their learning behaviour can arise from either intrinsic or extrinsic motivation (Deci E L & Ryan R M, 1985). The importance of curiosity in terms of internal motivation cannot be overstated. The concept of curiosity consists of two levels: the sensory and the cognitive (Malone T W. & Lepper M R, 1987). At the sensory level, the intrinsic motivation of the learners is stimulated by multimedia effects such as video, audio, music, animation, and the interactive functions provided by mobile devices (Liu M, Toprac P, & Yuen T T, 2009). The tactile effects of mobile devices can also promote curiosity at the sensory level. The ability to flick, tap, pinch, and stretch on iPads and smartphones enhances the visuals and interaction between players (Wong et al., 2010).

In addition, mobile devices provide learners with an open digital world full of unlimited exploration opportunities to enhance curiosity at the cognitive level (Liu M, Toprac P, & Yuen T T, 2009), because when learners find that their knowledge is incomplete, they will develop cognitive curiosity and be willing to actively explore new information (Malone T W. & Lepper M R, 1987).

Enthusiasm for language learning can also be an intrinsic motivation and mobile devices are regarded as beneficial auxiliary tools. Ushioda E (2013) studied technology and language learning motivation and emphasised that students have different starting points in language learning. Some students have an intrinsic interest in specific mobile technologies, which leads them to find these technologies of great benefit to their language learning, thus increasing their motivation. Some students are motivated by the language learning itself, and they find that applying mobile technology to language learning can increase their learning motivation (Ushioda E, 2013). Similarly, Vogel D, Kennedy D, and Kwok R C W (2009) found that it was the self-motivation of students that promoted the use of mobile technology to learn languages, which, in turn, promoted motivation after students had used mobile technology.

According to Lai C. and Gu M (2011), in a study that investigated how university students in Hong Kong learnt a second language, it was found that learners were willing to use social networking sites or applications on their mobile devices such as Facebook to acquire sufficient language skills because they found that they could interact with people speaking the target language anytime and anywhere (Stockwell G, 2013). Therefore, for students already highly motivated in language learning, mobile devices can be used as a powerful assistant and significantly increase their enthusiasm for language learning (Stockwell G, 2013).

Extrinsic motivation for second language learners usually arises from external rewards beyond the self (Anjomshoa L. & Sadighi F, 2015). Although extrinsic motivation is less effective than intrinsic, it also plays an important role in language learning (Ciampa K, 2014). It is evidenced that mobile games can be a positive external tool for language learners to improve their English language skills. In 2019, Elaish M M., Shuib L., and Ghani N A. investigated whether mobile games could stimulate the learning motivation of native Arab students. The results of the study showed that mobile games were of great benefit to those students with poor English skills and boosted their confidence (Elaish M M., Shuib L., & Ghani N A, 2019). Because mobile games can make the mundane learning process lively and interesting, learning motivation will be stimulated, particularly when the learning materials involve winning the game. The students will be keen to win and their motivation to learn will increase at the same time (Elaish M M., Shuib L., & Ghani N A, 2019). In addition, the clearance and feedback mechanism in the games can provide students with opportunities to acquire new skills and expand their abilities, which greatly generates positive attitudes towards challenges (Ciampa K, 2014).

In many cases, however, intrinsic and extrinsic motivation is complex, since motivation can come from both internal and external sources at the same time (Anjomshoa L & Sadighi F, 2015). Learners may be attracted by extrinsic factors such as the fun and interactivity of a game-based application, which gradually translates into intrinsic motivation as the level of difficulty increases (Ciampa K, 2014). Broadly speaking, motivation plays a vital role in language acquisition and both intrinsic and extrinsic motivation can facilitate learning behaviour, whereas a deficiency in motivation can hinder learning (Anjomshoa L. & Sadighi F, 2015).

2.3 Social-psychological motivation theory

As concerns the motivation of Chinese students in UK universities towards learning English, there are some aspects that differ from the general understanding of intrinsic and extrinsic motivation. The motivation of these students is often rooted in social-psychosocial theory, which has two aspects: instrumental motive and integrative motive (Gardner R C,

2010). The instrumental motive refers to the desire to learn a second language for practical reasons, such as gaining entry to a university or obtaining a degree (Gardner R C, 2010). Li D (2006) conducted a study on the motivation of four Chinese students studying at UK universities, which revealed that the participants initially learned English mainly for instrumental purposes. "Initially, the respondents felt the urgent need to improve their oral skills (listening and speaking) in order to cope with academic activities such as understanding seminars, and discussions or communications with their supervisors and others about their research" (Li D, 2006, p. 44).

