

Apps and EFL: A case study on the use of smartphone apps to learn English by four Japanese university students

Emily Mindog

Nagoya Women's University
mace.red13@gmail.com

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This study explores, describes and analyzes the utilization of smartphone apps by four Japanese university students to support learning English as a Foreign Language (EFL). Findings indicate that intermediate language learners use apps to access content and communicate on SNS and are not keen on studying discrete language parts. Participants believe that using apps helped them with their four language skills (listening, reading, speaking, and writing), grammar, vocabulary and spelling. Use of apps (location, frequency and duration) seems to be determined by opportunity, personal preference and desire to use.

Keywords: apps, MALL, EFL, university students

Introduction

Japanese students face many challenges in attaining English proficiency. Some of the biggest challenges are limited language instruction (Diaz-Vera, 2012) and limited exposure to the second language (L2). It is therefore important to find innovative ways to support L2 learners by extending language learning and instruction outside the classroom and providing opportunities for more exposure to the L2.

One of the ways this can be done is via mobile-assisted language learning (MALL). Mobile technologies have the potential to support second-language learning, by providing autonomous learning opportunities and access to learning materials (Reinders & White, 2011). Smartphones in particular are capable of opening many possibilities for language learners, and their rapid adoption makes it easier to make these

possibilities real (Byrne & Diem, 2014). Being multifunctional devices used for communication, entertainment, networking and learning, they are seen as potentially useful for L2 learning and instruction because of their portability and connectivity.

One of the more popular functions of smartphones is their ability to support mobile applications (apps). The use of smartphone apps for language learning seems ideal for Japanese learners, as the rate of smartphone use is increasing in Japan (Amano & Huang, 2013).

Few studies have been published on mobile apps for language learning, and most of them are surveys (see Byrne & Diem, 2014; Khaddage & Latteman, 2013; Steel, 2012; Watanabe, 2012). While these studies reveal useful information such as the demography of users, types of apps used and reasons for using apps, they do not provide detailed accounts on how and why end- users use apps to learn a L2. The primary aim of this research is to contribute to a deeper understanding of learners' interactions with smartphone apps for L2 learning by exploring, describing and analyzing their utilization as well as their reasons for choosing certain apps.

Literature review

Mobile-Assisted Language Learning (MALL)

In his survey of MALL studies, Chinnery (2006) pointed out the availability of mobile phones due to near universal ownership among college-age individuals (Dias, 2002; Thornton & Houser, 2005), relatively cheap prices compared to traditional computers, and high portability of mobile phones as the affordances that "clearly offer numerous practical uses" and show great potential in "expanding social inclusion in language learning" (Chinnery, 2006, p. 13). In the early years of their development, mobile learning projects were usually created by educators and software specialists using technologies that were not easily accessible to the general public (Kukulka-Hulme & Shield, 2008). Nowadays, learners can "take the lead and engage in activities that are motivated by their personal needs and circumstances of use" (Kukulka-Hulme, Traxler, & Pettit, 2007, p. 53). Currently, MALL programs are mostly used for "vocabulary, grammar, pronunciation, or reading activities" (Tuttle, 2011a, 2011b, 2013) and memorization by repetition and drills (Bahrani, 2011).

Apps for language learning

Apps have become increasingly popular and experienced exponential growth since their introduction. A survey conducted by Steel (2012) showed that students use apps to support what they are learning in the classroom. The students appreciate mobile apps for their usability, accessibility, ease of downloading, and the service of multiple purposes. Steel's survey result shows that students found mobile apps most beneficial for learning "vocabulary ... reading, writing, grammar and translation tasks" (Steel, 2012, p. 3). The most common apps used were dictionaries, translators, flashcards, and vocabulary games. A survey by Watanabe (2012) showed 45% of the respondents studying Japanese at an Australian university using mobile phones to access dictionary websites and apps. Another survey shows extremely high rate of smartphone ownership among students in Australia, Germany and Japan (Khaddage & Latteman, 2013) with language programs and quiz/tests apps being the most commonly used. In Byrne and Diem's (2014) grammar game app user survey, they

found that users are mostly beginners, under 35 years old, and with slightly more male to female users. Literature shows that in general, apps for language learning are used outside the classroom (Kukulka-Hulme, 2012; Steel, 2012) and in students' own time.

According to the Foreign Service Institute (FSI), learners need around 700 to 1,320 hours of instruction to achieve fluency (Bialystok & Hakuta, 1994). However, typical language courses, especially in educational institutions, do not offer this much instruction for language learners. It is clear that there is a need to extend language teaching and learning outside the classroom in order to compensate for insufficient instruction time. A promising way to support autonomous learning is through the use of smartphone apps. The portability of mobile devices enables learners to access content almost anytime and anywhere, even without an Internet connection, as many programs or applications work offline. The flexibility that mobile learning affords has great potential to support learners in becoming more efficient with their time. Apps can support autonomous learning by enabling learners "to chart [their] own course ... according to [their] own understanding of what is valuable and worth doing" (Wall, 2003, p. 308).

