

Student Quality Evaluation Amongst Tahfiz Science Schools in Malaysia

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Abstract

At present, there are three streams of Tahfiz Science School (TSS) in Malaysia, namely TSS wholly owned by the federal government, private, and private-state. Therefore, each TSS provider will implement its own Islamic education model. The objective of the study was to assess the impact of TSS education on students' self-efficacy, self-confidence, and leadership qualities. Overall, the findings of the survey carried out revealed that students have high self-efficacy, self-confidence, and leadership. Nevertheless, there is a difference in self-efficacy among the different types of TSS. Such differences in the quality of students are partly due to differences in quality of teachers, curriculum, financial resources, and facilities and infrastructure of the TSS. These differences also reflect that there is no uniform *tahfiz* science education (including curricula). Therefore, a uniform education policy of TSS is necessary to sustain the quality of *tahfiz* science students and provide Islamic technocrats for the labour force.

Keywords: Learning; Self-efficacy; Tahfiz science school; Islamic education; Malaysia.



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1. Introduction

In Malaysia, the Islamic education system initially began informally through religious studies in *pondok* and *madrasah* systems. Currently, *tahfiz* (memorising) schools of Quranic science have been institutionally formalised at par with other conventional educational institutions to meet the demands of Islamic education that is growing in the Islamic community. This has resulted in an Islamic educational institution established in a variety of forms and systems, most of which are privately-owned. Ironically, there is no *tahfiz* education policy at the national level to regulate Islamic educational institutions and to ensure the quality of education. Therefore, a Blueprint for National *Tahfiz* Education Policy needs to be formulated to empower the development of Malaysia's *tahfiz* education and in harmonisation with the National Education Philosophy.

The National Education Philosophy is an on-going effort toward further developing the potential of individuals in a holistic and integrated manner, so as to produce individuals who are intellectually, spiritually, emotionally, and physically balanced and harmonious, based on a firm belief in and devotion to God. Such an effort is designed to produce Malaysian citizens who are knowledgeable and competent, who possess high moral standards, and who are responsible and capable of achieving a high level of personal well-being, as well as being able to contribute to the harmony and betterment of the family, the society, and the nation at large (Ministry of Education Malaysia, n.d).

The blueprint for National *Tahfiz* Education will produce quality *huffaz* (Quranic memoriser) professionals and technocrats for the labour market. This group can contribute to the economic development of the country. In this regard, the objective of this article is to measure the effect of teacher delivery on the quality of students attending the Quranic science *tahfiz* education programme at the secondary school level, owned by the federal and state governments, as well as the private sector.

2. Literature Review

Based on previous study by Bandura (1997), Artino (2012) and Zimmerman and Cleary (2006) among the main factors identified to influence the quality of students is self-efficacy. Self-efficacy is the personal belief of individuals to carry out a task in accordance with predetermined standards. Self-efficacy affects the level of individual confidence in the ability to perform certain tasks to succeed. In the context of education, students who fail to effectively control their academic environment will find that their academic performance would tend to decline and subsequently they would lose their ability to achieve success at school. However, students with a strong self-efficacy to learn are more robust, and have greater academic achievement. Therefore, it is important to identify the level of self-efficacy among students with their academic achievement in school.

Putwain *et al.* (2013) noted that self-efficacy is an ability that can be learned by students through self-learning, to help them perform an activity with excellence. With good self-efficacy quality in students and self-learning, students are able to achieve good grades in their learning. According to Artino (2012) self-efficacy can be enhanced through four basic sources, namely a) real mastery experience, b) observation of others, c) verbal and non-verbal

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encouragement, and d) affective and psychological conditions of ability, strength, and weaknesses determined by others.

Furthermore studies by Zuffianò *et al.* (2013), Digman (1989), Caprara *et al.* (2013) and Poropat (2009) argued that the quality of the students is also closely related to their conscientious nature. Among these students who have good levels of self-efficacy with conscientious nature, they can demonstrate better performance at school because they have the ability to plan, control their behaviour according to their goals, strive to learn, and show their effort. Conscientious nature is one of the key elements in reinforcing student self-efficacy to achieve desired goals in school; whether in academic or otherwise. Moreover, student personality factors also influence their academic performance improvement. Both personality factors and self-efficacy beliefs have been proven as important measurement factors in academic achievement. Hence, students having more passive personalities require more guidance from their teachers to motivate their potential, so that the difference in self-efficacy gap between them and active students can be reduced.

Zimmerman and Cleary (2006) and Kamarul *et al.* (2013) noted that teachers also influence the quality of students. The teaching style of a teacher can affect the seriousness and achievement of students throughout the learning process. The frequency in applying many teaching styles would affect the effectiveness of teaching and learning of a teacher toward the student. Teachers also play a role in providing class notes, always attracting student interests, delivering ways that can be easily seen and heard, building lessons using audio-visual aids, getting feedback from students, giving examples, emphasising on continuous exercises, and how to close learning sessions.

