

## **CHAPTER 2**

### **LITERATURE REVIEW**

This chapter elaborates on the theories of several experts supporting the implementation of the research. The relevant study of this research and the description of the framework are also highlighted.

#### **2.1 Technology Acceptance Model (TAM)**

TAM or Technology Acceptance Model was developed by Davis et al. (1989). TAM postulates two main variables as antecedents to individual technology acceptance; perceived usefulness and perceived ease of use. According to Davis et al. (1989), the definition of perceived usefulness is the level of someone's belief that using a particular system would increase their achievement. It means whether or not a person perceives that technology to be useful for their needs. Meanwhile, according to Davis, perceived ease-of-use is the degree to which a person believes that using a particular system would be free from effort (Davis et al., 1989). Perceived usefulness and ease of use are the independent variables, whereas system use is the dependent variable. It can say that we can conquer the barriers when the technology is easy to use. But, when technology is complicated and not easy to use, people would not have a positive attitude. Perceived usefulness and perceived ease of use determine the attitude toward using the system.

According to the above explanation, the researcher used the TAM model as the framework related to this study's title, 'Teachers' perception of online learning during the pandemic of Covid-19. If the participants perceive online learning as useful and easy to use, they have a positive perception of online learning.

## 2.2 Teacher Perception

The word perception leads us to such words as “observation” and “opinion,” with definitions that include a view, judgment, or appraisal formed in the mind about a particular matter, a belief stronger than impression and less strong than positive knowledge, a generally held view, a formal expression of judgment or advice, and a judgment one holds as true (Bernhardt, 2007:1). Perception refers to the teacher’s subjective based on their experiences. Perception cannot decide whether it is right or wrong. Each person has his or her right to have their perception as long as it can be proved with the facts. Perception is the way stimuli are chosen so that they can be meaningful (Altman, 1985). Perception is broadly interpreted as a form of thinking about something that forms a certain pattern of attitudes. According to Robbins & Judge (2008: 175) Perception is defined as a process in which individuals interpret and organize their sensory impressions to give meaning or impressions to the environment. Perception is defined as a process in which individuals interpret and organize their sensory impressions to give meaning or impressions to the environment. Perception is also a process of the entry of information or messages into the human brain (Slameto, 2010).

Teachers’ perceptions are based on three assumptions. Canh & Barnard (2009) articulated that teaching is largely influenced by teachers’ cognition, teaching is guided by teachers’ thoughts and judgments, and teaching constitutes a high level of decision-making. Phipps & Borg (2009) elaborated teachers’ perception about teaching and learning is influenced by teachers’ learning experience, acts as a filter to interpret new information and experience, outweigh the effects of teacher education in influencing teachers’ action in the classroom,

influences teachers' instructional practices, not always reflected in the practice, and interact bi-directionally with experience. They also stated that evidently, teachers' perceptions have a powerful effect on teachers' pedagogical decisions, strongly influence what and how teachers learn during language teacher education and can be deep-rooted and resistant to change.

The way perception is described shows that stimuli have an important role in building perception. Every teacher has their perception of implementing e-learning. Perceptions are to spark off similar behaviour (Bargh et al. 1996). The study about perception had been done before the pandemic before, because of some factors that influence the perception such as study of Jannah (2020) in which focus on perception of primary school teachers about learning based on the digital 21<sup>st</sup> century. From this study it was found that the competence of the teacher determines the success of 21<sup>st</sup> century learning not only technology that has been used. Besides that, the positive change is happened at schools which have digital technology more than the school that does not have digital technology.

### **2.3 The Role of Technology in Online Learning**

In its implementation, online learning certainly cannot be separated from the role of technology. Technology can facilitate all needs in the teaching and learning process. This is in line with the opinion of Tounder et al (in Selwyn, 2011) which says that digital technology in educational institutions is a supporting tool in learning, both as a means of accessing information on learning resources or as a means of supporting learning activities and related to assignments. Along with the development of the technological era, there are currently many platforms that can help implement online learning such as e-learning, Google Classroom, Edmodo,

and even more platforms in the form of video conferencing such as Google meet, Zoom, and Visco Web. Previously, many studies related to the role of technology in education have been carried out, one of them by Rogantina (2017), who explained that technology plays a very important role in improving the quality of education. In addition, the role of technology can increase the effectiveness and efficiency of the teaching and learning process so that it can make it easier to achieve educational goals.

Besides, the role of educational technology is very important in the learning process, especially during a pandemic like nowadays. The emergence of Covid-19 requires all activities to be carried out at home, including teaching and learning activities. That way technology becomes the most important part in helping the online learning process. In connection with this, Buselic M., Tavakcu T., et al in (Latip, 2020) emphasized that the essence of implementing online learning is how to choose the right learning method with the help of technology that intends to deliver learning materials to students even though they do not meet with face to face directly as well as conventional learning. In other words, technology acts as a medium for interaction and transfer of information related to learning in the implementation of online learning.