Research questions

The paucity of research on mobile apps for language learning and the dominant use of survey show a need to conduct more studies. Researchers have been calling for more learner-centered research (see Byrne & Diem, 2014; Steel, 2012) outside of formal learning contexts (Kukulka-Hulme & Shield, 2008). This study aims to present more holistic, learner-centered information on smartphone app use to support language learning by answering these questions:

1. What apps do Japanese university students with intermediate-level proficiency use to learn English?
2. Why do they use smartphone apps to learn English?
3. How do they use smartphone apps to learn English?

Methodology

Research approach

Unlike most studies in MALL that are set within learning institutions (Byrne & Diem, 2014) this research looked at students' use of apps for English learning in authentic environments. The data in this study are based on each participant's authentic interaction with smartphone apps, and are analyzed based on their unique context. A case study method was chosen as it allows focus on each case while retaining "a holistic and real-world perspective" (Yin, 2014, p. 4). A case study allows "how" and "why" questions to be answered in a detailed manner. It also allows probing and follow-up questions to draw out the reasons and motivations of each participant. A multiple-case-study design was used, since it gives more compelling evidence, resulting in a more robust study (Herriott & Firestone, 1983). The primary unit of analysis is a Japanese university student who uses smartphone apps to learn English. Each participant serves as an exemplifying case (Bryman, 2012), which "capture[s] the circumstances and conditions" of app use for language learning (Yin, 2009, p. 48). Framework Approach to Thematic Analysis was used to code and categorize the themes that emerged from the data. The term "learning" is not limited to studying English, but

includes other activities that use English. This reflects the way in which the participants in the study used the term.

Participant selection

Recruitment was done via postings on bulletin boards and distribution of invitation flyers after classes (Appendix A). Personal contacts were asked to email flyers to potential participants among their families, friends and acquaintances. It was written on the flyers that participants have to talk about apps in English. In order to avoid making students feel obligated to participate, they were instructed to contact the researcher directly in their own free time. An information sheet (Appendix B) containing more detailed explanation of the research study, and a consent form (Appendix C) were emailed to students who expressed interest in participating. It was planned that at least ten students would be interviewed, so that there would be a wider pool from which to select the three to four cases that would best illustrate the phenomenon. However, there were only 7 participants, and the final four cases were chosen based on English fluency of the interviewee and the quality of data. Based on their TOEIC scores the participants are independent users (B1 and B2) of English according to the Common European Framework of Reference for Languages (Tannenbaum & Baron, 2011).

Interviews

The purpose of this interview is “to gather descriptions of the life-world of the interviewee with respect to interpretation of the meaning of” using apps to learn English (Kvale, 1983, p. 174). A semi-structured interview was chosen for data collection, as this has enough structure to ensure the collection of data necessary to answer the research questions, but is flexible enough to allow the emergence and discussion of other themes that could be useful to this study. The interviews were conducted via Skype, video-recorded and then transcribed with the use of Express Scribe. A two-way approach to transcription was used since gathering information for personal history does not require verbatim transcription. This follows Bryman’s (2012, p. 486) advice of transcribing only the “useful and relevant” portions of the interviews.

The first part of the interview consisted of a short briefing, followed by questions about the participants’ experiences with the English language and reasons for learning English. It is important for this study to understand each participant in his/her particular context in order to explain why and how they use a certain app. As Ushioda (2013, p. 11) argued, it is crucial that we understand what each individual, shaped as they are by their personal histories and social contexts, thinks of English, and not see them as all the same just because they share “cultural, historical and psychological legacies.” Understanding the utilization based on the individual actually using the technology is crucial to revealing contextually grounded and learner-centered insights. The second part of the interview was based around each research question; the participants were asked to enumerate the apps that they use to study, practice and/or use English. Then they were asked to give their reasons for using each app, followed by a detailed account on how they use each app (location, frequency, and duration).

Case study

This section presents the background of each interviewee. The information here will be used in the data analysis in order to give a more holistic picture of the utilization of smartphone apps by four Japanese university students (aliases used).

Exemplifying case 1. Akira is a third-year English-major student. He attended a public elementary school that offered English lessons focused on Basic English vocabulary and expressions. He went to public junior and senior high schools that used a grammar-translation approach to teaching English. In 2013, he stayed for three months in San Francisco and six months in Toronto to study English. He uses two smartphones; the first one, an iPhone 4s, has a Japanese mobile service provider and serves as his main mobile phone, while the second one, an iPhone 4, is an international phone which he mainly uses to access social networking apps to communicate with friends abroad. Prior to going to San Francisco he scored 560 in the TOEIC examination. He wants to be able to communicate with foreigners, which is why he majored in English and learns English in his free time. Akira uses five apps to learn English: TED, Metro, Charades, WhatsApp and Facebook.

