# THREE ATTITUDE MODELS ON THE USE OF QR CODE IN EFL INDEPENDENT LEARNING AT CORDOVA ELEMENTARY SCHOOL

Evi Wulandhari, Susilo, Aridah
English Department, Faculty of Teacher Training and Education
Mulawarman University, telp: (0541) 743641
eviwulandhari16@gmail.com, olisusunmul@gmail.com, aridah27@yahoo.com

#### **Abstract**

This research was about three attitude models on the use of QR Code in EFL independent learning at Cordova elementary school. The design of this study was qualitative phenomenology. This study use semi-structured interview from four selected students to collect the data. Participants were selected using purposive sampling with the criteria that had been prepared by the researcher. This research aimed to find out three attitude models based on Spooncer (1992) theory, the occurred of students feeling, beliefs, and behaviours. First, the students feelings there were two main points advantages and attractiveness. Advantages regards to ease and learning media. Attractiveness regards to interesting and fun. Secondly, the students beliefs there were two main points improve ability and preferences. Improve ability regards to soft skill and hard skill. Preferences regards to agreements of students. Last, the students behave there were one main point about experiences of students. The Experiences regards to problems of media, problems of tools, and personality problems. Therefore, it is suggested that teachers will try to implement digital-based learning in schools and facilitate students with the internet and media.

**Keywords:** Attitude, QR Codes, Independent Learning

## 1. Introduction

Attitude is one of the most crucial elements affecting learning a foreign language, especially English. Barker (1992) described that the problem of student attitudes is one of the most significant elements affecting language acquisition. Furthermore, attitudes affect how students behave and decide whether or not they can comprehend English language instruction. As Weinburg (1998) said that learning behavior will be influenced by attitudes toward learning.

However, in this study attitudes classified into three categories feelings, beliefs, and behaviours (Spooncer, 1992). Feelings refers to emotions someone (sympathy, brave, scare). Beliefs refers to the ways of thinking (I think tea has many benefits, I can pass the exam), behaviours refers to the way of action (I am going to the school, my computers were trouble). Thus, attitude is very important to know in learning English in order to be able to estimate the right method for the learning process.

Under the current situation, one of the major issues is a lack of desire on the side of students, as well as a lack of understanding of the necessity of learning a foreign language. Furthermore, study overload and uninteresting content delivery may be a

concern. The lack of students uninteresting content delivery (Ibrahim et al., 2020). Especially in 2013 curriculum, due to its restricted content and the fact that students need to learn more than just what is in the textbook, the textbook is insufficient for the learning process. Using books with a QR Code encourages students to learn through books more effectively and provides them with several options for doing so.

To support students' achievement, an attractive design for textbooks is also needed. Harmanto et al., (2021) explained that individuals can be assisted in becoming effective English practitioners using the e-book on their own. Bee & Karim, (2020) defined QR codes are matrix barcodes that may be scanned with any smartphone that has the necessary screen application installed in order for the code to be recognized. As a result, an e-book guide might be supplied as an option to meet their needs. It means to increase students' understanding of learning through books, an attractive digital ability or design is needed. Now, in the Covid-19 pandemic situation, students cannot conduct face-to-face learning exercises, so they are doing it by online. But, books will continue to be employed as teaching aids and will become one of the most often used teaching materials (Damayanti, 2018).

Furthemore, since covid-19 learning has started from home. Students learn independently. Even though, students study from home, they also have to study independently because they cannot ask the teacher directly. The changing learning process requires students to be able to manage time, know their weaknesses, and what to do in order to understand the learning. According to Hayta and Yaprak (2013), independent learning is the capacity to actively participate in one's own education. Students in this learning style are in charge of their own education. They absorb knowledge based on what they require. They can do this by creating their own learning plans based on their individual requirements. Additionally, it is a student-focused learning approach that prioritizes cooperative learning and the learning environment (Islam, 2011).

In the implementation, Herlina (2021) said that English is extremely important and should be taught from a young age. From the reality, the usage of QR codes as supplemental learning materials is a recent innovation discovered by the researcher. Researchers employ the learning tool, the internet, and smartphones in this technology-based media. From the youngest to the elderly, the majority of people in today's world own a smartphone.

From the explanation above, the researcher wants to see the attitude from students about feelings, beliefs, and behaviors on the use of QR Code in EFL Independent learning.

## 2. Literature Review

#### 2.1. Meaning of Attitude

One of the most crucial elements affecting learning a foreign language, especially English, is attitude. Student conduct is significantly influenced by attitudes developed during the teaching and learning process. According to the Merriam Webster Dictionary (2019), attitudes are a physical condition of preparedness to react to a stimuli (an item, idea, or circumstance) in a distinctive manner. In similar way, Herlen (1996) discussed that attitude is a person's preparedness, inclination, or behavior in response to a certain circumstance or object. Additionally, Gerungan (2000) said that

attitude is always connected to the object and is defined as a perspective or emotion that is followed by a tendency to act in a way that is consistent with the object.

However, Spooncer (1992) classified attitude into three components, three attitude components consist of: Feelings, beliefs, and behaviour. The first component refers to verbal expressions of feelings, the second component refers to a person's cognitive responses or verbal expressions of beliefs or thinking, and last component refers to someone action about object (Morgana, 2018). In this occasion, these three attitude refers to know how the human attitude from surroundings or experiences. To interpret the three attitude models on the use QR Code, it took from the students experience after studying EFL learning of e-book by QR Code.

# 2.2. Components of Three Attitude

Spooncer (1992) said that the attitude model, better known as the tripartite model, consists of his three attitude components: Feelings, beliefs, and behavior. These are following;

# a. Feelings Aspect

The feeling component has to do with how people feel about the object. Learning is an emotional process that is influenced by a variety of emotional elements (Choy & Saleh, 2006). Furthemore, Nitza (2018) point out that the feeling dimension involved the development and modification of attitudes as well as the encouragement of motivation and interest in learning.

According to Choy & Troudi (2006), a foreign language learner's internal feelings and emotions might influence their perspective and attitudes toward the target language. Example, if students are focused on the learning process, they can absorb as much knowledge as they can and get emotionally involved.

