TEACHER EDUCATORS' PERCEPTIONS OF UTILIZING MOBILE APPS FOR ENGLISH LEARNING IN SECONDARY EDUCATION

Imroatul Hasanah
Faculty of Arts and Society, Charles Darwin University, Darwin, Australia
imroatulhasna@gmail.com

Abstract

Mobile apps have gained significant popularity due to their myriad advantages, rendering them valuable educational tools. In Indonesia, English is a mandatory subject in secondary education, which refers to both junior and senior high schools. The research explores teacher educators' perspectives at the State Islamic Institute of Kediri regarding using mobile apps for English learning in Indonesian secondary education. With English being mandatory in secondary schools, teacher educators play a crucial role in preparing teacher candidates for the challenges of the modern era. Through semi-structured interviews with eight teacher educators and using thematic analysis, the research reveals varied perceptions: three teacher educators express positive views on the contribution of mobile apps, three hold negative perceptions suggesting potential disruptions to student focus, and two remain neutral. These differences are due to teaching experience, app usage, exploration experiences, app variety, school settings, and the success of teacher candidates during internships. The findings provide insights for academics,

educators, and policymakers, offering a foundation for future research in different settings and exploring the impact of teacher educators' perceptions on English teachers' practices.

Keywords

Teacher Educators' Perceptions, Mobile Apps, English Learning, Secondary Education

1. Introduction

VUCA (Volatile, Uncertain, Complex, Ambiguous) is being used to relate to more than just the service and political spheres; it is also impacting on how the world is changing, including in the field of education. The necessity to prepare scholars for the so-called VUCA terrain has been emphasized by UNESCO (Hadar et al., 2020). Furnishing a good education means preparing scholars to thrive, contend, and share in a decreasingly advanced and ever-changing world. One of the crucial players in education is teachers, who play essential places in the educational process by helping scholars acquire education (Ayanwale et al., 2022). In addition to being role models, they are their scholars' primary source of knowledge. Thus, the information they gather is of great significance.

Numerous teachers worldwide incorporate technology into the tutoring and literacy process because they believe technology is essential for furnishing scholars with a high-quality education (Hidayat et al., 2022). Currently, technology is nearly linked to Artificial Intelligence (AI), which powers numerous high-tech biases around us, similar to mobile phones. With AI capabilities, these biases have become necessary tools that people carry with them wherever they go (Maknuni, 2020). One of the most profitable features is the Play Store for Android and the App Store for iOS Apple, where users can download apps, some of which are free (Viswanathan, 2023). Many free English language learning mobile apps are accessible, cater to a diverse learners, and provide age-appropriate and educationally relevant resources to enhance their English language skills.

Indonesian secondary education students are highly familiar with mobile phones and their features. The use of mobile phones can be described as ubiquitous (Pusparisa, 2020). According to Cambridge International's research, more than 80% of Indonesian students utilize mobile phones to support their learning (BBC News Indonesia, 2018). This significant figure makes us realize that they are very close to technology, especially mobile phones. To pique their interest in learning English, they need a tool that will make them enthusiastic to use it and

become familiar with it. This can be achieved by utilizing mobile apps that have one of their strengths: providing continuous, time-unlimited feedback (Michos et al., 2022). This presents an excellent opportunity for progressive and open-minded teachers, to gain more successful students' English skills.

English teachers in Indonesian junior and senior high schools are typically graduates of teacher training and education faculties. Before they begin actual English teaching practices in schools, they must complete courses, including pedagogy courses and educational technology, taught and overseen by teacher educators. Teacher educators play pivotal roles as they serve as founts of knowledge, observers, advisers, and examiners for secondary education teacher candidates. The information they provide, based on facts and their opinions, can significantly influence the future teaching practices of these candidates. The views and understanding of a teacher related to all aspects of the teaching and learning process obtained through experience and observation are referred to as a teacher's perception. Alt and Phillips (2022) assert that perception is shaped by cognitive structures, specifically knowledge and interpretations derived from environmental stimuli, which can be obtained from the information in the surrounding environment or the outcomes of interactions.

In a study concerning teachers' perceptions of using mobile phones in learning English, Alzubi (2019) found that 58% of respondents did not perceive any restrictions on mobile phone use, while 79% believed it could enhance students' access to technology, motivation, creativity, opportunities for learning English, and instructional variety. Meanwhile, different teachers' perceptions came from a research In Tanzania (Keong et al., 2020), where it was found that mobile phone use in teaching and learning was minimal. This was attributed to teachers' need for knowledge about using these tools for learning, as well as their concerns about potential disadvantages, including distractions and inappropriate content. Additionally, teachers noted that using mobile technology in the classroom can be impeded by distractions, lack of attention, and inappropriate behavior, including accessing inappropriate content. Synnott (2018), based on the research, found that teachers who are in favor and against using mobile phones in education have various reasons. Those in favor argue that students can access up-to-date information on the studied topics and document their learning processes. On the other hand, those who are against it claim that mobile phones can disrupt the learning process, as students may send texts or visit social media during class and engage in cheating during exams.