Student quality is collectively influenced by internal and external factors. Quality students have the intrinsic motivation and self-efficacy to learn because they have the ability to see the perspective of their own goals, i.e., they know what they want. External factors such as the peers environment and teacher teaching strategies serve as the enabler of student goals in that they can achieve the goals they have set. Therefore, internal and external factors are important in the formation of quality students and their excellent academic achievement.

3. Methodology

This article examines the effect of teaching delivery by the teacher on the quality dimensions of the student, which includes self-efficacy, self-confidence, and leadership aspects. The study was quantitative in nature, using data from structured interviews with students in four science *tahfiz* schools. The selection of *tahfiz* science schools was based on the ownership entity, that is either established or owned by the federal government, private with state support, and fully private.

However for the purpose of confidentiality of the participating schools, the name *tahfiz* science school was replaced by to *Maahad Tahfiz Sains* (MTS) 1, 2, 3, and 4 in this article. The school owned by the federal government was MTS-1 in Besut, Kelantan, whereas private ownership with financial support from the state government included MTS-2 in Tanah Merah, Kelantan, and MTS-3 in Kuala Langat, Selangor. The fully private-owned school was MTS-4 in Ampang, Selangor. The total sample in this study was 209 respondents. Table 1 shows the study sample profile.

Table-1. Profile of Respondents

Variables	Description	Respondent (Number)	Percentage (%)
<i>Tahfiz</i> Science School	MTS-1	58	28
	MTS-2	57	27
	MTS-3	53	25
	MTS-4	41	20
Age	13-15	59	28
	16-17	150	72
Sex	Male	77	37
	Female	132	63
Ethnic	Malay	209	100
Total Sample		209	100

Questionnaire items include questions relating to student profile, teacher dimensions, specifically the teaching delivery by teachers that can be divided into two components, namely the teaching preparedness and enthusiasm in teaching. Student perception on teaching delivery by the teacher was based on a Likert scale from 1 (low evaluation of a teacher's ability) to 5 (very high). In querying the student dimension, questions related to self-efficacy, self-confidence, and leadership were presented. Student assessment on self-efficacy quality was based on a Likert scale (1=very untrue, 5=very true), self-confidence, and leadership (1=strongly disagree, 5=strongly agree).

Factor analysis was performed on the teacher's teaching delivery variable involving 14 items from the interview questions (see Table 2). Factor analysis is a technique that is employed to reduce a large number of variables into a fewer number of factors. This technique extracts maximum common variance from all variables and puts them into a common score.

Table-2. Teacher's Teaching Delivery Variable Factor Analysis Results

	Teacher's Teaching Delivery Dimension	Loading Factor
Item	Component 1 – Teaching Preparedness	
1	The teacher can enhance <i>tahfiz</i> science student interest	0.789
2	The teacher always monitors student understanding	0.732
3	Given feedback on tests and assignments helps my learning	0.684
4	The teacher clarifies the <i>tahfiz</i> science subject objectives during teaching	0.553
5	The teacher is successful in delivering the lesson that is easy to understand	0.514
6	The teaching is performed according to the teaching plan of <i>tahfiz</i> science learning	0.485
7	The teacher readily accepts the student's views	0.463
	Component 2 – Teaching Enthusiasm	
1	The teacher enters the class ready to teach	0.749
2	The teacher puts an effort into teaching	0.709
3	The teacher manages the teaching time well	0.649
4	The teacher gives opportunities to students to interact	0.639
5	The teacher employs teaching aids effectively	0.613
	Deleted item	
1	The given tasks are mentally challenging	.397
2	The teacher encourages students to think in class	.142
Total 14	Memo : – KMO – Bartlett Test of Sphericity: Approx. Chi Square – Degree of Freedom – Significance	0.863 740.889 91 0.000

Varimax rotated principal component analysis resulted in two components with factor loading in teaching delivery, namely (a) teaching preparedness by the teacher, and (b) teacher enthusiasm when teaching the students. Following [Ertz et al. \(2016\)](#) only factors with a loading value of 0.40 and above were considered, therefore two items were deleted from further analysis.

Factor analysis was performed on the teaching delivery dimension based on the results of the Bartlett Test of Sphericity and Kaiser-Meyer-Olkin (KMO). Bartlett Test of Sphericity indicates that it was significant (with Chi square=740.889, $p < 0.01$) and that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.863, which is well above the KMO acceptable level of 0.6.

From the aspect of student quality dimension, there was no multicollinearity detected between self-efficacy, self-confidence, and leadership. This is because each variable has coefficient r values that were less than 0.57 ($p < 0.01$). As suggested by [Allison \(1999\)](#) there would be no multicollinearity problem if the variables were less than 0.8.