The first app he talked about is TED. He started using it because it was highly recommended by his high school teacher. He finds the TED talks interesting and he appreciates being able to listen to different English accents. He said that “[listening to] American English, British English and Australia[n] or Asian accent this is kind of important for me because if I get a job overseas, I can’t just hear ... listen to ... and know American English.” He goes to school by train, which takes about two hours, and he usually uses this time to watch TED videos about three to four times a week. He usually watches each TED video about three times. He never uses subtitles in the first viewing and only turns them on for the second viewing if he is having a hard time understanding the content. He thinks that using TED improves his listening comprehension. Recently, he has started attending TEDee events, which provide opportunities for non-native speakers of English to develop their speaking ability, and he is quite excited about it. At TEDee events, attendees spend 20 minutes watching a TED video and 30 minutes talking about it in a small group, and then they prepare a 10-minute presentation (TEDee, n.d.).

Akira uses the Metro app to read the news in English. He first learned about Metro from advertisements in *Metro* newspaper when he was in Toronto. He downloaded the app because it allows him to read news from Canadian cities, which means he can keep up with events in Toronto; he enjoyed the time he spent there and is really fond of the city. He usually reads news with this app when he is at a cafe, or whenever he feels like reading but does not have a book to hand. The time he spends reading the news varies, depending on how interesting he finds an article. If he finds an article really interesting, he usually does follow-up reading on the Internet. He explained that he had been busy lately so he did not use this app as often as he used to, but he still uses it at least once a week. He likes this app because he does not need to consult a dictionary, as he finds the news easy to read. When asked if using Metro app helps him as a language learner, he said it helps him with his reading ability and improves his vocabulary and grammar.

Another app that Akira uses is Charades. The son of the family he stayed with in Toronto told him about it. Although he thinks Charades is an interesting way of learning vocabulary, he rarely uses it because the game requires at least two players. Therefore, he can only use it when he is hanging out with friends who feel like playing a game. He said that playing

charades is a good way to practice listening and pronunciation because he has to listen carefully to what his friends are saying in order to answer correctly and he has to speak clearly to be understood. He also said that playing charades is good for his English because the time limit makes him think in English immediately instead of thinking in Japanese and then translating into English.

Akira uses two social networking apps every day whenever he has free time. He has Facebook and WhatsApp to keep in touch with his English-speaking friends. He uses Facebook to send and receive messages from his friends as well as look at their photos. He mainly uses WhatsApp to chat or send audio messages.

Exemplifying case 2. Aiko is a third-year student majoring in nutrition who lived in the US when she was 2–4 years old. She did not have English classes at elementary school, but she went to a private Christian junior and senior high school where she attended special English classes. While she was in high school, she stayed in New Zealand for six months as part of the school's special English program. She took the TOEIC test when she was a first-year university student and got 720 points. She wants to improve her English fluency because she finds it frustrating that she cannot express herself clearly to her English-speaking friends. She likes using smartphone apps to study English because they are convenient. She used to carry her English grammar book around, but she found it too heavy since she is also carrying her other textbooks.

She regrets that when she was in New Zealand she could not express herself well. Even though she wanted to make friends, she had a hard time talking with the local students because she did not know what to talk about. After that, she decided that she wanted to learn how to communicate in English. She is not too keen on learning grammar or learning English the way she did in middle school, because she found it boring. She said “when I was [in] high school like I just... studied English like grammars and listening but I just found, found out that it's boring. So, it's kinda difficult to continue studying just, just studying grammars or boring things, so I just decide to use like funny or interesting apps and it helps me to yeah studying English and also it enjoy[able for] me.” It is therefore crucial that she finds an app interesting for her to use it. She does not think that English proficiency would give her an advantage in getting a job in the field of nutrition, but she is trying to learn English because she wants to pursue a postgraduate degree abroad someday. Recently, she has been quite busy studying for her major subjects, so she does not spend as much time learning English as she used to, and she thinks that her English ability is declining. Therefore, her main goal is to prevent the further decline of her English ability. She uses seven apps for learning English; TED, Zite, Umano, iTunes U, Instagram, Facebook and Bible.

Aiko learned about TED from a friend. She usually watches each video two to three times, and only uses subtitles when she needs them. She likes TED because she can improve her English and at the same time learn about things not related to her major. Recently she has been so busy that she does not watch TED videos much, but she used to watch them 2–3 times a week. She usually studies 2–3 hours a day and she sets aside 10–15 minutes for English; she sometimes uses this time to watch TED videos. She usually looks for videos under 15 minutes but there are not many of those, so she often watches a video in two separate sessions.

Aiko wanted to read English articles, so she searched on iTunes and found Zite. She uses Zite to read articles about a variety of topics. She used to use it about once or twice a day

on the train for 10–15 minutes each time. She thinks that it helps her with spelling, grammar and reading comprehension.

She uses Umano to listen to different audio content when she is commuting to school. She listens to this app almost every day for about 10 minutes. She likes Umano because aside from using it to improve her listening comprehension, she can learn about other things she finds interesting, such as love and friendship.

