ARTIFICIAL INTELLIGENCE TO MASTER ENGLISH LISTENING SKILLS FOR NON-ENGLISH MAJOR STUDENTS

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Abstract
Technology plays an important role in people’s day-to-day life and various aspects of life including education also use technology. Artificial Intelligence is regarded as an example of the advancement of technology. The purpose of this study is to investigate students’ perceptions of using Artificial Intelligence mobile applications to improve English listening skills. It was under phenomenological qualitative research characterized by an interdisciplinary approach, mainly education and technology. The online interview was used to gain information from students’ on the specific theme of artificial intelligence mobile applications in improving English listening skills. The survey consists of seven questions which become category such as 1. The Knowledge of Artificial Intelligence; 2. The Knowledge of Tune In, Joox Music, VOA Learning English Listening every day, and Netflix; 3. The Use of the Applications; 4. The Reason to Use the Applications; 5. The Use of Applications in Improving English listening Skills; 6. The Influence of the Applications toward The Users; 7. The Most Effective and Efficient Applications to Improve English Listening Skills. This survey was conducted at the Faculty of Psychology in Universitas Sarjanawiyata took part in this study. Participants were three females and two males. The results showed that the most effective and efficient Artificial Intelligence mobile application to improve English listening skills is Netflix.

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INTRODUCTION

Language is foremost a way of communication. Communication itself nearly always takes place inside some varieties of social context. Language is integrally tangled with the notions of who we are on both the personal and also the border which means social levels. When people use language, they impart their individual thoughts as well as the cultural beliefs and practices of the communities of which they are the vicinity of their families, social teams, and alternative associations (Kuiper, Allan, Kuiper, & Allan, 2017).

Additionally, language is the divine gift of God that distinguishes man from animals. The language will mean a set of words that set in the sentences in which every word has a separate meaning (Haerazi et. al., 2018). English is additionally a language that offers expression to thoughts and feelings of a group (Haerazi & Irawan, 2019). Language is actually a talent and not a content-based subject like Science, Social Studies, Commerce, Mathematics, and so on that aims to impart the information and fill the human mind with information too. Also, language could be an advanced talent involving four subskills that are listening, writing, speaking, and reading skills (Husain, 2015). Listening is critical in the teaching and learning process and can assist students to enlarge the other language skills (Dwi
Savitri Nuryadi, 2013). Listening is an activity of recognizing the element of sounds and sounds consequences (Asemota, 2015).

The utilization of technology has become a very important part of the training process and out of the category. Technology has been utilized to facilitate and improve learning. One in every of the foremost technology that is utilized to improve English skills is understood as artificial intelligence (Ahmadi, 2018). Consistent with The New International Webster’s Comprehensive Dictionary of the English Language, Encyclopedic Edition, artificial intelligence deals with the event of computers which can have interaction in human-like thought processes like learning, reasoning, and self-correction. The idea of that machine is often improved to assume some capabilities usually thought to be like human intelligence like learning, adapting, self-correction, and so on.

Before artificial intelligence becomes far-famed, the students typically use the other media so as to enhance their listening skills. For instance, YouTube is often utilized to teach listening skills to language learners. YouTube videos give audio-visual inputs to learners (Karkera, 2018). There are some impacts of using a podcast in raising listening and even speaking performance (Yoestara & Putri, 2019). The utilization of radio in promoting scrutinized talent will improve the listening comprehension of language learners (Budyana et al., 2018). In this study, we examine artificial intelligence mobile applications to give the students or English learners opportunities to enhance their English listening skills. This aims to clarify concerning some artificial intelligence mobile applications which will be used for non-English major students to master English listening skills.

