FIRE SAFETY COMPLIANCE OF PRIVATE TAHFIZ SCHOOLS IN SELANGOR

BY

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A thesis submitted in fulfilment of the requirement for the degree of Master of Science (Built Environment)

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ABSTRACT

The expanding numbers of Tahfiz schools in Malaysia were due to emergent public demand and pursuing the target of producing 125,000 professional huffaz in the year 2050 as stated in the Malaysian Tahfiz Education Policy. However, 40% of Tahfiz schools nationwide fail to comply with the minimum fire safety regulation in the inspection held by the Tahfiz task force. Nevertheless, the arising crisis of fire trend in Tahfiz schools has limited the benefits of fire safety regulation among them. As such, the objectives of this study are to identify the cause of fire safety issues and evaluate the level of fire safety measures in Tahfiz schools based on the requirement under the Selangor Uniform Building By-Laws (1986). A semi-open interview and structured observation were adopted to analyse the issues in the selected Tahfiz schools. Among the fire safety issues that were identified are a lack of fire safety regulation knowledge, governance issues and low fire safety awareness. The finding of this study recommends an improvement towards the aspect of Tahfiz schools establishment, fire safety compliance and education towards fire safety. The study concludes that a proactive collaboration among the relevant stakeholders is essential to encourage fire safety regulation compliance in the establishment of Tahfiz schools.



ملخص البحث

إن التزايد في عدد المدارس لتحفيظ القرآن في ماليزيا كان نتيجة لطلب جماهير الناس وسعيا لتحقيق السياسة التعليمية الماليزية لتحفيظ القرآن حيث تهدف إلى إيجاد ١٢٥،٠٠٠ حافظ بارع في العلوم الحديثة في عام ٢٠٥٠. ومع ذلك، فإن ٤٠٪ من مدارس التحفيظ في البلد لا تفي بالحد الأدني من متطلبات لائحة شروط السلامة والحماية من الحريق، وذلك حسب ا التفتيش الذي أجراه فريق عمل لشؤون مدارس التحفيظ. وبالرغم من ذلك، فإن التزايد في أزمة الحرائق في مدارس التحفيظ قد حد من قدرتها في الاستفادة بلائحة شروط السلامة والحماية من الحريق. ولهذا، هدفت هذه الدراسة إلى تحديد الأسباب المتعلقة بقضايا السلامة والحماية من الحريق، وتقييم مستوى تدابير السلامة والحماية من الحريق في مدارس التحفيظ بناء على متطلبات قانون البناء الموحد لولاية سلانجور (١٩٨٦). اعتمدت الدراسة على مقابلات شبه مفتوحة وملاحظات منظمة في تحليل هذه القضايا في مدارس التحفيظ المختارة. ومن بين قضايا السلامة والحماية من الحريق التي تم تحديدها: نقص في المعلومات المتعلقة بلائحة شروط السلامة والحماية من الحريق، وقضايا حوكمة، ونقص في الوعى بالسلامة والحماية من الحريق. توصى نتائج هذه الدراسة بتحسين كل من هذه الجوانب: الامتثال لمتطلبات السلامة والحماية من الحريق، والقضايا المتعلقة بإنشاء مدارس التحفيظ، والتثقيف بأهمية الامتثال للسلامة والحماية من الحريق. وخلصت الدراسة إلى أن التعاون بشكل استباقي بين أصحاب المصلحة أمر ضروري في تشجيع الامتثال بلائحة شروط السلامة والحماية من الحريق في إنشاء مدارس التحفيظ.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a thesis for the degree of Master of Science (Built Environment).

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DECLARATION

I hereby declare that this thesis is the result of my own investigations, except whereby otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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This thesis is dedicated to my beloved husband and children.

