

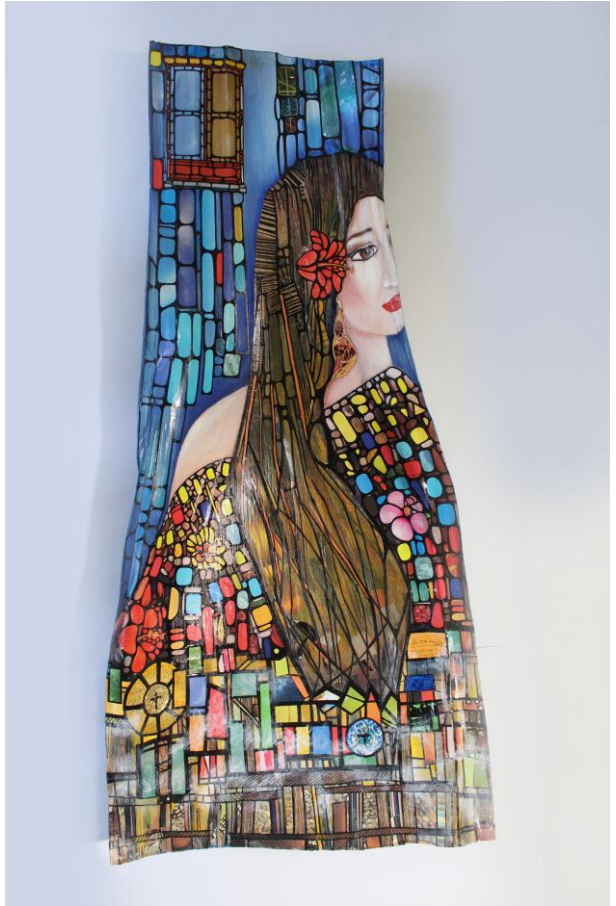
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The validity and reliability of self-efficacy instrument for Islamic education teachers

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Abstract

This study aims to report the validity and reliability of the self-efficacy instrument for IET (Institution of Engineering and Technology). A quantitative approach was used in this study, which 544 sets of questioners had been distributed to the IET in several schools under the supervision of the Ministry of Education SMK. In result, with the loading factor 0.6, 4 factors were identified with the reliability value of student participation (0.844), classroom management (0.843), teaching strategies (0.814) and academic and character guidance (0.845) respectively. In conclusion, the validity and reliability gained has enabled the instrument to be adopted for the actual study.

Keywords: Validity, Reliability, Instrument, Self-Efficacy.

La validez y fiabilidad del instrumento de autoeficacia para docentes de educación islámica

Resumen

Este estudio tiene como objetivo informar sobre la validez y confiabilidad del instrumento de autoeficacia para IET. En este estudio se utilizó un enfoque cuantitativo, el cual se distribuyeron 544 grupos de interrogadores al IET en varias escuelas bajo la supervisión del Ministerio de Educación SMK. Como resultado, con el factor de carga 0.6, se identificaron 4 factores con el valor de confiabilidad de participación estudiantil (0.844), gestión del aula (0.843), estrategias de enseñanza (0.814) y orientación académica y de carácter (0.845) respectivamente. En conclusión, la validez y confiabilidad obtenidas han permitido que el instrumento se adopte para el estudio real.

Palabras clave: Validez, Confiabilidad, Instrumento, Autoeficacia.

1. INTRODUCTION

Teachers, in particular, the ones teaching Islamic Education, play a big role and responsibility in educating students. This is because teachers are the ones who spend most of their time with students. All forms of speech, deeds and characters displayed by these teachers are taken into account and become part of the daily life of their students. This is a string of changes in family institutions today, whereby parents lack the time to spend with their children due to work demands. A study has shown that good teachers influence the achievement of students in learning, more than the family background and student factors. Teachers are not only responsible for teaching the

contents of the lesson, but also holding the responsibility of educating students (Alhawiti and Abdelhamid, 2017). The implementation of this great responsibility certainly requires a form of internal confidence in the ability to carry it out. This concept is known as self-efficacy (SE), which is personal expectations in the ability to perform a task or duty according to the desired standards. Although the dimensions of teachers' SE introduced by Tschannen & Woolfolk (2002) has been widely used in the study, but still, there are problems in measuring actual teachers' SE, both in terms of conceptual or statistical. Most of the researchers are still unclear on the definition of a general teaching efficacy and personal, as well as items loading on factor analysis is not stable. In addition, the measure does not refer explicitly to the job of a teacher (Adedoyin and Okere, 2017).

