

## IEBMC 2019

### 9th International Economics and Business Management Conference

# THE BURNING TAHFIZ: AN EXPLANATION FROM HEALTH BELIEF MODEL

Nor Izzati Nor Redzuan (a)\*, Mazlina Mustafa (b), Fadhilah Abdul Ghani (b), Fatini Hanim Mohamed Taufek (b), Ahmad Shidki Mat Yusoff (c), Fahmi Zaidi Abd Razak (d), Muneerah Kassim (d), Siti Aminah Harun (d), Sakinah Husain (d)

\*Corresponding author

(a) College of Business Management and Accounting, Universiti Tenaga Nasional, Muadzam Shah, Pahang, Malaysia, NorIzzati@uniten.edu.my

(b) College of Business Management and Accounting, Universiti Tenaga Nasional, Muadzam Shah, Pahang, Malaysia

(c) Institut Pendidikan Guru (IPG) Kampus Sultan Mizan, Malaysia

(c) Widad University College, Malaysia

### *Abstract*

This paper was extracted from a full research paper done following the completion of a community project. The community project was an engagement with Tahfiz School principals located in Selangor, Malaysia. The engagement was conducted to determine several issues, most importantly the factors in encouraging the Tahfiz School Principals in obeying the safety aspects and also the factors or obstacles that discourage them from complying with the safety regulations. Thus, this article explores the relationship between Perceived benefit, Perceived barrier, Cues to action, Perceived susceptibility, Perceived severity and Intention to comply with safety rules and regulations among Tahfiz School Principals in Malaysia. A theoretical framework is proposed based on Health Belief Model and tested with empirical data collected in Selangor, Malaysia. The findings revealed significant influences of Perceived benefit and Perceived severity towards Intention to comply with safety rules and regulations with 43% variance explained. This research may offer initial understanding of the factors that may have affect Intention to comply with safety rules and regulations among Tahfiz Principals in Malaysia.

2357-1330 © 2020 Published by European Publisher.

**Keywords:** Tahfiz school principals, health belief model, fire incident, quantitative methods, safety rules and regulation.

## 1. Introduction

The significant morbidity, mortality, and increased number of Tahfiz burnt down have led to substantial efforts to search for its contributor. We believed that if the School Principals can obey the safety regulations set by the government, the numbers of such incident will decrease. The fire incidents in the Tahfiz School is increasingly common. According to Nurul Husna Che Hassan et al. (2017), 33 fire incidents among Malaysian Religious and Tahfiz Schools from 2007 to 2017 were reported. The above data clearly showed that the number of fire incidents were highly alarming situation and requires prompt action. However, studies on the causes of fire incident in Tahfiz Schools is still at nascent stage. Therefore, understanding the intention to comply with safety rules and regulations is crucial for the researcher. In the past, numerous studies on health behaviour intention have been done. However, very few studies conducted focused on the Islamic religious schools principals' responses towards safety behaviour. Thus, this research is the first attempt to analyse factors that would affect Tahfiz principals to comply with safety rules and regulations. Accordingly, the present research has used the Health Belief Model (HBM) as its theoretical framework.

The HBM was firstly developed by Becker et al. (1977), postulate that an individual's likelihood of performing an action is dependent on his or her perception of four constructs: perceived susceptibility to the condition in question, perceived severity (or seriousness) of the consequences of the condition, perceived benefits, and perceived barriers related to performing the action(s) to behavioral change. According to Jeong and Ham (2018) and Rosenstock (1966), construct "cues to action" was added to the original variables of the HBM as a factor stimulating an individual's "readiness" by making them aware of the potentially adverse consequences of the disease or health condition in question or a cue or stimulus triggers the response. For health, such events or cues can be internal (e.g., perception of body symptoms) or external (e.g., interpersonal interactions or influence from others or media communication). Furthermore, Rosenstock (1990) claimed that many researchers had suggested that the combination of susceptibility and severity under the label of perceived threat is more relevant.

## 2. Problem Statement

Statistic from Fire and Rescue Department shows that 211 cases of fires have occurred at Tahfiz schools nationwide between 2015 and 2017. Studies revealed that many fires that occurred at religious schools were due to lack of awareness of fire safety (The Star, 2017). Construction of the Tahfiz Schools were done without approval from the relevant authorities, including the Fire and Rescue Department. Currently, 941 private tahfiz schools with 9,470 teachers and more than 150,000 students are registered with Persatuan Madrasah Tahfiz Al-Quran Malaysia (New Straits Times, 2017). This research is proposed to explore the level of compliance by Tahfiz schools towards safety rules and regulations. Statistics from Fire and Rescue Department as reported by The Star in 2017, showed the frequency of fire outbreak in Tahfiz Schools were very high and involved high casualties. This phenomenon can be prevented if the Tahfiz Schools realize the importance of compliance to the safety rules and regulation.