## **b.** Beliefs Aspect

The thoughts or perceptions of specific knowledge and the learning process are the focus of the beliefs, part of attitude (Abidin et al., 2012). Similarly, the beliefs aspect of attitude according to Verešová and Malá (2016) the component of an individual's ideas concerning broad topics, including likes and dislikes. This mindset is one that builds understanding via experience in learning. Knowledge and attitudes in this field come from experience.

The degree to which a person understands the attitudinal object is indicated by the beliefs component. A condition will therefore be represented by people who have a strong attitude toward an attitudinal object and the necessary knowledge about it. "Agree/like, disagree/dislike" is one approach to express this state (Morgana, 2018). From the definition above, it is clear that react to what students have done and learned. The student's beliefs is the student's way of thinking.

According to (Shidu, 2003), student cognition is the student's perception of what has happened in the learning process of the class, providing suggestions and arguments for teachers and classmates to improve the learning process. This means that students have their own opinions about what comes out of the teaching and learning process and how to approach it.

## c. Behaviors Aspect

The behavioral component is concerned with an individual's actions and reactions in particular situations. The behavioral component, which includes actions or perceptible reactions brought on by an attitude object, is an individual's verbal behavioral predisposition. How one responds to particular emotions and concepts is determined by the conative (Schiffman and Kanuk, 2004). Moreover, the behavioral component is an attitude statement about behavior, an action, or a behavior. This mindset can be impacted by prior experiences as well as the stimulus of the object in front of us. experiences, present situation, and anticipated future (tulus, 2004). The views that people display toward the outside world are reflected in their behaviour. As a result, attitudes could be considered a driving force behind conduct.

# 2.3 Concept of QR Codes

## a. Definition of QR Codes

QR, or Quick Response code, is a type of 2D (two-dimensional) bar code that may store and encode a range of content such as words, URLs, automatic messages, photos, audios, videos, and communicate information that can be read by a scanner (Jeon, 2015). It offers qualities like fast recognition, detailed information storage, mobile device accessibility, user-friendliness, low cost, and portability. Similarly, in Bee & Karim, (2020) assumed that QR Codes are matrix barcodes that can be scanned with any mobile phone that has an appropriate screen application that recognizes the codes. These codes can be used to link straight to a picture, a website, a video, or a lab sheet, giving you fast access to any information you want, as long as you have permission.

Additionally, Nur (2020) claimed that using the Quick Response (QR) Code program had a positive attitude in the classroom because it provided convenience, simplicity, and efficiency in teaching and learning, and it inspired students to learn more effectively. Both teachers and students had a favourable attitude toward the employment of QR Code programs in classroom activities. The children thought that using the QR Code application in the classroom made things easier for them and that it was also a fun thing to do, such as learning new things.

Figure 1 is the sample of 2D (two-dimensional) bar codes that used. "QR" stands for "Quick Response". It can be read by phones with cameras and QR scanners that are moderately equipped as URLs, SMS, contact information, images, and videos can all be incorporated in the two-dimensional matrix. With smartphones, we can rapidly access the URL-linked website, send a message, or save contact information to the address book (Denso, 2009).



Figure 1. Sample QR Code for scan

#### b. How to use the OR Code

According to Bee & Karim, (2020) QR codes are matrix barcodes that may be scanned with any smartphone that has the necessary screen application installed in order for the code to be recognized. These codes can use to quickly access any type of information by linking directly to an image, a webpage, a video, or a lab sheet. This paper will measure the student's perception usage of the QR Codes in the ESPS Erlangga book that are presently being used in the Cordova Elementary school and will explore the possibilities of problem face students. The use QR Code can be used via PC and handphone that they can conveniently access anywhere and at any time. As for the tutorial in order to be able to use the QR Code on the Erlangga ESPS electronic book, use the "Erlbook Reader" application like in the figure 2 which must be downloaded beforehand then students can access the video or photo by scan the bar code as figure 3. Here's a tutorial how to use: https://www.youtube.com/watch?v=yTtj1KxetmY.

Students can access multimedia resources on the Web efficiently and flexibly by connecting QR Codes on paper assignments to them in just two easy steps. This allows students to access the resources from any location (Law & So, 2010). Furthemore, education has already taken advantage of this potential to extend learning materials by offering "just in time support materials" such as video, explanatory text, and URLs (Law, 2012). The operation is simple, quick, and pleasurable.

Students can study more effectively and recall more knowledge with electronic books, which can display animations and noises and allow users to interact with them (Soonghanghwa, 2009). Electronic books can also be utilized in an online context and are suitable with distance learning, allowing students to learn the contents on their mobile devices or save them for later use.



Figure 2. Erlangga book Reader App Figure 3.QR Code for scan

# 2.4 Using the QR Code in EFL learning

During the Covid-19 epidemic, activities in education must be carried out online, So, learners are independent students. According to Stiadi, (2021) in implementing online learning students must be able to learn independently and increase their ability to use technology and communication. In addition to its advantages, online learning has some drawbacks, including higher costs and unstable internet connection constraints. To face problems, schools must transform in ways that will enable students to achieve flexible time and place, also they can understand the material well.

Rahayu et al., (2021) said that thematic module based on QR Code can be used as extra teaching material for the thematic book, based on the findings of the explanation above, to make it simpler for students to understand the lesson content and apply characters education in schools and communities.

Students can use the technology in their pockets to get instantaneous learning through the use of QR Codes. Students can obtain information from a variety of methods that can explain subjects in greater detail thanks to digital content like videos. By presenting more visually appealing, technologically advanced, and stimulating learning resources, QR Code enhances the learning process (Stoyanova, et. al., 2018).

Additionally, Harmanto et al., (2021)expect that students to be highly interested in the e-book that had been created. The technique was particularly helpful at motivating people in the pandemic Covid-19 crisis. As a result, an e-book guide might be supplied as an option to meet their needs.

## 2.5 Concept of Independent Learning

According to Hayta and Yaprak (2013), independent learning is the capacity to actively participate in one's own education. Students in this learning style are in charge of their own education. They absorb knowledge based on what they require. They can do this by creating their own learning plans based on their individual requirements. Additionally, it is a student-focused learning approach that prioritizes cooperative learning and the learning environment (Islam, 2011).