As time progresses and in response to the need to find teaching methods and tools that are appropriate for today's students, some secondary education teachers have begun to utilize tools that are both familiar and readily available to students, such as mobile apps, which can be easily accessed on their mobile devices. The aim is to stimulate students' interest in learning more effectively. In the research findings, Ardiansyah and Nana (2020), indicate that mobile apps positively impact secondary students in Indonesia in the context of Physics education. Additionally, students tend to be more motivated to learn due to mobile apps' user-friendly nature, accessibility anytime and anywhere, and the lack of time constraints. Similar results were observed in a study conducted in New Zealand, where mobile apps positively contributed to both students and academic staff in research and teaching, even though only approximately 20% of survey respondents reported using mobile apps (Hinze et al., 2023). The utilization of mobile apps for educational purposes remains a subject of debate, especially in secondary education. Nikolopoulou (2020) asserts that secondary education teachers in Greece hold varying perceptions regarding using mobile apps for learning. Those in favor argue that mobile apps can serve as suitable learning tools since students are already familiar with them, and these apps are easily accessible. Furthermore, using such technology can enhance student motivation and engagement in the learning process.

Research on teachers' perceptions of mobile app usage is currently limited, and this is especially true for research that specifically examines the use of mobile apps for teaching English. Additionally, there has yet to be no prior research on teacher educators' perceptions of mobile app usage for English learning, especially in secondary education. Therefore, based on this background, the researcher finds it imperative to investigate how teacher educators perceive the use of mobile apps for secondary education students and to identify the factors influencing their perceptions. Consequently, this study has two primary objectives:

1. To explore teacher educators' perceptions regarding the use of mobile apps for English learning in the context of secondary education.

2. To identify the factors that influence teacher educators' perceptions in this regard.

Building on a solid foundation of prior research, this research is driven by the recognition of swift technological progress. This research aims ~~not only~~ to contribute to the existing body of knowledge and to offer a resource for scholars interested in extending these findings or employing the available data for future investigations. By investigating teacher educators'

perceptions towards the use of mobile apps for English learning in secondary education, this research seeks to provide insights that can inform educational practices and decision-making in the rapidly evolving field of language education.

2. Method

This qualitative research involves collecting and analyzing non-numerical data (Aspers & Corte, 2019). Qualitative research assists the researcher in understanding specific phenomena (Lester et al., 2020). The phenomenon under investigation in this research is teacher educators' perceptions regarding the use of mobile apps in the learning process of English subjects in secondary education in the age of artificial intelligence. Additionally, the research aims to explore the factors that influence these perceptions. The researcher invited eight teacher educators from the State Islamic Institute of Kediri (IAIN Kediri), Indonesia. This institution was selected because it is the only public higher education institution in Kediri with the highest concentration of English majors who will eventually work as English teachers in secondary education, encompassing junior and senior high schools.

The interviews were conducted individually in a face-to-face manner on June 12, 2023, and June 19, 2023, at IAIN Kediri during regular working hours. Each day's interviews involved four teacher educators, specifically on June 12, 2023, with Ms. NA, Mr. MA, Ms. YAH, and Ms. YKU, and on June 19~~th~~, 2023, with Ms. R, Ms. RF, Ms. URU, and Ms. S. The selection of participants was predicated upon several specific criteria, which encompassed:

1. Lecturers who have earned a master's degree in English, either in English Education or English Literature.
2. Demonstrated active teaching involvement in the English Language Education Program for a minimum duration of 2 years.

The inclusion of the criteria for master's degree graduates in English and the two-year teaching experience was contingent upon the lecturer certification requirements for English lecturers, two of which align with the criteria as mentioned earlier. Lecturer certification is a formal process of awarding lecturers a certificate to symbolize their professional career expertise (LLDIKTI Wilayah VI, n.d.).

As for the criterion 'active teaching in the English Language Education program,' it was implemented due to the research's central focus on the perceptions of these lecturers as

teacher educators within the context of English language instruction for secondary education. These teacher educators educate teacher candidates who will teach secondary education students (Undang-Undang tentang Guru dan Dosen, 2005). In Indonesia, secondary education encompasses junior high schools and senior high schools. Junior high schools represent three compulsory years of education following primary education. In contrast, senior high schools serve as a mandatory advanced level of education preceding higher education at universities or colleges.

For data collection, the researcher has chosen to use semi-structured interviews. This approach allows for asking insightful and open-ended questions to the selected sample of eight teacher educators. It provides interviewees ample opportunities to express themselves (Adosi, 2020), as the questions are loosely structured. Through the application of this methodological approach, researchers are capable of delving more profoundly into the insights provided by participants while concurrently ensuring that the research remains focused and purposeful. The utilization of the 5W1H framework, which consists of 'Who, What, Where, When,' and encompasses the facets of 'Why and How,' serves as two specific types of inquiries aimed at eliciting more in-depth responses (Ruslin et al., 2022).

In the context of this research, semi-structured interviews were conducted employing open-ended questions. These questions were carefully crafted to allow participants to provide detailed and in-depth responses. This methodology was chosen to give the researcher a comprehensive understanding of the phenomena under investigation. The interview questions were as follows:
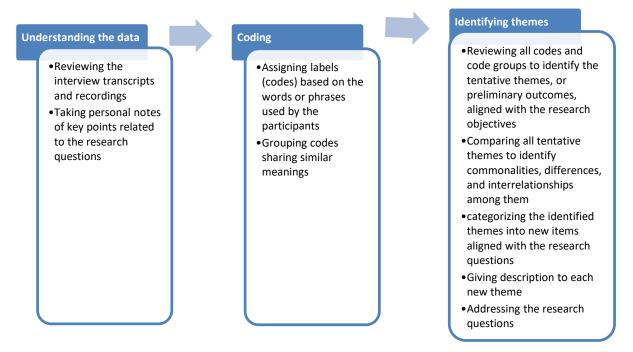
1. How old are you?
2. What is your academic background?
3. How long have you been engaged in teaching within the English Language Education program?
4. In which secondary schools are you typically assigned as a field supervisor for teacher candidates specializing in English during their internship?
5. What facilities are provided by the schools for English learning?
6. What forms of instructional media are employed by teacher candidates, and are there any who utilize mobile apps? If so, which mobile apps are utilized?