The integrative motive refers to the desire to learn a second language to gain knowledge about the host culture or to become closer to the target language community (Gardner R C, 1996). Liu C (2013) showed that Chinese students learnt English in the UK, not only to understand lectures but also to integrate into the local environment. Many Chinese students tend to live with international peers in order to make friends and look for every opportunity to practise their speaking skills (Liu C, 2013). Moreover, they also learn English to talk with salespeople in shops, order food in restaurants, and chat with strangers in the street (Liu C, 2013).

It is interesting to note that the participants in Li's research emphasised that over the time they remained in the UK, the motivation to learn English shifted from an instrumental motive to an integrative motive (Li D, 2006). This change seemed to be related to their actual living experience in the UK. As time went by, their social sphere gradually expanded from campus to further afield (Li D, 2006). They wanted to actively participate in social life, join social associations, and travel to other cities, which encouraged them to learn English to achieve their wishes (Li D, 2006). Therefore, it is possible for language learners to experience both instrumental and integrative motivations concurrently. While learners may be driven by the instrumental motivation to pass exams for utilitarian purposes, they may also be motivated by a desire to embrace and integrate into the culture of the community where the target language is spoken (Anjomshoa L. & Sadighi F, 2015).

Several studies have demonstrated that the utilisation of mobile technologies can be conducive to achieving better academic performance. Mengorio and Dumlao (2019) conducted research on the efficacy of the Moodle app on mobile devices in the daily classroom activities and tasks of 100 high school students in the Philippines. The experimental group utilised mobile devices during classroom activities and for after-school assignments, while the control group did not use them at all. The results of this study indicated that the experimental group exhibited a favourable response, with the average score increasing from 27.14 in the pre-test to 28.86 in the post-test, following the use of mobile devices. On the contrary, the control group exhibited a negative trend as their average score decreased from 24.96 in the pre-test to 21.96 in the post-test (See Figure 1).

Table 1. The Performance Scores of Experimental and Controlled Groups in the Pre-Test and Post-Test Examination (Mengorio T M, & Dumlao R, 2019, p. 56)

	pre-test meanscores	post-test meanscores
experimental	27.14	28.86
controlled	24.96	21.96

Students in this research identified three motivations for using mobile devices to learn English: helpful, easy, and enjoyable. A significant number of participating students held the opinion that mobile phone applications were highly beneficial for their English language education. The rationale behind this belief stemmed from the convenience of storing a diverse array of learning resources, including but not limited to literary pieces, audio recordings, and grammar points, within these applications (Mengorio T M & Dumlao R, 2019). The students were afforded the flexibility of utilising the application at their convenience and in any location. As a result, the app has been proven to facilitate preparatory studies, which can subsequently aid effective participation in classroom discourse (Mengorio T M & Dumlao R, 2019).

In addition, the accessibility and usability of the application are uncomplicated. Merely downloading the app is all that is required for the students to utilise it (Mengorio T M & Dumlao R, 2019). The researchers also pointed out that incorporating specific visual effects into the teaching of English as a Second Language (ESL) would foster heightened learner engagement and enthusiasm towards the learning process (Mengorio T M & Dumlao R, 2019).

Similarly, in a study investigating language learners' self-directed use of mobile devices beyond the classroom, Lai C and Zheng D (2018) reported that personalisation was the most common reason students used mobile devices for language learning. Out of the 175 surveyed participants in Hong Kong, 131 individuals (75%) recognised that the

personalisation on mobile devices primarily serves two functions: (1) enabling language learning and support across temporal and spatial boundaries, and (2) the provision of instant assistance and feedback. (Lai C. & Zheng D, 2018). This perspective is comparable to the findings of Mengorio and Dumlao (2019), which highlighted that the utilisation of mobile devices in language learning was perceived to be easy by participants.

It is interesting, however, to note that only 66 out of 175 respondents (38%) in Lai C. and Zheng D's (2018) research acknowledged employing mobile devices as a tool for accessing authentic language materials, such as songs, videos, dramas, news articles, blogs, Facebook, or Twitter updates. Moreover, only a small fraction of the participants (n=21, 12%) reported utilising mobile devices to communicate with others in the target language. This suggested that second language learners tended to use mobile devices for practical benefits rather than to obtain authentic information about the target language community.