A student's behavior, motivation, and elements of the learning environment influence their accomplishment, includes independent learning. Students' capacity to apply autonomous learning will be demonstrated by their capacity to engage in active learning in terms of metacognitive, motivated, and serious behavior in reaching learning objectives (Naibaho, 2019).

Independent learning not only motivates students but also students will be aware of their shortcomings or inability to learn. Although initially independent learning is confusing over time, students will get used to independent learning to hone abilities that have not been achieved. This is in accordance with Race (2021). Race (2002) presents instances of autonomous learning in action, implying that autonomous learning is fundamentally the idea that a person can become more capable of learning on their own over time. Similarity, Nehe (2021) said independent learning gives pupils a fantastic opportunity to develop their competence and become more mature adults in the future.

Additionally, Ki Hajar Dewantara defines freedom in learning as (Kurniasih & Rahimah, 2021). not being subject to authority, which implies that an individual can choose his own objectives and exercise self-government; standing tall due to one's independence in using one's efforts to accomplish goals; Capable of managing his life in an orderly fashion, an individual's ability to do so depends on the standards and ideals held by the community. Anyway, Independent learning is not only freedom in learning, but students can find their life goals, manage the time, what they want, what they have not achieved and what they needs to be improved in learning.

#### 3. Methods

In this study, the design of this research is qualitative. Qualitative chose base of related the live experience of humans. Approach of qualitative use is phenomenology. Phenomenology is a pure qualitative approach and is very common and has strong foundation in philosophy (Saldana, 2011). This approach it focuses on the description of the common meaning for several individual of their lived experiences. Focus of this research design is what all participants have in common with purpose to reduce individual stance. To interpret the data, the researcher used descriptive qualitative. A descriptive qualitative analysis of what happened rather than how or why something happened.

In this study, the researcher investigated the students' attitude using the application QR Codes in EFL learning independently. The researcher used a qualitative of phenomenology to interpret the phenomenon that happened when students study EFL use e-book with the QR Code.

## 3.1. Research participants

The Participants of this research were students of sixth-grade from Cordova Elementary school at Samarinda. The researcher chose this subject based on the observation that their students used e-books and closely used at home. E-book provided facilities that was very easy to understand by students. The available facilities were videos and pictures that can explained lessons with full color creations and are easily accessible in the school or home.

## 3.1.1 Purposive Sampling

At Cordova elementary school, the resercher choose the sampling. The sampling only find in English book of sixth grade. All of students of sixth gradeare 117 students from four classes, but the subject chooseonly one student each class.

Creswell (2012) mentions that the researcher selects topics with the purpose of learning or understanding the main phenomenon. The criterias of study are includeone studenteach class from a representative sixth-grade from Cordova Elementary School at Samarinda. The students have an android phone are able to access the Internet via their phone or android and closely used at home. These students are choosing by the criterias:

- 1. Determining students who used the e-book in EFL learning.
- 2. Determining students had android or phone, who can access the internet.
- 3. Determining students used QR Code for learning independently in the home.

- 4. Determining the interview got from students of class six each class as the representative with standards that students have an android.
- 5. Determining the interview connect to the data and clarify the data. The interview refers to interview protocol. It does around 10-15 minutes in a semi-structured interview way for each student.

During interviewing, researcher recorded the audio to minimize the fault. collecting the data by interview students to find out students' perceptions on the use of QR Code in EFL independent learning.

#### 3.2. Research instrument

In this research, the researcher used one instruments, only interview. These instruments used to find out the answers of research questions.

# 3.2.1. Interview guide

preference)

Interviewing is an effective way for a researcher to control and verify the accuracy of the data that the researcher collected. Interviewing is also a qualitative researcher's most essential data collecting strategy (Fraenkel, Wallen, & Hyun, 2012). Fraenkel, Wallen, & Hyun also explained that the goal of an interview is to learn what's on people's minds, what they think, and how they feel about something.

There was one point of the question to answer the research question: their perceptions using the application of QR Codes in EFL learning independently. The goal of the interview is to find out the students' attitude using the application of QR Codes in EFL learning independently. To get the goal of interview, interview guide interms of feelings, beliefs, and behaviors. Interview guide took by adopt and adapt questioner.

NO Indicators of Attitude

1. Affective/Feeling (advantages, attractiveness)

2. Do you feel interested in learning EFL towards QR Codes? Why?

2. Cognitive/Belief (thinking, 1. What specific factors lead you to believe

that learning EFL in relation to QR Codes

2. Why do you think learning EFL in relation to QR Codes can help you become more

3. Do you agree that QR Codes applied in the

can enhance your English proficiency?

proficient in English?

other lesson book? Why?

Table 1. Indicators of Interview Guide

3.	Behavior (problems)	1. What are problems that you face when		
		learning EFL towards QR Codes?		

#### 3.4. Procedure of data collection

According to Saldaña (2011), the data collecting approach is a good way to get an individual's or a group's perspectives, feelings, opinions, values, attitudes, and beliefs about their personal experiences and social world, as well as factual facts about their life, in their own words. The researcher collecting the data by groups feeling, attitudes and beliefs from the personal experiences students. Hence, the data for this study got from the results of interviews.

## 3.5. Data analysis technique

In this study, the researcher focused on students' perceptions using the application of QR Codes in EFL learning independently. The data that results from observations and interviews analyse to find out the purpose of this study which were to find out the students' perceptions using the application of QR Codes in EFL learning independently. For gathering data researcher used sampling to determine the characteristic of participants. In analysing participants, the researcher used snowball technique, which was a method of gathering information to access specific groups of people (Huges, 2005). Because the characteristics of the participants were not easily accessible, the researchers used the snowball technique.

Miles & Huberman (1994) point out that data analysis in qualitative research will continue interactively until the data is saturated. The researcher uses an analytical systematic interview guide to examine the data. In this case, the researcher uses a Miles, Huberman & Saldaña analysis model. Miles, Huberman & Saldaña also mention in their book Qualitative Data Analysis: A Methods Sourcebook (3rd) that to analyze qualitative data, there are three concurrent flows of activity: data condensation, data display, and conclusion drawing/verification.

