A Survey on Student's Application for Using Smartphones in Learning at HCM City University of Food Industry

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ABSTRACT

Nowadays, smartphone use is popular among universities both inside and outside of teaching institutions. The purpose of this research project is to investigate students' applications for using smartphones in learning. This will help students have more support in their learning. It has many positive sides. For example, most students can use many useful applications to serve their learning; it will be more effective. The percentage of students who use their phones to study is quite high, and it is also used to go on social networks, text or call in their spare time. In addition, there are also negative sides due to weak phone networks, disclosure of security information, virus intrusion systems, etc. However, it is necessary to use modern applications on the phone to support it for more learning.

Keywords: Modern applications, negative sides, positive sides, smartphone use, useful applications.

1   Introduction

Learning technology applications are quite important components in the learning of all Primary schools, High schools as well as Universities. For educational technology applications, it must be proactive and always changing through certain factors, in order to develop more and more new applications. Therefore, learning applications on mobile phones have been recently introduced. Many people depend more and more on mobile devices as well as laptops and electronic devices today, along with more and more modern learning applications not only for learning but also in daily life day. And elementary schools and high schools are increasingly adopting mobile technology to enhance teaching. Therefore, using technology is beneficial to any learning environment. This survey studies the application of smartphone use in learning by students of the University of Food Industry in Ho Chi Minh City. How often do students use phones? In a day, how many hours do students use their phones. What applications students use to learn English today and what skills are included, it has what are the benefits of students learning English? Moreover, it is necessary for students to have the habit of using phones for study purposes.

2   Literature review

Overview of the application on mobile devices

Nowadays, mobile technology is ubiquitous in the lives of all of us, especially college students in learning. Adult use of mobile phones accounts for most of daily life for things like calling and texting, but university students use mobile devices even higher than adults. Students use mobile devices more than tablets. Mobile devices are an integral part of students' daily lives, mobile devices increasingly upgrade many applications on a unique operating platform. Can use many learning applications anytime, anywhere, no longer limited by geographical location. It is possible to improve knowledge and many skills through education and training, and learners will no longer depend on space, time, and place. Many researchers have shown that learning English on the phone has many different teaching processes. On smartphones, it is possible to connect friends from many different countries and learn a variety of languages, not except English teaching applications. Will create a lively learning space with a high-speed internet connection that will make learning quality and effective (Nghi, Thang, & Phuc, 2021) .Therefore, the use of mobile devices to apply both in and out of the classroom is now very popular.

Mobile Device Use in Higher Education

Higher education students frequently own mobile devices. According to study findings comparing the years 2012 and 2014, the percentage of smartphone users who use their devices to learn climbed significantly from 58 to 77 percent (Chen, Seilhamer, Bennett, & Bauer, 2015) Currently, most of the students using phones with the most traffic are apps related to social networks and music, which increased slightly by 3% and 2% respectively from 2012 to 2014. Members used a number of other apps including navigation, entertainment, and books, up from 9%, 5% and 8%. However, compared to the rest of the apps, there was a larger increase including document catalogues references increased by 22%, UCF applications by 14% and finally photography by 14%. The most amazing thing is that students reduced their use of mobile game apps between 2012 and 2014 by 6%.

(Gikas, Joanne; M. Grant, Michael, 2013) From studying learning applications on mobile phones. We have shown that students in all universities use phones for many different purposes and most of them in learning environments. Based on the fact, the results show that the use of learning applications on mobile phones by students helps students to grasp lessons effectively and access information as quickly as possible. With versatile applications on devices with mobile phones, students can learn many new skills depending on different contexts. With all the diverse learning content in each app, students can. Maybe every day students often use devices to support learning from applications such as Duolingo, Cake, LingoDeer, etc. And there are ways for students to remember lessons for the longest time based on camera applications to record videos or images that preserve knowledge. In the case of using a phone application to study, it needs proper guidance, the wrong way will switch to another method of distraction caused by the device.

The Educause Center for Analysis and Research (ECAR) looked into undergraduate students' expectations and experiences with information technology (IT) in 45 U.S. states and 15 other countries. According to the findings of the ECAR study on undergraduate students and information technology, students used smartphones, tablets, and e-readers more frequently in 2014 than they had in prior years due to the rise in device ownership. For instance, in 2016 86% of undergraduate students had a smartphone, up from 76% in 2013 (Dahlstrom, Eden ; Bichsel, Jacqueline, 2014). According to Pearson's 2015 Student Mobile Device Survey findings, younger college students tend to use cellphones more frequently. Nine out of every ten college students regularly use laptops or smartphones. Every day, one in four students downloads content to their smartphones so they can utilize it later, when they do not have an Internet connection. Almost all college students utilize learning apps on their tablets or smartphones (Poll, Harris, 2015).