Despite the extensive utilisation of mobile devices in language education, a multitude of apprehensions remain among teachers and learners with regard to quality, misuse, integration, financial implications, security, and privacy concerns (Elaish M M., Shuib L., and Ghani N A, 2017). For example, mobile devices are fraught with potential distractions in the form of games, videos, and images, which may impede the capacity of learners to focus on their learning activities (Yu Z, 2019). Despite the prevalence of mobile-assisted language learning, some scholars remain opposed to the use of mobile devices in this context, citing concerns that personal devices may serve as a means for students to engage in academic dishonesty by enabling cheating during examinations (Yu Z, 2019). In addition, learners may inadvertently download unreliable mobile applications from online sources such as unreliable electronic dictionaries thereby causing needless distress and disruption for learners in their language learning (Dashtestani R, 2013).

2.4 Research questions

In summary, this literature review highlights the growing preference amongst learners for the use of mobile devices in English language learning. Several studies have suggested that features such as portability, interactivity, and fun elements can enhance motivation in second language learners. However, the review also acknowledges that mobile devices can sometimes serve as distractions. It is important to note that although a large number of studies have explored the relationship between mobile devices and second language learning, the participants have been primarily native students from Arabic-speaking countries, The Philippines, and Hong Kong, and there is a lack of research data on Chinese students in UK universities. Furthermore, while Li D (2006) and Liu C (2013) have examined the English language learning motivation of Chinese students studying in UK universities, they have not specifically investigated the link between motivation and the use of mobile devices.

Therefore, this research investigates the following questions:

1) What mobile technologies do Chinese students use to learn English at UK Universities?
2) How do Chinese students use mobile technology for the purpose of language learning?
3) Do Chinese students think mobile technologies motivate or demotivate them in learning a foreign language?

3. Methodology

This chapter will discuss the methodology of this research. It consists of six parts, which are (1) Research design (2) Participants (3) Ethical considerations, and (4) Data analysis

3.1 Research design

Due to the belief that the research questions are not entirely quantitative or qualitative in this study, they cannot be fully explained using only one method (Cohen, L., Manion, L., & Morrison, K., 2018). Therefore, mixed methods will be used in this study with a focus on both quantitative (broad overview of the phenomenon) and qualitative (individual understanding and interpretation) data (Bryman A, 2016). Online questionnaires will be used to provide quantitative data because this method is a straightforward way to obtain large numbers of responses quickly and allows respondents to answer the questionnaire directly through an online link (Burton D. & Bartlett S, 2006; Check J. & Schutt R, 2012).

The data produced from the questionnaires allow the first and second research questions to be answered: What mobile technologies do Chinese students at UK universities use to learn English? And how do Chinese students use mobile technology for the purpose of language learning? The data can be expressed as descriptive statistics such as pie charts, bar charts, tables, etc (Burton D. & Bartlett S, 2006). It is thus possible to generate a general trend, for example, the percentage who always use mobile phones for the purpose of language learning and can also be used to make

comparisons with responses reported in earlier research and studies (Burton D. & Bartlett S, 2006; Rudestam K E. & Newton R R, 2007).

The questionnaire has been adapted from an existing questionnaire from Sun Y., and Gao F (2020) but modified and adjusted. This questionnaire is suitable because Sun Y. and Gao F (2020) aimed to investigate the influence of intrinsic motivation on students' intention to use mobile devices in language learning which is similar to the topic of the research questions identified for this study, although the objects were not Chinese students in UK universities.

One of the disadvantages of questionnaires is that while closed-ended questions are used to provide responses that are direct and less prone to ambiguity, they may restrict participants' cognitive processes and obscure their true perspectives (Check J. & Schutt R, 2012). To overcome this drawback, every question used in this study will have an optional open-ended fill-in-the-blanks to allow participants ample room for comment and they will be codified by the researcher (Burton D. & Bartlett S, 2006).

Another disadvantage is that the truthfulness of a self-filled questionnaire cannot be guaranteed because it did not take place face-to-face with the researcher (Denscombe M, 2014). This issue can be solved through the utilisation of interviews as these enable participants to express their genuine thoughts and also allow the researcher to pick up non-verbal cues, such as facial expressions and body language, which are not feasible through questionnaires (Burton D. & Bartlett S, 2006).