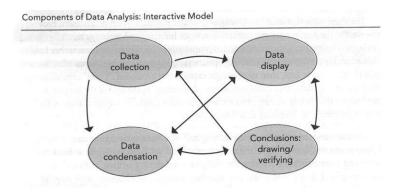


Figure 3. Components of Data Analysis: Interactive Model (Miles et al., 2014)

## a. Data condensation.

According Miles, Huberman, & Saldaña (2014), the process of selecting, condensing, simplifying, abstracting, and/or modifying data from written field notes, transcripts of interviews, papers, and other empirical sources is known as data condensation. By condensing data, we reinforce it. Data condensation is the process of creating summaries, coding, creating categories, identifying themes, and drafting analytical memoranda as data collection moves forward. The process of condensing and changing data persists after the fieldwork is over, until the final report is finished.

**Table 2.** The coding system used by the researcher

1 L1,L2,L3, L means for line of utterance. The nun means which line is.  Example: L1: First line. L2: Second line. L3: Third line.  2. R R stands for researcher. 3. S S stands for participant/student  4. FE FE stands for feeling  5. BE BE stands for behaviours  6. BV BV stands for advantages  7. AD AD stands for attractiveness  8. AT AT stands for Improving Ability  10. PF PF stands for experience  11. EX EX stands for ease  13. LM LM stands for learning media  14. IN IN stands for fun  16. SS SS stands for soft skill  17. HS HS stands for Hard skill	Code Item Represented				
Example: L1: First line. L2: Second line. L3: Third line.  2. R R stands for researcher. 3. S S stands for participant/student  4. FE FE stands for feeling 5. BE BE stands for beliefs  6. BV BV stands for behaviours  7. AD AD stands for advantages  7. IM IM stands for Improving Ability  10. PF PF stands for preferences  11. EX EX stands for experience  12. ES ES stands for ease  13. LM LM stands for interesting  15. FU FU stands for soft skill	nber				
L1: First line. L2: Second line. L3: Third line.  2. R R stands for researcher.  3. S S stands for participant/student  4. FE FE stands for feeling  5. BE BE stands for beliefs  6. BV BV stands for behaviours  6. AD AD stands for advantages  7. AT stands for attractiveness  9. IM IM stands for Improving Ability  10. PF PF stands for experience  11. EX EX stands for experience  12. ES ES stands for ease  13. LM LM stands for learning media  14. IN IN stands for fun  16. SS S stands for soft skill	means which line is.				
L2: Second line. L3: Third line.  2. R R stands for researcher.  3. S S stands for participant/student  4. FE FE stands for feeling  5. BE BE stands for beliefs  6. BV BV stands for behaviours  7. AD AD stands for advantages  8. AT AT stands for attractiveness  9. IM IM stands for Improving Ability  10. PF PF stands for preferences  11. EX EX stands for experience  12. ES ES stands for learning media  14. IN IN stands for interesting  15. FU FU stands for soft skill	1				
L3: Third line.  2. R R stands for researcher.  3. S S stands for participant/student  4. FE FE stands for feeling  5. BE BE stands for beliefs  6. BV BV stands for behaviours  7. AD AD stands for advantages  8. AT AT stands for attractiveness  9. IM IM stands for Improving Ability  10. PF PF stands for preferences  11. EX EX stands for experience  12. ES ES stands for ease  13. LM LM stands for lineresting  14. IN IN stands for interesting  15. FU FU stands for soft skill					
2. R R stands for researcher. 3. S S stands for participant/student 4. FE FE stands for feeling 5. BE BE stands for beliefs 6. BV BV stands for behaviours 6. AD AD stands for advantages 7. AT stands for attractiveness 8. AT AT stands for Improving Ability 9. IM stands for preferences 11. EX EX stands for experience 12. ES ES stands for experience 13. LM LM stands for learning media 14. IN IN stands for interesting 15. FU FU stands for soft skill	L2: Second line.				
3. S S stands for participant/student 4. FE FE stands for feeling 5. BE BE stands for beliefs 6. BV BV stands for behaviours 7. AD AD stands for advantages 7. IM IM stands for Improving Ability 9. IM stands for preferences 11. EX EX stands for experience 12. ES ES stands for ease 13. LM LM stands for learning media 14. IN IN stands for fun 16. SS S stands for soft skill	L3: Third line.				
4. FE FE stands for feeling  5. BE BV BV stands for behaviours  6. AD AD stands for advantages  7. AT stands for attractiveness  9. IM IM stands for Improving Ability  10. PF PF stands for preferences  11. EX EX stands for experience  12. ES ES stands for ease  13. LM LM stands for learning media  14. IN IN stands for interesting  15. FU FU stands for soft skill					
5. BE BE stands for beliefs  BV stands for behaviours  AD AD stands for advantages  AT AT stands for attractiveness  IM IM stands for Improving Ability  PF PF stands for preferences  11. EX EX stands for experience  12. ES ES stands for ease  13. LM LM stands for learning media  14. IN IN stands for interesting  15. FU FU stands for soft skill					
5.  BV BV stands for behaviours  AD AD stands for advantages  7.  8. AT AT stands for attractiveness  9. IM IM stands for Improving Ability  10. PF PF stands for preferences  11. EX EX stands for experience  12. ES ES stands for ease  13. LM LM stands for learning media  14. IN IN stands for interesting  15. FU FU stands for soft skill					
6. AD AD stands for advantages 7. 8. AT AT stands for attractiveness 9. IM IM stands for Improving Ability 10. PF PF stands for preferences 11. EX EX stands for experience 12. ES ES stands for ease 13. LM LM stands for learning media 14. IN IN stands for interesting 15. FU FU stands for fun 16. SS SS stands for soft skill					
7.  8. AT AT stands for attractiveness  IM stands for Improving Ability  10. PF PF stands for preferences  11. EX EX stands for experience  12. ES ES stands for ease  13. LM LM stands for learning media  14. IN IN stands for interesting  15. FU FU stands for fun  16. SS SS stands for soft skill					
9. IM IM stands for Improving Ability  10. PF PF stands for preferences  11. EX EX stands for experience  12. ES ES stands for ease  13. LM LM stands for learning media  14. IN IN stands for interesting  15. FU FU stands for fun  16. SS SS stands for soft skill					
9. PF stands for preferences  11. EX EX stands for experience  12. ES ES stands for ease  13. LM LM stands for learning media  14. IN IN stands for interesting  15. FU FU stands for fun  16. SS SS stands for soft skill					
11. EX EX stands for experience 12. ES ES stands for ease 13. LM LM stands for learning media 14. IN IN stands for interesting 15. FU FU stands for fun 16. SS SS stands for soft skill					
12.ESES stands for ease13.LMLM stands for learning media14.ININ stands for interesting15.FUFU stands for fun16.SSSS stands for soft skill					
13.LMLM stands for learning media14.ININ stands for interesting15.FUFU stands for fun16.SSSS stands for soft skill					
14.ININ stands for interesting15.FUFU stands for fun16.SSSS stands for soft skill					
15. FU FU stands for fun 16. SS SS stands for soft skill					
16. SS SS stands for soft skill					
17. HS HS stands for Hard skill					
1					
18. AG AG stands for agree					
19. PM PM stands for problem of Media					
20. PT PT stands for problem of tools					