Therefore, Tschannen & Woolfolk (2002) have attempted to measure teachers' SE by assessing personal teaching efficacy in the context of cross-field in specific teaching task. Figure 2.4 shows a three-dimensional cross-field teachers' SE task introduced by Tschannen & Woolfolk (2002), namely (1) the involvement of the pupils; (2) instructional strategies, and (3) classroom management. However, referring to the Islamic Education Philosophy, one of the roles of the Islamic Education teachers is to shape students to excel in the world and the hereafter (Haseeb, 2018). Thus, the aspect of 'academic and character guidance' becomes one of the main duties of the teachers to fulfil. For that reason, the researchers have added another sub-construct in the construction of the self-efficacy instrument. The fourth sub-construct is termed, Academic and

character guidance. Thus, the objective of the study is to determine the validity and reliability of the ideas and contents of the self-efficacy questionnaire for Islamic Education teachers (IET). Specifically, this study aims to:

1. Determine the validity of the self-efficacy instrument that covers the face, content and constructs validity.
2. Determine the reliability of the instrument by analysing alpha coefficients.

2. LITERATURE REVIEW

Most of the studies on teachers' self-efficacy in teaching are based on Social Cognitive Theories introduced by Tschannen & Woolfolk (2002). On the other hand, Tschannen & Woolfolk (2002) have tried to measure teachers' self-efficacy by assessing the efficacy of personal teaching across the job scope within a particular teaching context. Figure 1 shows the three dimensions of teacher self-efficacy across different fields that was introduced by Tschannen & Woolfolk (2002), namely (1) student participation; (2) teaching strategies and (3) classroom management.

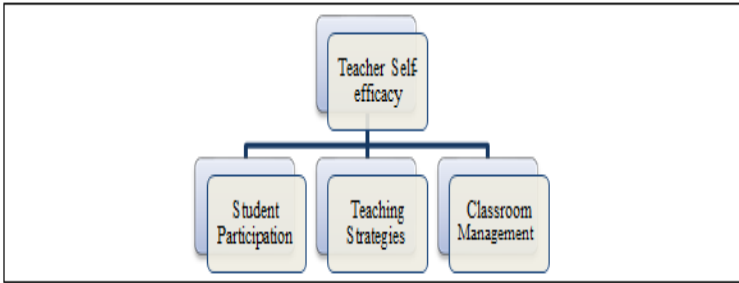


Figure 1. The Dimensions of Teacher Self-efficacy

However, referring to the Islamic Education Philosophy, one of the roles of the Islamic Education teachers is to shape students to excel in the world and the hereafter. Thus, the aspect of academic and character guidance becomes one of the main duties of the teachers to fulfil. For that reason, the researchers have added another sub-construct in the construction of the self-efficacy instrument. The fourth sub-construct is termed academic and character guidance.

2.1. Teachers' Self Efficacy in Terms of Students' Involvement

Students' participation is not just a yardstick in evaluating the effectiveness of a teaching session, but it is also used as a measure to gauge the level of teachers' SE (Secondary Education) (Tschannen & Woolfolk, 2002). Students will be encouraged to engage in activities in the classroom (curriculum) as well as outside of the classroom

activities (extra-curricular) when they are often provided with motivation and encouragement from teachers. Students will be excited when the teacher often gives encouragement and subsequently children will be competing with each other to participate in any extra-curricular activities or co-curricular activities. Tschannen & Woolfolk (2002) have drawn Venn diagram (Figure 2.5) to show the relationship between the motivation and engagement of students, whose participation can be measured through active learning.