Effect of the use of a smartphone in students learning activities

According to (Ifeanyi & Chukwuere, 2018) depending on how they are utilized, smartphones can have both beneficial and bad effects on students. The article also focuses on the downside, where using a smartphone while learning has become a major distraction. For instance, students who are attached to their smartphones have a significant predisposition to check updates or messages virtually every minute if they are not rigorously regulated. As a result, they become distracted from their studies, even during lecture periods when lecturers are at their most effective. The author came to the conclusion that there are a number of issues with how smartphones affect students' learning or academic achievement.

According to (Kibona & Mgaya, 2015), the majority of programs like WhatsApp, Facebook, and games have a detrimental impact on Tanzanian students on all levels because of their addictive nature. This is true despite the fantastic benefits of smartphone learning. Thus, it unintentionally robs students of their time, which has a negative impact on their academic achievement. Similar research was conducted by Lee et al. (2015) among 210 Korean female university students (mean age=22 years) to examine smartphone addiction in college students and its implications for learning. The study showed high-risk addictions, which led to a low rating on "self-regulated using smartphones."

In addition to the English learning functions on the application, students can also compose messages and talk to each other through the phone screen confidently. The use of mobile applications is a benefit that makes students proactive and improves student interactions when learning. It can be seen that more and more students are interested and engaged in learning English on smartphone applications. This brings a lot of benefits to enabling the learning process and actively learning about learning apps on the phone more. Bring new vision and level to higher students (Nghi, Tran Tin; Phuc, Tran Huu;, 2020).

Shai (2016), on the other hand, evaluated smartphone usage at the university's general physics laboratory. The study discovered positive replies on the impact of cellphones on students' learning activities using 120 students and a survey approach. The respondents agreed that having a smartphone helped them in their academic endeavors. For instance, they said that it "provides an effective background on the lab safety information, administrative needs, and basic knowledge of physics lab equipment" (p.33 as cited in Sarfoah, 2018).

Factors that prevent students from using smartphones in learning

In as much as numerous phenomenal advantages of the smartphone has been revealed, there are some inhibiting factors that halt students in their quest to adopt smartphone for their learning activities. In the works of Gikas and Grant (2013) students experience in mobile computing in higher education was focused. The study found that students were reluctant to utilize smartphones as learning tools because of their small screens, as opposed to laptops, which have larger screens, a smaller keypad, and less potential for distraction during lectures.

Similar findings were made in the works of Sarfoah (2017), where respondents agreed that smartphones make learning uncomfortable to an extent of 79% of them. Additionally, Sarfoah (2017) found that inconsistent or unpredictable internet access is a significant barrier preventing students from using smartphones as a learning aid, and 72% of respondents agreed with this finding.

It was discovered in the same study that some course content is incompatible with smartphones. Furthermore, according to 80% of the responders, the smartphone gadget does really freeze up during important learning moments. According to general opinions, this circumstance renders learning unproductive.

Additionally, it was discovered in the same study that "intruding calls may come in during learning" (73 percent). Due to their ability to divert attention from the main reason why they are in class or during a time or place designated for productive study, these factors significantly hinder learning.

3   Methodology

Statistics on the age of learning English through the application

Currently, any age group can learn English through the application, but compared to the fact that I have researched, the age group from 19 to 22 tends to learn English on the application quite a lot compared to other ages other. Because students often have a need to use more diverse and rich learning applications. The number of times used in and out of class is almost 60-70%. It can also be more than that number because the application on the phone can learn anytime, anywhere as long as there is a mobile network.

Today's era has been enhanced the use of mobile phones for learning is part of the most progressive change ever. Not only the younger generation but also the parents who have learning needs but do not have time.