Consequently, the researcher will employ semi-structured interviews to gather qualitative data, which will facilitate an exploration of the final research question: "Do the students think mobile technologies motivate or demotivate them in learning a foreign language?" Semi-structured interviews typically involve a set of open-ended questions or prompts that the interviewer uses to guide the conversation, while still allowing the interviewee to speak freely and share their own perspectives (Borg W R. & Gall M D, 1989). This can help to generate rich qualitative data that provides insights into the interviewee's experiences and perspectives (Borg W R. & Gall M D, 1989). During the interviews, participants will be requested to share their perspectives on how mobile devices influence their English language learning processes. The interview questions are created by the researcher and will comprise both predetermined and open-ended inquiries to enable a thematic analysis of the data obtained (Check J. & Schutt R, 2012).

3.2 Participants

The study recruited participants through email and the WeChat platform as these are popular with young Chinese people, especially university students (Jin W & Zhirui D., 2017). These individuals were requested to share online questionnaires with other Chinese students. The participants were from different universities and programmes such as education, cultural and media studies, computer science, business management, and so on. In total, 35 online questionnaires were distributed, and 30 responses were collected. Of the 30 participants who provided valid responses, 50% (N =15) identified as male and 50% (N =15) identified as female. The ages of the participants ranged from 18 to 34.

The interview participants were all from the University of Leeds as it was easier to conduct face-to-face interviews compared with participants from other universities. The reason for using face-to-face interviews instead of online interviews was that this method allowed for a richer collection of data, including nonverbal cues such as facial expressions and body language (Bryman A, 2016). Additionally, face-to-face interviews can reduce potential technical issues that may arise from online interviews, such as problems with internet connectivity or video/audio quality (Denscombe M, 2014). Five participants were recruited for the interviews, 60% (N =3) of the participants were female and 40% (N =2) were male. All participants' names were made anonymous.

3.3 Ethical considerations

The ethics form of this research has been approved by supervisors in the School of Education, University of Leeds which means I am officially authorized to conduct data collection.

3.3.1 Invasion of privacy

In my interview, I may kindly ask if my participants would like to share how mobile devices motivate them to learn English. They may be asked to show how the apps on their mobile phones work to help them learn English. However, mobile devices are their own property and there is much personal information in there. Some participants may be reluctant to show their mobile devices' screens as it is likely to lead to privacy breaches and invasion of privacy (Diener E. & Crandall R, 1978). To address this potential problem, participants can decide whether they would like to share their screen with me. If they agree to show, I won't video their screen, I will just record the voice. If participants feel any

uncomfortable, they can stop sharing at any time and I will not ask why they no longer want to share with me.

3.4 Data analysis

3.4.1 Quantitative data analysis

Data obtained from the questionnaire will be analysed quantitatively. The data in the questionnaire clearly indicates if most of the participants prefer to use mobile devices for English learning and how they use them. In addition, although the impact of mobile devices on participants' motivation will be explored in depth during the interviews, a general phenomenon should also be seen in the quantitative data. Due to the word limit, questionnaire data will be presented in descriptive percentages. The Codes or themes that guide the qualitative data analysis were identified by the findings from the quantitative data.

3.4.2 Qualitative data analysis

Data obtained from the interviews will be transcribed and then followed by the thematic analysis method to explore the participants' opinions about whether mobile technologies motivate or demotivate them in learning a foreign language. The pre-set codes are generated from quantitative data, including instant feedback, personalisation, easy-to-find interests, and distractions. Additionally, other codes are created from the interview transcripts which include extensive listening, affordance of mobile technologies, authentic material, etc.

4. Findings

This study aims to explore the relationship between mobile technologies and the motivation of Chinese students at UK universities to learn English. The findings section will be organized into four parts, the first three parts correspond to the three research questions and the last section is interesting findings.

4.1 RQ 1: What mobile technologies do Chinese students at UK universities use to learn English?

The result shows that the majority of participants (43%) prefer to use smartphones to learn English, followed by iPads at 30% and laptops at 24%, while only one participant (3%) prefers to use a media player.