4. Findings and Discussion

Questionnaire data were analysed based on factor analysis and statistical inference. Statistical inference used in this study was descriptive analysis (mean score) and inferential analysis (Pearson correlation and multiple regression). The findings were divided into a three-part analysis. The first part discusses the mean scores for the dimensions of teachers and students according to the type of *tahfiz* science school ownership entity, while in the second part, the results of the correlation between the components of teacher readiness and the dimensions of the students was examined. Finally, the regression results between teaching enthusiasm components and the student dimensions were revealed.

4.1. Mean Score: Teacher and Student Dimensions

Table 3 shows the mean scores for the dimensions of teachers and students in schools of different ownership types, namely owned by the federal government, private with full state financial support, or fully private. For the lecturer dimension, MTS-2 (owned by the private sector with financial support from the Kelantan state government) recorded the highest mean score, followed by MTS-3 (supported by the Selangor state government).

In the context of comparing the four types of *tahfiz* science schools, the combination model of a privately owned entity with financial support from the state government recorded the highest teacher delivery quality with MTS-2 recording a mean score of 3.95, which is greater than the mean score of 3.71. This was followed by MTS-3.

Meanwhile, the mean scores of teacher delivery in MTS-1 and MTS-4 were lower than the overall mean score (3.71), where the federal government owned MTS-1 scored 3.63 and MTS-4 (fully privately owned) scored 3.45.

Based on interviews with *Tahfiz* Science School Administrators –[MTS-2 Administrators \(2016\)](#), [MTS-1 Administrators \(2016\)](#), [MTS-4 Administrators \(2016\)](#) and [\(MTS-3 Langat Administrators, 2016\)](#) - the difference in mean scores of teaching deliveries by teachers in different *tahfiz* science school types is due to the instructors with different educational backgrounds that have been recruited by the school management. The salary, as offered by the management as an attraction for trained teachers, becomes a factor, as well as holding a Bachelor or Master degree,

which also contributes to the effectiveness of teaching delivery from the teacher to the students. The *tahfiz* science school owned and funded by the federal government has a financial advantage over those owned by the private and state government. Financial resources of these private schools depend heavily on tuition fees to cover the cost of management and administration of the school. This can limit the private school finance, thus preventing them from offering high salaries in order to get trained and experienced teachers.

Table-3. Mean Scores Achieved by Teacher and Student Dimensions According to School

	<i>Tahfiz</i> Science School	Number of respondents	Mean Score			
			Teaching Delivery	Student's quality		
				Self-efficacy	Self-confidence	Leadership
1	MTS-1	58	3.63	3.92	3.43	3.93
2	MTS-2	57	3.95	3.78	3.44	3.89
3	MTS-3	53	3.76	3.91	3.25	3.89
4	MTS-4	41	3.45	2.37	2.33	2.43
	Total	209	3.71	3.76	3.35	3.81

For the student dimension, students from *MTS-1 Administrators (2016)* recorded the highest mean score for self-efficacy (3.92), followed by *MTS-3 (3.91)*, and *MTS-2 Administrators (2016) (3.78)*. The mean score for these three *tahfiz* science schools surpassed the overall mean score (3.76). However, self-efficacy for *MTS-4 Administrators (2016)* students was the lowest (2.37), even lower than the overall self-efficacy mean score.

For self-confidence quality, students from *MTS-2* recorded the highest mean score (3.44), followed by *MTS-1 (3.43)*, and *MTS-3 (3.89)*. *MTS-4* recorded the mean score for the lowest self-confidence (2.33). In fact, the *MTS-4* recorded low mean scores for leadership (2.42) and self-efficacy (2.37), as compared to other *tahfiz* science schools that recorded a mean score for leadership greater than 3.00, even exceeding the mean score of 3.81.

Based on interviews with *Tahfiz* Science School Administrators, amongst factors affect the quality of student dimensions, including students' academic entry qualification, student behavioural profile, education funding support from their parents, and school co-curriculum programmes at the *tahfiz* science school. Just as an example, for parent income profiles, most of those who send their children to the *MTS-4 Islamic School* are professionals, and middle to high income earners, as compared to parents who register their children at *MTS-2* and *MTS-3*, with the majority having low income. Meanwhile, parents who send their children to *MTS-1* have all levels of income. This is because *MTS-1* is owned by the federal government which gives educational opportunity priority to qualified students, especially with parents from the lower income group. Also, the tuition fees are low and parents can afford to pay.

4.2. Relationships Between Student Qualities Dimension

Table 4 shows correlation between variables in student qualities dimension. Self-efficacy has a strong significant relationship with student leadership ($r=0.533$). However, self-efficacy of students has a weak relationship with self-confidence of students ($r=0.217$). Nevertheless, the relationship between these two variables is still significant. Self-confidence also has significant relationships with leadership, but the relationship is moderate ($r=0.300$).

