

## Using Interactive Multimedia iPad During Pandemic: A Thematic Analysis of Students' Perception

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### ABSTRACT

The use of iPad in Islamic education is an effort to improve the quality of learning. Its application certainly raises various perceptions among students. Perception is a psychological aspect of a person and it is an important element that can affect learning outcomes. Hence, this study is important and timely, especially during the COVID19 pandemic where online learning has become a new normal. The aim of this study is to investigate how students perceive the use of iPad in learning Islamic education during the pandemic. This study is a qualitative research with a thematic analysis approach using semi-structured interviews with a sample that has been determined by purposive sampling. It consists of 11 participants. Data was collected through focus group discussions. The results of the study revealed that there are four main themes namely: 1) Regarding the feelings of students learning PAI using iPad, 2) Problems in learning PAI using iPad, 3) The advantages of using iPad in PAI learning, 4) Benefits of using iPad in learning. As a follow-up to this study, practical implications that can be used as learning and input for teachers, schools and related education offices are also presented.

**Keywords:** Interactive multimedia, iPad, Student Perception, Thematic analysis, Islamic Education

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### INTRODUCTION

Recently, the increase in globally infected cases and deaths due to the corona virus 19 (COVID19) has changed government policies in education where the implementation of learning is mostly done online to all subjects including Islamic Religious Education or *Pendidikan Agama Islam* (PAI) and at all levels of education. (Depdikbud 2020). In the COVID19 emergency situation, both students and teachers, including parents and the government panicked (Adedoyin and Soykan 2020). One research found that there are four negative emotions felt by teachers, namely frustration, being overwhelmed, tired and stressed

(Ferren 2021). Distance learning by utilizing Information and Communications Technology (ICT) media is an effective way of learning during a pandemic (Ali 2020). Because there is no other faster and more precise media that can replace face-to-face learning even through online (virtual) meetings other than ICT media. However, it is unfortunate that several studies have found that learning during this pandemic is not effective (Pratiwi 2020). It is even more unfortunate if this happens in PAI learning which is a very important subject in the formation of character or morals.

Regarding the effectiveness of PAI learning from research results and some assumptions before the pandemic, it indicates that the quality of PAI learning is still low. Research results reveal that the instruction of PAI is still largely traditional, outdated, and conservative. The teacher tends to use the lecture method, writing on the blackboard, while the students just write, listen, and memorize the materials given by the teacher. Such a learning approach is monotonous and tedious for students, so the learning process is not effective (Sumarni 2013). Similar to the learning achievement of Islamic religious education in the pre-pandemic period, it has been found that the students' achievement of affective competency in PAI is still lacking. One study found that the affective achievement of value inclusion in the life of interfaith relations within the context of society, nation, and state is still low. However, cognitive achievement is satisfactory (Sumarni 2013). Other research found that religious attitudes related to religious intolerance are alarming. It was found that 17.3% of the surveyed religious teachers were intolerant towards other religions, while 34.1% were intolerant towards their coreligionists (Nasuhi & Abdullah 2018). This study may suggest that PAI has not successfully affected the students' affective and psychomotor aspects.

The results of the research mentioned above must be noticed by all parties, such as teachers, school principals, the ministry of religion (government), and including academics and researchers. These results indicate that in abnormal circumstances (during the COVID19 pandemic) PAI learning may be far more ineffective than the achievements as set out in the curriculum. However, this study will not directly investigate its effectiveness but will focus on revealing students' perceptions of learning PAI during the online pandemic using multimedia. Many types of platforms are used in distance online learning such as whatsapp, zoom, moodle, google class, google meet and others (Haryadi and Selviani 2021; Noor, Isa, and Mazhar 2020). Likewise, there are also many types of media devices used such as smartphones, tablets, laptops, iPads and others (Basilaia 2020). This study however, is limited to the use of interactive multimedia iPad. Thus, the aim of this study is to reveal students' perceptions of the use of interactive multimedia iPad in PAI learning during the COVID19 pandemic.