In abstracting the processed above, the data filled in the table below to simplify the research the data display of this study. The table that uses the researcher used as follow:

**Table 3.** The Reduction table

In this stage, the data obtained from interviews. The data are obtained by interviewing the participants in giving information after they were using the QR Code.

# b. Data Display

A display is a well-organized, condensed collection of data that enables decision-making and action (Miles, Huberman, & Saldaña, 2014). The display of the data was a description of the data. Data visualization is regarded as a crucial phase in the writing up or qualitative data analysis processes. Numerous kinds of tables, matrices, charts, networks, and images are included in the data display. (Miles, Huberman, & Saldaña, 2014).

In this study, the researcher describes the data in form of a descriptive analysis. The descriptive text consists of the interview result. The result of the interviews is interpreting as the findings in this study. The data investigating is displayed in table form that supports the investigation. The result of the data was interpreted based on research questions.

The researcher discussed the data in the form of text after completing the above-mentioned tasks. Each of the points mentioned above explanation in the narration text by the researcher. Display activities from the previous data collection stage at this stage. The data from the interview was given in a descriptive manner. It was offered to obtain information about three attitude models on the use of QR CODE in EFL independent learning.

 No.
 3 Aspect Of Attitude
 Categories
 Condition
 Conclusion

 1.
 Feeling
 Advantages
 Ease

 Attractiveness
 Interesting

**Table 4.** Data Display table

2.	Beliefs	Improve ability	Fun Soft skill Hard skill	
		Preferences	Agreement	
	Behaviours	Experiences	Problems Of media	
3.			Problems of	
			tools	
			Personality	
			problem	

# c. Drawing/Verification

Drawing/Verification can be as simple as a thought crossing the analyst's mind while writing, followed by a quick return to the field notes (Miles, Huberman, & Saldana, 2014). The researcher drew conclusions of the results and verification by looking the meanings of single phenomenon.

#### 4. Result

In order to answer the research question, How three attitude models used on the QR Code in EFL independent learning, the research had five questions to guide the interview. It can be explained as follow:

#### 4.1. Feeling aspect

To answer the first research questions about the feelings of students toward the use of QR codes in EFL independent learning. The researcher found answers from the students. There are three factors that can support the answer to the question: advantages and attractiveness.

#### A. Advantages

There were some advantages that students got after using the QR Codes for learning EFL independently, such as easy learning and learning new media. Easy learning was included in the category of fun and happiness. Learning new media, such as videos, audios, and tutors, makes learning more interesting. To classify it, the interview showed the following:

#### 1. ease

Based on interview results, the researcher found that the participants' perceptions about QR Code in learning EFL independently. S1 said that after using the QR Code in learning, she got easier in learning because it applied with the pictures and videos "Learning to be easier and the QR Code was providing many pictures in the video" (S1, L38, FE, AD, ES).

It's almost in the same statement with S2, S2 also felt easier in learning. Especially, when she got limited explanation from the teacher by saying "Helping us to learn more understand" (S2, L14, FE, AD, ES).

Like S1 and S2, S3 also felt easier in learning "It's fun, it's easy, but sometimes the network is difficult" (S3, L33, FE, AD, ES)

After hearing statement S1, S2, and S3, S4 also got easier in learning such as clear in understanding by stating "The advantage is easier for us without need to read. We watch the video, it can be clear to understand". (S4, L55, FE, AD, ES).

They felt that the use of QR Codes had advantages, they felt easier in learning. As their statement that the QR Codes were providing many pictures and videos in the explanation, information to help people understand more during learning, and they felt easier to learn rather than just read material from the book.

## 2. learning media

After interviewing, the researcher found that students got new learning media through QR Codes. Media that applied by QR Co des animation in the videos, audio to relatedness video and picture, and tutor in the video to support understanding of learning. S1 got learning media through animation in the videos by saying "There is an animation in the videos".(S1, L88, FE, AD, LM).

Like S1, S2 also got learning media in the same namely videos and audios "Learning can be through videos and sounds" (S2, L32, FE, AD, LM).

In common S1 and S2, S3 learning new media through tutor explained learning in the videos by stating "The voice of the tutor" (S3, L85, FE, AD, LM)

She enhanced picture in the video also support understanding of learning "There were pictures that support quite a bit of understanding". (S3, L86, FE, AD, LM). Like S1, S2, and S3. S4 said QR "Just audios and videos without teacher" (S4, L39, FE, AD, LM)

They felt that QR Codes were one of the solutions for a new learning media. Media offers learning with animation in the video, audio, and a tutor for explaining the learning. By QR Codes, students can access it anywhere, and learning videos can be repeated at any time, so that learning becomes a good quality.

#### **B.** Attractiveness

#### 1. Interesting

The results of interviews showed that all of students felt interesting. S1 assumed that learning by QR Codes was interesting with videos, audios and

also pictures by saying "In the QR Codes we learned through videos, audios, and pictures" (S1, L84, FE, AT, IN).

Therefore S2 felt interesting because QR Codes can replay the videos anytime and anywhere by saying "We can replay English lesson alone in the home" (S2, L53, FE, AT, IN).