Aiko uses iTunes U to listen to Clinical Dietetics lectures from Abilene Christian University. She went on a two-week school trip to University of California, Davis, to listen to talks by registered dietitians. Even though they have interpreters, she wanted to be able to understand what was being said in English, so she started using the iTunes U app to access lectures. But now she uses this app less frequently, usually when she has “short free time” on the train or bus or while walking to school. She likes this app because she can listen to lectures about her major and that she can listen to “high level English.” She finds the lectures helpful, but it has its challenges since the lectures are audio files and she does not have a copy of the textbook being used; this causes problems when the lecturer asks the students to look at their textbooks. Since it is a live lecture, she also finds it a little noisy at times.

Aiko has five SNS apps: Line, Twitter, Skype, Facebook and Instagram. She only uses the last two to communicate in English. She uses Facebook to keep in touch with her friends by sending messages around twice a week and posting on her wall about twice a month. The length of time she spends on Facebook depends on what she is doing or what she and her friends are talking about. She uses Instagram multiple times each day – a lot more frequently than Facebook – but she only spends five minutes or less each time. She said that using social networking apps helps her learn new vocabulary, especially slang. When she encounters new words, she finds their definitions using the Internet and “if it sounds cool, maybe I will use it next time.”

Aiko is a Christian, and she sometimes uses Bible app to read the bible in English for about 5–10 minutes. Aiko have downloaded other apps for language learning but she deleted them because she found them difficult to use (“It was difficult to use...[not] like [Zite]...easy to use. I like simple apps.”), not fun (“...I felt strange talking to app...It’s good but not fun”) or not useful (“TOEIC, TOEFL [apps]... I just felt it’s not...useful”).

Exemplifying case 3. Jun is an English-major student, now in his final year at university. He started studying English in junior high school. The grammar–translation approach was used in both junior and senior high schools. He majored in English because it was his best subject in high school. He wants to learn English since he wants to get a job that requires English ability. He also wants to use English when traveling abroad. In his first two years at university he attended an English-conversation school (*eikaiwa*), but he quit because of the cost and he felt that he was not improving much. Moreover his school provides opportunities for speaking English (e.g. English lunch, English Speaking Society). He has no experience staying in an English-speaking country. He used to study a lot in preparation for the TOEIC test, which he took last year, getting a score of 730 points. He said that many hiring officers he met complimented him on his English and offered him a job because of his TOEIC score. Now, he is focused on improving his speaking ability. He uses HelloTalk, Skype, Line and YouTube to learn English.

HelloTalk is a social networking site that enables users to find language-exchange partners. Jun uses HelloTalk to find people who speak English and want to learn Japanese. He

uses this app about three times a week, when he is on the train or at home. The time he spends on this app varies but is usually around 20 minutes. When asked how this app helps him learn English, he answered that it helps with his reading and writing skills.

Another app that he uses to communicate with his language partners is Skype. He uses Skype at home to talk with a woman he met on HelloTalk who wanted to learn Japanese. They talk for 30–50 minutes, half the time in Japanese and half in English. He likes using Skype and he thinks that it helps him with his speaking ability. What he does not like about it is that sometimes the reception is bad.

He uses Line to communicate with people he has met on HelloTalk; he gave his Line ID to those language partners since he prefers to chat on Line than on HelloTalk – he thinks that Line is a better tool for communication. He uses Line about four times a week. Since he has to write in English to communicate with his friends, he thinks that using this app helps his writing ability. Interestingly, although he has Facebook he never posts English updates or comments; all his friends there are Japanese and he explained that using English would seem like showing off. This anxiety is also the reason why he restricts access to his Line timeline to those who he feels will not criticize him for using English.

Jun has a YouTube app, which he uses to watch videos. Once or twice a week he watches American TV shows such as *Glee* and *iCarly* for about 50 minutes on the train. He thinks that many Japanese people speak in the same manner and use the same expressions because they have learned English from a textbook. He thinks that by watching American TV shows he will learn natural expressions that can help him “get out of textbook English.” Although he can watch these shows on TV with subtitles, he likes watching them on YouTube because the lack of subtitles forces him to focus, and he thinks this is good for his listening comprehension.

He has used a TOEIC reviewer app and English-English dictionary app but he deleted them because they are not in line with his goals anymore (“I don’t have to study TOEIC anymore,” “[I] don’t have passion... to study, and vocabulary and these kind of things.”)

Exemplifying case 4. Kenji is a fourth-year university student majoring in social studies. He attended a public junior high school that used Japanese as a medium of instruction (MOI) for English lessons. He then moved to a private high school that also used Japanese to teach English. However, a native-English teacher would come to their class sometimes and use English as MOI. He had stayed in Australia for six months on a working holiday visa, working at a hotel. He also stayed in South Africa for two months to do some fieldwork as part of his coursework. He said that most Japanese companies want to hire people who can speak English, and his high TOEIC score (830 out of 990) was an advantage when he was applying for work. His university offers free TOEIC tests once a year and although he already accepted a job offer, he still wants to take the test and try to get a higher score. At first, he wanted to learn English so that he could talk to foreigners and gain “new knowledge and ... new thoughts ... new ideas from them.” Now, he wants to improve his English fluency not so much because he is interested in the language *per se* but because he thinks that English is a tool crucial in acquiring and sharing information about his main interest, which is social studies. He thinks that lack of English proficiency would limit his ability to access information and share ideas. He uses three apps to learn English: Facebook, NHK World and YouTube.