### **3. Research Questions**

1. Is there a relationship between perceived barriers and willingness to comply?
2. Is there a relationship between perceived susceptibility and willingness to comply?
3. Is there a relationship between perceived severity and willingness to comply?
4. Is there a relationship between perceived benefits and willingness to comply?
5. Is there a relationship between cue to action and willingness to comply?

### **4. Purpose of the Study**

1. To determine the relationship between perceived barriers and willingness to comply.
2. To determine the relationship between perceived susceptibility and willingness to comply.
3. To investigate the relationship between perceived severity and willingness to comply.
4. To determine the relationship between perceived benefits and willingness to comply.
5. To investigate the relationship between cue to action and willingness to comply.

### **5. Research Methods**

#### **5.1. Research Design**

Research design is quantitative in nature. Specifically, correlational method was used for determining relationships between two or more variables.

#### **5.2. Respondent**

The study was designed as a cross-sectional survey. The population of interest consists of the Tahfiz Schools Principals in Selangor, Malaysia. This specific group was selected because, compared to the general population in Malaysia, its members are more likely to be exposed to the risk because of lack of monitoring due to the fact that they are some of the schools are not registered with the relevant authorities.

#### **5.3. Survey method and instrumentation**

The HBM was quantitatively tested using the survey methodology to understand consumer health behaviour in order to reduce measurement error, and care was taken in preparing the questionnaire layout, the question format and the question order. The questions were scored on a 1–5 Likert point scale and all of the items were extracted from previously validated instruments found in prior literature and modified to fit the research context for the Malaysian health and safety context.

### **6. Findings**

As shown in Table 1, the number of Male respondents were 119, while female were 55. As for the race, Malay accounted mainly 89.4% of the total respondents. The level of education of the respondents having Degree, accounted for 31.4%, while the rest ranged from SRP to PhD and 31 of the respondents or 16.5% had other qualifications.

As for the teaching certificates, about 27.1% have teaching certificates; while 63.3% respondents are without teaching certificate. Majority of the respondents (30.3%) were Management Committee of the Schools and 26.6% were Administrative Committee of the Schools. Most of them had an experience of 1 to 3 year of managing the institution. 45.7% of the institution was located in the urban area and 41% are from the rural area. Interestingly, 75.5% of them were registered institution; while 20.7% are in the process of registering. Only 0.5% of the institution are not registered. Most of the institution had 21 to 50 number of students.

**Table 01. Demographic information**

Dimension	Category	Frequency	Percentage
Gender	Male	119	63.3
	Female	55	29.3
	Missing value	14	7.4
Race	Malay	168	89.4
	Non-Malay	6	3.2
	Missing value	14	7.4
Education	Doctorate	2	1.1
	Master	16	8.5
	Degree	59	31.4
	Diploma/STPM/STAM	29	15.4
	SPM Certificate	32	17.0
	SRP	1	0.5
	Others	31	16.5
	Missing value	18	9.6
Teaching certificate	Yes	51	27.1
	No	119	63.3
	Missing value	18	9.6
Role	Management Committee of the Institution	57	30.3
	Administrative Committee of the Institution	50	26.6
	Safety Committee	5	2.7
	Teacher	36	19.1
	Others	20	10.6
	Missing value	20	10.6
Experience	Less than 1 year	19	10.1
	1 to 3 year	50	26.6
	4 to 6 year	49	26.1
	7 to 9 year	29	15.4
	10 year and above	25	13.3
	Missing value	16	8.5
Location	Urban	86	45.7
	Rural	77	41.0
	Remote	9	4.8
	Others	8	4.3
	Missing value	8	4.3
Institutional status	Registered	142	75.5
	Non- registered	1	0.5
	Registration in progress	39	20.7
	Missing value	6	3.2

No of students	Below 20	19	10.1
	21 to 50	66	35.1
	51 to 100	56	29.8
	101 to 500	37	19.7
	501 to 1000	1	0.5
	Missing value	9	4.8

### 6.1. Validity and reliability

As shown in Table 2, the 22 items of the Health Belief Model scale were subjected to exploratory factor analysis (EFA). Since the measurement items were derived from different country and culture and to be applied to a new setting, EFA was used to explore the data and extract the most suitable number of factors to best represent the data. Table 3 shows the correlation analysis between constructs, Table 4 shows the multiple regression analysis results for each variables, and Table 5 shows the hypotheses results for the study.