S3 felt interesting because the videos can explain previous lesson by stating "The Video can explain the previous lesson" (S3, L42, FE, AT, IN)

In the same way S1, S2, and S3. S4 also felt interesting with QR Codes because study like watching TV by stating "English lesson became easy like watching TV" (S4, L78-L79, FE, AT, IN)

It was found that all students felt interested with the QR Code. They were interesting because the QR Code has provided with the videos, audios, and pictures. QR Codes can replay the videos anytime and anywhere. videos can explain previous lesson, it's like watching TV.

#### 2. Fun

According to interview results, the researcher found that some students felt fun during learning by QR Codes. S2 felt fun because she got understand the learning material, before it is presented at school, also her siblings can study and she got faster in understanding material of learning by saying "Happy to be able to learn more, get explanations to understand more, get to know the material in school in advance" (S2, L19, FE, AT, FU).

"It's fun. Sometimes my siblings also followed study. Also, quicker to understand" (S2, L68-L69, FE, FU).

Like S2, S3 also felt fun by stating *Learning English to be fun* (S3, L33, FE, AT, FU).

Similarity S2 and S3, S4 also felt fun because she can study without reading the book but through videos "Yes. It's fun to learn through videos than reading" (S4, L89, FE, AT, FU)

It was found that learning using QR Code was fun. S2, S3 and S4 had felt fun during learning by QR Code independently. They assumed that learning being fun because they got understanding material from explanation by the videos and QR Codes was easy used.

# **4.2 Beliefs Aspect**

To answer the second research questions, the beliefs students about the use of QR codes in EFL independent learning. It can be explain as follow:

## A. Improve ability

#### a. Soft skills

Based on interview result that students got soft skill after using the QR Code. S1 said "I can study independently" (S1, L47, BE, IM, SS).

As S1, S2 also got soft skill, he thought he can study English because he prepare his self after studying through QR Codes "I can prepare myself better before the lesson begin" (S2, L28, BE, IM, SS).

S3 thought that he can study anytime and anywhere what he wants,

"The time is also more flexible" (S3, L75, BE, IM, SS)

From S1, S2, S3. S4 also thought that he being motivating to learn English, "I'm motivating to learn" (S4, L72, BE, IM, SS).

All of the students believe that they got soft skills after learning through QR codes because they can study independently, they can prepare themselves before studying English at the school, and they can study flexibly; they can study anywhere and anytime they want, and after getting some soft skills, they are motivated to learn English.

#### b. Hard skills

The results of interviews showed that all of the students thought that they got hard skill. S1 know the meaning of the vocabulary through learning by QR Codes with said "I understood the meaning of vocabulary" (S1, L53, BE, IM, HS).

But S2 thought that he can understand basic grammar with said "I can understand basic grammar such present continuous, past tense, and present tense" (S2, L23-L24, BE, IM, HS).

S3 in the same way with S1, S3 know the meaning of the vocabulary but through the pictures with said, "I know the meaning of vocabulary through pictures (S3, L37, BE, IM, HS).

S4also similarity with S1 and S3 adding in new vocabulary with said, "Adding new vocabulary" (S4, L79, BE, IM, HS).

That's all above students beliefs in the hard skills. They got hard skill as they know the meaning of the vocabulary through learning by QR Codes, then know vocabulary by pictures on the videos, and they know basic grammar.

#### **B.** Preferences

Based on interview result, the researcher found that students agree that QR Code provided in every single book. S1 agreed because QR Code support learning to be better, the QR Code was explained the material of book by saying "Agree. Hmm... If the material in the book is easy to understand, no problem, but if the explanation in the book is difficult to understand, I'm also confused. It's better to have a QR Code so someone can help explain the material in the book" (S1, L61-63, BE, PF, AG)

Like S1, S2 also agree that QR Code provided in the lesson book because it's useful "Agree because it's already in PJOK lessons and English. it's very useful." (S2, L52, BE, PF, AG).

Like S1 and S2, S3 agree because students got understand better in EFL learning through QR Codes like understand meaning of material or sentences by stating "Agree. So, we get understand better. If we just read it, we don't know what it means, we get confused, but if we are learning with the QR Code, we understand the meaning of the material" (S3, L77, BE, PF, AG)

Like S1, S2, and S3. S4 agree because QR Code can help lazier read understand learning by watching the videos "Yes, I agree. Because, it easier for children, who are lazy to read, so they understand learning by watching the videos." (S4, L65, BE, PF, AG).

All of students agreed that the QR Code provides in every single book because they felt the QR Code was learning to be better, useful, easy to understand the material of book, and can help lazier read understand learning by watching the videos.

## 4.3 Behaviors Aspect

To answer the third research questions, based on the experiences the students face the problems on the use of QR Code in EFL independent learning. . It can be explain as follow:

# A. Experiences

#### a. Problems of media

Based on the interview, the researcher found that all participants got some problems in their experience when use the QR Codes for learning. S1 thought that QR Code has problem. It was unclear the picture of videos "Some of the duration of the pictures were blurry" (S1, L93-L94, BV, EX, PM).

Like S1, S2 has problem during use the QR Code. It was lately in loading the videos because it needs internet for connection the videos by stating "Yes, sometimes. Sometimes, the data runs out, so loading. Sometimes also the Wi-Fi doesn't connect" (S2, L76, BV, EX, PM).

As S1 and S2, S3 has problems when using QR Codes. If the student wants to change hand phones, they should download before, with said "I have to download the application first" (S3, L60, BV, EX, PM).

.As S1, S2, and S3. S4 has same problems with S2 when using QR Codes. The problems it when open the QR Code needs a long time in loading "Yes. When it opens, it takes a long time to load about 5 minutes" (S4, L95, BV, EX, PM).

Based on the interview, all participants got some problems in the media when they used the QR Code. The problems they faced were about picture was blurry, application need time for loading, problem networking that QR Code needs internet for process application and they should download application before.

#### b. Problems of tools

One of students got problems in the tools. S2 did not have hand phone, so he should borrow the hand phone from his parents, with said "But if I were given a hand phone" (S2, L30, BV, EX, PT).

Not all of the students have the hand phones. Findings that one of the students did not have a hand phone, so they should borrow it from their parents.