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LIST OF ABBREVIATIONS

CCC	Certificate of Completion and Compliance			
CF	Certificate of Fitness			
DBP	Dewan Bahasa dan Pustaka			
FRDM	Fire and Rescue Department Malaysia			
JAKIM	Jabatan Kemajuan Islam Malaysia (Department of Islamic Development Malaysia)			
JAIS	Jabatan Agama Islam Selangor (Selangor Islamic Council)			
MOH	Ministry of Health Malaysia			
NGO	Non-Government Organization			
NIOSH	National Institution of Occupational Safety and Health (Malaysia)			
SP	Submitting Person			
PSP	Principal Submitting Person			
UBBL	Uniform Building By-Laws, 1984			
SUBBL	Selangor Uniform Building By-Laws, 1986			

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

^cLife safety is ultimate building design' as it became the prime consideration in fire safety requirements as the description of part VII and VIII of the Uniform Building By-Laws, 1984 (Hamzah, 2011). Precaution measures of fire safety through prevention were emphasized to reduce the hazard of fire that results in injury, death or damaged property. According to Mohd Fadzil (1997), a building should meet the acceptable compliance of fire safety requirements by considering the building's purposes and occupancy. As such, ensuring fire safety compliance in schools buildings is significantly to ensure the protection of students and teachers while avoiding the negative impact on the learning environment, wellbeing and community (Pauline *et al*, 2007).

1.2 BACKGROUND OF THE PROBLEM

The majority of Malaysian Muslim parents have chosen Tahfiz schools as alternative education for their children in ensuring the balance between physical and spiritual needs. Exposure to the fast-paced of today's modern world causes worries among Muslim parents about their children's well-being. Thus, enrolment into Tahfiz schools was seen as the best solution to ensure the knowledge and value of Islam remain as 'protection' for the children to live in this challenging world.

Due to the public demand, the existence of Tahfiz schools in Malaysia has increased up to 52.6% in 2019 as compared to 2017 (Nur *et al*, 2020). The increment

is following the recent target; to produce 125,000 professional *huffaz* by 2050; as stated in the Malaysian National Tahfiz Education Policy initiated by the Department of Islamic Development (JAKIM). Presently, the institution has involved almost 55,000 teachers and students nationwide. Nevertheless, it is believed that 800 unregistered Tahfiz schools are operating privately without registration to the respected authorities (Lee, 2019).

The fire crisis issues in Malaysia's Tahfiz schools sparks due to the heartbreaking incident at Darul Quran Ittifaqiyah Tahfiz Centre in Dato Keramat, Kuala Lumpur on 14 September 2017. 21 students and two teachers perished in a fire that razed their dormitories on the third floor of the Tahfiz centre (Shawaliah, 2020). Subsequently, the Fire and Rescue Department Malaysia (FRDM) records show that 211 fires have occurred at Tahfiz schools nationwide since 2015 (Syed Azhar, 2017). Those fire tragedies involving Tahfiz schools have recorded 54 death; involving students and teachers between 1989 until 2017.

Following the above incidents, scholars among the educational community have established their studies on Tahfiz schools in regards to governance issues (Hamidah *et al*, 2016; Noreha, 2018), fire safety training (Nurul Husna *et al*, 2017), teaching and learning facilities (Ridza *et al*, 2017; Nur Alia *et al*, 2019; Arita *et al*, 2019; Zulhilmi *et al*, 2020), fire safety management (Muhd Hafiz, 2018), school's management (Nurul Syahira, 2018; Ismat *et al*, 2020) and data tracking (Suziyanti et al, 2020).

Hence, this study intends to further contribute the outcome of evaluation to the current fire safety compliance in private Tahfiz schools in Malaysia. A top priority concern must be placed on fire safety provision in schools to ensure the protection of the future generation. This is in line with the aim of the Malaysian Educational Blueprint 2013 to 2025; improvement of the school facilities and infrastructure to promote a conducive educational environment (MOE, 2013; Nor Rimie, 2017).

1.3 PROBLEM STATEMENT

The majority of Tahfiz schools in Malaysia give the least attention to fire safety provision (Muhd Hafiz, 2018; Nurul Syahira, 2018) due to low fire safety awareness (Nurul Husna et al, 2017;), disorganized school establishment (Hazlina, 2017), unstandardized infrastructures (Ridza *et al*, 2017) and unaccountable governance (Noreha, 2018, Hamidah *et al*, 2016). Consequently, it does not contribute to a conducive learning environment for Muslim students and teachers, and in turn, the school may become death traps and fire cases will continue to repeat in making headlines. Due to the above problems, this research was conducted to evaluate the fire safety compliance issues in private Tahfiz schools.