Several previous studies have been conducted on students' perceptions of online learning. They indicate that students have positive perceptions and empirically, e-learning is important during the COVID19 pandemic (Bali and Liu 2018; Biswas, Roy, and Roy 2020; Khan et al. 2021). The gap addressed in this research is about the research subjects. The subjects of this study were students, and the context is on PAI learning through the interactive multimedia iPad device. In addition, the current study used a qualitative approach through thematic analyses. The research question that guided this study is:

- What are the students' perceptions of using an interactive multimedia iPad in learning Islamic education during the pandemic?

## **METHOD**

### **Participants**

Participants were chosen from an Islamic-based primary school in Indonesia through the purposive sampling technique. The criteria of sampling include: informants who are willing or comfortable to participate, have time, are not disturbed by their learning activities, and are willing to be interviewed (Whitehead and Lopez 2016). Based on these considerations, 11 students were obtained. Then the participants were divided into three groups and semi-structured interviews were conducted at three different times, agreeable to each of the assigned group. This study used a qualitative approach using semi-structured group interviews (Creswell et al. 2007; Given 2008). This design was used to explore students' perceptions of PAI learning using interactive multimedia iPad, enabling the researchers to find interesting issues to enrich the topic content during the interview.

### **Data Collection and Analysis**

As mentioned earlier, data was collected through semi-structured interviews (Whitehead and Lopez 2016) which were conducted through focus group discussions (FGD) (Given 2008). Two focus groups were carried out online through zoom meetings and one group was interviewed face-to-face. This was done because the group was willing to meet face-to-face while still adhering to the health protocol. Semi-structured interviews were conducted using an interview protocol that have been prepared. The FGD interviews were conducted directly by the main researcher with the help of the student's homeroom teacher as a liaison to determine the time and place, share the FGD link and ensure student participation in FGD activities. Interviews lasted about 40 to 60 minutes and were digitally recorded and then transcribed verbatim. Data triangulation was carried out during interviews as well as by submitting transcripts for the sample to be seen and read.

Data analysis was carried out through six phases, namely recognizing data, coding, finding themes, reviewing themes, naming themes and making reports (Braun and Clarke 2012). The initial stage in recognizing the data is done by reading the interview transcripts, then reading them over and over again. The second stage is code generation. After all the data were fully transcribed and read over and over again then the data was entered into the nVivo 12 software, and given relevant codes. Coding was done by determining the keywords used to categorize or organize the text. The third stage is finding the theme. This phase was done by viewing or reviewing the data that have been coded to see areas of similarity and overlap between the codes. Themes and sub-themes can bind and unify the same set of codes so as to represent and describe coherent and meaningful patterns in the data (Braun and Clarke 2012). The themes found were typed into the nVivo. The fourth stage of theme review was done by looking back at existing themes and conforming the code to the theme. If there was any code that did not fit in one theme, then it can be moved or deleted. The fifth stage is naming the theme. At this stage, an in-depth analysis of the research data was carried out. Finally, the sixth stage is to write the report.

## **FINDINGS**

Based on the thematic analyses carried out through the 6 stages mentioned above, the authors have discovered 4 recurring themes which will be explained in the following sub-sections.

### **Theme 1: Students' Feelings on Learning PAI Using iPad**

Research findings regarding students' perceptions of the use of iPad in PAI learning begins with the theme of students' feelings on the use of iPad in PAI learning. The students highlighted the feelings they felt while learning to use the iPad. From the data, two types of feelings were detected, namely negative feelings and positive feelings. The negative feelings of students related to the use of iPad in PAI learning that they felt during the pandemic were feelings of boredom with the way the teacher taught via zoom. Here is what one of the students 9stated,

*"Surely it ever happens, sir, it's like when you zoom in, sometimes I get bored, sir. It's not fun. I don't like it, the teacher explained it but he/she just said it, sir."*

The feeling above emphasizes boredom not because of the iPad but the teacher's skill in delivering the material. Almost the same as student 9's statement above, student 1 also assertedthe boredom of learning to use iPad while online,

*"Yes sir, I'm bored, because it makes you sleepy, because the teacher's voice is soft so you don't pay attention to that."*

Student 4 added that besides the teacher, it was also related to internet connections or networks,

*"I have never been bored, sir, it's like sometimes I don't get the shipment. After that, it's like a bad mood. Yes, sir, it is due to the network so then I am bad mood, sometimes waiting for friends is too long."*