# **b.** Personality Problems

Findings in the field that students have personality problems. S1 said "I was confused" (S1, L72, BV, EX, PP).

S2 found that he got explanation from the teacher is limited by stating "At the school the explanation by teacher is limit" (S2, L71, BV, EX, PP).

Whereas, S3 felt use the QR Code is a bit complicated, by saying "So, it's a bit complicated" (S3, L103-L104, BV, EX, PP)

Differelently S1, S2, S3 in personality problems. S4 felt read the books make tired and that effect to his eyes like sore eyes "If I read the book is tired, it hurts my eyes" (S4, L103-L104, BV, EX, PP).

That's all above the personality problems of students. All of the students got experience in the personality problems. They got confused, explanation from teacher is limit, use the QR Codes is a bit complicated, and read the books makes sore eyes.

#### 5. Discussion

The result of discussion from the findings of data interview of three attitude models on the use of QR Code in EFL independent learning at Cordova elementary school. Based on six points of the questions that were used to answer the research questions.

Spooncer (1992) said that the attitude model, better known as the tripartite model, consists of his three attitude components: Feelings, beliefs, and actions. Based on the spooncer's statement and findings in the field about QR Codes, how do students feel after using them.

#### **5.1 Feeling Aspect**

The result of this study about feelings in using the QR Code in EFL independent learning showed that students feelings two main points advantages and attractiveness. The first main points, advantages such as easy learning and learning new media. First, they felt that the use of QR Codes for learning to be easier. As their statement that the QR Codes were providing many pictures and videos in the explanation, information to help people understand more during learning, and they felt easier to learn rather than just read material from the book. Then, students felt advantages in a new learning media. They felt that QR Codes were one of the solutions for a new learning media. Media offers learning with animation in the video, audio, and a tutor for explaining the learning. By QR Code, learning becomes interesting, students can access it anywhere, and learning videos can be repeated at any time, so that learning becomes a good quality. Those statements were suitable with Nur. Nur (2020) said that the children thought that using the QR Code application in the classroom made things easier for them and that it was also a fun thing to do, such as learning new things.

The second main points of feeling, all students felt interested and fun with the QR Code. They were interesting because the QR Code has provided with the videos, audios, and pictures. QR Codes can replay the videos anytime and anywhere. videos can explain previous lesson, it's like watching TV. Also, some students had felt fun during learning by QR Code independently. They assumed that learning being fun because they got understanding material from explanation by the videos and QR Codes was easy used. Those results were above similar with the state of Harmanto et al., (2021). Harmanto et al., (2021) expected that

students to be highly interested in the e-book that had been created. The technique was particularly helpful at motivating people in the pandemic Covid-19 crisis. As a result, an e-book guide might be supplied as an option to meet their needs.

#### **5.2 Beliefs Aspect**

The second attitude was beliefs. The students got improve ability and preferences. In the improving ability is categorized into two parts; soft skills and hard skills. In the categories soft skill, all of the students believe that they got soft skills after learning through QR codes because they can study independently, they can prepare themselves before studying English at the school, and they can study flexibly; they can study anywhere and anytime they want, and after getting some soft skills, they are motivated to learn English. Whereas, they got hard skill as they know the meaning of the vocabulary through learning by QR Codes, then know vocabulary by pictures on the videos, and they know basic grammar. And in the preferences, all of students agreed that the QR Code provides in every single book because they felt the QR Code was learning to be better, useful, easy to understand the material of book, and can help lazier read understand learning by watching the videos. As well as, Nehe (2021) said independent learning gives pupils a fantastic opportunity to develop their competence and become more mature adults in the future.

## **5.3 Behaviors Aspect**

Based on the interview, all participants got some problems when they used the QR Code. The problems they faced such as problems of media, problems of tools, and personality problems. All participants got some problems in the media when they used the QR Code. The problems they faced were about picture was blurry, application need time for loading, problem networking that QR Code needs internet for process application and they should download application before. In the problems of tools, not all of the students have the hand phones. Findings that one of the students did not have a hand phone, so they should borrow it from their parents. In common, all of the students got experience in the personality problems. They got confused, explanation from teacher is limit, use the QR Codes is a bit complicated, and read the books makes sore eyes. It contrast with Law and So (2010). Students can access multimedia resources on the Web efficiently and flexibly by connecting QR Codes on paper assignments to them in just two easy steps. This allows students to access the resources from any location (Law & So, 2010). In the fact, students can study more effectively and recall more knowledge with electronic books, which can display animations and noises and allow users to interact with them (Soonghanghwa, 2009).

## 6. Conclusion

The researcher drew some conclusion below that related with problem of the studies. The result of interview based on theory of Spooncer (1992) showed that that there are three attitude components that: feelings, beliefs, and actions.

First, the students feelings there were two main points advantages and attractiveness. Advantages regards to ease and learning media. Attractiveness regards to interesting and fun. Secondly, the students beliefs there were two main points improve ability and preferences.

Improve ability regards to soft skill and hard skill. Preferences regards to agreements of students. Last, the students behave there were one main point about experiences of students. The Experiences regards to problems of media, problems of tools, and personality problems.

#### References

- Abidin, M. J. Z., Pour-Mohammadi, M., & Alzwari, H. (2012). EFL students' attitudes towards English language learning: The case of Libyan secondary school students. Asian Social Science, 8, 119–134.
- Bee, T. C., & Karim, M. Bin. (2020). Boundaryless Educational Database Accessed by QR Codes to Support the Practical Section. *E-Proceedings of the National Technology Research in Engineering, Design and Social Science Conference (NTrends'19), April*, 1–8.
- Choy S. C. and Saleh T,. (2006) "An Investigation into the Changes in Perceptions of and Attitudes Towards Learning English in a Malaysian College," Int. J. Teach. Learn. High. Educ., vol. 18, no. 2, pp. 120–130.
- Creswell, J. W. (2012). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research 4th ed. Boston: Pearson.
- Damayanti, A. E., et.al., (2018) *Indonesian Journal of Science and Mathematics Education* (1), pp. 63-70.
- Denso (2009). Denso Wave Incorporated.
- Eshghinejad, S. & Gritter, K. (2016). EFL students' attitudes toward learning English language: The case study of Kashan University students. Cogent Education. 3:1. DOI: 10.1080/2331186X.2016.1236434
- Fitria, Baharudin, & Asti. (2022). An Analysis Of Students' Attitude In Learning English At Eleventh Grade Of SMA NEGERI 2 GU. English Education Journal.58-68.10.55340/e2j.v8i2.1074. https://ejournal.lppmunidayan.ac.id/index.php/english/article/view/1074
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to Design and Evaluate Research in Education*. New York: McGraw-Hill.
- Getie, A. (2020). Factor affecting the attitudes of students towards learning english as a foreign language. Teacher Education and Development Journal.
- Harmanto, B, Wijayanto, H., & Rahmawati, I. Y. (2021). Helping Early Childhood Education Teacher Teach English with an E-Book Guide. *Proceedings of the 2nd Annual Conference on Social Science and Humanities (ANCOSH 2020)*, 542(Ancosh 2020), 207–210.https://doi.org/10.2991/assehr.k.210413.048