Kenji communicates on Facebook with his English-speaking friends. He uses Facebook app everywhere – home, train, *izakaya* (Japanese pub) – whenever he has free time. He said

that he uses this app a lot (around 10–20 times) almost every day. The amount of time he spends on Facebook varies; when he is just checking updates, maybe about 1–2 minutes, but when he is chatting with his friends it could be from 30 minutes to an hour. He thinks that using Facebook helps him with his writing skills.

He uses the NHK World app every day for 5–10 minutes to watch news in English. He uses this app in his room before going to bed or in a café, but not on the train or other public places where there is a lack of privacy; he does not like the idea that people close to him on a train could see what he is watching. He likes using this app because he can watch news in English from a Japanese perspective. He thinks using this app improves his vocabulary and helps with his listening skills.

Kenji uses the YouTube app about once or twice a week to access English content usually when he is “bored to tears.” As stated above, he is concerned about people looking at what he is watching, so he only uses this app at home, usually in his room. When asked why he watches English videos on YouTube, he answered that it is just for fun, but maybe it helps with his vocabulary because he sometimes watches videos of songs with lyrics, and when he does not know something he looks it up. He does not use TOEIC apps because he is afraid he might lose his motivation (“...if I focus on TOEIC, I become don’t like English. I want to get the English skills from my interests, like...I watch in the news.”)

Findings

All participants are self-motivated learners. They share a similar English-learning history – grammar and translation focused classes and limited authentic L2 opportunities in Japan. They are motivated to learn English because they want to be able to express themselves well enough to make friends, learn something or share ideas. They think that English will be useful in their future (job, education or travel). All of them have taken the TOEIC test. Only Jun does not have an experience living in or travelling to an English-speaking country. No one is using apps to help with their English classes. They use apps to pursue self-determined goals. Apps were chosen based on students’ interests and goals. SNS apps used to communicate in Japanese and deleted smartphone apps that came up in the discussion were not included in the analysis.

1. What apps do Japanese university students with intermediate-level proficiency use to learn English?

The sorting of the apps based on the iTunes App Store category was done to enable comparisons between the types of apps available in the market and the types of apps language learners use. This could provide useful insights to app developers who want to create language-learning apps, and to educators who wish to incorporate app use into their lessons. It could also provide information for future research on why language learners tend to use apps from certain categories.

Akira, Aiko and Jun use the iTunes App Store to download their apps, while Kenji downloads from Google Play. Table 1.1 provides description of the 15 unique apps (free downloads) identified from the interviews. Table 1.2 shows that apps were downloaded from: (1) education, (2) games, (3) news, (4) photos and video, (5) social networking and (6) reference categories. Since iTunes categories do not give information on the purpose of language learners for downloading apps a new grouping was generated based on their function (Table

1.3), and three categories emerged: (1) content apps: give access to various content such as lectures, talks, news etc. to the user, (2) game apps: used for learning English through game play, and (3) social networking apps: connect users to people within the network via personal relationships or common interests that usually includes photo sharing, messaging etc. The most common types of apps among the participants in this study are content apps (10) and SNS apps (8).

Table 1.1 App descriptions

	(Bible n.d)	Bible® is an app that allows users to read, listen, watch and share the bible (LifeChurch.tv, 2014)
	(Charades n.d)	Charades® is an app containing various categories for playing charades (FatChicken Studios, 2014)
	(Facebook n.d.)	Facebook® is a social networking app for communicating with friends, sharing updates, photos and videos (Facebook, Inc., 2014)
	(HelloTalk n.d.)	HelloTalk® is a social networking app especially designed for language learners who wish to have language exchange partners (HelloTalk Foreign Language Exchange Learning Talk Chat App, 2014)
	(Instagram n.d.)	Instagram® is an app that enables the editing and sharing of photos (Instagram, Inc., 2014)
	(iTunes U n.d.)	iTunes U® provides access to learning content such as lectures and courses from different learning institutions (iTunes K.K., 2014)
	(Line n.d.)	Line® allows users to send free messages and make free calls (Line Corporation, 2014)
	(Metro n.d.)	Metro® is the app for Metro newspaper, offering newspaper content from different cities in Canada (Free Daily News Group Inc., 2014)
	(NHK World n.d.)	NHK World® provides news broadcast in English produced by Nippon Hoso Kyokai (Japan Broadcasting Corp.) (NHK World, 2013)
	(Skype n.d.)	Skype® is an app that enables messaging, audio or video calling for free (Skype Communications S.a.r.l, 2014)
	(TED n.d.)	TED® provides access to TED talks with subtitles in different languages (TED Conferences, 2014)
	(Umano n.d.)	Umano® provides a range of narrated content such as news and magazine articles (Umano, 2014)
	(WhatsApp n.d.)	WhatsApp® is a messenger app (WhatsApp Inc., 2014)
	(YouTube n.d.)	YouTube® hosts a variety of videos, and allows users to subscribe to different channels as well as share videos (Google, Inc., 2014).
	(Zite n.d.)	Zite® provides various content such as news, blogs, videos etc. suitable for the user based on his/her reading history on the app (Zite, Inc., 2014)