Although students expressed that during online distance learning they were bored, thefeelingis not due to the iPad factor but because they want to return to the normal situation and hang out with their classmates. As studen 11 stated,

*"The thing is, only sit at home so then I get bored, if we are in the class, I have friends so then I do not feel alone."*

On the other hand,some positive feelings of students regarding the use of iPad in PAI learning during the pandemic are also apparent. They are reflected in the form of feelings of ease, fun, simple, comfortable to use, and interesting, as conveyed by the students 10,

*"For myself, using the I-pad makes it easier for learning. Everything is there, complete, everything can be done."*

Student 2 also said,

*"It's easy, for example looking for a difficult answer, it is easy to find on the I-pad, we don't have to go back and forth to look at the page, on paper we have to go back and forth to look at the page. If on the i-pad it's easy to find a page, just click on it. In elementary school, we used offline or with books, for example, for example the funeral prayer, so we don't have to look for books like how to pray the corpse, so we can see on YouTube what the funeral prayer looks like. Could it be easier to understand sir. Yes sir, very useful, very useful, easier to read and understand. We find it easier to extract information to know."*

Another statement added by the student 3 and 5,

*"It's easy, sir, because the learning system is already on the I-pad, sir, so just open the i-pad and just look for the material that we want to learn."*

*Yes, it's like if there is something you want to find, just open the book, it's easier there because you only see it from the i-pad. Easier, more complete too. Everything is there."*

The same thing was conveyed by Student 10,

*"Same sir. Because you don't need anything, if other schools use books and google, it's a bit complicated, isn't?, because we need to look for more materials, from the I-pad everything is already there so nothing is left behind, so for example, even if the material is lost can ask to send from friends again. There, all the materials are already there, so we don't have to worry anymore. The material is all there. Because in one item, everything is there for learning."*

Besides making it easier to learn the material, the operation of the iPad is also easy as conveyed by the students 7,

*"To operate the application it is easy, just tab the application and it will appear immediately. If the book is in the form of an e-book on the I-pad, it can be used online and offline."*

In addition to making it easy, the use of iPad in PAI learning is also fun for some as stated by students 3,

*"It's fun because there are games in the material too."*

Another student said that apart from having fun using iPad in learning, it also motivates their learning. As stated by students 10,

*"It's good that we are motivated to learn that way."*

One more student said,

*"It's good, sir, because I want to make notes simpler, can be noted, can be decorated. Fun sir. If we only use zoom, it's boring, sir, but if all this time, Alhamdulillah, I have studied with teachers at Al-Azhar, I rarely get bored" (Student 11).*

Also, students felt that using the iPad was simpler.

*" the i-pad, so it's pretty simple. The lessons are from the I-pad. It's not heavy, sir, the bag doesn't carry books" (Student 3).*

Another student argued,

*"It's simpler without books. For example, in elementary school, we used offline or with books, for example, for example the funeral prayer, so we don't have to look for books like how to do the funeral prayer, so we can see on YouTube what the funeral prayer is like" (Student 2).*

The same thing was conveyed by student 11,

*"It's simpler, sir, I like to take notes because it's easier to decorate on the I-pad" (Student 11).*

Also students felt comfortable with iPad in learning.

*"i-pad is also comfortable to use, then we can also log and activate applications to play*

*games, so we don't keep playing games so we focus on one lesson" (Student 7).*

In addition to some of the feelings conveyed by students above, there are also students who say that the use of iPad in PAI learning is interesting. As stated by student 6,

*"Because many facilities are the same, learning is more interesting. Because it can be repeated continuously" (Student 6).*

This study highlights that students have mixed feelings about the use of iPad in learning PAI. The negative ones are sparked from the uninteresting ways teachers deliver the lessons despite using technology, and also due to the unstable internet connections they face. The positive feelings are stemmed from the fun, easy and convenient uses of iPad to learn PAI.