Actually, this study of mine is about improving the quality of student learning. To save time and transportation.
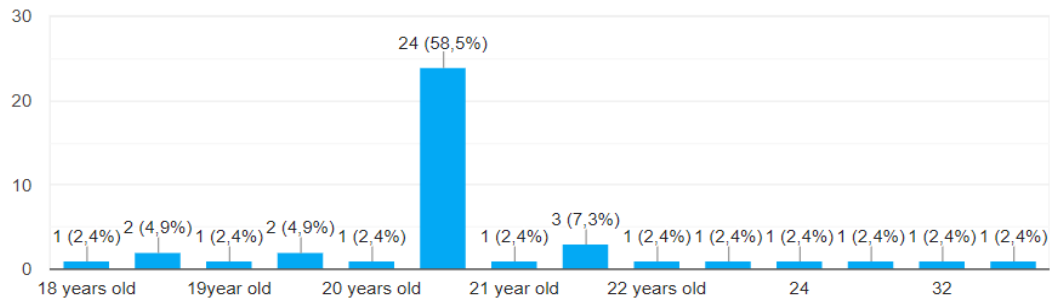

Figure 1: *The age of learning English through the application*

According to my research, 3rd year students appreciate the use of apps on smartphone devices. Using phones is mostly about studying, about entertainment applications account for about 30% in a day. But it can also be the opposite, because depending on the learning needs of students is not fixed.
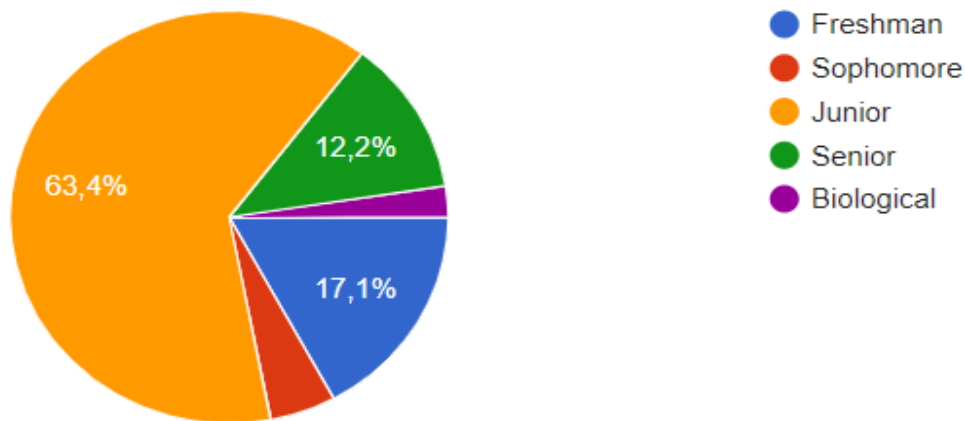

Figure 2: *Level of student*

4 Results and Discussion

4.1 Time to use the application to study on the phone

On the data chart that I have studied, students use phones very often to study at 100%. Use the phone at least 1-2 hours a day and at most 5-6 hours. As far as I know from other research, it is not allowed to use the phone for more than 8 hours in a day. On smartphone devices, there are many applications to access for learning such as Duolingo, LingoDeer, TFLat, Elsa, etc. These are applications for students to learn English anytime, anywhere. Overall those applications include a lot of skills to learn and practice. There are specific levels for students to easily choose depending on their ability.
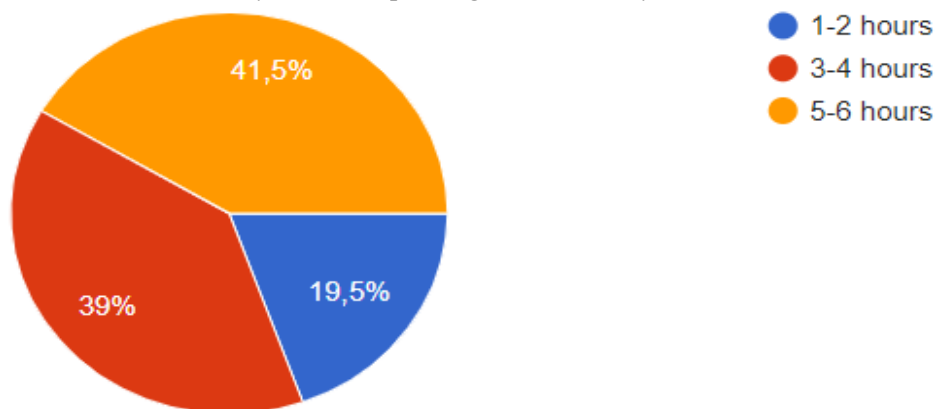