7. What is your assessment of the students' academic performance as instructed by these teacher candidates using their media and available facilities?

8. Have you ever personally utilized mobile apps for educational purposes? If so, which mobile apps have you used, and for what duration?

9. What is your perspective regarding the utilization of mobile apps for English learning? Do you believe that they have more benefits than drawbacks?

10. Would you recommend that the teacher candidates incorporate mobile apps for English instruction in secondary education, and could you provide the rationale for your recommendation?

The researcher employs thematic analysis to analyze the results of the semi-structured interviews with the open-ended questions above. It analyzes by sorting and sifting through the data to identify recurring words, phrases, and relationships (Taskan et al., 2022). The analysis encompasses two main stages: 1) reading through all the interview transcripts to gain context, highlight patterns, and code data, and 2) generating concepts and ideas and connecting them where applicable (Sitasari, 2022).

In analyzing the data for this research, the researcher adopted the thematic analysis stages proposed by Heriyanto (2018), which are presented comprehensively in the figure below.

Figure 2.1: *The Stages of Thematic Analysis in Semi-structured Interview*

Understanding the data
- Reviewing the interview transcripts and recordings
- Taking personal notes of key points related to the research questions

Coding
- Assigning labels (codes) based on the words or phrases used by the participants
- Grouping codes sharing similar meanings

Identifying themes
- Reviewing all codes and code groups to identify the tentative themes, or preliminary outcomes, aligned with the research objectives
- Comparing all tentative themes to identify commonalities, differences, and interrelationships among them
- categorizing the identified themes into new items aligned with the research questions
- Giving description to each new theme
- Addressing the research questions

(Source: Author's Own Illustration)

3. Analysis

This research employed a qualitative method utilizing a semi-structured interview approach with open-ended questions to gather comprehensive and detailed data. For data analysis, the researcher applied thematic analysis with a three-stage process adapted from Heriyanto (2018), which encompasses understanding the data, coding, and identifying the themes. The elaboration of these three stages can be found in the subsequent discussion.

3.1. Understanding the Data

At this stage, the researcher endeavors to comprehend the data by repeatedly reviewing eight interview transcripts while taking note of significant and noteworthy elements with the coding potential.

3.2. Coding

The researcher employed two methods to code the data: in vivo coding, which involves assigning codes based on the participants' verbatim statements and interpreting the conveyed meanings. The in vivo coding method was utilized when participants' explicit responses and required no additional interpretation. In contrast, the researcher employed the interpretive method for responses characterized by lengthy and detailed descriptions, which entailed discovering latent meanings beneath the participants' words. The outcomes of the coding process are detailed in the following table.

Table 3.2.1.: *The Coding Results*

Transcripts		Codes
Questions 1, 2, and 3. Participants' Brief Information		
Ms. NA	"36 years old", "8 years of teaching experience." "A master's degree in English Education."	1. Age: 36 2. Years of teaching: 8 3. Master's degree in English Education
Mr. MA	"38 years old." "8 years of teaching experience." "A master's degree in English Literature."	1. Age: 38 2. Years of teaching: 8 3. Master's degree in English Literature
Ms. YAH	"38 years old." "7 years of teaching experience.",	1. Age: 38

	"A master's degree in English Education."	2. Years of teaching: 7 3. Master's degree in English Education
Ms. YKU	"40 years old." "8 years of teaching experience." "A master's degree in English Education."	1. Age: 40 2. Years of teaching: 8 3. Master's degree in English Education
Ms. R	"Age - 38, Teaching Experience - 10 years, Educational Background - Master's degree in English Education."	1. Age: 38 2. Years of teaching: 10 3. Master's degree in English Education
Ms. RF	"43 years old." "15 years of teaching experience." "A master's degree in English Education."	1. Age: 43 2. Years of teaching: 15 3. Master's degree in English Education
Ms. URU	"42 years old." "14 years of teaching experience." "A master's degree in English Education."	1. Age: 42 2. Years of teaching: 14 3. Master's degree in English Education
Ms. S	"Age - 36, Teaching Experience - 7 years, Educational Background - Master's degree in English Education"	1. Age: 36 2. Years of teaching: 7 3. Master's degree in English Education
Questions 4 and 5. Information about the Schools Where the Participants Serve as ~~the~~ Field Supervisors		
Ms. NA	"A private and boarding school having a limited number of computers and LCD projectors"	1. School type: Private and boarding school 2. School facilities: Limited computers and LCD projectors
Mr. MA	"A private school with computers, LCD projectors, and the Internet"	1. School type: Private 2. School facilities:

