CHAPTER II : LITERATURE REVIEW

2.1 Introduction

This chapter will explore previous works and studies on the history of the development of the Braille Quran in Malaysia. This review offers an outline of the history of the Braille Quran development in Malaysia, from its inception to the present day institutes offering Braille Quran learning in Malaysia. Furthermore, this chapter will clarify concerns related to the research topic. Among the subjects covered in this chapter are prior issues of research undertaken by other researchers. To further the discussion and comprehension, this chapter is separated into three sections: learning styles that emphasise on the visual, auditory, and kinaesthetic (VAK) model, Braille, and FPQS students.

2.2 Learning Style

An individual's learning style is to digest knowledge and address issues as they arise (Entwistle, 1981). According to Gregorc (1982), as cited by Cynthia (1996), each individual has their unique learning style (Azizi Yahaya, 2004). Various researchers have described 'learning style' as a sign for individual variations in the processing of learning something. According to Shahabuddin and Rohizani (2004), a person's learning style refers to how they learn or store knowledge. Learning styles, as defined by (Eric M & Lynley Hicks, 2009), are a collection of typical learning methods. The theory behind learning styles is founded on the notion that people absorb information differently, which results in very diverse learning requirements.

The Oxford Dictionary defines 'learning' as the process of learning something. Meanwhile, 'style' refers to the specific manner something is done. In addition, Meor Ibrahim & Assaadah (2011) asserts that learning style is commonly described as the manner a person learns something based on the individual's own inclination.

According to (Huda & Sadia Zamir., 2015), "learning styles" refer to the concept that every learner learns differently. Essentially, a person's learning style refers to the preferred manner in which the learner absorbs, comprehends, and remembers knowledge. It may be stated that learning style is an individual's method of retaining knowledge according to capacity and in different ways to the individual based on their own approach or understanding in terms of studying a specific subject or items.

According to recent research, the selection of innovative learning methods is suitable based on the students' potential to become more active and creative during learning and teaching sessions. Several models, such as VAK learning style (Barbe et al., 1979), Kolb Learning Style Theory (Kolb, 1984), and Dunn and Dunn Model (1975) (Dunn & Burke, 2006) others, are used in the teaching and learning process. The VAK model is one of the most regularly used models for determining student learning styles. The VAK learning styles model has been frequently utilised in educational history to reflect on the significance of recognising learner characteristics in order to enable successful instruction (Hamdani, 2015). The VAK learning approach aligns to the *Kalāmullah*, as illustrated in the following verse:

..... وَجَعَلَ لَكُمُ ٱلسَّمۡعَ وَٱلۡأَبۡصَٰرَ وَٱلۡأَفۡـِٔدَةَۙ لَعَلَّكُمۡ تَشۡكُرُونَ ٧٨

... and He made for you hearing and vision and intellect that perhaps you would be grateful.

[Surah an-Nahl: 78]

According to academicians, learning styles and teaching styles should be properly matched in order to improve students' motivation to learn (Yassin & Almasri, 2015), as mentioned by Chetty et al., (2019). The VAK learning style inventory, according to Nugraha et al., (2020), assesses the preferred method of acquiring sensory information. Even though it is vital to implement any lesson nowadays, learning style must be addressed while executing a scientific lesson.

In terms of activities and teaching aids, the VAK learning model divides students into three categories: visual, auditory, and kinaesthetic. Azizi and Nurfaizah (2004) define visual learning styles as students learning by seeing and watching; students attempt to envision what they learn in mind. In general, visual learners are classified into two types: visual-verbal and visual-nonverbal. In 2010, Bobbi DePorter et al., presented a study in which they characterised the visual learning style, in which students are drawn to text, colour, images, tables, diagrams, and charts, whether in a

book, on a blackboard, or on a computer display. Reading a sentence or text helps visual learners retain, comprehend instructions, and recall information. This study is backed by Abdul Rahman et al., (2016), who classified visual learners as those who learn by seeing visuals of what they are learning; they are oriented to written text and can learn by reading. Visual learners think in terms of visuals and learn best via the use of visual imagery. They tend to apply an appealing colour on the slide presentation, besides from picking up more information from the high tone of lecturer or teacher during the learning session (Noornajihan et al., 2017).

On the other hand, auditory students require the explanation and question session. When the student answered the question, the lecturer or teacher approached them, and the element of music in the learning slide was introduced (Noornajihan et al., 2017). The auditory style is characterised by students learning by listening to spoken instruction and remembering by constructing the voices of the words. In the context of auditory learning, this does not imply that the learner should simply hear the material to remember it. In any case, the auditory student must hear for themselves in order to properly include the material they wish to recall in the memory (Azizi & Nurfaizah, 2010). Auditory learners are more likely to learn by hearing sound, music, tone, rhythm, voice, teaching, or knowledge orally, according to Nor Musliza and Mokmin (2015). Students may also be provided a description of the auditory by powerful readings (reading loudly) or moving the lips when reading, especially when learning anything new. Students can improve their memory by listening to the audio recording tape several times, teaching other students, and conversing with the teacher. Abdul Rahman et al., (2016) affirms that auditory learners will learn more effectively if they can hear the material they are learning.