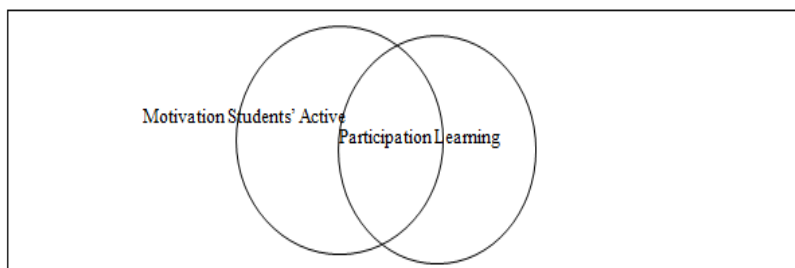


Figure 2. The relationship between motivation, students' participation and active learning

The term students' participation is used to describe the willingness of students to participate in routine school activities, such as attending classes, submitting assignments and adhere to the rules of the school and teacher instruction. This includes taking part in extra-curricular activities and other activities organized by the school. According to Ramli et al. (2018) students' involvement has been measured through other aspects, namely (1) the cognitive criteria: it is

measured by how well students involve cognitive learning of a task, such as linking new studies with the past of the subject; (2) behavioural criteria: it is measured by how well students respond to a given task, such as answering questions, participate in discussions and completing schoolwork supplied by teachers; and (3) effective criteria: it is measured by looking at how emotions react when confronted with learning tasks, such as curiosity, enthusiasm, positive attitude and so on. Thus, the ability of IET must believe in their ability to ensure students are actively involved in the classroom, whether in terms of cognitive, behavioral and effective.

2.2. Teachers' Self Efficacy in Terms of Teaching Strategies

Teaching strategies were also among the aspects evaluated in the measure of teachers' SE. Instructional strategy or action plan is structured in a teaching session. It includes setting approach based on learning outcomes; selection of methods and techniques for teaching the prescribed approach; compiler tools and techniques taught in a systematic manner; planning the allocation of time for each step of the lesson; and the usage of teaching aids according to the needs of each method and steps (Ramli et al., 2018). According to Ramli et al. (2018) the teaching strategies can be classified into three main categories, namely teacher centred strategy, student centred strategy and teaching aids centred strategy. Figure 2.6 shows a summary of the classification of instructional strategies with methods and techniques related.

Teacher Centered Strategy	Student Centered Strategy	Teaching Aids Centered Strategy
<ul style="list-style-type: none"> • Explanation • exploitation • demonstration • lecture • group teaching • micro teaching • story telling • whole class 	<ul style="list-style-type: none"> •project •inquiry-discovery •discussion •questioning •solving problem •simulation •role playing •brainstorming •group work •learning through experience 	<ul style="list-style-type: none"> •audio visual •computer •printed materials •integrated T&L •module •textbooks

Figure 3. Classification of T&L strategies and methods and related techniques

In addition, the delivery of KBSM lesson content, including IE must be established on an integrated approach which is based on an integrated concept. This means that each of IEt must be attributing the content of the lesson with Allah s.w.t., man and nature; elements of knowledge; values; and language elements. Teaching & Learning (T&L) strategy can be seen through a number of examples: (1) combine strategies of some skills such as reading, writing, mathematics, speaking and thinking; (2) the strategy of implementing values in the subject; (3) strategy combination of facts from a variety of subjects; (4) strategy of combining whole class methods to group methods; and strategy of merging lessons skills in combining classes. In the context of IE, although there are a variety of innovations to the method of IE T&L, such as computer-based learning, inquiry, concept maps, reciprocal, resource centre, and others, the usage of various teaching methods cannot run away from the original concept, as it was practiced by the Prophet and other earlier scholars. Thus, IEt should convince themselves the ability to diversify teaching strategies that are

appropriate to the syllabus and the students, either from a teacher-centered teaching strategy, student or material.