It shows that smartphones are the most popular mobile device for Chinese students to learn English, while almost no one chooses to use media players to learn English. The distribution is relatively balanced between the iPads and laptops, with only a slight difference in percentage.

Similarly, almost all the participants mentioned they prefer to use mobile phones as the ideal learning tool. Participant E commented that *'I usually use my mobile phone most of the time because it is very convenient'.* Participant C said '*Usually I will use my mobile phone, which is portable, convenient and you can take it anywhere.'*

It clearly shows that Chinese students tend to use mobile phones, iPad, and laptop for English learning, among which mobile phones are the most popular.

4.2 RQ 2: How do Chinese students use mobile technology for the purpose of language learning?

4.2.1 Language learning Apps and online dictionary

Surprisingly, when it comes to the percentage of the different language learning apps used by Chinese students for the purpose of learning English, a high rate of students (53%) claim not to use language learning apps to learn English, while Duolingo and Cambly represent 18% and 9% respectively. The remaining 21% are classified under the "other" category, where several participants mentioned a preference for online dictionaries or dictionary apps. Participant **A** expressed a similar preference for using an online dictionary *DEEPL*:

> *"Sometimes when I encounter new words, I can quickly find them on DEEPL. DEEPL helps me to check the accuracy of my English grammar and vocabulary".*

Participant D also expressed a preference of using online dictionaries: "*I use EuroDict and Baidu Translate on my phone, which are helpful for both academic and daily English."*

Therefore, it clearly shows that while a few students may use Duolingo or online dictionaries as tools to study English, most students are reluctant to use language learning apps for this purpose.

4.2.2 Social media

In terms of the number of participants who use different social media platforms to gain English skills, the most popular social media among students are Instagram and WhatsApp, accounting for 70% and 67% of the students respectively, followed by Twitter with 37%. Notably, the percentages of Facebook and Snapchat are equal (27%). LinkedIn is the least popular platform, with only 10% of the students choosing it. It is interesting to note that only 4 participants (13%) tend not to use any social media to study English.

It indicates that students widely embrace different social media platforms for English learning, with Instagram and WhatsApp being the most favoured among them. Participant **B** reported that he enjoys subscribing to the accounts of famous singers, music bands, and official university societies on Instagram. This is because he can learn how English is utilised by individuals from diverse cultural backgrounds in various situations:

> *"I am following some of like the singers or official accounts and the society of the university. Yeah, the way they expressed themselves are different, which gives me the opportunity to see how English is practically used in different context"*

4.2.3 Video websites

Students also prefer using video-sharing websites to study English. YouTube and Bilibili are the two most preferred video websites among students, accounting for 73% of the total usage. TikTok and Netflix, however, have a relatively lower percentage of usage, 9% and 8%, respectively. Only a small proportion of participants, specifically 7%, reported that they never use any video websites for learning English.

From this data, it can be seen that YouTube and Bilibili are the top two video websites that students utilise the most to study English.

Participant A stated that *'I watch videos on Bilibili and Youtube, where there are some English bloggers and sometimes I just watch them randomly.'*Similarly, participant **E** stated that she frequently uses YouTube and Bilibili to watch videos where bloggers share their experiences of studying and living abroad to learn authentic expressions. She gave an example:

> *"I remember a Chinese blogger who was married to a British person. She often uploads some daily videos of living in the UK, such as the reaction video of letting her parents-in-law taste traditional Chinese food. I love those videos because I could learn a lot of authentic expressions of the locals*

To sum up, based on the data presented, Chinese students in UK universities are more likely to use video websites and social media on their mobile devices to learn English. YouTube and Bilibili are the favoured video websites, whereas Instagram and WhatsApp are the most widely used social media platforms. Despite the abundance of language learning apps available, only a small number of participants tend to use them.

4.3 RQ 3: Do they think mobile technologies motivate or demotivate them in learning a foreign language?

After investigating the percentage of participants who feel that mobile technologies either encourage or fail to motivate them in their English learning, a majority of students (67%) believe that mobile technologies have a positive impact on their motivation, while a smaller proportion (20%) feel that these technologies have a negative effect. The following sections will focus on how students perceive the use of mobile devices as a motivator for language learning.