Figure 3: *Application usage time*

4.2   Popular apps that students use to study

Table 1*: Use apps to learn English*

App	Amount (person)	Percent (%)
Duolingo	29	69
Cake	20	47.6
LingoDeer	9	21.4
Mochi	2	4.8
Quillbot	1	2.4
TFLat	1	2.4
Elsa	1	2.4

According to the statistics table that I researched, we can see that today, there are many learning applications on mobile devices. Not only mobile devices but also laptops, large screens will be convenient compared to mobile phones. Students using the application the most is Duolingo, the number of people choosing is 29 and accounting for about 69%. The percentage of students who use a lot is Cake with the number of people choosing 20 and accounting for 47.6%. The number of students with the fewest options to study is LingoDeer accounting for about 21% and the number of students choosing is 9 people. The apps that are rarely used are Quillbot, TFLat, Elsa with only 2.4%. Because these applications have not been developed properly according to the needs of students. For students, the applications that stand out or have many skills are enough to meet the needs. Usually, students use the application a lot in and out of class, can use it anytime, anywhere and just need a stable mobile network. Many things can also be detrimental to online learning on the application that is due to the poor quality of the network.

4.3   Some skills in mobile learning apps

According to my research on learning apps on smartphones, apps include 4 skills as follows: Listening, speaking, reading, and writing. Regarding the ratio of learners, there are many, almost all of them use the application to learn 4 skills. Because these skills are common in English. These apps are curated and tracked by students in a variety of ways. First, students need to find an application that has all of the above skills needed for their course. Look up the information of the application as well as see if the reviews and comments of the application are suitable for you, see the comments of people who are and have used it for a long time. In addition, the learning application includes not only the above 4 skills but also other skills such as grammar, pronunciation, phonology, etc. Second, after learning about the necessary information If necessary, the next step students will experience within 2 or 3 days to see if it is suitable for the learning content in and out of class. Third, through many experiences, students will select the applications that are suitable for the content that students need most and then learn and rely on the application to support throughout the learning process.

Most students will invest in the skill that they are weakest in, according to the research, I found that students learn listening and speaking skills the most, accounting for about 81% and 73% compared to the other 2 skills. Because most skills are important, but more realistically speaking, listening and speaking account for the most learning rate. Students who apply more to reality should choose to practice skills that are closer to life.
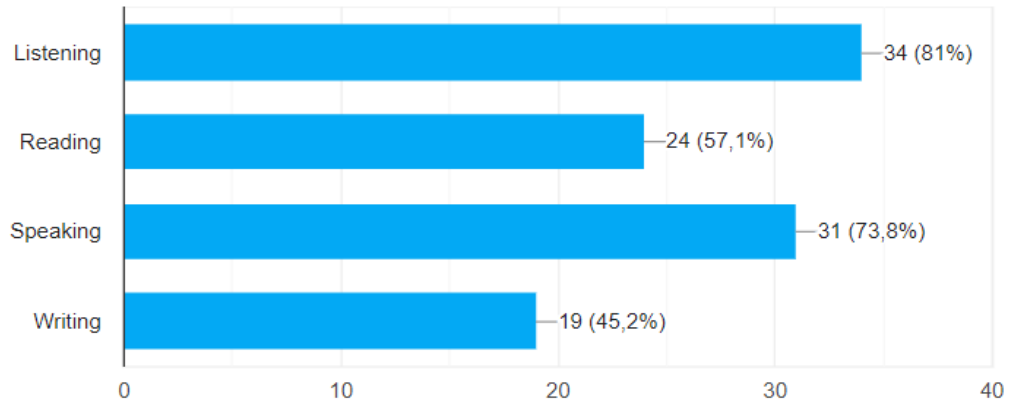