- Hayta, F., & Yaprak, Z. (2013). *Learner autonomy and computer technology as a facilitator of autonomous language learning*. Journal of Educational and Instructional Studies in the World, 3(2), 57–63.
- Hong, K-S. Ridzuan, A. A, & Kuek, M-K. (2003). STUDENTS' Attitudes Toward the use of the Internet for Learning. A Study at University in Malaysia. Educational Technology & Society, 6(2), 45-49. (ISSN 1436-4522).
- Islam, MN. (2011). *Independent English Learning through the Internet. Journal of Language Teaching and Research*, Vol. 2, No. 5, pp. 1080-1085, September 2011.
- Kurniasih, S., & Rahimah, R. (2021). Penggunaan power point interaktif dalam kegiatan bercerita untuk meningkatkan kemampuan berbicara anak di masa pandemik covid-19. Al Athfaal: Jurnal Ilmiah Pendidikan Anak Usia Dini, 4(2), 233–249. https://doi.org/10.24042/ajipaud.v4i2.10028
- Law, C. & So, S. (2010). QR Codes in education. *Journal of Educational Technology Development and Exchange*, 3(1).https://doi.org/10.18785/jetde.0301.07
- Merriam-Webster.com. (2019). "Definition of attitude". Retrieved <a href="https://www.merriam-webster.com/dictionary/attitude">https://www.merriam-webster.com/dictionary/attitude</a>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis 2nd ed.* United States of America: SAGE publications.
- Miles, M. B., Huberman, A. M. & Saldana, J. (2014). *Qualitative Data Analysis: A Method Sourcebook (3<sup>rd</sup> ed.)*. Thousand Oaks., California: Sage Publications, Inc.
- Morgana, R. (2018). *Pre Service English Teachers' Attitude Towards Intercultural Language Learning* (An Instrumental Case Study on the Sixth Semester of Tertiary English Students at Sebelas Maret University.
- Naibaho, L. (2019). The Effectiveness of Independent Learning Method on Students' Speaking Achievement at Christian University of Indonesia Jakarta. Asian EFL Journal Research Articles. Vol. 23 Issue No. 9.
- Nehe, B. M. (2021). Kampus merdeka dalam mengahadapi era revolusi Industri 4.0 di masa pendemik di STKIP Setia Budhi. Prosiding Seminar Nasional Setiabudhi, 1(1), 13–19.
- Nitza D. and Roman Y. (2018). The Impact of Mobile Tablet Use on Students' Perception of Learning Processes, Problems of Education in the 21st Century, 76.1, 29–42.
- Nur, H. (2020). Thesis teachers and students' perception using quick response code program in efl teaching and learning.
- Rusna, H. (2021). A Study On Students' Attitude Toward Speaking Online At English Study Program of IAIN CURUP.Skripsi. Tidak Diterbitkan. Fakultas Tarbiyah. Institute College For Islamic Studies (IAIN): Curup.
- Saldaña, J. (2011). Fundamentals of Qualitative Research: Understanding Qualitative Research. Oxford University Press.
- Schiffman, L.G. & Kanuk, L.L., (2004). Consumer Behaviour8th ed., Upper Saddle River, NY: Pearson Education.

- Shidu, (2003). Literature in the Language Class room: Seeing through the eves of Learners, In: Ganakumaran& Edwin Malaci (Eds). *Teaching of Literature in ESL/EFL context*. Pp.88-110. Petaling Jaya: Sasbadi-Melta ELT Series.
- Singh, S. (2016). QR Code analysis. *International Journal of advanced research in computer science and software enginereing*.
- Soonghanghwa, S. (2009). The Development of Electronic Book through Branch Storytelling for grade 5 Students at AnubanPonthong School. *Journal of Roi-Et Teacher Zone 3*, 3(1), 35-40.
- Spooncer, F., (1992). Behavioural studies for marketing and business, Leckhampton,UK: Stanley Thornes.
- Stiadi, M. (2021). The Implementation of Online Learning During Pandemic Covid-19: Digital Business Students' Perception. *Jurnal Manajemen Bisnis (JMB)*, 34(1), 128–132. <a href="http://ejournal.stieibbi.ac.id/index.php/jmb">http://ejournal.stieibbi.ac.id/index.php/jmb</a>
- Stoyana, P., Kafadaroya, N., Stoyanova, D., Mileva, N., Sotirov, S. &Vakrilov, N. (2018) Technology Enhanced Education by QR Codes, Edulearn18 Proceedings, pp. 6207-6210.
- Tulus, T. (2004) Peran *Disiplin Pada Perilaku Dan Prestasi Siswa*. Jakarta: PT. Gramedia Widiasarana Indonesia.
- Verešová, M. & Malá, D. (2012). Stress, proactive coping and self efficacy of teachers. Procedia Social Behavioural Sciences, 55, 294-300.
- Weinburgh, M. H. (1998). Gender, ethnicity, and grade level as predictors of middle school students' attitudes toward science. Retrieved from <a href="http://www.Ed.Psu.Edu/Ci/Journals/1998aets/S5">http://www.Ed.Psu.Edu/Ci/Journals/1998aets/S5</a> 1 Weinburgh.Rtf