1.4 RESEARCH QUESTIONS

The problem statement above brought to the research questions as stated below;

- i. What is the cause of fire safety issues in private Tahfiz schools?
- ii. What is the level of fire safety measures in private Tahfiz schools?
- iii. What are the strategies to improve fire safety compliance in Tahfiz schools?

1.5 RESEARCH AIM

The aim of this research is to identify the appropriate aspects that can improve the fire safety compliance among private Tahfiz schools in Malaysia. This findings are useful for the school coordinators (schools' owner, principal or stakeholder), Tahfiz schools' governance, authorities and professional community to corporate in encouraging the building regulation fulfilment as an important measure in fire safety strategies.

1.6 RESEARCH OBJECTIVES

The following are the objectives that were generated from the research question of the study:

- i. To identify the cause of fire safety issues in private Tahfiz schools.
- ii. To evaluate the level of fire safety measures in private Tahfiz schools.
- iii. To recommend improvement towards fire safety compliance in Tahfiz schools.

The relationship between the research questions, research objectives, and research methodologies was drafted in Table 1.1.

Resear	search Questions (RQ) Research		cch Objectives (RO)	Data Collection	Research Outcome
RQ1	What is the cause of fire safety issues in private Tahfiz schools?	RO1	To identify the cause of fire safety issues in private Tahfiz schools.	 Literature review Interview 	 Understanding of Tahfiz schools in Malaysia & Private Tahfiz Schools establishment (Chapter 2) Identifying the course of fire safety issues in private Tahfiz Schools (Chapter 4)
RQ2	What is the level of fire safety measures in private Tahfiz schools?	RO2	To evaluate the level of fire safety measures in private Tahfiz schools.	3. Literature review4. Observation	 Understanding of Fire safety requirement for Tahfiz Schools. (Chapter 2) Level of fire safety measures in Tahfiz Schools (Chapter 5)
RQ3	What are the strategies to improve the fire safety compliance in Tahfiz schools?	RO3	To recommend improvement towards fire safety compliance in Tahfiz schools.	5. Analysis of RO1 & RO2	Recommendations of improvement towards fire safety compliance in the private Tahfiz Schools (Chapter 6)

Table 1.1: The relationship of research questions, research objectives, and data collection.

1.7 RESEARCH SCOPES

These research scopes are focused on the following aspect;

- i) The Tahfiz schools in Selangor due to the latest highest fire cases reported from 2017 until 2019.
- ii) The Private Tahfiz schools that provide hostel facilities due to the trend of fire cases in such premises.

1.8 RESEARCH GAP AND SIGNIFICANCE OF THE STUDY

In general, there have been studies on fire safety to develop the efficiency of its application in various aspects; such as fire safety assessment (Venkatesh *et al*, 2019), management application (Nuzaihan, 2021) and integrating human factors (Subramaniam, 2004). Similarly, studies on fire safety in educational facilities include higher education institutions (Tuah, 2016; Emmanuel *et al*, 2017; Ebenehi *et al*, 2018), school facilities (Hassanain, 2006; Nadzim *et al*, 2014; Khamsiah *et al*, 2016; Salaheldin, 2020) and hostels (Kofi *et al*, 2016; Shazrizil, 2019).

Previous scholars have established assessments on Tahfiz schools in Malaysia in regards to the governance issues (Hamidah *et al*, 2016; Noreha, 2018; Suziyanti *et al*, 2020), school management (Nor Izzati *et al*, 2020; Ismat *et al*, 2020), learning environment (Ridza *et al*, 2017; Nur Alia *et al*, 2018; Arita *et al*, 2019; Zulhilmi, 2020), fire safety training perception (Nurul Husna *et al*, 2017), fire safety management (Muhd Hafiz, 2018) and fire safety cost elements (Siti Nadhirah *et al*, 2018).

It is confirmed that there are lack of study about fire safety compliance in private Tahfiz schools. As such, this study intends to fill the gaps by exploring the issues associated with fire safety compliance in private Tahfiz schools to improve the application while minimizing the chance of hazard caused by a fire in such premises. The findings from this study are to enhance the understanding and knowledge on fire safety requirements as well as strategies of effective fire safety compliance in Tahfiz schools which indirectly contribute to the schools community, regulator, professionals and community in general.