## **2.4 Online Learning**

Online learning is not a new concept. It has existed for the last decade around the world after digitalization. Online learning is also known as E-learning, which is a system or concept education that utilizes information technology in a learning process. Online learning implies a learning process that uses electronics as a learning medium. According to Onno W Purba (2002), online learning is a form

of information technology that is applied in the field of education in the form of virtual schools. During the pandemic, online learning is defined as when teachers and students do not attend school and instead teach and study from home using technology. The technology can be used like smartphones, laptops, i-pad, and tablets. Many platforms are offered for online learning that can be integrated with the technology, such as Whatsapp, Google Classroom, Ruang Guru, Quipper, Zoom meeting, etc. Jeong-Bae Son (2015) has compiled a list of online tools that are currently available and are free to use. The online tools have been divided into twelve categories based on the main functions and features: learning/content management systems; communication; live and virtual worlds; social networking and bookmarking; blogs and wikis; presentation; resource sharing; Website creation; Web exercise creation; Web search engines; dictionaries and concordancers; and utilities (Son, 2015). According to some experts, E-learning is a learning process based on electronics. The media used is a computer or mobile phone. E-learning using a network known as a website or the internet. Ardiansyah (2013) said E-learning is a learning system that is used as a means of teaching and learning process that is carried out without having to meet face-to-face directly between educators and students. After Covid 19, distance learning process or online learning in Indonesia is an obligation that must be followed and obeyed by students, educators and parents. Prohibition of face-to-face contact has been recommended since the Covid-19 virus spread throughout the country. The results of Irawan's research (2015) explain the use of information technology and communication in the teaching and learning process must be done well and directed in order to be able to provide good quality learning. So there needs to be joint improvement in learning

methods, communication and interaction between students and teachers who facilitate the sharing of learning resources and discussion activities without being hindered by time and space. More and more students feel familiar with using technology in increasing knowledge through the application of the learning process. This online learning has characteristics or characteristics certain characteristics, according to Nursalam (2008: 135) that the characteristics of learning online as follows (a) are self-learning materials, the use of a schedule learning that can be viewed online at any time via a website or web, (c) using electronic technology services, and (d) computer network.

In addition, as cited in (Arora, 2019) research, there are two types of online learning models. First, wrap around Model: this online learning model relies on learning materials, which can consist of online study guides, activities, and discussions that are “wrapped” around previously published resources such as textbooks or CDROM, etc. This model is a learning-based approach because it tries to use existing material that is relatively unchanging and easily accessible online or offline. Second, integrated Model: this model is closest to a complete online learning course. Such courses are often offered via a comprehensive learning management system. They comprise the availability of much of the subject matter in electronic formats like opportunities for computer conferencing, small group-based collaborative online learning activities, and online assessment of learning outcomes.

The previous study that explained the implementation of online learning that was carried out was only a trial in a short period. Online learning will greatly affect this effectiveness. The current state of emergency (pandemic Covid-19) has resulted

in all having to study online. Then, online learning was not carried out in a very short time, but this has been done several months ago since the existence of the Covid-19 pandemic and will continue until the pandemic period ends. From the issue above, it is necessary to investigate in detail how online learning was implemented in schools during the COVID-19 pandemic. Therefore, it can help in providing solutions for teacher online learning that will be carried out in the future. In fact, online learning faces some problems in the learning process, some teachers in Indonesia are already accustomed to face-to-face learning activities, due to the transition to online learning; some teachers have difficulty finding the right way to use ICT for online learning activities, how to use the online learning media, and how to develop and effective learning strategy. Some senior teachers are unfamiliar with online learning activities or technology-based online learning. This is supported by (Brown C. L., 2015) with the title Secondary Teachers' Perceptions of Online Learning. The result of the study by those secondary teachers that participated emphasized the importance of social interaction that still needs to take place even in an online learning environment, yet, online learning has provided an ideal venue for those students that need the flexibility to move at their own pace and are highly motivated. The report from the World Bank (2020) states that several countries have implemented different learning systems because physical schools are closed due to Covid-19. For example, in early February In 2020, China implemented an online learning system by holding simultaneous online learning exercises to ensure that learning for students is not interrupted. In Bulgaria, in early April 2020, The Ministry of Education and Science launched an e-learning system. In Finland, because school closings, instruction, and guidance for students have

been implemented by distance learning, digital learning environments, and solutions and, if necessary, self- learning. Some ways to support e-learning have been found including creating an e-Content Repository, publishing specialist pedagogical material for working in an e-learning environment.

## **2.5 Advantages and Disadvantages of Online Learning**

The adoption of E-learning in education has several advantages and benefits, e-learning is considered among the best methods of education. Several studies and authors have provided benefits and advantages derived from the adoption of e-learning technologies into schools (Klein and Ware, 2003; Algahtani, 2011; Hameed et al, 2008; Marc, 2002; Wentling et al. 2000; Nichols, 2003).