The term artificial intelligence or it can be shortened as AI was coined by John McCarthy in a very known Dartmouth College workshop, held in the summer of 1956 (Benko & Sik Lányi, 2011). Artificial intelligence is an aspect of computer science that deals with the modeling of intelligent machines that work and behave like humans (Habeeb, 2017). In philosophy, artificial intelligence includes the branch of mathematics which is presented by media as a substitute for the human intellect. It is considered as a branch of mathematics which would help to unravel intellectual problems as many branches helping (Abu-Mostafa, 2018).

Artificial intelligence (AI) is a wide-ranging branch of computing involved with building sensible machines which are capable of acting tasks that usually need human intelligence. Artificial intelligence is an interdisciplinary science with multiple approaches. It is machine learning and deep learning which are creating a paradigm shift virtually in every sector of the tech industry. In other words, artificial intelligence (AI) is a machine that will think and act humanely and rationally (Builtin.com, n.d.).

Artificial intelligence becomes a vital part of people’s lives. People who live in this generation are very lucky because it is filled with technological advancement. Artificial Intelligence includes a special place altogether the advancement which is created these days. AI is the science of computers and machines developing intelligence like humans. During this technology, the machines will do a number of simples to advanced tasks that people do often. The AI systems are capable enough to cut back human efforts in varied areas. To conduct completely different operations within the business, several businessmen use artificial intelligence to create machines that perform numerous activities. The artificial intelligence applications facilitate to induce the work done quicker than before with the correct results.

There are some benefits for using artificial intelligence in people’s lives such as in the daily operations, repetitive tasks, digital assistances, healthcare, agriculture, automotive, aviation, education, arts, finance, and political economy, government, military, gaming, news, and commercial enterprise, and advertising (Churcher, 1991).

As an example, in daily operations, smartphone os is an apt and everyday example of how people have a tendency to use AI. People too have a tendency to hit the road for long...
drives and travels with the assistance of GPS. In utilities, people can predict what they have to type and correct the spellings. In the finance and economy area, AI can be used in the following use cases such as algorithmic trading, market analysis, personal finance, and underwriting.

In government areas, these style of government issues is acceptable for using artificial intelligence applications such as resource allocation, large public and employee datasets, expert shortage, predictable scenarios, procedural tasks, and diverse data. In the education area, one in every of the less dimmed innovations is that the plan of a private artificial intelligence tutor or assistant for every individual student because one teacher cannot work with each student directly, artificial intelligence tutors would provide students to get extra, one-on-one helping areas of required growth. These advantages are incredibly amazing. These show that people cannot be separated from artificial intelligence’s existence in every aspect of life.

**Literature of Review**

There are some writers who have explained artificial intelligence in dealing with English language courses. Firstly, Köse and Arslan investigate about artificial intelligence that can support e-learning scenarios in order to ensure better teaching and learning experiences along with educational activities. Their purpose is to report the advantages of artificial intelligence in especially the education field (Köse & Arslan, 2015). Secondly, Yang investigates about artificial intelligence for integrating English oral practice and writing skills. His research focuses on the use of artificial intelligence in language teaching and learning, especially the Lucy program (Yang, 2007). Thirdly, Artificial intelligence application that can be used to improve English speaking skills. Her article emphasizes the benefits of using AI applications which names Elsa to improve English speaking skills (Casey Hynes, 2016). Fourthly, Artificial intelligence such as Google and Grammarly can help people to improve writing. He describes that Google and Grammarly save millions of embarrassing errors which are caused by carelessness (Bernard Marr, 2018).

There are some ways to improve learners’ English listening skills done by teachers. Students are asked to recruit in a web course however they are going to use mobile apps for learning a language. Learning language through mobile apps can build their learning fun, accessible, and intuitive (Saigal, 2018). Some artificial intelligence mobile applications which are able to improve English skills, notably in raising English listening skills such as TuneIn – NFL Radio, Free Music, Sports & Podcasts, Netflix, Joox Music, and VOA Learning English Listening every day.