		Computers, LCD projectors, and the Internet
Ms. YAH	"A private school having only an LCD projector"	1. School type: Private 2. School facilities: An LCD projector
Ms. YKU	"A private and boarding school with a language laboratory and LCD projectors"	1. School type: Private and boarding school 2. School facilities: A language laboratory and LCD projectors
Ms. R	"A public school with a language laboratory, the Internet, and LCD projectors"	1. School type: Public 2. School facilities: A language laboratory, the Internet, and LCD projectors
Ms. RF	"A public and non-boarding school with a computer class, the Internet, and an LCD projector in every class"	1. School type: Public and non-boarding school 2. School facilities: A computer class, the Internet, and an LCD projector in each class
Ms. URU	"A public school with adequate LCD projectors and limited usable computers in a computer room"	1. School type: Public 2. School facilities: Limited computers and LCD projectors
Ms. S	"A public and non-boarding school with a stable Internet connection, English corner, a computer room, and an LCD projector in each classroom"	1. School type: Public and non-boarding school 2. School facilities: The Internet, English corner, a computer room, an LCD projector in each class
Questions 6 and 7. Participant Observations of Teacher Candidates During Internship		
Ms. NA	"The teacher candidates have done ~~really~~ well in	1. Instructional media utilized

	boosting the students' English skills using these tools: books and PPT."	by teacher candidates: Books and PPT 2. Participant's opinion on the effectiveness of using those media: Well
Mr. MA	"It's pretty standard for these teacher candidates to stick with books, but some of them use their own module."	1. Instructional media utilized by teacher candidates: books and module 2. Participant's opinion on the effectiveness of using those media: Average
Ms. YAH	"They use things like PowerPoint and English books, and it seems to do the trick in getting the students interested in learning."	1. Instructional media utilized by teacher candidates: English books and PPT 2. Participant's opinion on the effectiveness of using those media: The media is sufficient to engage the students to learn.
Ms. YKU	"Even when they only use textbooks and sometimes grab material from the internet, the class flows smoothly."	1. Instructional media utilized by teacher candidates: Textbooks and materials from the Internet 2. Participant's opinion on the effectiveness of using those media: The class flows smoothly.
Ms. R	"When they come prepared, it makes English instruction more engaging. They even use the Words Booster mobile app alongside books and PowerPoint."	1. Instructional media utilized by teacher candidates: Words Booster, books, and PowerPoint 2. Participant's opinion on the

		effectiveness of using those media: English instruction is more engaging.
Ms. RF	"The tools they use are typically their own worksheets and sometimes PowerPoint slides, which seem to work."	1. Instructional media utilized by teacher candidates: Their own worksheet and PPT 2. Participant's opinion on the effectiveness of using those media: It works.
Ms. URU	"Since these teacher candidates are still learning, classroom management can be a challenge. They rely on books and appropriate teaching aids for support."	1. Instructional media utilized by teacher candidates: Books and teaching aids 2. Participant's opinion on the effectiveness of using those media: The teacher candidates face difficulties.
Ms. S	"These teacher candidates have found a way to make learning English more appealing by adding the Elsa Speak mobile app to their materials, alongside with the English textbooks."	1. Instructional media utilized by teacher candidates: Elsa Speak and English textbooks 2. Participant's opinion on the effectiveness of using those media: Class is more appealing.
Questions 8 and 9. Participants' Perspectives on Mobile Apps		
Ms. NA	"I've been using BBC Learning English for about 5 years now. It's been a great resource for me to learn English, especially when it comes to speaking. Personally, I can only see its advantages."	1. Name of the mobile apps: BBC Learning English 2. Years of using the mobile apps: 5 3. The participant's opinion about the mobile apps: It has many advantages.

Mr. MA	"Babbel has been a great choice for learning English, and I've been using it for 6 years. I find it very beneficial, although it does come with a price tag."	1. Name of the mobile apps: Babbel 2. Years of using the mobile apps: 6 3. The participant's opinion about the mobile apps: It is very beneficial.
Ms. YAH	"I've been using the mobile app Grammarly for almost 5 years. I use the free version because I only need it for basic grammar corrections in my writing, and I've been quite satisfied with it."	1. Name of the mobile apps: Grammarly 2. Years of using the mobile apps: 5 3. The participant's opinion about the mobile apps: It is satisfying.
Ms. YKU	"I've heard about some mobile apps for learning English, but I've never tried any of them."	1. Name of the mobile apps: - 2. Years of using the mobile apps: - 3. The participant's opinion about the mobile apps: -
Ms. R	"I enjoy learning English through mobile apps because they allow me to learn a lot without having to attend classes, and I can do it anytime and anywhere. I have used Grammarly, Duolingo, and Words Booster for 8 years. They have more advantages than disadvantages in my opinion."	1. Name of the mobile apps: Grammarly, Duolingo, and Words Booster 2. Years of using the mobile apps: 8 3. The participant's opinion about the mobile apps: They have more advantages than disadvantages.
Ms. RF	"I've found Grammarly and Duolingo to be cool mobile apps. They've been my companions for 9 years in improving my English and have also	1. Name of the mobile apps: Grammarly and Duolingo 2. Years of using the mobile

	helped me with my research projects."	apps: 9 3. The participant's opinion about the mobile apps: They are cool.
Ms. URU	"I have no experience with mobile apps, so I'm not sure if their advantages outweigh their disadvantages."	1. Name of the mobile apps: - 2. Years of using the mobile apps: - 3. The participant's opinion about the mobile apps: -
Ms. S	"My primary focus has always been on developing two English skills—writing and speaking. I have received considerable assistance from Grammarly and Elsa Speak. I've felt many benefits from them over the past 8 years."	1. Name of the mobile apps: Grammarly and Elsa Speak 2. Years of using the mobile apps: 8 3. The participant's opinion about the mobile apps: They have many benefits.
Question 10. Do the participants recommend ~~for~~ the utilization of mobile apps in teacher candidates' internships, or do they not?		
Ms. NA	"I wouldn't recommend it due to the fact that some schools, particularly boarding schools, have policies that prohibit students from bringing mobile phones."	1. Participant's recommendation on integrating mobile apps in English language teaching for teacher candidates: No 2. Reason: Some schools, especially boarding schools, forbid students from bringing mobile phones.
Mr. MA	"No, because the existing teaching media have already been quite successful. Moreover, the use of mobile apps is feared to disrupt the learning process as students may lack discipline in their	1. Participant's recommendation on integrating mobile apps in English language teaching for