Table-4. Correlation values of student's qualities

Student's quality variables	Self-efficacy	Self-confidence	Leadership
Self-efficacy	-		
Self-confident	.217**	-	
Leadership	.533**	.300**	-

** . Correlation is significant at the 0.01 level (2-tailed).

4.3. Impact of Teachers' Teaching Delivery and Students' Qualities Dimension

This section discusses the significant relationship between teacher and student dimensions. Three equation functions will be regressed with the following functional form:

- (1) Self-efficacy = f (preparedness to teach, enthusiasm to teach)
- (2) Self-confidence = f (preparedness to teach, enthusiasm to teach)
- (3) Leadership = f (preparedness to teach, enthusiasm to teach)

As mentioned above, teacher delivery is divided into two components, namely (a) the preparedness to teach and (b) the enthusiasm of teaching. Table 5 shows the hypothesis (H) to test the significant relationship between teacher and student dimensions.

Table-5. Hypothesis between teacher’s and student’s dimensions

Teacher’s Teaching		Self-efficacy	
1. Preparedness 2. Enthusiasm		H1a	There is positive relationship between teacher’s preparedness and student’s self-efficacy
		H1b	There is positive relationship between teacher’s enthusiasm and student’s self-efficacy
		Self-confidence	
		H2a	There is positive relationship between teacher’s preparedness and student’s self-confidence
		H2b	There is positive relationship between teacher’s enthusiasm and student’s self-confidence
		Leadership	
		H3a	There is positive relationship between teacher’s preparedness and student’s leadership
		H3b	There is positive relationship between teacher’s enthusiasm and student’s leadership

Table 6 shows the multiple regression results between the teacher and student dimensions. For equation (1), it was found that the component of teaching preparedness does not affect self-efficacy, but teaching enthusiasm affects self-efficacy. In other words, teacher preparedness focuses more on teacher perspectives in organising their teaching to students in the classroom. Meanwhile, students are more focused on their learning for the purpose of completing academic and co-curriculum assignments, and preparing for the exam. Therefore the preparedness in teaching does not affect the student’s self-efficacy. On the other hand, the enthusiasm of teachers to teach would affect the student’s self-efficacy. Students see the enthusiasm of teaching by teachers as role models for them to succeed in the future.

Table-6. Significant Relationships between Teacher Preparedness and Student Dimension

Eq.	Independent variable	Dependent variable	Standardised Beta	t	Sig.	R ²	Result
(1)	Teacher’s preparedness	Self- efficacy	0.157	1.949	0.053	0.094	Not Supported
	Teacher’s enthusiasm		0.189	2.341	0.02		Supported
(2)	Teacher’s preparedness	Self- Confidence	-0.017	-0.208	0.836	0.02	Not Supported
	Teacher’s enthusiasm		0.15	1.791	0.075		Not Supported
(3)	Teacher’s preparedness	Leadership	0.074	0.918	0.36	0.104	Not Supported
	Teacher’s enthusiasm		0.275	3.437	0.001		Supported

Although the regression results of equation (1) generates low R², the low P value can still show a significant relationship between the enthusiasm of teaching and self-efficacy. As noted by Hair *et al.* (2017), in studies of predicting human behaviour, such as psychology, R² usually has a value lower than 50% because human behaviour is difficult to predict accurately.

For equation (2), both teaching delivery components do not directly impact on quality of self-confidence. This is because self-confidence has been embedded in self-efficacy. It is also supported by a significant relationship between self-efficacy and self-confidence, as shown in Table 3.

Regression on equation (3) showed only the enthusiasm of the teacher affecting the quality of leadership. As discussed previously, students see the enthusiasm of the teacher as a role model, which affects the quality of self-esteem. In addition, self-confidence also has a significant relationship with leadership, as shown in Table 3.

In summary, only the enthusiasm of teaching among teachers has a positive relationship to the student’s self-efficacy and leadership. Meanwhile, teaching preparedness does not affect all students’ quality dimensions.

5. Conclusion

Based on the mean score results, the *tahfiz* science school under study scored between 3.35 and 3.76 from a scales of 1 to 5. This shows that each school type is capable of producing quality students in terms of self-efficacy, self-confidence, and leadership. However, there is currently no holistic policy at the national level to regulate the development of *tahfiz* science schools, so as to have a more significant impact in producing more qualified *huffaz* professionals and technocrats. Therefore, the achievement of quality students by the *tahfiz* science stream can be enhanced if the federal government can implement the National *Tahfiz* Education Blueprint. This can produce quality *huffaz* professionals and technocrats for the labour market and they also contribute to other stakeholders in the development of the country’s economy. This Blueprint can also ensure the sustainability of *tahfiz* science school

development and guarantee the quality of *tahfiz* science education at par with other conventional educational institutions.

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