TuneIn – NFL Radio, Free Music, Sports & Podcasts is the application that consists of live sports, music, news, podcasts, and AM & FM radio from all around the world. This application has lots of music channels, fast-breaking news, and has more than 5.7 million podcasts and also 100,000 AM & FM radio stations that come from various zones. The users of this application can upgrade to the premium in order to be Premium to get the full experience in TuneIn – NFL Radio, Free Music, Sports & Podcasts.

Netflix is considered as the application which becomes the most talked about TV shows and movies globally. The users can use this application everywhere, such as while they travel, commute, or just take a break from daily work. Users can use Netflix easily. They can browse new titles of the movies or they can search their favorites and stream the videos on their mobile phones because Netflix adds TV shows and movies all the time. Netflix provides lots of movies, such as documentaries up to stand-up specials. Moreover, the users can save the data by downloading the titles to their mobile phones so that they can watch them wherever they are.
Joox Music is one of the streaming music applications which is a free music player and provides lyrics. Through the application, the users can stream or download the latest songs with million tracks whether they are local songs or international songs. The users can also obtain the music playlists from the editor of the application so that they can listen to the recommended songs which fit with their taste and mood. The application has music videos as well so that the users can watch music videos, even many interviews, and documentaries. This application is indeed designed for music lovers.

The last application is VOA Learning English Listening every day. This application is considered as the best and the simplest application to improve English for the users. Actually, VOA Learning English is one of the programs run by Voice of America which aims to assist English learners to develop their English skills every day. This application consists of stories, lessons, up-to-date news reports, and so on. The users can read, listen, and watch the lessons whenever they want to. The content of this application is always updated every day so that the users can obtain new things or new lessons every day. There are the most popular contents in this application, such as world news, education, business, science, technology, American history, culture, nature, stories, Grammar, vocabulary, and so on. The application provides transcribed audios and videos as well. The most helpful thing is the users can save the lessons for offline learning.

**RESEARCH METHOD**

To gather the data we used the qualitative method by using an online interview. In the first place, we thought deeply regarding what kind of questions which we were going to ask the subjects related to the topic. After that, we wrote on a certain note about the seven questions. Then, we summarized their answers depending on the questions.

**Research Design**

This study is designed under qualitative research. It deals with nonstatistical methods of inquiry and analysis of social phenomena (Shakouri, 2014). Qualitative research is often utilized as an argument to show the low validity of qualitative research (Crescentini & Mainardi, 2009). Qualitative research is a shape of social action that deals with the way people interpret and make sense of their experiences in order to comprehend the individual social reality. The aim of qualitative research is to explain and interpret issues or phenomena systematically from the perspective of the individual population being studied and to gain new concepts and theories (Mohajan, 2018).

To conduct the research, the researchers used phenomenological qualitative research. Phenomenological research is an examination that tries to comprehend people’s perceptual experiences, perspectives, and comprehension of a certain phenomenon. Moreover, phenomenological research is originated in an inflection of individual insight and subjectiveness and delivers more importance to individual experience and representation (Pathak, 2017). The purpose of phenomenological research is to light up certain experiences in order to observe the phenomena that are gained by people in a specific condition (Qutoshi, 2018).

**Subject**

The subjects of the study were five students who consist of 2 males and 3 females as examples of Psychology students. All of the subjects were, of course, no English programs because their major is Psychology and they learn it at Faculty of Psychology in Universitas Sarjanawiyata Tamansiswa (UST), Yogyakarta. The address of the university is Jalan Kusumanegara No. 157, Muja Muju, Umbulharjo, Yogyakarta City, Special Region of Yogyakarta. We chose them as the subjects because they were not English students and they
were all at their pre-intermediate level of proficiency in the English language. In addition, we collected the groups through the WhatsApp application.

**Instruments**

We used an online interview by using the WhatsApp application to gather the data. The interview method is applied as a pilot study to collect the preliminary data before the survey is conducted (Qu & Dumay, 2011). The interview is a method in qualitative research where the researcher gathers the data from the participants (Showkat & Parveen, 2017). Interviews set qualitative data with rich and detailed data in order to clarify the perspectives of the participants, how they interpret such experiences and their significance (Castillo-Montoya, 2016).