4.3.1 Motivating factors

1) Convenience

Convenience and portability are the most important reasons why Chinese students use mobile devices to learn English. Participant **B** reported that learners can easily begin their learning journey with just a few taps on their mobile devices. **B** also expressed the opinion that without access to mobile phones, the process of acquiring knowledge could become very difficult:

> *"I can just download the Apps and directly start my learning process. What if we don't have mobile phones? Then how can we get access to these resources? We have to go to the library, and we have to speak with the teachers. Yeah, I think that's a great revolution there"*

Participant **E** claimed that the convenience of mobile devices is that any paper book and learning material can be

stored in it and can be easily accessed:

> *"The most prominent advantage of mobile devices is convenience, and traditional books can also be viewed on mobile devices. When I was in China, I still used flashcards to memorize English words, and sometimes I needed to carry them with me, which was very troublesome"*

2) Personalization

Nearly all the interviewees acknowledged the advantages of personalization offered by mobile devices. They can assist students who have intrinsic motivation in learning English by improving their productivity and sustaining their motivation over time. Personalization is mainly reflected in facilitating their access to authentic learning materials and enabling them to quickly find information that interests them.

Authentic material

Nearly all the participants reported that they can easily access authentic learning materials on their mobile devices. Participant **D**, for instance, shared that she can effortlessly find authentic English information in Daily English on WeChat: *"There are many English resources on Daily English, including foreign journals, The Economist, and BBC 6 Minutes".* Participant **A** provided an example of how using authentic learning materials helps her address real-life problems:

> *"I remember one time I wanted to return something to the post office, but I didn't know the specific steps and how to express myself to the staff at the post office. So, I looked up information on Little Red Book[1] on my phone and found a blogger who specializes in how to return items to the post office in the UK and some authentic expressions. In the end, this helped me return the item at the post office"*

Participant B expressed how the authentic material on YouTube helps him be confident in understanding people with different English accents:

> *".....I think it's because I watch lots of YouTube videos. I think it helps me to practice my speaking and listening skills. It's just much easier for me to understand what my lecturers said. I'm doing better in listening to people with accents. I learned how they speak English in their daily life so that I can use them into daily communication which I think is quite supportive and make me more confident"*

Interesting material

Some participants claimed that mobile devices motivate them because they can look up the learning information that interests them easily. For example, participant **E** tends to search English songs and discover their meaning because she is studying translation at university:

> *"Sometimes when I search for songs, I will consciously look for English versions of songs. I think it has something to do with my major. Although listening to songs is unconscious, I will consciously look for these songs..... mobile devices can also make our learning less boring. There are many pictures and videos that can help us enjoy the learning process"*

Participant **C** likes to search YouTube videos that relate to the Bible because he is studying Theology and is interested in preaching:

> *"Actually, I'm interested in preaching the gospel like the Bible, so I will be searching different English preachers and their messages on YouTube so that I learn from the way they preach and as well as the content"*

Therefore, the feature of personalization on mobile devices can assist self-motivated students in accessing authentic learning materials that align with their individual needs and interests.

3) Affordance of mobile technology

The term *affordance of mobile technology* refers to the specific functions or capabilities of mobile devices that support and encourage sustained exploratory learning. These functions can include such examples l as pausing, subtitles, note-taking, and more, which can help learners stay engaged and focused on their learning activities (Lai et al., 2007). Participant **C**, for instance, indicated that he benefits from the multisensory function when he studies English on YouTube because it can help him concentrate on studying:

> *"I'm the type of learner that really prefers multi modal type of learning because that's more suitable for me. Yeah. If I read something, I tend to be distracted really quickly. But I can concentrate on studying and get a deeper understanding about what the speaker is thinking through their eye movements, facial expressions, tones, pitches, and the way they convey the message in the video"*

Additionally, he also mentioned that the pause, replay, and subtitle features can help him digest the information and learn new vocabulary:

> *"I can always watch it for multiple times. I can repeat the watch the same clip if I don't really understand it. And also, there's a pause button, which basically I can pause and just sync and digest what that really means. If the pace of speech is too fast and there's some like jargons or new vocabulary that I don't understand. I got the time to look them up. Yeah. And at the same time, I would say that the subtitle is important. I can see what is going on. especially helpful for expanding my lexical resources"*

Participant **D** emphasised the importance of pause and paraphrase functions when it comes to intensive listening. This function enables her to control the pace of the learning process and improve her comprehension:

> *"When I listen intensively, I can put a sentence and stop a sentence, and when I encounter a word that I don't know, I can directly click to view the definition.....pause, view paraphrase functions on these apps are helpful because you can get timely answers to things you don't know"*

Obviously, the affordance of mobile technology such as the ability to pause, replay, and access subtitles all contribute to a more effective and enjoyable learning experience that motivates students to keep learning.