Figure 4: *Skill on the app*

4.4 The effect off using the application on the phone

The effect of learning English on the application has positive and negative effects, but based on the statistics that I researched, the negative effect is less than the positive effect. The parameters of learning apps on the phone are based on positive factors such as being learned anytime, anywhere. There is also some extreme this factor that is there is no mobile network to access the application on the phone.
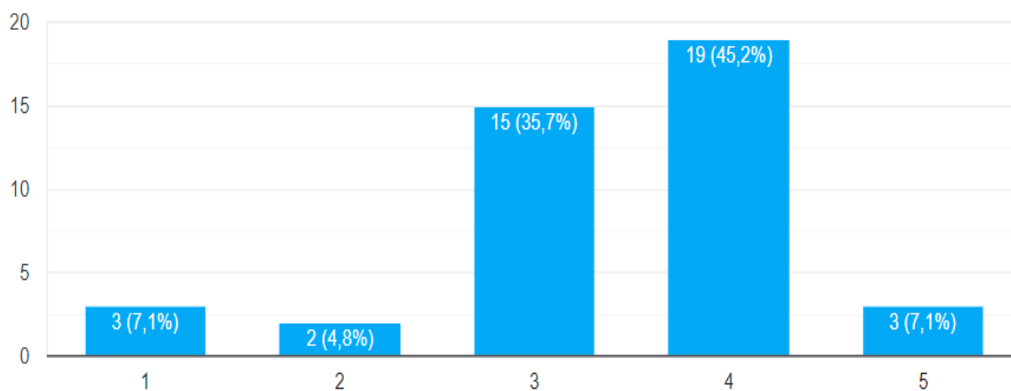

Figure 5: *The effect of using the application on the phone*

4.5 The efficiency of using a smartphone for remote learning, according to respondents

Respondents at the University of Ghana were asked to confirm whether they believed the use of smartphones has made distance mode of teaching and learning effective, as shown in Figure 6. It is obvious that the distance mode of teaching and learning blends face-to-face and fully online modes of course delivery.

Figure 6 shows that, of the total respondents, 206 (or 70%) indicated in affirmative that the usage of smartphones has made distant learning a very successful method of instruction. But 88 (30) of the respondents gave contradictory answers. This result suggests that the success of the distance learning mode in the is influenced by the use of smartphone. Therefore, the University of Ghana's distant learning division should try to integrate smartphones as a teaching tool for online courses. For instance, those who answered "yes" shared their inspiring tales about how they could learn a topic without physically attending class with

the help of their smartphones. Instead, the lecturer could simply record a video explanation or a screenshot of the topic and upload it to the Sakai platform for the students to access.

Others mentioned how their use of smartphone allowed them to hold class conversations with their peers before to exams, which had a significant impact on their academic success. The results are consistent with those of Tuncay (2016), who discovered that using smartphones for remote learning has increased students' behavioral intentions to use smartphone for learning activities.
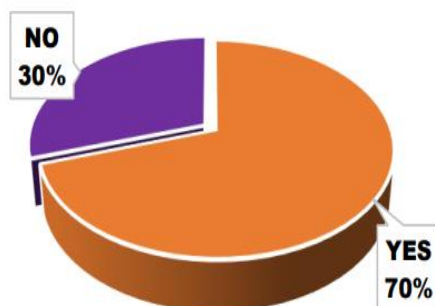

Figure 6*: The efficiency of using a smartphone for remote learning, according to respondents*

4.6   The effect of a smartphone in the students' learning activities

Table 2*: The effect of a smartphone in the students' learning activities*

No.	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Instead of utilizing my smartphone for learning, I almost always use it more for playing games and accessing social media.	10(3.4%)	31(10.5%)	28(9.5%)	125(42.5%)	100(34.0%)
2	The use of a smartphone during academic tasks may increase multitasking and task switching, which could lower academic performance.	8(2.7%)	50(17%)	117(39.8%)	85(28.9%)	34(11.6%)
3	More of my focus is diverted from my academics by my smartphone.	3(1.0%)	22(7.4%)	40(13.6%)	153(52.0%)	76(25.9%)
4	My smartphone sometimes prevents me from paying attention in class.	19(6.5%)	64(21.8%)	75(25.5%)	89(30.3%)	47(16.0%)

5	The amount of data used when using a smartphone for learning drives up my costs.	4(1.4%)	34(11.6%)	30(10.2%)	145(49.3%)	81(27.6%)
6	Both teachers and students experience isolation or a sense of being left behind while using smartphones for learning.	12(4.1%)	19(6.5%)	60(20.4%)	141(48.0%)	62(51.1%)

According to Table 2, the majority of respondents—125 (42.5%—said they always use their smartphones more for playing games and accessing social media platforms than for learning; 100 (34%) said they strongly agreed; 28 (9.5%) said they were neutral; and 31 (10.5%) said they disagreed. The statement that "smartphone can potentially increase multitasking and task switching during academic activities leading to decrease in academic performance" received mixed reactions from respondents, with 117 (39.8 percent) remaining undecided, 85 (28.9 percent) agreeing, and 50 (17 percent) disagreeing. Additionally, it is clear from the table that smartphone use diverts respondents' attention away from their studies. The majority of respondents—153, or 52 percent—said they agreed, while 40 respondents—13.6 percent—and 22 respondents—7.4 percent—said they were neutral or disagreed.