	utilization. "	teacher candidates: No 2. Reason: The current teaching media has already proven to be quite effective.
Ms. YAH	"Not all schools have adequate facilities, especially when it comes to the Internet. So, the use of mobile apps might not be effective, especially since not all students have mobile phones and sufficient data."	1. Participant' recommendation on integrating mobile apps in English language teaching for teacher candidates: No 2. Reason: Some schools need more facilities, especially the Internet.
Ms. YKU	"I haven't used mobile apps for learning English before, so I don't have any opinions or recommendations for them."	1. Participant's recommendation on integrating mobile apps in English language teaching for teacher candidates: - 2. Reason: -
Ms. R	"Yes, because students nowadays are very tech-savvy, especially with gadgets. So, mobile apps would be quite appealing to students and could motivate them even more."	1. Participant's recommendation on integrating mobile apps in English language teaching for teacher candidates: Yes 2. Reason: Students are tech-savvy so mobile apps would be pretty appealing.
Ms. RF	"In school, students are usually obedient to their teachers and school rules. In the school where I serve as a field supervisor, the students are very disciplined, so I'm not too concerned about them not staying focused on mobile apps and getting	1. Participant's recommendation on integrating mobile apps in English language teaching for teacher candidates: Yes

	distracted by social media or other things."	2. Reason: Students are ~~very~~ disciplined and obedient to the teachers and school rules.
Ms. URU	"I can't say yes or no because I've never used them and don't know the benefits and drawbacks."	1. Participant' recommendation on integrating mobile apps in English language teaching for teacher candidates: - 2. Reason: -
Ms. S	"In our school, students have free Internet access, and they are allowed to bring mobile phones to school, so the utilization of mobile apps for learning would be very supportive for them."	1. Participant's recommendation on integrating mobile apps in English language teaching for teacher candidates: Yes 2. Reason: The school provides free Internet access and allows students to bring their mobile phones.

(Source: Author's Own Illustration)

Following the completion of coding for all transcripts, the subsequent phase involves the researcher categorizing codes with shared connotations and assigning them new designations. This is then followed by composing descriptions. The outcomes of this coding classification, and their corresponding descriptions are detailed in the table below.

Table 3.2.2.: *The Coding Classification Results*

Group	Code	Description
The younger participants	Five: Ms. NA, Mr. MA, Ms. YAH, Ms. R, and Ms. S	Participants aged between 35-39 years
The older participants	Three: Ms. YKU, Ms. RF, and Ms. URU	Participants aged between 40-44 years
The shorter teaching experience	Five: Ms. NA, Mr. MA, Ms. YAH, Ms. YKU, and Ms. S	Participants' teaching experience of less than 10

		years
The longer teaching experience	Three: Ms. R, Ms. RF, and Ms. URU	Participants' teaching experience of more than 10 years
The field of expertise held by the most participants	Master's degree in English Education	Seven participants hold this degree: Ms. NA, Ms. YAH, Ms. YKU, Ms. R, Ms. RF, Ms. URU, and Ms. S
The field of expertise held by the fewest participants	Master's degree in English Literature	Only one participant holds this degree, that is Mr. MA
Type of schools and facilities	1) Private and boarding schools ● Facilities: Computers, LCD projectors, and a language laboratory ● Participants: Ms. NA, Mr. MA, Ms. YAH, and Ms. YKU 2) Public and non-boarding schools ● Facilities: A language laboratory, Internet access, LCD projectors, a computer room, and an English corner ● Participants: Ms. R, Ms. RF, Ms. S, and Ms. URU	Type of schools, and facilities, where the participants supervise teacher candidates during their internship at secondary schools
English language learning media	1) Books: All teacher candidates 2) PPT: Teacher candidates supervised by Ms. NA, Ms. YAH, Ms. R, and Ms. RF 3) Module: Teacher candidates supervised by Mr. MA 4) Materials from the Internet: Teacher candidates supervised by Ms. YKU 5) Words Booster: Teacher candidates	Media used by teacher candidates during their internship at secondary schools and their success in improving students' English skills

	supervised by Ms. R 6) Worksheet: Teacher candidates supervised by Ms. RF 7) Teaching aids: Teacher candidates supervised by Ms. URU 8) Elsa Speak: Teacher candidates supervised by Ms. S	
Mobile apps used by the participants	1) BBC Learning English: Used by Ms. NA 2) Babbel: Used by Mr. MA 3) Grammarly: Used by Ms. YAH, Ms. R, Ms. RF, Ms. S 4) Duolingo: Used by Ms. RF 5) Words Booster: Used by Ms. R 6) Elsa Speak: Used by Ms. S	The names of mobile apps used by the participants for various uses
Positive opinions	1) It has many advantages (Ms.NA) 2) It is very beneficial (Mr.MA) 3) It is satisfying (Ms. YAH) 4) They have more advantages than disadvantages (Ms. R) 5) They are cool (Ms. RF) 6) They have many benefits (Ms. S)	The participants' positive opinions about mobile apps for English learning for personal use
NO recommendation	1) Some schools, especially boarding schools, forbid their students to bring mobile phones (Ms. NA) 2) The existing teaching media have already been quite successful (Mr. MA) 3) Some schools lack of facilities, especially the Internet (Ms. YAH) 4) The use of mobile apps is feared to disrupt the learning process due to the lack of discipline among many students (Mr.	The participants' reasons for NO recommending mobile apps for English learning in secondary education