4.3.2 Demotivating factors

1) Fragmented information

This study also highlights that mobile devices sometimes can be a distraction that decreases motivation for students during their learning process. Despite the abundance of useful materials that learners can find on their mobile devices, such information is often fragmented, and learners can easily get lost in the vast sea of the internet. Participant **B** stated that he finds it difficult to focus on studying on Duolingo due to the vast array of options available to him:

> *"I cannot just consistently use Duolingo even though I know that it's going to be really supportive for my vocabulary. It's attractive for me in the first few weeks. But then, you know, there's always lots of other choices like Ins[tagram], YouTube and Facebook. There are just too many choices for you"*

Participant **A** argued that some videos are too short to gain enough understanding of the content:*"Many videos are only a few minutes long, which is not enough for me to deeply understand specific content and only scratch the surface"*

2) Unforeseen distractions

Another challenge associated with using mobile devices for studying is that learners may encounter unforeseen distractions such as advertisements and other irrelevant content on the webpage. Participant **C** expressed that he is often distracted by advertisements while watching videos on his mobile device:

> *".....the advertisement will pop up sometimes which is pretty annoying. But I don't think I can overcome it because I don't want to pay for the premium price"*

> Similarly, participant **A** commented that "*sometimes I am attracted by other content on the page, which makes it difficult for me to focus on learning."*

In summary, the results in this chapter indicate that while mobile technology can be a valuable tool to motivate and assist learners in English language acquisition, it can also be a source of distraction. Participants in the study found mobile technology helpful for accessing authentic materials and maintaining motivation but also reported difficulty concentrating and unexpected distractions.

4.4 Interesting findings

4.4.1 Shift in motivation

Interestingly, almost all the interviewees mentioned a shift in their motivation to use mobile devices for learning English

between China and the UK. In China, they were more focused on achieving practical benefits such as improving their IELTS scores, whereas, in the UK, they were more interested in using mobile devices to acquire social skills and learn about the local culture. Participant **B** gave an example of this shift:

> *"For me in China, I wanted to achieve high marks in IELTS test to get an opportunity to study abroad. At that moment, I think the main motivation for me is to achieve the higher mark. But after coming to the UK, I focus more on English used in daily life, such as for shopping, communicating and buying train tickets"*

Participant **C** was an English teacher when he was in China. He always uses mobile devices to learn about culture in the UK because "*I don't really think language is my barrier, but instead the cultural barriers."*

Therefore, it is clearly shown that when students arrive in the UK, their motivation for using mobile devices to learn English shifts from improving their scores to developing authentic communication skills that can be applied in real-life situations.

4.4.2 Disagreement with instant feedback

Some interviewees questioned whether mobile devices can provide feedback in a timely manner compared to face-to-face interactions with native English speakers. Participant **B** indicated that mobile devices are a useful scaffolding tool for language learning, but he does not believe that these devices are more effective than face-to-face conversations. He argues that during in-person interactions, it is easier to know whether the other person comprehends what is being said by observing their facial expressions:

> *"Sometimes you can't get instant feedback on your mobile devices. From my experiences, I think if I directly speak with native speakers in English, I think I can just get the instant feedbacks from like from their facial expressions which can help me realize do they understand what I'm saying? But if you're use online devices, you're just more likely to remember vocabularies. So, I think that it's good to use the devices to scaffold your learning progress. But I think at the end, you still need to speak and interact with people"*

Similarly, participant E also commented that talking with English speakers is a better way to get instant feedback:

> *"Communicating with locals can directly use the English you have learned and get instant feedback, and you can get more authentic expressions"*

5. Discussion

This study has investigated how mobile technologies affect the motivation of Chinese students to learn English. The data analysis showed that mobile phones were the most commonly used devices. Farr, F., and Liam M (2016) emphasised that mobile phones can incorporate numerous functions into a small device, thereby significantly enhancing the convenience of using them. Additionally, Mengorio and Dumlao (2019) also pointed out that the accessibility and user-friendliness of applications in mobile devices are straightforward. Students only need to download the app to start using it. This means that students worldwide recognise the advantages and convenience of mobile phones.