## **Theme 2 : The Issue in Using iPad for Learning of PAI**

The use of iPad in PAI learning is still found to bring some problems as seen in the following comments from the participants. First, the student said that there were still students who were clueless,

*"If the problem is that there are still people who don't understand the use of this I-pad, what is the term for being ignorant. Sometimes many of our children don't know about the I-pad so it's difficult to use it" (Student 3).*

The second problem is that the lock system built on the learning system can still be 'tricked' by students so that they can get out. Student 10 said,

*"Hmm, it's good that sometimes there are stubborn children who leave the school system, so they need to be supervised. Yes, there are things that come out of the school system, so that needs to be monitored. If you leave school, you can't supervise anymore, you don't know what students are doing anymore" (Student 10).*

Added by student 3,

*"It's bad for example he downloads applications that are prohibited by school such as games. There are sanctions such as warnings" (Student 3)*

Student 5 confirmed,

*"Yes sir, it was supervised by the teacher automatically so the I-pad was not like a regular I-pad, so there was an application that was deleted by the school so we couldn't download it. Like youtube. Well, there were some students, he was really stubborn about erasing the school system and finally he became like an ordinary i-pad, so he could download all kinds of games that were not related to learning" (Student 5).*

In terms of e-book content, students find problems or expectations of the existing pdf e-books on the iPad device so that voices can be added.

*"Eeh, maybe the book will add sound" (Student 5).*

Another problem voiced out by the students is related to teacher problems as argued by student 8.

*"In PAI, sometimes the teacher asks to recite Al-Quran and also the tajwid, sometimes the teacher is not clear when teaching, about recitation" (Student 8).*

Another problem is related to the perceived network use of iPad during the pandemic. This condition is only experienced by them when learning online through the zoom meeting application using iPad, because from the side of the iPad learning system it can be offline. It is also argued by student 9,

*"I don't know, sir, because there are some who don't use wifi, so sometimes the network is bad, sir. If the zoom of the screen is black when it's lagging, I can't share the screen from the teacher because it leaves the material behind"* (Student 9).

The last problem found is that these devices are expensive as mentioned by majority of the students,

*"Actually, this costs money too, sometimes there are children whose economy is less so it's difficult"*

### **Theme 3: Advantages of Using iPad Devices**

The findings of this study found several advantages that exist in the use of iPad in PAI learning. The first finding is that PAI learning tools through iPads are flexible to use. As revealed by several students,

*"It's easy, flexible. In that one, all the books are already there, so you don't need to bring another book, at least a notebook to take notes. On the i-pad there are notes to take notes because he is offline. For the book itself, he's offline. Often, there's no network on the way from home to school, right, you can still open books. The system can still be opened even at home"* (Student 5).

It was reinforced by another student,

*"Yes sir, sometimes we can't go to school or for example we travel by land and there is no network. I can read the book because it's offline"* (Student 10).

Another student also said,

*"Yes, because the book can be used anywhere, even if we are not at school, the book can be read anywhere. The book has already been downloaded"* (Student 3).

Likewise, student 2 said,

*"It's like we want to go to school, right, so we are still on the way, we can also do the exam even though the hours are different"* (Student 2).

The same thing was said by student 7,

*"It can be carried in a bag, taken anywhere. If it's offline, I just take my i-pad with me to school. Yes, there is also wifi at school. If the book is in the form of an e-book on the I-pad, it can be used online and offline. Still biased"* (Student 7).

Next, student 1 said,

*"Easy to use anywhere. here, there are e-books and notes so they can be opened at any time. If I am no longer studying online, at least at night, I read and read"* (Student 1).

Another advantage of this iPad learning tool is that students can jot down notes and highlight the e-books. As pointed by student 7,

*"I like it, sir, because it can be recorded on the I-pad and the book can also be highlighted"* (Student 7).

The last advantage of this device is that it has a control system from teachers and schools as well as a good lock system. So, this can minimize students using the device for other (negative) activities, apart from studying. As stated by the following students,

*"Because sometimes it's locked, so I can't open other applications. Yes, there are things that come out of the school system, so it needs to be monitored, it needs to be considered again. If we leave school, we can't supervise anymore, you don't know what the students are doing anymore, you're caught. There are sanctions. If this school is supervised, this I-pad used for learning, here we are also taught how to use the I-pad properly and correctly. it is supervised by an automatic teacher so the I-pad is not like a regular I-pad, so there is an app that deleted by the school so we couldn't download it. Like youtube"* (Student 5).