According to another effect of smartphone use on student learning activities, "sometimes I am not able to pay attention in class because of my smartphone," 89 (30.3 percent) of respondents agreed, while 75 (25.5 percent) were unsure, and 64 (21.8 percent) disagreed. In terms of data bundle usage, 145 respondents (49.3 percent) agreed that "using a smartphone 27 for learning consumes a lot of data bundle which raises my expenditure," 34 respondents (11.6%) agreed, and 30 respondents (10.2%) were unsure. Additionally, 141 (48.0 percent) of the respondents, or the majority, indicated that they agreed with the statement that "both instructors feel excluded or out of the loop when students use smartphones in class." 19 (6.5%) disagreed, while 60 (20.4%) were undecided.

In conclusion, it can be deduced from these results that, despite the enormous value of smartphones in educational activities, they frequently have a detrimental impact on distance learning students. This research backs with a study by Kibona and Mgaya (2015) that found that using a smartphone for work had a detrimental impact on pupils at all levels since it diverts their attention away from their academics due to its addictive nature. According to Ifeanyi and Chukwuere's (2018) research as well as Lee et al (2015). However, the study contradicts Shai (2016) and Sarfoah (2018), where participants' positive effects were found to be present.

4.7 The effect of a smartphone in the students' learning activities

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4.8   The benefit of learning English on the app

Convenience: this is the first plus point for English learning apps, because learners can learn anytime, anywhere. Especially busy people or office workers can also take advantage of time to self-study. For example: waiting for a bus, waiting for a friend, waiting for an elevator, waiting for a flight, etc.

Savings: The second factor that makes working people decide to invest in English learning apps is the low cost. It can be said that you only need to spend a small amount of money to own the right learning apps, not to mention there are completely free learning apps.

Variety: most applications allow you to install on mobile devices, tablets, desktops, laptops. This helps to facilitate maximum learning and diversity for users.
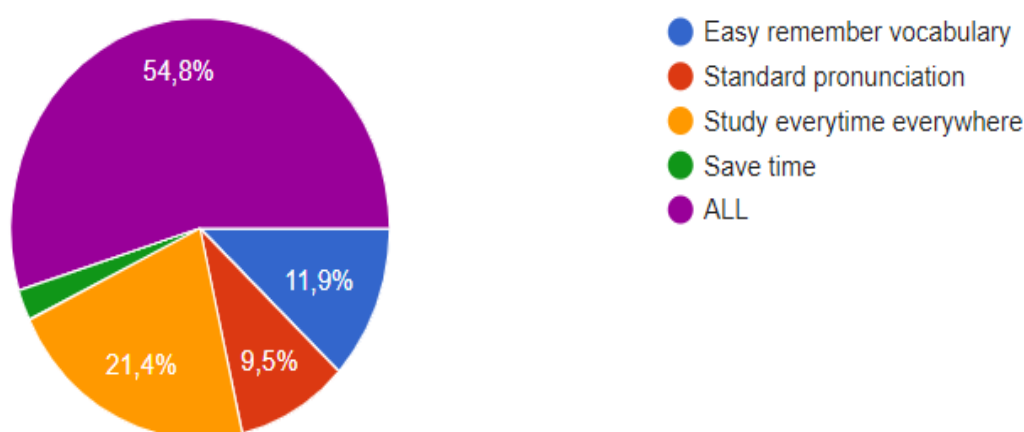

Figure 7: *The benefits of learning English on the app*

4.9   Improve English while learning on the app

According to the above research chart, I find the ability to study on mobile applications in parallel with classroom learning is a good thing. Because when learning on English applications, it helps students improve their shortcomings to support their learning. There are 42% of people who choose that learning English on mobile applications improves by 50%. Because not necessarily 100% improvement, but at least 50% support in student learning. There are many apps that require a fee to learn, so students have selected