	MA)	
YES recommendation	1) Students are very tech-savvy, so mobile apps would be quite appealing (Ms. R) 2) Students are very disciplined and obedient to the teachers and school rules (Ms. RF) 3) The school provides free Internet access and allows its students to bring their mobile phones (Ms. S)	The participants' reasons for YES recommending mobile apps for English learning in secondary education
NEUTRAL Recommendation	1) Having no opinion or recommendation (Ms. YKU) 2) Unaware of mobile apps' benefits and drawbacks (Ms. URU)	The participants' reasons for NEUTRAL recommending mobile apps for English learning in secondary education

(Source: Author's Own Illustration)

3.3. Identifying the Themes

This stage marks the final step in thematic analysis, where the researcher explores themes based on organized codes and then links them to the research objectives. Thus, at this stage, answers to the research questions are uncovered. The initial step involves the creation of tentative themes, which are preliminary themes derived from the analysis, subject to potential modification during the review. Tentative themes are formed by revisiting the codes and groups that have been established and identifying similarities and differences. The next step involves comparing these tentative themes to uncover similarities, differences, and interconnections. The following elaboration elaborates of the results obtained from identifying themes to answer two research questions: the participants' perceptions of utilizing mobile apps for English learning in secondary education and the factors influencing their perceptions.

Table 3.3.1: *The Result of Identifying the Themes*

Themes	Descriptions
The participants' opinions of mobile apps for personal use	Six out of eight participants acknowledged utilizing mobile apps to enhance their English language skills and for research purposes. These six participants conveyed a positive stance on mobile apps, asserting

	that the benefits outweigh the drawbacks. On the other hand, the remaining two participants refrained from expressing an opinion as they have ~~not~~ yet utilized language-learning mobile apps.
The participants' perceptions of utilizing mobile apps for English learning in secondary education	The participants exhibit divergent perceptions regarding using mobile apps for English learning in secondary education. While three participants hold positive perceptions, another three harbor negative perceptions, and the remaining two maintain neutral perceptions.
The factors influencing the participants' perceptions	The factors influencing these disparate perceptions include 1) the duration of participants' teaching experience, 2) the duration of participants' experience in using mobile apps, 3) the duration of their experience with mobile apps, 4) the variety of mobile apps they have used, 5) the type of school and its facilities where participants observed teacher candidates during their internships, and 6) the success of the teacher candidates under their guidance during the internship.

(Source: Author's Own Illustration)

4. Result and Discussion

This research reveals several key findings that will be discussed in the following section.

4.1. Differences in Participants' Perceptions Regarding the Use of Mobile Apps for English Learning in Secondary Education

Based on the thematic analysis of transcripts from semi-structured interviews with eight teacher educators participating in this research, the results indicate that participants' perceptions are divided into three categories: positive, negative, and neutral. Three participants have positive perceptions, three have negative perceptions, and the remaining two have neutral perceptions.

Participants with positive perceptions clearly state that mobile apps have numerous benefits, and they have been leveraging these benefits for years for various educational purposes and research report writing. Therefore, they recommend using mobile apps for teacher candidates undergoing internships in junior and senior high schools. This implies they also advocate for its

general use among all English teachers at the same levels. In other words, they believe many benefits can be gained from mobile apps for English learning in secondary education.

Participants with negative perceptions regarding using mobile apps for English learning in secondary education acknowledge the many benefits that can be derived from mobile apps. They admit that mobile apps have helped them improve their English language skills and assisted in research report writing, similar to the benefits expressed by the positive perception group. However, this group with negative perceptions does not recommend using mobile apps for English learning in secondary education. This presents a contradiction where they recognize that mobile apps are handy for enhancing English skills and aiding in research report writing. However, on the other hand, they do not recommend integrating them into English learning for teacher candidates in secondary education. This also implies that they do not endorse the widespread use of these mobile apps for English language instruction among English teachers at the same educational level.

As for participants with neutral perceptions, they state that they have never used these mobile apps. Therefore, they cannot provide an opinion on whether the advantages of using mobile apps outweigh the disadvantages or whether they are suitable and can be used to support English learning in secondary education. They do not have any views on this matter.

4.2. Factors Influencing and Non-influencing the Participants' Perceptions Regarding the Use of Mobile Apps for English Learning in Secondary Education

The semi-structured interviews conducted with eight participants, who are teacher educators, comprised ten questions covering aspects such as age, educational background, years of teaching experiences, types of schools and facilities where they serve as field supervisors for interns, the success of their teacher candidates during their internships, whether the participants have ever used mobile apps, the specific mobile apps used, the years of their usage, and whether they recommend the use of mobile apps for teacher candidates.

Results from the thematic analysis of transcripts from the semi-structured interviews indicate that several factors influence and do not influence participants' perceptions regarding using mobile apps for English learning in secondary education. Influencing factors include:

1. Their duration of teaching experiences
2. Whether they have used the mobile apps or not
3. Their duration of experiences in using mobile apps

4. Variety of mobile apps they have used

5. Type of school and facilities where participants serve as field supervisors overseeing teacher candidates during internships

6. The success of teacher candidates under the guidance of participants

Experienced mobile app participants are evenly divided into two groups, each consisting of three participants, with positive and negative perceptions, respectively. Meanwhile, participants without experience using mobile apps express neutrality, having no opinions or recommendations regarding mobile apps. The duration of participants' experiences with mobile apps is also influential, as those with positive perceptions have longer experiences than those with negative perceptions. In the case of those with positive perceptions, they have experiences in using mobile apps ranging from 8-9 years. Meanwhile, those with negative perceptions fall within the 5-6 years range.