Another student also said,

*"the iPad is supervised by the teacher, sir, so we can't download anything else. Yes, it's really supervised, so we can't open content that isn't for learning, so it's specifically for learning"* (Student 10).

Another student added,

*"So we are in the system, the name is in the zeluddes system, so in zelludes it is already connected to the school, now there is a child who deletes it"* (Student 3)

Another advantage is that its use can be repeated countless times according to students' needs,

*"because it can be repeated. Using the I-pad sir, because it can be repeated. Because when zooming in, it can be recorded and repeated"* (Student 6)

It can also be used both offline and online. *"If the book is in the form of an e-book on the I-pad, it can be used online and offline. Still can"* (Student 7).

#### **Theme 4: Benefits of using iPad for learning**

Data also show that learning through iPad can provide benefits in inculcating independent learning and training students' honesty. As found from the results of interviews with several students as follows,

*"So we are more independent, we also prepare how to understand the material easily, the material in PAI. We are searching or asking the teacher"* (Student 10).

*"It doesn't matter because we want to study privately, so we study alone there, not mixing with others. So if we don't understand, we can search, that's right"* (Student 5)

*"Hmm, you can, because if we don't use the I-pad, we need more explanations outside of the teacher, so we can search google, we can pay attention to videos from people, we can also practice. on the I-pad there are many facilities that make it easier for teachers without having*



*to be taught by the teacher, students can learn first with the existing facilities in the i-pad. It's the same, sir, because I use the I-pad myself, learning by myself is easier to understand" (Student 8).*

*"When it's time for class, sir, it's the same again, for example, at night after Isha, I study alone" (Student 11).*

*"If you don't study online at least at night, read and read" (Student 1)*

*"When I go to school and at night, I study again from 7 to 9 pm" (Student 6)*

*"Such as honesty or what, for example, in exams, we can't cheat, for example, so if we can, we can pay attention again, monitored by the teacher" (Student 3).*

*"Yes, it trains our honesty, sir, because it is part of the character" (Student 10)*

Furthermore, it was found that the use of this application has positive benefits or impacts, including students' better understanding of the materials. However, it was found that after all, there was still a teacher's role behind it all. As argued by the following students:

*"I like it, so I can understand the material deeply. Because there are apps for reading photonotes, then the book can be turned into a pdf like that, the book can be highlighted like that" (Student 7)*

*It's the same, sir, because I use the I-pad myself, learning by myself is easier to understand (Student 11)*

*In my opinion, sir, the i-pad is easy, more understandable (Student 1).*

*I can't sir, I won't understand. That's it, sir, if we ourselves have material that we don't understand and we have to ask the teacher, so that's it (Student 2).*

*Sometimes there are sentences that are difficult to understand. So for example, the language of the book is difficult to understand, the teacher explains it, sir (Student 10)*

Unlike the three students above, for student 3, if there is something he doesnot understand, he just finds out on Google via the iPad device. As stated below,

*"Ooo, if there is something we don't understand, we can look it up on Google" (Student 3).*

## **DISCUSSION AND CONCLUSION**

### **Discussion**

The aim of this study was to reveal students' perceptions of the use of interactive multimedia iPad during the COVID19 pandemic which is limited to the subject of Islamic religious education. This study also attempted to contribute to improving the quality of PAI learning by revealing aspects of students' perceptions. Student perception is a psychological aspect of a person which is an important part that can affect student activity and learning outcomes (Benton 2012). In a studyby Dornye (2001), it was argued that perception is a very important factor and determines the success or failure of a learning.

This current study revealed four main themes related to PAI learning using interactive multimedia iPad, namely the feelings of students learning PAI using iPad, problems in PAI learning using iPad, advantages of using iPad in PAI learning, and the benefits of using iPad in learning based on students' perspectives. From the 11 students who were interviewed through the FGD, they had different feelings towards the use of interactive multimedia iPad in PAI learning during the covid 19 pandemic. In general, they were divided into two, namely negative and positive feelings. The negative feeling felt by students is that they feel bored. However, this feeling of boredom is not caused by the use of iPad but because of the monotonous way of teaching through traditional lectures and the lecturers' soft voices. Other reasons for the negative feelings include the unstable internet network, being confined at home during the pandemic and because students miss learning together in class with friends.. This study also found positive feelings of students towards the use of interactive multimedia iPea in PAI learning during the covid 19 pandemic. The positive feelings on the use of interactive multimedia iPad were its simplicity to use, fun, simple, comfortable to use, and interesting for students.