a few that help improve their English and are free to use throughout their learning. On the other hand, we can learn to utilize English the way that foreigners do by watching English movies, listening to English music, and reading English books. The secret to learning English is to practice speaking it in real life rather than trying to remember what we had written in our notebooks.
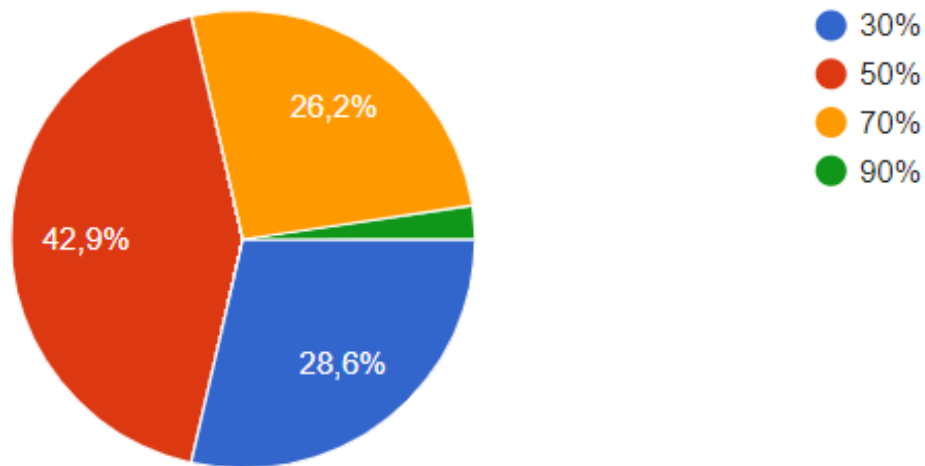

Figure 8*: Improve English while learning on the app*

5   Conclusions

The goal of the current study was to determine whether Vietnamese students were using and accepting mobile devices for studying the English language. In contrast to using mobile devices for online learning, this study indicated that Vietnamese students tended to utilize them more for non-academic activities including surfing social networks and conducting informational searches. In light of the study's findings, certain recommendations were made, including how to use smartphones as learning tools, how to use them to support the teaching and learning of English at various educational levels, and how to set up an English language training program using smartphones (Thuy, 2022). In terms of their current use of mobile devices for online learning in general and English language learning in particular, there were statistical variations between rural and urban, university and school, and English and non-English majors. Students' assessments of the influence of social factors on their attitudes and intentions to utilize mobile devices for learning were different for male and female students. The variations were slight in size, nevertheless. The study also found that students' learning activities benefited by utilizing smartphones. Examples include how easy it was to share and access lecture materials online, how simple it was to communicate with fellow students and teachers, how portable a smartphone was in comparison to a laptop, and many more. Another negative effect of smartphone use on students' academic activity was discovered by the study. For instance, smartphone addictive qualities, intrusive calls that ring during class, and an inclination to check social networking sites all make users lose focus, which hinders the ability of distance learning students to study. Other barriers included erratic internet connectivity, a smartphone's huge screen, and awkward size even if the differences were barely noticeable. The peak of a learning experience, among many others, can also be captured on a smartphone. A strong Wi-Fi connection, consistent energy, and guidance from the university's distant education section on how to use smartphone effectively and with the fewest disruptions are all recommended by the study. According to the study's suggestions for consistent strong Wi-Fi connection, consistent power, and student orientation, the university's distance education program should teach students how to effectively utilize their smartphones for their academic responsibilities with the fewest interruptions.

6   Declarations

6.1   Competing Interests

There is no conflict of interest on the part of the authors.

6.2   Acknowledgements

First of all, I would like to thank Dean of the Faculty of Foreign Languages Tran Tin Nghi of Ho Chi Minh City University of Food Industry for providing useful resources and clear arguments. His advice and enthusiastic support have partly helped me to have more will and effort to complete this research paper well.

On the other hand, I would like to thank the students at the University of Food Industry for helping me get good results from this research paper. I will remember your sincere love and contributions.

6.3   Study Limitations

The enumeration of data and the number of participants in this study is limited, which might significantly affect research outcome.

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Questionnaire: 8 questions

1. Do you often use smartphone?

Yes

No

Other

2. How many hours do you use your phone every day?

1-2 hours

3-4 hours

5-6 hours

Other

3. Do you use app to learn English?

Yes

No

4. What apps do you use to learn English?

Cake

Duolingo

LingoDeer

Mochi

Other

5. How many skills are in the application?

Listening

Reading

Speaking

Writing

Other

6. Do you feel that learning English on the application is effective?

Effective

1

2

3

4

5

Strongly effective

7. What are the benefits when you learn English on the application?

Easy remember vocabulary

Standard pronunciation

Study everytime everywhere

Save time

ALL

Other

8. How much have you improved when learning English on the app?

30%

50%

70%

90%

Other