While an online interview is a kind of interview that is done online, not face-to-face. In this study, we used WhatsApp as media to interview. We used WhatsApp because it is easy to use and the subjects have the application. WhatsApp is an instant messaging which includes the most popular smartphone application in Indonesia. WhatsApp is utilized by people as an important aspect of their life to communicate with others. There are seven questions that we ask the students (O’Hara, Massimi, Harper, Rubens, & Morris, 2014). These questions include:

1. Do you know what is artificial intelligence;
2. Do you know TuneIn – NFL Radio, Free Music, Sports & Podcasts, Netflix, Joox Music, and VOA Learning English Listening every day;
3. What is the application that you have ever used;
4. Why do you use it;
5. What is the application that assists you to improve English listening skills;
6. What does the application influence your English listening skills;
7. Based on your opinion, what is the most effective and efficient application that can help you to improve your English listening skills.

**Data Analysis**

After collecting the data, we moved the data from WhatsApp application to Microsoft word. Then, we grouped each question from different subjects in Microsoft excel. We created the lists in order to make it easy to identify the answers to each question. Next, we summarized the data and entered it into the category which was the depict of the questions themselves.

**RESEARCH FINDINGS AND DISCUSSION**

**Research Findings**

The study sample consisted of 5 subjects. The administration of the survey was done through an online interview. The data obtained in this study were analyzed using a qualitative methodology. Specifically, we examined participants’ perceptions of some artificial intelligence mobile applications that can be used to improve listening skills such as TuneIn – NFL Radio, Free Music, Sports & Podcasts, Netflix, Joox Music, and VOA Learning English Listening every day.

**Category 1. The Knowledge of Artificial Intelligence**

When the subjects were asked about artificial intelligence. Only one of five students who did not know about artificial intelligence, while the four students have known about artificial intelligence. The purpose of this category is to know whether the students have already known about the topic that we conducted or they have not.

“Yes, I know. Artificial intelligence is the intelligence that is made by human” (MS1)
“No, I do not know” (FS1)
“Yes, I do know” (FS3)
It showed that most of the students know about the term *artificial intelligence*. Most of them answered that artificial intelligence is made by humans for humans.

**Category 2. The Knowledge of Tune In, Joox Music, VOA Learning English Listening every day, and Netflix**

In category 2, we asked the students about the knowledge of artificial intelligence mobile applications such as TuneIn – NFL Radio, Free Music, Sports & Podcasts, Netflix, Joox Music, VOA Learning English, and Netflix. The aim of this category is to know whether they have already known about some artificial intelligence mobile applications or not and to know whether all of the applications which we mention have been known or not. The students expressed what they know about these applications as follow:

- “I just know about Joox Music, the other applications I have not known yet” (FS2)
- “Joox Music, Tune In, and Netflix are the applications that I know so far” (FS3)
- “I only know Joox Music and Netflix” (MS4)

The students’ answers showed that they have already known some artificial intelligence applications but they have not known yet all the applications. Moreover, most of the students know about the Joox Music and Netflix application. They really seem more familiar with both applications than the rest.

**Category 3. The Use of the Applications**

In this section, the researchers tried to dig in more about the use of those applications whether they also use it or only know about the applications. The purpose of the category is to know the application that they used in their daily life. They conveyed their answers about the question as follow:

- “I am using Joox Music” (MS1)
- “I am using Joox Music and Netflix application” (FS3)
- “I am using Joox Music as well and I do not use the other applications that you mention before” (FS5)

From their answers, we can know that they also use artificial intelligence mobile applications in their daily life. Most students use only two applications on their mobile phones which are Joox Music and Netflix.