Table 1.2 Types of apps (iTunes App Store classification)

Participant	Education	Games	News	Photos & videos	Social networking	Reference
Akira	TED	Charades	Metro		Facebook WhatsApp	
Aiko	iTunes TED		Umano Zite	Instagram	Facebook	Bible
Jun	HelloTalk			YouTube	Skype Line	
Kenji			NHK World	YouTube	Facebook	

Table 1.3 Apps classification based on function

Participant	Content	Game	Social networking
Akira	Metro, TED	Charades	Facebook, WhatsApp
Aiko	Bible, iTunes U, TED, Umano, Zite		Facebook, Instagram
Jun	YouTube		HelloTalk, Skype, Line
Kenji	NHK World, YouTube		Facebook

2. Why do they use smartphone apps to learn English?

Participants were asked to give the reasons why they use smartphone apps to learn English. Four main purposes for using English apps emerged from the data (Table 2.1): to get information, for entertainment, for communication, and for language learning. Participants were asked what aspects of English benefit from their use of apps and they mentioned the four main language skills (listening, reading, speaking and writing) plus grammar, vocabulary and spelling (Table 2.2).

Table 2.1 Purpose for using app

Participants	Information	Entertainment	Communication	Language learning
Akira	Metro, TED	Charades	Facebook, WhatsApp	Charades, TED
Aiko	Bible, iTunes U, TED, Zite, Umano		Facebook, Instagram	TED
Jun		YouTube		HelloTalk, Skype
Kenji	NHK World	YouTube	Facebook	NHK World

Table 2.2 Language skills and app use

Participants	Listening	Reading	Speaking	Writing	Grammar	Vocabulary	Spelling
Akira	Charades, TED	Metro	Charades		Metro	Metro	
Aiko	iTunes U, Umano	Zite		Facebook		Facebook, TED, Zite	Zite
Jun	YouTube	HelloTalk	Skype	HelloTalk, Line			
Kenji	NHK World			Facebook		NHK World	

3. How do they use smartphone apps to learn English?

There are 19 instances of app use that will be discussed in this section: seven for Aiko, five for Akira, four for Jun and three for Kenji. Table 3.1 shows where apps are used: home, commuting-related locations, and anywhere (non-location specific). There are seven instances of app use at home (mostly in students’ rooms), six instances of app use on trains, buses or while walking (commuting-related), and seven instances of app use in various places (pubs, school, home etc.). Apps used to access contents are the ones mostly used while commuting, social networking apps are generally accessed in various locations and when students need silence and/or privacy they generally use apps at home. The participants in this study have different ways of using apps when it comes to location. Akira uses TED when commuting, Charades when he is at home and Metro plus two SNS apps in various places. Aiko uses three content apps on buses, trains and while walking; she uses TED and Bible apps at home, and SNS apps in various locations. Jun watches YouTube videos on the train, HelloTalk both on the train and at home, talks with a language-exchange partner only at home, and uses Line in various locations. Kenji watches NHK World news and YouTube videos at home, and uses Facebook in different places.

Table 3.2 shows that majority of the apps in this study are used regularly (e.g. daily, weekly) while three apps are used sporadically. When it comes to frequency of use most of the apps (ten out of the 19) are used between once to five times a week, with three used daily – and four SNS apps used multiple times a day.

Table 3.3 shows that there is a great deal of variety when it comes to duration of app use. Many apps are used for under one hour (12/19), mostly from 5 to 15 minutes (7/19). Seven apps are used for different lengths of time: four SNS (three Facebook, one WhatsApp), one content (Metro) and one game (Charades). Only Instagram is consistently used for less than five minutes. Duration of use for the content apps seems to be determined by the length of time it takes to finish reading, listening to or watching one unit of content (i.e. article, video, news) while type of activity (e.g. reading posts, chatting) and desire to use an app mainly determine SNS app use.

Table 3.1 Locations of app use

Participant	Commuting	Home	Any place
Akira	TED	Charades	Facebook, Metro, WhatsApp
Aiko	iTunes U, Umano, Zite	Bible, TED	Facebook, Instagram
Jun	HelloTalk, YouTube	HelloTalk, Skype	LINE
Kenji		NHK World, YouTube	Facebook

Table 3.2 Patterns and frequency of app use

Participant	Irregular	1/week	1-2/week	2-5/week	Daily	Multiple/day
Akira	Charades	Metro		TED		Facebook WhatsApp
Aiko	iTunes U		Facebook	TED Bible	Umano Zite	Instagram
Jun		Skype	YouTube	HelloTalk Line		
Kenji			YouTube		NHK World	Facebook