A similar trend is observed in another factor: the duration of participants' teaching experiences. Participants with positive perceptions have significantly longer teaching experiences, ranging from 7 to 15 years, compared to those with negative perceptions, whose experiences fall within the 7 to 8 years range.

Similarly, for the third factor, those with more varied experiences using mobile apps tend to have positive perceptions compared to participants with negative perceptions who have experience with only one type of mobile app. It is noted that those with positive perceptions have experiences using multiple types of mobile apps. Specifically, Ms. R utilizes Grammarly, Duolingo, and Words Booster; Ms. RF employs Grammarly and Duolingo; and Ms. S utilizes Grammarly and Elsa Speak. Conversely, participants with negative perceptions use only one type of mobile app each, with Ms. NA using BBC Learning English, Mr. MA opting for Babbel, and Ms. YAH selecting Grammarly.

Another influencing factor is the type of school and facilities where participants serve as field supervisors for interns (teacher candidates). Those with positive perceptions are placed in public and non-boarding schools, where secondary education students are disciplined and obedient to teachers and school rules, reducing concerns about distractions from integrating mobile apps in the classroom. There are also adequate school facilities, especially the Internet availability for students, further support the positive perceptions. The school rules also support integrating mobile apps; students are permitted to bring their mobile phones to enhance the

learning experience in the classroom. They claim that mobile apps can be supplementary tools alongside existing resources such as books, computers, language laboratories, English corners, and LCD projectors.

In contrast, participants with negative perceptions serve as field supervisors in private and boarding schools. They observe a need for more discipline among students and limited school facilities, especially Internet access. Due to these concerns, they do not recommend the use of mobile apps for English learning in secondary education, fearing that the presence of mobile apps may disrupt students. Additionally, students are not allowed to bring their mobile phones. They argue that the English language teaching and learning process in secondary education runs smoothly with existing resources such as books, computers, worksheets, modules, teaching aids, and LCD projectors.

In terms of the factors that do not influence participants' perceptions regarding the use of mobile apps for English learning in secondary education, the age and educational background of the participants play negligible roles. This is evident in the two groups with differing perceptions; the group with positive perceptions has varying ages, namely 36, 38, and 43 years, while those with negative perceptions also exhibit diverse ages, specifically 36, 36, and 38 years. This suggests that age plays a minor role. Similarly, educational background does not exert a significant influence, as seven out of eight participants share the same educational background, holding a master's degree in English Education, with only one participant having a master's degree in English Literature. Despite this lone participant with a different background being classified in the group with negative perceptions, the number is outweighed by the two others who, like the majority, hold a master's degree in English Education and share negative perceptions. This count is nearly equal to the number of participants with positive perceptions. Therefore, the two groups have similar educational backgrounds.

5. Conclusion

In the current era of technology and artificial intelligence, where advancements are rapidly progressing, and students are highly accustomed to technology, including mobile phones, one of the tools for learning English that can adapt to the times is mobile apps. The participants in this research are eight teacher educators at IAIN Kediri who are teaching teacher candidates who will teach English lessons in secondary education, encompassing junior and senior high

schools. Six of the eight teacher educators have experience using mobile apps, and they continue to use them to this day. Only two participants have yet to use them. Those who have used mobile apps acknowledge that they have many benefits, not only for enhancing their English language skills but also for assisting them in research report writing. However, these six teacher educators have different perceptions regarding using mobile apps for English learning in secondary education. They are divided into two groups: those with positive perceptions and those with negative perceptions. As for teacher educators who have never used mobile apps, they hold a neutral perception.

Several factors influencing the differences in perceptions among these teacher educators include:

1. The duration of their teaching experiences

2. Whether or not they have used mobile apps

3. The length of their experiences in using mobile apps

4. The variety of mobile apps they have utilized

5. The types of school and school facilities where these teacher educators serve as field supervisors, guiding and overseeing teacher candidates during their internship

6. The success of the teacher candidates under the guidance of these teacher educators during their internship

It is important to note that students in secondary education are highly familiar with technology, and many learning resources are available to them beyond their teachers. As technology advances rapidly, it offers opportunities to enhance student learning. If teacher educators can introduce and encourage teacher candidates to incorporate mobile apps into English learning, secondary education students can easily, independently, and confidently enhance their English skills, ultimately leading to more advanced educational outcomes.

Exploring research in different settings and investigating how teacher educators' perceptions of the use of mobile apps for English learning affect the teaching practices of secondary school teachers are two intriguing areas for future research.

ACKNOWLEDGMENTS

REFERENCES

Adosi, C. (2020). Qualitative data collection instruments : the most challenging and easiest to use. Institute for Educational Planning and Administration, September, 0–7. https://www.researchgate.net/publication/344251614

Alt, N. P., & Phillips, L. T. (2022). Person perception, meet people perception: exploring the social vision of groups. Perspectives on Psychological Science, 17(3), 768–787. https://doi.org/10.1177/17456916211017858

Alzubi, A. A. (2019). Teachers' perceptions on using smartphones in English as a foreign language context. Research in Social Sciences and Technology, 4(1), 92–104. https://doi.org/10.46303/ressat.04.01.5

Ardiansyah, A. A., & Nana, N. (2020). Peran mobile learning sebagai inovasi dalam meningkatkan hasil belajar siswa pada pembelajaran di sekolah. Indonesian Journal of Educational Research and Review, 3(1), 47. https://doi.org/10.23887/ijerr.v3i1.24245

Aspers, P., & Corte, U. (2019). What is qualitative in qualitative research? Qualitative Sociology, 42(2), 139–160. https://doi.org/10.1007/s11133-019-9413-7