The second theme revealed the problems of PAI learning using iPad. The first problem is students' ability to use iPad devices. It was revealed that there were some students who were not technologically savvy. The second problem is the lock system built on the learning system that can still be escaped by students so that they can leave the system. The third problem is related to e-books contents that have not been integrated with audio and video. Fourthly, the teachers' ability. Some students revealed some of the teachers' weaknesses related to the way they teach which makes students bored and in a bad mood, namely related to the teacher's voice, teacher methods, and the ability to explain regarding recitation of the Al-Quran. Fifth, network problems, and sixth, the high cost of iPad devices. Teacher skills and internet connection are two important things in online learning. The findings agree with the statement that without teacher skills, both technical skills and pedagogical knowledge learning will not be achieved (Stork 2017). Also other findings suggest several digital learning methods that can be done by teachers including interactive learning, inquiry-based learning, collaborative learning, immersive learning, game based learning, and others (Hedberg et al. 2018). Likewise, this finding agrees with the statement that internet connection is an obstacle that often arises in the implementation of digital learning (Marcial et al. 2015) and has a very large influence on the sustainability of the online learning process. Unstable network connections are not merely felt by students in rural areas but also students in urban areas. Thus, for online learning to be effective, it is necessary to improve the quality of teachers and networks.

The third theme revealed the advantages of using iPad. Based on 11 students who were interviewed, several advantages were revealed, namely, *first*, that the PAI learning tool through iPad was flexible. *Second*, students can highlight the e-book and *thirdly*, it has a lock system and control system from teachers and schools. *Lastly*, theme four reveals the benefits of using iPad in learning, namely fostering learning independence and practicing honesty as well as increasing students' understandings of the subject materials.

Thus, these findings reveal that there are 4 major themes related to students' perceptions of the use of interactive multimedia iPad in learning and can strengthen the results of previous

research regarding the effects of using interactive multimedia iPad on students' perceptions, attitudes, motivation, and academic skills in learning (Abdullah, Bakar, and Mahbob 2012; Neo, Neo, and Yap 2008; Venkatesh and Smith 2003). Definitely, these findings have theoretical implications and contribute to educational theory, especially in the field of educational media. This study provides evidence that the use of iPad can affect perceptions, besides that, the pedagogical and technical skills of teachers also play an important role in the use of iPad in PAI learning. This finding also has practical implications for the application of the use of interactive multimedia iPad in learning specifically in PAI learning.

Some of these practical implications are: *First*. The implementation of interactive multimedia iPad in PAI learning is felt to provide convenience, interest, enjoyment and pleasure. This can be used as learning for implementing and developing a better system. However, the implementation of this system needs to be accompanied by careful teacher preparation before they carry out the teaching and learning process using iPad by trying to avoid using methods that tend to be monotonous and cause boredom. *Second*. Principals, schools, education officers and the government need to make efforts to improve teacher skills pedagogically and technically in the application of learning technology, especially iPad during the pandemic.

## Conclusion

This study indicated four main themes related to students' perceptions of the use of interactive multimedia iPad in PAI learning. These themes pointed out how PAI learning through iPad according to the students' perspective and it revealed that students convey positive perceptions of the use of iPad in learning. Its use during the COVID19 pandemic definitely changed its function, it is no longer being used in face-to-face learning systems but used in online distance learning systems. Thus, its use also utilizes several other learning platforms such as zoom, whatsapp and telegram. Therefore, its usage needs to be supported by facilities and teacher skills. It is also related to the reach and level of network stability, and the technical and pedagogical abilities of teachers are needed in the use of this device in online distance learning. This research certainly has limitations and is very relative to all qualitative research. Participants were only from one Islamic-based primary school in Indonesia, which limits the ability to generalize these findings to a wider population. Thus, it must be noticed in interpreting this study in other contexts with a broader scope. Therefore, further research is needed regarding the implementation of iPad in PAI learning in other settings.

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