It is surprising that Chinese students, despite their preference for world-famous platforms such as YouTube, Instagram, and WhatsApp for learning English, also frequently utilise Chinese apps like Bilibili and The Red Book. Although there is limited research available to explain this behaviour, one possible explanation is that the familiarity of Chinese students with using Chinese apps to learn English in China and limited access to Google is due to China's Great Firewall. This familiarity may lead them to continue using these apps in the UK, despite having access to a wider range of options (Zheng Y. & Wang Q, 2020).

The study has identified three factors that motivate students to learn English using mobile devices: (1) convenience, (2) personalization, and (3) the affordances of mobile technology. These findings align with those reported in much of the existing literature. Ushioda E (2013) proposed a theory of technology and language learning motivation, in which mobile devices can serve as external assistants for students who are already motivated to learn the language. Yang K (2020) also identified the affordances of mobile technology as one of the key motivating factors for language learners.

Surprisingly, in contrast to the findings of Ciampa E's (2014) study, this research suggests that instant feedback has a limited impact on the motivation of Chinese students, as they viewed interacting with English speakers as a more effective way to obtain feedback. This finding is likely to be explained by social-psychological motivation theory. While Ciampa's study utilised mobile devices in a language classroom, with game-based language learning apps employed by

teachers to enhance motivation and obtain higher grades for the students, the Chinese students in UK universities do not feel the same need for feedback to improve their grades, having already passed the IELTS exam. Their priority, instead, lies in gaining insight into local culture and improving their communication skills, which is readily achievable through conversations with native English speakers in the UK.

Interestingly, the shift in the motivation of the participants to use mobile devices for learning English between China and the UK found in this study can also be explained by the social-psychological motivation theory. Motivation to learn English shifts from instrumental motive to integrative motive because they, as participants, spend more time in the UK and become more familiar with the language and culture, they may realise the importance of engaging more deeply with the target language community, including its speakers, social activities, and cultural practices (Li D, 2006).

Additionally, the study has found that fragmented information and unforeseen distractions are the main factors that demotivate students in their English learning. These results are consistent with those of Yu Z (2019) who reported that various multimedia elements, such as games, pictures, texts, and videos, could potentially create numerous distractions for learners, making it difficult for them to maintain their focus on the learning activities.

5.1 Implications

Some implications can be drawn from the discussion above. Firstly, UK universities could consider providing or recommending specific English language learning materials for Chinese students to help them avoid getting lost or distracted by the abundance of materials available on the internet. Secondly, universities could establish language centres to offer opportunities for Chinese students to interact with native English speakers and learn how the language is used in real-life situations. Finally, Chinese students are encouraged to find their own motivation for language learning through their daily life experiences, and mobile devices can be useful tools in supporting their learning process.

6. Conclusion

This study has explored how mobile technologies influence the motivation of Chinese students in the UK for the purpose of English learning. This study has shown that the mobile phone is the most popular mobile device to learn English. The second finding was that Chinese students prefer learning English on social media platforms such as WhatsApp, Instagram, and video-sharing websites like YouTube and Bilibili. The most significant finding was that mobile technologies have both positive and negative effects on the motivation of the participants.

The convenience, powerful assistance, and affordances provided by mobile technologies are motivating factors, while fragmented information and unforeseen distractions are demotivating factors. It is interesting to note that most participants do not view instant feedback as a motivating factor because it is not needed to improve their grades, which differs from the findings of previous studies. Additionally, all the participants claimed that they experienced a shift in motivation, which could be explained by the social-psychological motivation theory.

Some implications have been suggested for UK universities on how to help Chinese students make the best use of mobile technologies and avoid the disadvantages. Additionally, students are encouraged to find their own interests in language learning through daily life, which mobile devices can also assist with.

Although this study uses mixed methods to gain a comprehensive understanding, a limitation of this study is that the sample size is relatively small, with only thirty responses collected for the questionnaires and five participants for the interviews. It means the results probably cannot be generalised to all Chinese students in UK universities. Nonetheless, this small-scale study allows the researcher to do an in-depth analysis to explore how mobile technologies impact the motivation of the participants for language learning. Further studies could conduct large-scale research to test if the findings in this study can be applied to all Chinese students in UK universities.

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