**Table 02.** Validity and reliability assessment

Construct	No of items	Reliability	Content validity	Remark
		Cronbach alpha		
Perceived benefit	5	0.96	Previous literature	Supported
Perceived barrier	4	0.71	Previous literature	Supported
Cues to action	4	0.92	Previous literature	Supported
Perceived susceptibility	2	0.86	Previous literature	Supported
Perceived severity	2	0.95	Previous literature	Supported
Intention to comply with safety rules and regulations	5	0.98	Previous literature	Supported

### 6.2. Hypothesis Testing

**Table 03.** Partial correlation between constructs

		barrier	intention	benefit	cues	susceptibility	severity
Barrier	Pearson Correlation	1	-.206**	-.288**	.432**	-.185*	-.207**
	Sig. (2-tailed)		.010	.000	.000	.021	.009
	N	174	158	165	174	156	157
Intention	Pearson Correlation	-.206**	1	.569**	-.167*	.484**	.641**
	Sig. (2-tailed)	.010		.000	.035	.000	.000
	N	158	164	151	160	160	162
Benefit	Pearson Correlation	-.288**	.569**	1	-.275**	.579**	.630**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	165	151	168	167	150	152

Cues	Pearson Correlation	.432**	-.167*	-.275**	1	-.163*	-.222**
	Sig. (2-tailed)	.000	.035	.000		.040	.005
	N	174	160	167	176	158	159
Susceptibility	Pearson Correlation	-.185*	.484**	.579**	-.163*	1	.535**
	Sig. (2-tailed)	.021	.000	.000	.040		.000
	N	156	160	150	158	164	161
Severity	Pearson Correlation	-.207**	.641**	.630**	-.222**	.535**	1
	Sig. (2-tailed)	.009	.000	.000	.005	.000	
	N	157	162	152	159	161	165

**Table 04.** Multiple regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error				Beta	Tolerance
(Constant)	.147	.498		.295	.769		
barrier	-.063	.111	-.041	-.572	.568	.791	1.264
benefit	.348	.107	.292	3.242	.001	.501	1.997
cues	.108	.084	.092	1.287	.200	.792	1.263
susceptibility	.064	.080	.065	.796	.427	.621	1.611
severity	.445	.092	.404	4.818	.000	.580	1.725

**Table 05.** Hypotheses testing result

Hypotheses	t-value	Remark
H <sub>1</sub> : Perceived benefit will positively affect intention to comply with safety rules and regulations	3.242	Supported
H <sub>2</sub> : Perceived barrier will negatively affect intention to comply with safety rules and regulations	-.572	Not-supported
H <sub>3</sub> : Cues to action will positively affect intention to comply with safety rules and regulations	1.287	Not-supported
H <sub>4</sub> : Perceived susceptibility will positively affect intention to comply with safety rules and regulations	.796	Not-supported
H <sub>5</sub> : Perceived severity will positively affect intention to comply with safety rules and regulations	4.818	Supported

## 7. Conclusion

To the best of our knowledge, no studies up to this date have been designed to investigate Tahfiz School Principals' intention to comply with safety rules and regulations in Malaysia by using the HBM. The findings of this paper thus contribute to a growing body of literature implicating HBM in behavioural decision-making. In order to enhance intention to comply with safety rules and regulations, an emphasis on education is important. Enhancement programs to promote safety awareness among Tahfiz School Principals could focus on the facts that there is always a high chance of being involved in a fire incident, which can cause severe consequences such as death or severe injuries. Fatal injuries are always foreseen in

fire incident, and that there is no excuse for a person or no exempted circumstances especially if they failed to comply with the rules and regulations.

For this study, a number of important limitations need to be considered. The first limitation is the concern for generalization of the findings. As our study was conducted in Selangor which is a developed state in Malaysia, the findings may not apply to other regions/state that are less developed. Secondly, this study only examined five health belief variables as predictors of intention to comply with safety rules and regulations. Future research can explore other relevant factors that may help increase the applicability of HBM to a wider range of safety and health related issues.

## Acknowledgments

This research is a continuation from one of the Yayasan Canselor Uniten (YCU) Community Project Grant. For the purpose of this conference, it is fully supported by Uniten's Human Resource Grant. We would also like to extend our deepest gratitude to everyone involved in this project.)

## References

- Becker, M. H., Haefner, D. P., Kasl, S. V., Kirscht, J. P., Maiman, L. A., & Rosenstock, I. M. (1977). Selected psychosocial models and correlates of individual health-related behaviors. *Medical care*, 15(5), 27-46.
- Hassan, N. H. C., Ismail, A. R., Hamzah, N. A., Makhtar, N. K., Sulaiman, M. A., & Satrya, A. (2017). Perception of Ergonomic Safety Training among School Teachers in Kelantan, Malaysia.
- Jeong, J. Y., & Ham, S. (2018). Application of the Health Belief Model to customers' use of menu labels in restaurants. *Appetite*. <https://doi.org/10.1016/j.appet.2017.12.012>
- Rosenstock, I. M. (1966). Why people use health services. *The Milbank Memorial Fund Quarterly*, 44(3), 94-127. <http://www.ncbi.nlm.nih.gov/pubmed/5967464>
- Rosenstock, I. M. (1990). The Health Belief Model: explaining health behavior through experiences. *Health behavior and health education: Theory, research and practice*, 39-63.