**Category 4. The Reason to Use the Applications**

This section tried to obtain the students’ reasons for using the chosen applications. The purpose of this category is to understand the reason why they choose and use artificial intelligence mobile application. Their answers were very unique. These answers can be seen as follows:

- “I think the application is very simple to use to listen to the songs so that I do not need to download them” (FS2)
- “I use Joox Music and Netflix because their features are complete so that I can find anything through them” (FS3)
“I use Joox Music because I can listen to the songs freely and it provides the lyrics as well”

(FS5)

From their answers, we can know that there is the reason why they use the application. The researchers can conclude that they use Joox Music because they can listen to the songs and it has a complete feature such as lyrics.

Category 5. The Use of Applications in Improving English Listening Skills

This category emphasizes the use of applications in improving listening skills so it is like a question whether the applications really help them to improve English listening skills or not. The aim of this category is to know the use of applications in order to improve their English listening skills. The students told their answers as follow:

“I prefer using Joox Music than Tune In, VOA Learning English, or Netflix because it helps me to improve my English listening skills. One of the reason is this application comprises not only Indonesian songs but also English songs in which if the listeners do not know the meanings they will search it in Indonesia meanings to understand what the songs are about”

(MS1)

“I choose to use Joox Music because it assists me to improve my English listening skills. I think if we always use it to listen to the songs, our hearings will be automatically habitual with the English words”

(FS2)

“The reason why I choose to use Joox Music because I believe that it will help me to improve my English listening skills. If we often listen to the English songs, of course, we want to know the meanings and what the songs are talking about so that we will find the Indonesia meanings and this can be a self-learner. In other words, the application teaches how to be a self-learner”

(MS4)

The researchers can know that the students really gain advantages from the artificial intelligence mobile application, notably Joox Music. For example, Joox Music encourages the students to search the meanings of the English songs and to train their English listening skills as well.

Category 6. The Influence of the Applications toward The Users

In this category, the researchers wanted to emphasize deeply about the influence of the applications on them. The purpose of this category is to know exactly the impacts of the applications. Their statements can be seen as follows:

“In my opinion, Joox Music is good to use because it can improve my English listening skills”

(MS1)

“For me, Joox Music gives a good impact on my English listening skills and I enjoy English listening to music because it makes my mood better than before”

(FS2)

“I think Tune In, Joox Music, and Netflix can help me to improve my English listening skills because I can learn the English vocabulary”

(FS3)

After asking the students about the influence of the applications. Then we can catch the conclusion that the applications give a positive impact on their English listening skills.
Category 7. The Most Effective and Efficient Applications to Improve English Listening Skills

We asked the students about the most effective and efficient applications to improve English listening skills so that they consider which one of the artificial intelligence application is the most effective and efficient one in improving English listening skills. The aim of the study is to know one application from four applications that are considered as the most effective and efficient mobile application. Their answers can be seen as follow:

“I choose Netflix as the most effective and efficient application in improving my English listening skills” (FS3)

“I also choose Netflix but of course it is without any subtitles” (MS4)

“I think the most effective and efficient application in improving English listening skills is Netflix” (FS 5)

Category 7 is the last category and becomes the core of the study because it shows the most effective and efficient artificial intelligence mobile application in order to improve English listening skills. Three participants chose Netflix as the most effective and efficient application and the two ones chose Joox Music.

Discussion

After collecting the data and identifying the research finding, we can find that many students chose Netflix as the most effective and efficient artificial intelligence mobile application that can help them to improve their English listening skills. It proves that artificial intelligence applications can indeed assist human activities, including in education, notably language learning. Digital technologies have already become an important part in people’s lives today. They modify the way people are trying to find information, how people communicate with one another, even how people behave. This transformation applies to several areas, including education (Chassignol, Khoroshavin, Klimova, & Bilyatdinova, 2018). Artificial intelligence in education is quite a fantasy. Educational artificial intelligence includes educational technology or EduTech and this goes well beyond language learning (Broadhead, 2018).