Some studies give advantage of e-learning as its ability to focus on the needs of individual learners. Online learning has several advantages as follows:

- a. Learning is not limited by place and time so that anytime students can access the learning process.
- b. Students in this learning process must be active so that the online learning process is a student-centered process.
- c. Save on education costs (infrastructure, equipment, books, official travel).
- d. Train students to be more independent in gaining knowledge.
- e. Professional online help.

Meanwhile, (Arora, 2019) lists some advantages of online learning, namely, online learning provides accessibility, the ability to plan and direct one's own learning, the ability to develop teachers' cognitive abilities, the cost-effectiveness

of online learning, and the ability for teachers to acquire technical skills in using Information Communication Technology (ICT), online learning allows students to work and study at their own pace without time constraints, and teachers can compete globally using online learning. Besides, (Sadeghi, 2019) mentions that some of the benefits of online learning are flexible in place, save costs, and save time.

E-learning, in spite of the advantages that it has when adopted in education, also has some disadvantages. The disadvantages of e-learning that have been given by studies include the following:

- a. E-learning as a method of education makes the learners undergo contemplation, remoteness, as well as lack of interaction or relation. It therefore requires a very strong inspiration as well as skills with the management of time in order to reduce such effects.
- b. E-learning may also probably be misled to piracy and plagiarism, predisposed by inadequate selection skills, as well as the ease of copy and paste.
- c. E-learning may also lead to congestion or heavy use of some websites. This may bring about unanticipated costs both in time and money disadvantages (Collins et al. 1997; Klein and Ware, 2003; Hameed et al, 2008; Almosa, 2002; Akkoyuklu & Soylu, 2006; Lewis, 2000; Scott et al. 1999; Marc, 2002).

## **2.6 Study of the Relevant Research**

Some researchers and educators believe that the use of Information Communications Technology (ICT) in education is necessary and that it can support

both the teachers and children's development. In Indonesia, the spread of the COVID-19 pandemic has an impact on all aspects of life, especially education. All schools are required to implement online learning. Along with online learning practices, teachers use online learning to support the teaching and learning process. Online learning is a learning activity that can be done anywhere by relying on an internet connection. Many factors contribute to the success or failure of online education and learning. (Sandra C. Hughes, 2002).

Initially a lot of research on online learning was used at the level of secondary education and higher education (Dewi, 2017; Arif et al., 2018 & Iqbal et al., 2019), but recently there has been a lot of research on online learning conducted in elementary schools, for instance using a zoom, Google classroom (Beacha , 2018., & Yanti et al., 2020). From various studies that have been conducted on online learning many conclude that it is effective and can be applied in education, as evidenced by various studies (Shelton et al., (2017); Larson & Vontz, 2018 & Wei & Chou, (2020)), even according to Delen & Liew (2016) that the development of online learning will greatly assist students in considering ways to use self-regulation strategies that are personal, behavioral and environmental behavioral education people also have the potential to provide creative and communicative activities for children. Therefore, it is important to draw educators' attention to this issue of safe and healthy provisioning of online environments suitable for children, to develop their thinking, technological skills and understanding for learning in the 21<sup>st</sup> century.

According to Rusman (2013), the key to the success of education is that one held by the teacher, because the teacher touched the student in education. Then, the

teacher should also ensure that the process of learning to walk is because of responsibility and their professionalism as a teacher. However, the condition becomes a dilemma in the conduct of teaching and learning activities. As a result, it requires teachers to implement online learning activities, which is an important reason for educational researchers to examine details about how the implementation of online learning is included by the teacher. The aspects tested in this study related to aspects of knowledge, the effectiveness, and the level of satisfaction in carrying out online learning conducted by the teacher. It is expected to be able to provide the idea of objective conditions experienced by the teacher in applying online learning. Therefore, be evaluation materials for a wide variety of parties including the policymakers of education in online learning.

The teacher faces significant challenges in adapting to online teaching, and maintaining at least a minimum of communication with students, and supporting students' learning and development. However, the extent to which teachers have successfully mastered these challenges and which factors are most relevant remain unknown. The Covid-19 pandemic situation has posed unprecedented challenges requiring teachers to adapt to teaching online. Until March 2020, the typical teaching situation at school was characterized by students who characterized classrooms according to their timetables and teachers who covered their subjects' standard content, frequently through formal lecturing. Students were required to listen to their teacher, work individually or in groups, and predominantly reproduce knowledge in assessments (Lipowsky 2015).

## **2.7 Framework**

Based on the literature review, this research focuses on analysing how the teachers' perception of the use technology on online English learning during the Covid-19 pandemic at Madrasah Tsanawiyah (MTs). Online learning is carried out electronically using computer-based media and a network. The impact of covid-19 influenced the teaching-learning process for the teachers. The teachers' skill to use technology becomes a teacher's challenge to improve teachers' technology skill because teachers' technology skill also determines the success of learning that has been done in pandemic time. The implementation of online studying also involves the educators rethinking about the learning model or method that will be used. The teacher should change the method with another method. Therefore, this study shows empirical understanding on what are teachers' perception of online learning as an impact of school from home during the pandemic Covid-19 period.