2.3. Teachers' Self Efficacy in Terms of Class Management

The classroom is the main medium for teachers to perform their duties, roles and responsibilities. Classroom management is very challenging although various theories and techniques are learned during the training of teachers. Classroom management skills will not be conquered by just learning the theory. Teaching experience is required for a teacher to build skills. Therefore, it is also taken into account in measuring the level of a teacher's SE. Classroom management refers to the set of complex and dynamic of teachers' behaviors to develop and create a harmonious atmosphere in the classroom. A harmony classroom environment does not only look at the physical layout of the classrooms arrangement design, but it involves setting students' behaviour. Management of student behaviour is important because it will influence the classroom climate, discipline, effectiveness of teaching and learning, and academic performance of students. Good classroom management provides many benefits, such as saving time and energy, have many opportunities to perform T&L activities as well as to overcome the disruption of discipline.

Among the problems faced in the management of classroom are class truancy; vandalism on class property like chairs, tables,

blackboards and so on; a student who loves to play and does not focus to teaching; students who do not bring textbooks or exercise books; and the problem of collecting school fees. To overcome the problems faced by teachers in classroom management some basic skills of classroom management should be mastered by teachers. However, Ramli et al. (2018) say that the important thing that should be noted by the teachers every time before entering the classroom is keeping up their appearances in dressing, ornaments and makeup for women teachers. This ensures that the teacher is a neat, reassuring, calm and professional individual.

Entering the classroom for the first time, the teacher should begin with introductory sessions. Ramli et al. (2018) have provided simple tips for handling the introduction of the first meeting when school session begins: remember the acronym WISHES – Welcome, Introduction, Share Hopes, Establish Standards, this is your formula for a good start on the first day. These introductory sessions are important to build good relationships with pupils and help manage teaching and students' behavior. Teachers need to learn and know about the background of the students. This will make students feel valued thus building their trust, respect and affection towards teachers. This allows the teacher to control students' behavior in the classroom. In addition, teachers need to set the rules of the classroom clearly to students as well as teachers' expectations. These rules provide guidance for imposing sentence on each offense committed students. Establishing rules with students will make it easier for teachers to

control their behaviour. Teachers need to be firm and consistent with the rules set so that students adhere to the regulation.

Physical classroom management such as the placing of teacher's table, students' desks, bulletin boards, and the decor is also a factor that helped in creating harmony in the classroom. Ramli et al. (2018) pointed out that classrooms with a cheerful and happy atmosphere will lead to a more robust learning. At the same time, Ramli et al. (2018) suggested that teachers provide a reading corner for the atmosphere read and revise lessons as a mini library. Ramli et al. (2018) also suggested that teachers put pets or plants to help the students build a sense of responsibility in them. To ensure classroom management classes can be implemented effectively, teachers need to build good relationships with pupils. Teachers need to be patient and tolerant with children to ensure a good relationship. Compliments are one of the best methods in winning the hearts of the students thereby helping to change behaviour. In the meantime, teachers should avoid using sarcasm in pointing pupils 'error. Teachers need to be forthright and correct the errors made by pupils in a gentle way. A smooth process of learning depends on teachers' mastery of the content of teaching. Ramli et al. (2018) suggest that teachers make careful planning before starting their teaching in the classroom so that teachers know what is to be taught to students. Teachers also need to be skilled in managing tasks, exercises and tests that must be provided to students to reinforce what has been taught in the classroom. Evaluation is an important asset that can help trainee teachers improve students' learning.

Classroom management also considers how teachers ended the T&L. Skills in ending T&L sessions can be done in two ways, namely to associate either with cognitive or social aspects. To end a lesson with a cognitive aspect, teachers should relate back to the important contents of the lessons and give students assignments as reinforcement. If teachers choose to end the lesson with the social aspect, then the tasks given should create a sense of mastery in students, enhance their curiosity and motivate students thus provide positive reinforcement to students. Thus, the IET must be confident with their ability to self-manage classroom either in the physical layout of the classroom, or managing student's behaviour in the classroom as well as managing the process of T&L.