Artificial intelligence becomes an increasing part of people's daily lives, including in education, whether it is educational institutions or the education industry (Lane, Grover, & Roschelle, 2008). The form of artificial intelligence and machine learning is that starting to change education tools and institutions and altering what the longer terms might appear as if in education. In line with the Artificial Intelligence Market in the US Education Sector report, artificial intelligence in United States education will grow by 47.5% from 2017 up to 2021. There are many usages of artificial intelligence in education, especially to aid developing skills and testing systems. Artificial intelligence can help learning and teaching process and it can drive efficiency, personalization, and streamline admin tasks (Benard Marr, 2018).

Researchers surprise that Netflix becomes an application which is considered as the most effective and efficient artificial intelligence mobile application to improve their English listening skills rather than the other applications such as TuneIn – NFL Radio, Free Music, Sports & Podcasts Joox Music, Joox Music, and VOA Learning English Listening every day.

When we started to ask the students about the artificial intelligence and mentioned the four applications, we think that they would choose Joox Music as the most effective efficient artificial intelligence mobile application to improve their English listening skills but in the end, three of five students chose and suggested Netflix as the most effective and efficient one.
The reasons why they finally chose Netflix because they can watch movies, especially without any subtitles and it helps them to improve their English listening skills. Once people have chosen a show on Netflix, it is time to start to watch the movie. It is truly normal if they only understand 70-80% of what they hear when watching the movies and TV series with no subtitles at all. This exercise will help them improve their ability to utilize context to fill in the blanks. However, if it is still too difficult, they can turn on the subtitles, of course, English subtitles, for the first few episodes if it is a TV series (Abbe, n.d.).

Moreover, it is the best way to listen to the movies because they provide English conversation and most of the English words in the movies are taken on a daily basis. Therefore, Netflix will make the hearings become habitual to the English words effectively. Beginning to watch Netflix shows with the English audio is often overwhelming, but if people get used to it, they will never return to watch the dubbed versions again. Also, it is a normal thing if people do not know or understand everything that they hear in the movies and perhaps when they start to watch it, they will find it very difficult and frustrating. However, if they watch only one short episode of a TV series a day, they will get used to the speed, pronunciation, and customary expressions used. This may really assist them when they are having conversations with native speakers and provide their confidence to speak longer (Brenda, 2019).

In addition, Netflix is easy and simple to use. Unlike the normal mode of watching TV or movies, Netflix is very easy for every individual to use. They just need an internet connection in order to be able to watch movies. They can directly visit the website which is www.netflix.com if they use the computer and register to have an account to log in. If they use their smartphone or tablet, they can download the Netflix application for Android and iOS. Then, they can log in to their account and start to stream the movies (Anderson, 2019). This result can be a suggestion for future study in order to observe only one artificial intelligence mobile application which is Netflix to improve English listening skills in a broad population.

CONCLUSION

Listening skills are harder skills than the other skills that exist in English skills. This study explains how non-English students can master listening skills. As we know, global connectivity, smart machines, and new media are just some of the drivers reshaping how people think about work, and how they learn and develop the skills to work in the future. The persistent speed of innovation will constantly demand new skills and knowledge to keep pace. The development of technology gives good impacts on education as well. One of the impacts is the born of artificial intelligence in educational aspects.

Artificial intelligence or AI refers to software technologies that make a robot or computer act and think like a human. There are some artificial intelligence mobile applications that can help the users to improve their English listening skills, such as TuneIn, Netflix, Joox, and VOA Learning English Listening every day. As a result, non-English major students who are Psychology students from Universitas Sarjanawiyata can master listening skills through artificial intelligence mobile applications. Many of them choose and use only two applications. These applications are Joox Music and Netflix. However, the most effective and efficient artificial intelligence mobile application that can be used to improve English listening skills is Netflix.
REFERENCES