Table 3.3 Duration of app use

Participant	≤ 5	5-15	~20	30-50	> 1 hour	Varies
Akira					TED	Charades, Metro, Facebook, WhatsApp
Aiko	Instagram	Bible, iTunes U, TED, Umano, Zite				Facebook
Jun		Line	HelloTalk	Skype, YouTube		
Kenji		NHK				YouTube, Facebook

Discussion

The interviews revealed a fairly limited variety of apps based on iTunes App Store classification. The participants downloaded from six out of 23 categories, with SNS apps being the most popular. There is a glaring absence of language dictionary apps, language program apps, test/quiz apps and apps for vocabulary acquisition, which had been reported as popular among L2 learners (see Khaddage & Latteman, 2013; Watanabe, 2012). One likely explanation for this disparity is the difference in language proficiency among study participants; previous studies mostly had beginner to lower intermediate learners, while this study had intermediate learners with TOEIC scores ranging from 560 to 830 points. It is interesting that out of 15 apps only one (HelloTalk) was specifically designed for language

learners. It would seem that current language-learning apps do not address the needs of intermediate language learners.

The six categories can be narrowed down to three when apps are grouped according to function (Content, SNS and Games). All participants have at least one content app that provides access to materials interesting to them. It would seem that participants' intermediate language proficiency allow them to focus on understanding the content without worrying too much about individual words or grammar. The popularity of apps delivering various contents is in line with the findings of Kukulska-Hulme and Shield (2008) on their meta-analysis of MALL studies.

The popularity of SNS apps among the participants could be attributed to two factors; desire to improve communicative ability and the experience of living in an English-speaking country. Akira, Aiko and Kenji who have lived abroad, use SNS apps because they enjoy keeping in touch with their friends. Jun, who has never been to an English-speaking country, uses the most number of SNS apps, as this is the only way for him to interact with English speakers. SNS apps enable these students to have regular authentic communication in English.

The participants downloaded and are using content apps based on what they want. For example, Akira uses Metro because he wants to keep up with what is happening in Toronto, Aiko uses Umano since she wants to learn about a variety of topics (e.g. love and friendship). Jun uses YouTube app because it allows him to watch a show that is both entertaining and helpful for getting out of "textbook English." Kenji on the other hand uses YouTube to be exposed to English but mainly to be entertained. The reasons given by the participants on why they deleted apps (not interesting, not useful anymore, may lead to loss of motivation etc.) suggest that once an app is no longer relevant to the user, it gets deleted. Another common characteristic among apps used is the "fun factor." These apps help learners get what they want in a fun way. Enjoyment seems to be crucial in the continued use of an app for language learning. This finding lends support to the suggestion that students' motivational resources should be nurtured by letting students take the initiative and focus on their interests (Jang, Reeve and Deci, 2010). The students continue using apps because these tools allow them to engage in activities that are relevant to them.

The participants cited listening, reading, speaking, writing, grammar, vocabulary and spelling as areas that are helped by using apps. This is quite similar to previous studies that reported improving language skills and improving knowledge of language components as the main reasons for using mobile devices for language learning.

It is interesting to note that when asked why they use apps, most of the reasons given by the participants had more to do with getting information, for communication and for entertainment rather than language-learning benefits. Some apps are being used even though the participants do not perceive language-learning benefits from them (e.g. Kenji-YouTube, Akira-Facebook, WhatsApp). It would seem that language-learning comes secondary to the other purposes.

Based on the data, it would seem that the use of apps (location, frequency and duration) by intermediate language learners are influenced by three interconnected factors; opportunity, personal preferences and desire to use an app (Figure 1):

- ✧ Having the opportunity to do something is of course critical in engaging in any activity. Participants either made use of time around their daily routines such as commuting to school, or allotted a certain amount of time to use apps.

- ✧ Personal preferences also dictate which app a student uses at a certain time and/

or location. For example, the four participants use different apps when commuting to school. Akira said he prefers to use TED on the train because he could watch the video again within the duration of the trip. Aiko prefers using Zite and Umamo apps with contents of no more than 15 minutes. She does not use TED because the noise on the train prevents her from understanding the videos. Jun said that he uses two apps on the train: HelloTalk which is for social networking, and YouTube which is a content app. Kenji watches YouTube and NHK World videos at home and never on public transportation due to privacy concerns.

- ✧ Finally, desire to use the app dictates when and where the app will be used; not all free time are seen as opportunity to use apps. There are times when participants do not use apps even if the other two conditions are met, simply because they are not in the mood to do so.

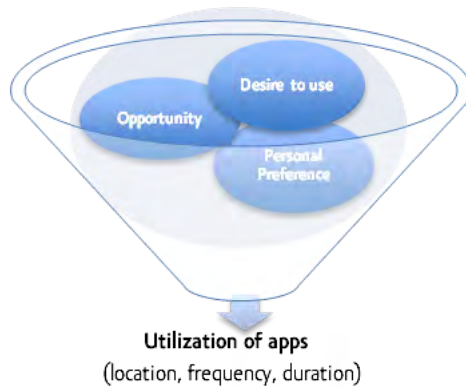


Figure 1. Factors determining the use of smartphone apps

Conclusion

Apps are popular technological tools that have a lot of potential to support language learning. They are easily accessible (free/cheap), highly portable for anytime-anywhere learning, customizable and can be accessed via smartphones that many students already own.