Ayanwale, M. A., Sanusi, I. T., Adelana, O. P., Aruleba, K. D., & Oyelere, S. S. (2022). Teachers' readiness and intention to teach artificial intelligence in schools. Computers

and Education: Artificial Intelligence, 3, 1–11.
https://doi.org/10.1016/j.caeai.2022.100099

BBC News Indonesia. (2018). Pelajar Indonesia jadi salah satu pengguna teknologi tertinggi di
dunia. Www.Bbc.Com. https://www.bbc.com/indonesia/majalah-46500293

Hadar, L. L., Ergas, O., Alpert, B., & Ariav, T. (2020). Rethinking teacher education in a VUCA
world: student teachers' social-emotional competencies during the covid-19 crisis.
European Journal of Teacher Education, 43(4), 573–586.
https://doi.org/10.1080/02619768.2020.1807513

Heriyanto, H. (2018). Thematic analysis sebagai metode menganalisa data untuk penelitian
kualitatif. Anuva, 2(3), 317. https://doi.org/10.14710/anuva.2.3.317-324

Hidayat, D. N., Lee, J. Y., Mason, J., & Khaerudin, T. (2022). Digital technology supporting
English learning among Indonesian university students. Research and Practice in
Technology Enhanced Learning, 17(1). https://doi.org/10.1186/s41039-022-00198-8

Hinze, A., Vanderschantz, N., Timpany, C., Cunningham, S. J., Saravani, S. J., & Wilkinson, C.
(2023). A study of mobile app use for teaching and research in higher education.
Technology, Knowledge and Learning, 28(3), 1271–1299.
https://doi.org/10.1007/s10758-022-09599-6

Keong, Tan, C., B.D., N., Wah, Lee, K., & Choo, Kang, H. (2020). The impact of the design
teams approach on preservice teachers' tpack in the Vietnamese context. Studies in
English Language Teaching, 8(1), p85. https://doi.org/10.22158/selt.v8n1p85

Lester, J. N., Cho, Y., & Lochmiller, C. R. (2020). Learning to do qualitative data analysis: a
starting point. Human Resource Development Review, 19(1), 94–106.
https://doi.org/10.1177/1534484320903890

LLDIKTI Wilayah VI. (n.d.). Sertifikasi Dosen. Lldikti6.Kemdikbud.Go.Id. Retrieved
November 7, 2023, from https://lldikti6.kemdikbud.go.id/sertifikasi-dosen/

Maknuni, J. (2020). Pengaruh media belajar smartphone terhadap belajar siswa di era pandemi
covid-19. Indonesian Education Administration and Leadership Journal (IDEAL),
02(02), 94–106. https://online-journal.unja.ac.id/IDEAL/article/view/10465

Michos, K., Cantieni, A., Schmid, R., Müller, L., & Petko, D. (2022). Examining the relationship
between internship experiences, teaching enthusiasm, and teacher self-efficacy when

using a mobile portfolio app. Teaching and Teacher Education, 109, 1–13.
https://doi.org/10.1016/j.tate.2021.103570

Nikolopoulou, K. (2020). Secondary education teachers' perceptions of mobile phone and tablet use in classrooms: benefits, constraints and concerns. Journal of Computers in Education, 7(2), 257–275. https://doi.org/10.1007/s40692-020-00156-7

Pusparisa, Y. (2020). Pengguna Smartphone diperkirakan mencapai 89% populasi pada 2025. Databoks. Katadata. Co. Id. https://databoks.katadata.co.id/datapublish/2020/09/15/pengguna-smartphone-diperkirakan-mencapai-89-populasi-pada-2025

Ruslin, R., Mashuri, S., Rasak, M. S. A., Alhabsyi, F., & Syam, H. (2022). Semi-structured Interview: A methodological reflection on the development of a qualitative research instrument in educational studies. IOSR Journal of Research & Method in Education (IOSR-JRME), 12(1), 22-29. http://repository.iainpalu.ac.id/id/eprint/1247/1/Saepudin%20Mashuri.%20Artkel%20inter..pdf

Sitasari, N. W. (2022). Mengenal analisa konten dan analisa tematik dalam penelitian kualitatif. Forum Ilmiah, 19(1), 77–84. https://digilib.esaunggul.ac.id/public/UEU-Journal-23188-11_2248.pdf

Synnott, C. K. (2018). Smartphones in the classroom: the pros and cons. SSRN Electronic Journal, 1(35). https://doi.org/10.2139/ssrn.3138884

Taskan, B., Junça-Silva, A., & Caetano, A. (2022). Clarifying the conceptual map of VUCA: a systematic review. International Journal of Organizational Analysis, 30(7), 196–217. https://doi.org/10.1108/IJOA-02-2022-3136

Undang-Undang tentang Guru dan Dosen, Pub. L. No. 14, Presiden Republik Indonesia 1 (2005). https://drive.google.com/file/d/1QNGBCbAWAvy5QejMxmH12unYiwOjdjYY/view

Viswanathan, P. (2023). iOS App Store vs. Google Play Store. Lifewire.Com. https://www.lifewire.com/ios-app-store-vs-google-play-store-for-app-developers-2373130

NA. (2023, June 12). Personal interview.

MA. (2023, June 12). Personal interview.

YAH. (2023, June 12). Personal interview.

YKU. (2023, June 12). Personal interview.

R. (2023, June 19). Personal interview.

RF. (2023, June 19). Personal interview.

URU. (2023, June 19). Personal interview.

S. (2023, June 19). Personal interview.