1.9 RESEARCH METHODOLOGY

The research methodology in this study is formulated by referring to the research questions and objectives. As such, a mixed method was adopted in which the triangulation approach was used (Mark, 2007; Creswell, 2009; Collins, 2010). For this research, the researcher collected both quantitative and qualitative data concurrently. Then, all data were being triangulated by comparing and combination of both data. In addition, the researcher is able to confirm the answers to the research questions based on the research findings.

The qualitative data was adopted based on an interview with the private Tahfiz school coordinator to identify the issues in fire safety application, Tahfiz School's establishment, management of the fire safety and fire safety awareness programs. Concurrently, the quantitative data was applied based on structured observation to evaluate the fire safety measures according to the Selangor Uniform Building By-Laws (1986). The observation was established using a fire safety checklist and visual studies through photos and drawings.

Figure 1.1 shows the triangulation design; suggested by Creswell (2007); adopted in this research. According to Creswell (2007, 2009) and Collins (2010), the mixed method can reduce the error in the research while producing accurate information by various applications and techniques. The qualitative and quantitative data collection has leads to the triangulation and interpretation as mention in Figure 1.1.

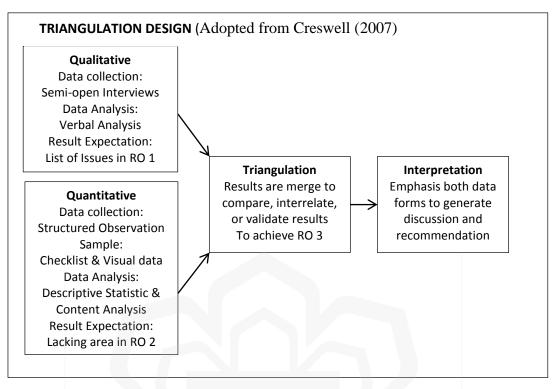


Figure 1.1: The Triangulation Design for the Research

1.10 RESEARCH STRUCTURE

The structure of this research was arranged based on five main stages namely research design, literature review, data collection, data analysis and conclusion. It is organized and presented in seven different chapters.

Chapter one (stage 1) introduces the overall structure of the research by presenting the background of the problem and issues of the research. Then, problem statements are determined based on the issues and it leads to the research questions, research aim, and research objectives. The research scopes and limitations are also stated in this chapter with summarized methodology selected in this study. Further overview of research flow is presented in the research framework. The research's significance indicated in this chapter is elaborated as it might be beneficial to the Tahfiz schools coordinator, teachers and authority.

Chapter two (stage 2) provides the review of literature based on the research keywords: Tahfiz schools in Malaysia and fire safety requirements; as suggested by Creswell (2009). This makes helps to generate an understanding of the research area. The literature review of this study is obtained from conference papers, journal articles, government reports and checklist, thesis and dissertation abstracts, newspapers, published books and web articles. It helps to identify the appropriate fire safety requirements according to the SUBBL (1986) and related authority checklist.

Chapter three (Stage 3) presents the theoretical framework of the research to draw the research methodology to achieve the objectives explained in the first chapter. Three methodologies were involved in the study, such as interviews, observations and collection of visual data. The elaboration extend on the research variables and data analysis for further overview.

Chapter four focuses on the interview with the selected private Tahfiz school coordinators. The findings from the analysis data were present to accomplish the first research objectives. The results and findings were discussed based on fire safety compliance, Tahfiz school establishment, management of the fire safety application and fire safety awareness programs.

Chapter five focuses on the evaluation based on observation at the selected private Tahfiz schools. The findings of statistics and visual data were presented. The results and findings were discussed based on the level of fire safety compliance statistics to highlight the issues in the lacking firefighting items.

Chapter six analyses both findings of chapter four and five. The combination of both data brings toward the recommendation of three effective elements towards fire safety compliance for private Tahfiz schools; such as effective fire safety compliance, governance in the Tahfiz Schools establishment and appropriate fire safety training and education for Tahfiz schools.

Chapter seven express the conclusion of the overall results and discussion that meet the research objectives. Then, future research is listed to encourage extension studies on the fire safety compliance strategy.