Meanwhile, kinaesthetic students learn by physically interacting with and applying what they have learnt. Kinaesthetic students learn more effectively through hands-on experiences in the classroom (Azizi & Nurfaizah, 2010). Kinaesthetic learning style is defined as a method of learning that involves interacting, moving, experiencing, and exploring (Widiyanti, 2011). Students with kinaesthetic learning styles are more likely to learn well via experience and to participate in practical learning activities such as movement, the concept of emotional, physical, and emotional acts. When students are exposed to direct practical exercises, they are more able to recall a lesson (Nor Musliza & Mokmin, 2015). The lecturer or teacher

approached the student to write the answer in front of the class and make a gesture, which is a movement of the body, to help the learner recall what they had learned (Noornajihan et al., 2017).

Nor Musliza and Mokmin (2015) in their article '*Pembelajaran Al-Quran Berasaskan Teknik dan Gaya Pembelajaran VAK (Visual, Auditori dan Kinestetik)*' assert that by learning the Quran utilising the VAK learning approach, students can learn autonomously based on their capacity to attain effective understanding and learning. This is because the VAK learning style model incorporates sight, hearing, and movement, and students may immediately practise their experiences to better retain and understand what they have seen, heard, and done. This results in greater learning outcomes than students who use traditional learning methods. It may be stated that this approach allows students to study individually and freely, allowing them to acquire optimal rote and comprehension levels in the exploitation and development of student potentials. Implementing memorising exercises utilising innovative techniques may help boost student interest, motivation, and momentum in the Quran reciting process, hence enhancing student quality and potential.

Several studies have been conducted to investigate the link between students' attitudes in academic studies as well as Quranic studies and students' learning patterns. The major objective of Norul Haida et al. (2016) study, which was conducted using qualitative methodology, is to identify the application of VAK Model in the learning style of Komsas Bahasa Melayu and explore the application of VAK Model in the style of teaching and learning Komsas. In their research, they discovered that there was a difference between outstanding and weak students' learning styles when learning Komsas Bahasa Melayu. Excellent students were more likely to utilise visual and auditory learning methods, whereas weak students were more likely to use kinaesthetic learning techniques.

According to past study, no research on the learning style of the Braille Quran was conducted, particularly at higher education institutions. This is because, according to the research, USIM was the only university that provided the Application of Braille in Quran and Sunnah Studies (QNR3013) for typical students (Ahmad Kamel et al., 2008) cited by (Norakyairee, 2019). The findings demonstrate that the VAK model learning method may be used in the process of teaching and studying QNR3013 among FPQS students at USIM to help students memorise the Braille Quran code.

This research was carried out among FPQS students at USIM. The purpose of this study is to determine the learning strategies used by students when learning and memorising Braille Quran codes using the VAK model. Each student must know the Braille Quran codes in order to facilitate the reading process of the Braille Quran during the test. At the same time, it adds value to the student.

2.3 Braille

Braille is a writing system for the blind people invented by Louis Braille. Braille is a system of raised dots that individuals who are blind or have poor eyesight may read with their fingertips (American Foundation for the Blind, 2019). It comprises of six raised dots organised in two parallel rows, each with three dots to inscribe the character on paper and read by visually impaired using their fingertips.

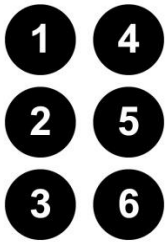

Figure II-I: The Braille Cell

The cells generate 64 combinations that represent alphabets, letters, numbers, punctuation marks, special signs or even the entire words.

2.3.1 Braille History

Braille is a language used by blind people to discern letters and numbers. Despite the challenge in terms of vision, they still need to obtain information to improve their knowledge and make the learning process better. Braille codes are usually synonymous to visually impaired individuals who read by using the tips of their fingers. However, Braille codes may also be used by non-blind individuals to study and practise in order to assist blind persons and teach Braille to others.