2.4. Teachers' Self Efficacy in Terms of Academic Guidance and Personal Development

Philosophy of education in Islam, as a whole focuses on all aspects of human life such as intellectual, spiritual, emotional, physical and moral. Islamic Education Philosophy was formed, based on the Quran and the Sunnah of the Messenger is parallel and support the National Education Philosophy, focusing on holistic education to develop competent generations that can be of benefit to themselves, society and country (Kamarul & Halim, 2007). Viewed from another perspective, the philosophy of education in Islam is not only measured by the level of understanding, as it even covers appreciation and practice, which can be summarized in one word namely culture.

Recognition according to the view of researchers includes three components, namely knowledge, attitudes and practices of individuals on matters. Cultivating a culture is something that is derived from acknowledging, thereby forming a practice among community and nation. Thus, the task of IET not only limited to academic teaching as they even cover broader aspects of responsibility, which shape the personality of students through mentoring. Accordingly, the IET must instill internal confidence in the ability to accomplish this task and go beyond the scope and time. This means that the IET should be prepared to sacrifice and help pupils outside school hours as well as developing additional activities in order to achieve academic excellence and personal development of pupils.

3. METHODOLOGY

Basically, this study is a quantitative approach based. This study is essentially a survey conducted by means of a deductive descriptive survey. A survey is a research method that can be used to gather information about a large group of the population by sampling methods. By using this method, the researcher can make generalizations to the actual study population based only on the sample (Creswell, 2008). Therefore, the two main reasons for choosing the survey method as the main method in this study is that, 1) the data obtained by this method is large and covers a wide geographic population; and 2) The results of this study can be

generalized to the real population, provided that proper sampling techniques are used.

3.1. Research Location

This research is conducted in several schools under the supervision of the Ministry of Education SMK. The study involved several secondary schools in four states, namely Kedah, Kelantan, Selangor and Malacca.

3.2. Population

The population is a complete set of a group of individuals that have some similarities in general, but should be defined specifically. Population refers to the entire individuals that are present in location studied. Information about the population studied is important because it specified the number of samples should be taken to represent a population surveyed. Consequently, the population of this study refers to the IET of secondary schools. Based on statistical data, the number of the population studied until January 31, 2012 stood at 8562 teachers.

3.3. Sample Size

There is a wide range of views on the size of the sample which is sufficient to qualify for factor analysis. Ramli et al. (2018) view that

300 respondents are appropriate for this analysis to be carried out. However, they also view that the number of respondents of 150 is sufficient. There is also the view that the overall number of respondents is not very important, but what is more important is the ratio of the items to the number of respondents. Ramli et al. (2018) suggest 10 respondents for each item, while Hair (2006) recommends five respondents for each item. Thus, the number of respondents for this study, which is $N = 544$, qualifies the factor analysis to be carried out.

3.4. Instrument

The new instrument uses the Likert scale of measurement which starts with 1 (Totally Not Confident), 2 (Not Confident), 3 (Less Confident), 4 (Confident) and 5 (Very Confident) (Allen & Seaman, 2007; Wyatt & Meyers, 1987). The use of the Likert scale in the construction of this questionnaire is due to several factors such as providing a wide range of multiple answer opportunities over a nominal scale; the scales are easy to build as they are clear compared to the Turnstone scales that seem less clear and require an assessor; and its high reliability due to the clarity of respondent responses. The instrument consists of four subconstructs, student participation (7 items), teaching strategy (6 items) class management (6 items) and academic and character guidance (8 items). All in all, there are 27 items altogether.

4. RESULT

The key feature of determining the suitability and usability of a questionnaire is its validity and reliability. The validity of an instrument refers to the extent to which the measuring instrument can really measure what is to be measured. This includes the validity of the face, content and constructs (Yanpiaw, 2006). In the initial stages of the questionnaire construction, the researcher had discussed with two experts in the field of measurement and evaluation of the appropriate scale to use, a clear indicator of each scale and other matters related to the formulation of the questionnaire. In addition, discussions with three Excellent Teachers (Guru Cemerlang) in the Islamic Education field were also conducted. The discussions are aimed at looking at the suitability of items that are drafted with the job scope of Islamic Education teachers. Figure 2 shows the validity process that considers three aspects, namely the face, the content and the construct validity.