The findings suggest that intermediate language learners use apps because they want to be a part of social networking sites and access various content rather than study discrete language parts as reported in previous studies (see Steel, 2012; Tuttle, 2011a, 2011b). This study provides some evidence that apps can support intermediate English language learners by giving them easy access to English content that caters to their interests. Apps can also provide regular opportunities for authentic L2 communication that can be difficult to get otherwise in a “culturally and linguistically homogenous” country like Japan (Aubrey & Nowlan, 2013, p. 129). There is some evidence that apps can be effective tools for autonomous learners. Since there are so many apps in the market, the users enjoy great freedom in choosing apps that work for them. Individual language learners can make decisions on what types of apps to use. Not only that, they can also choose the manner (location, frequency, duration) in which the app will be used based on their preferences, goals and everyday life. When the users’ goals and preferences change, they can easily make adjustments on how to use and what apps to use to accommodate the changes. It would seem

that intermediate language learners use apps that allow them to enjoy learning English. In the absence of external pressure (e.g., test), the absence of “fun factor” seems to lead to the deletion of apps.

This study lends support to the claim that apps can be useful for L2 learning. Apps are already popular among language learners but since they are still relatively new, research in this area still has a lot of catching up to do particularly into the authentic use of apps by actual users.

The small number of participants, the homogeneous nature of participants’ proficiency level and motivation, and the use of participants L2 in the interview limit this study. Future research that address these limitations are needed in order to gain a better understanding on learner-led use of smartphone apps for language learning.

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Author biodata

Emily Mindog completed her MA in Education and Technology (Distinction) at the Institute of Education, University of London in 2014. She is currently an instructor at Nagoya Women's University. She is interested in the use of mobile technologies in second language acquisition.

Appendix A

Invitation/flyer

Let's talk about apps!

Hi,

I am Emily Mindog.

I used to teach English in Japan for 7 years.

Now, I am studying at IOE, University of London.

When I finish, I want to teach English at a Japanese university.

I am interested in language learning.

For my school project, I want to know what apps students use to study English.

I hope you can help me.

I want to talk using Skype to students who:

- ✧ study at a university
- ✧ own a smartphone
- ✧ can talk about their experience studying/learning English
- ✧ can talk about using apps in English
- ✧ For example:
 - What apps do you use?
 - Why do you use them?
 - When and where do you use them?

Please email me at emindog@ioe.ac.uk or +44 (0) 7935 534106.

I look forward to talking with you.

Appendix B

Information sheet

08 June 2014

STUDY INFORMATION SHEET

The utilization of smartphone apps by Japanese university students learning English as a second language (ESL)

I would like to invite you to participate in a research study that explores how university students utilize smartphone apps for autonomous language learning. This study will also investigate learners' reasons or motivations for using apps. I am a student pursuing my master's degree in Education and Technology at the Institute of Education, University of London, interested in the use of digital technologies for second language acquisition (SLA).

If you decide to participate, I will ask you to take part in a one-to-one interview session via Skype, which will be video-recorded. The session will last approximately 45 minutes to 1 hour. I will also share the overall results of the study with you once it is completed.

Any data obtained from you will be kept securely. At every stage of the project and beyond, all personal information will remain confidential and will not be shared to 3rd parties. Your identity will be anonymized by the use of a unique identifier. Screenshots from the interview will be used for illustration purposes but will only focus on the smartphones and apps used and will not include the participant's face. The data collected will only be used for the abovementioned purpose.

You are free to withdraw from the study at any time without reason and without any impact on you. If you decide to withdraw, any data collected from you will be destroyed. If you have any queries about the study, please feel free to contact me at emindog@ioe.ac.uk or +44 (0) 705 50006.

I would be very grateful if you would agree to take part!

Emily Christine Mindog

Appendix C

Consent form

CONSENT FORM		
Project title: The utilization of smartphone apps by Japanese university students learning English as a second language (ESL)		
	YES	NO
1. I have read and had explained to me by Author the Information Sheet relating to this project.	<input type="checkbox"/>	<input type="checkbox"/>
2. I have had explained to me the purposes of the project and what will be required of me, and any questions have been answered to my satisfaction. I agree to the arrangements for my participation as described in the Information Sheet.	<input type="checkbox"/>	<input type="checkbox"/>
3. I give my consent to the video-recording of my interview as explained in the Information Sheet.	<input type="checkbox"/>	<input type="checkbox"/>
4. I understand that my participation is entirely voluntary and that I have the right to withdraw from the project any time.	<input type="checkbox"/>	<input type="checkbox"/>
5. I agree with the contents of this Consent Form and have received the accompanying Information Sheet.	<input type="checkbox"/>	<input type="checkbox"/>
Name:	_____	
Signed:	_____	
Date:	_____	