D'Andrea (2002) notes that Louis Braille was born in the French town of Coupvray in January 1807 and lost his sight at the age of three due to an accident. His left eye became irritated after Louis stumbled while playing with a long bladed, razor-

edged object, and the object wounded his right eye. Louis was fully blind at the age of five (Barbier, 2009). In brief, at the age of 13, Louis Braille developed the military writings known as 'night writing' to help the troops read in the dark, which was devised by Charles Barbier. In October 1824, he refined his own tactile alphabet by using a mixture of raised dots to represent actual letters of the alphabet, including numerals, spaces, punctuation, and accent marks, and subsequently, mathematical symbols and musical notation (Barbier, 2009). The Braille alphabet is based on a basic pattern of six dots arranged in a framework known as the Braille cell. Each cell is three dots high and two dots wide, allowing for 64 distinct characters. This is known as the Braille system. However, at the time, Braille did not include the letter W (Noornajihan & Kauthar, 2015).

2.3.2 Braille Quran

The term Braille Quran refers to the combination of the Holy Quran and the Braille code. The Quran is the primary source of reference for Muslims. The name Quran derives from the Arabic word *Qira'ah*, which implies uniting letters and words in a well-ordered discourse (Al-Zarqani, 1994). In *Surah al-Qiyāmah* [75: 16-19], Muslims are required to read, memorise, comprehend, and apply the contents of the Quran in their everyday lives (Norakyairee & Tamuri, 2011). While from the perspective of the term, Quran refers to Allah SWT's message, it is a miracle revealed to Prophet Muhammad SAW by Jibril AS, recorded in *mushaf*, recounted by *mutawatir*, and regarded a form of devotion by people who read it. As a Muslim, recite the Quran, for it will come as an intercessor for its reciters on the Day of Resurrection [*Saḥīh Muslīm*].

Braille Quran is a version of the Quran *mushaf* written in Braille code that employs the base Arabic Braille codes to represent the letters of *hijaiyyah*, line signs such as *fathah, dammah, kasrah* and symbols such as *shaddah, sukun, mad* and others (Ahmad Kamel et al., 2008). The words of Allah must not only be told to the normal group. Therefore, the use of Braille in Quran writing is one of the key contributions made by Muslims in order to assist the visually challenged in reciting the holy words of the Quran and learning more thoroughly. In this study, Braille Quran refers to the Malaysian Association for Blind Muslims (PERTIS) Braille Quran *mushaf* (*al-Qurʾān al-Karīm bī al-Kitābah al-ʿArabiyyah al-Nāfirah*). To recognise the codes that

represent *hijaiyyah* letters and punctuation marks in the Braille Quran, a learning process is required. Readers must also be familiar with specific signs in order to detect stop signs and sentence numbers.

Noornajihan & Kauthar (2008) found PERTIS pioneered the Braille Quran developmental scene in Malaysia; an effort that has been recognised at the national level. According to Zakaria (2009), Jordan contributed a complete 30 *juz* Braille Quran *mushaf* to Malaya in 1952. It is divided into six volumes, each including five *juz*. The Mushaf Braille Quran is printed on both sides. However, in 1954, the *mushaf* of the Braille Quran was given to SKPK Princess Elizabeth in Johor Bahru for safekeeping and instructional purposes. Mr. Zakaria Yahya and Mr. Muhammad Lee constructed the Braille Quran code on a computer in the 1994s by translating the computer keyboard character code to Braille code using Duxbury Translator (DBT). Then, it was printed using a Braille printer called Embosser. Next, they and the Department of Islamic Development Malaysia (JAKIM) has reviewed the reading and law of Tajwid for almost four years and the publication is approved in the 1998s (Norakyairee et al., 2013). For almost 12 years, the tireless efforts paid off when JAKIM approved the Braille Quran code produced by the two of them since 1998. Therefore, now PERTIS can print two Braille copies of the Quran a day. Each copy is sold at a price of RM200 (Noornajihan & Kauthar, 2015).

Several significant dates and observations concerning the historical chronology of the creation of the Braille Quran in Malaysia may be determined based on Norakyairee et al. (2013) analysis. Generally, the chronology can be divided into four phases: 1. The Braille Quran Copy; 2. Braille Quran Printing; 3. The Phrasebook Publishing of the Braille; and 4. Braille Quran Innovation Phase.

Today, Islamic nations such as Malaysia have created their own copies of the Braille Quran based on the *Uthmani* system. Braille Quran has been printed nationally since 1999, and has been approved by the Al-Quran Control and Licensing Board of Malaysia's Ministry of Home Affairs. (KDN) with KDN code: PQ/Q.1001/1.2/QA/304/49/2010 (Norakyairee, 2019).

Visually impaired persons, like everyone else, must study Islamic education and the Quran. In an endeavour to disseminate Islamic education among the visually impaired, they encounter the issue of teaching techniques and teachers who do not grasp the acceptable ways to utilise with students (Latifah, 2017). Thus, even though a

normal student might be able to read Braille Quran codes by looking at the code directly, they must study and master all of the Braille Quran codes. Braille is a touch-based reading and writing system that enables visually impaired persons to participate in the reading culture. As a result, Dahnil et al. (2020) claims that learning Braille code, such as the basic concept symbolising punctuation mark and *hijaiyyah* alphabet position, is the first stage in studying Braille Quran.

2.3.3 Chronology of Braille Quran

Braille Quran production is one of the options for disabled persons with visual impairment to recite the Quran. The Malaysian Association for Blind Muslims (PERTIS) pioneered the development of the Braille Quran alphabet, which has now been approved at the national level. This is demonstrated by the release of the Braille version of the Quran (Language Grade 1 Arabic Grade Code), which is based on the Indonesian Braille Quran issue. It is the only Quran approved by JAKIM and the Ministry of Internal Affairs (KDN).

Zakaria Yahya is a Braille Quran trainer at Setapak High School for the Blind (SMPK). The history of Jawi writing Braille and the Braille Quran in Malaysia dates back to 1948, with the establishment of the Prince Elizabeth National School of Special Education (SKPK) in Johor Bahru. According to Zakaria Yahya (2008), Jordan sent a copy of the Braille Quran *mushaf*, consisting of six volumes (30 *juz*), to the Prince Elizabeth National School of Special Education (SKPK), Johor Bahru, circa 1952. Each volume comprises five Quran components printed on both sides. According to the evolution of various Braille codes recorded by UNESCO under the United Nations (UN), standard Arabic Braille codes were created and used by the 1960s (Ahmad Kamel, 2008). It is believed that in the 1950s, the Arabic-based Braille code began to be used in numerous Islamic Middle Eastern nations.

In 2013, JAKIM, USIM, and NGOs collaborated with blind people to produce a standard style of writing the *Rasm Uthmani* Braille Quran, which is slated to be printed in September 2015 (Nur Adzam Rasdi et al., 2017). The *Mashaf* Al-Quran Braille Malaysia (MQBM) has accepted the authentication of the final proof of the MQBM text by KDN on April 9, 2021, in accordance with the Printing of Al-Quran Text Act 1986 (Sundaily, 2021). The older version of the Braille Quran did not adhere to the *mushaf* in *Rasm Uthmani* in terms of *waqf* (rules for halting when reading the

Quran) and *juz* (section) transition. This is demonstrated by their release of the Braille Quran, which is the only Braille Quran authorised by the Malaysian Islamic Development Department (JAKIM), as well as Minister in the Prime Minister's Department (Religious Affairs) and the Ministry of Internal Affairs (KDN).

2.3.4 The features of PERTIS Braille Quran writing

Muhammad Mustaqim (2014) briefly state the entry structure and method of writing Braille Quran used by PERTIS in teaching and learning sessions (Refer appendix F). However, there are some punctuation sign in the *Rasm Uthmani Mushaf* not written in the Braille Quran PERTIS.

2.4 Student of Faculty of Quranic and Sunnah Studies

The effort towards *da'wah* dissemination is a vital component in strengthening the role of each individual Muslim as a caliph. As early as 2006, USIM's Faculty of Quranic and Sunnah Studies (FPQS) began investigating Braille Quran in the community of special needs with visual impairment. A group of scholars lead by Ahmad Kamel Mohamed researched the associated history and techniques of teaching Braille Quran in Malaysia and discovered that PERTIS has been spearheading the efforts to engage these specific populations. As a result of the research, FPQS began offering Faculty Compulsory courses (WF) on the Application of Braille in Quranic and Sunnah Studies (QNR3013) course in 2008. This is the first time such a course has been given in higher education. Through research and innovation, publishing, teaching and learning, training services and consultancy, volunteer students, and the *khidmat ummah*, this course begins to flourish.

This course gives FPQS, USIM graduates a valuable edge in the area of education in terms of obtaining technical and practical skills. It includes an introduction to Braille Quran, the history of code construction, methods for reading Braille Quran, and ways for transcribing words in the Quran. The primary goal of this course is to expose students to the historical context of Braille Quran abilities essential for reading Braille Quran and transcribing words from the Quran. Delivered through a combination of lectures and tutorials, students' knowledge of the topic is tested utilising tests, mid- semester assessment, course assignment and final examination.

Teaching and Learning	Status	Remark
The Application of Braille in Quranic and Sunnah Studies	Faculty Compulsory Course (*WF*)	QNR3013

Table 1: The Application of Braille in Quranic and Sunnah Studies in FPQS

2.5 Conclusion

This chapter mainly focuses over the literature review for the underlying theory employed in this research. This chapter discusses in detail the history of Braille, Braille Quran, and the chronology of the Quran in Malaysia. The researcher, on the other hand, discuss learning styles from a scholarly standpoint, such as the VAK learning style (Barbe et al., 1979). The researcher focus into the VAK learning model, which is separated into visual, auditory, and kinaesthetic components (VAK).