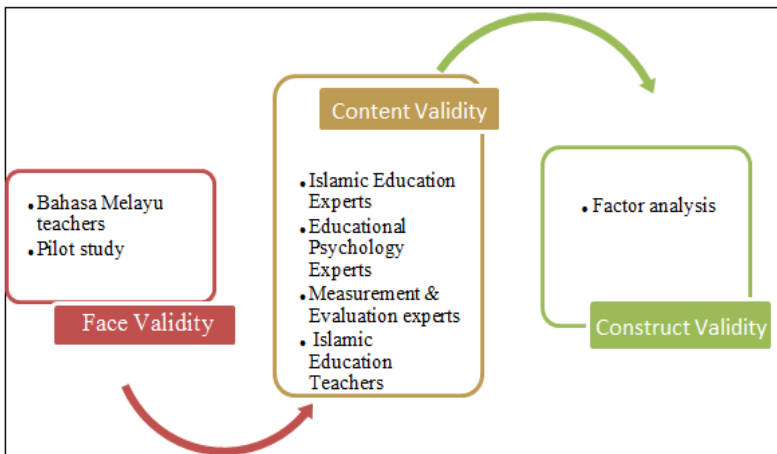


Figure 4. Instrument Validity Figure 4. Instrument Validity

4.1. Face Validity

Face validity refers to the technical aspects in questionnaires such as spelling, writing and form. To determine its face validity, the questionnaire has been evaluated by two Bahasa Malaysia teachers from Sekolah Menengah Kebangsaan Presint 9 (2) Putrajaya. Comments from the aspects of language, spelling and writing styles have been noted and changed. In addition, the face validity has also been made through a pilot study on Islamic Education teachers, taking into account the views of Ramli et al. (2018) that face validity can also be achieved by asking for comments from the respondents about the instrument.

4.2. Content Validity

Content validity is a process to determine whether the items used in the instrument are sufficient to represent the measured field of knowledge. In order to determine the validity of the content, a panel of evaluators comprising 10 experts was formed. They represent the fields of Islamic Education, Educational Psychology, Measurement and Evaluation, and also the Islamic Education teachers. A set of instrument evaluation forms containing constructs, sub-constructs, scales used, references, questionnaire items and expert approval scales and comment columns, were distributed to the panel. The drafted items are evaluated by the panel to determine the validity of the conceptual content and suitability of the items used in the

questionnaire. The evaluation process of this questionnaire instrument involving comments and suggestions from the panel group was conducted to further enhance the content, language use and clarity of items.

Overall, the process took about two weeks to one month. Generally, the panel acknowledges that the items in the instrument are able to measure the content of each construct to be measured. However, some of the additions to the sub-constructs of academic guidance and teaching strategies have been suggested. The panel has also amended some unclear items, as well as suggesting the use of some more appropriate words on some items. Additionally, some items that have two or more meanings are requested to be removed. All the views and recommendations from the panel of assessors have been considered to improve the questionnaire.

4.3. Construct Validity

Construct validity refers to the extent to which an item used in a construct and sub-construct really represents what it claims to test or experiment, and whether a variable actually reflects the true theoretical meaning of a concept. To measure the validity of the constructs, factor analysis was used including KMO, loading factor and varimax rotation. It aims to track, reduce, and define question items into constructs. There are three prerequisites before factor analysis can be run, which include:

4.4. Correlation Matrix

For factor analysis to be conducted, the correlation matrix has to be at the minimum of $r=0.3$. Bartlett's Test of Sphericity is used to determine whether the inter-item correlation is adequate for the factor analysis to be conducted. The test result is deemed significant at $p < 0.05$. Meanwhile, the Kaiser-Meyer-Olkin (KMO) test is used to determine the occurrence of multicollinearity in the data. KMO test is carried out to determine whether the items are appropriate for the factor analysis. Factor analysis is deemed appropriate if the KMO values are greater than 0.6. Table 1 shows Bartlett's Test of Sphericity at 0.000, $p < 0.05$. This indicates that the inter-item correlation is adequate for factor analysis. The KMO value is at 0.909 which is greater than 0.6. This suggests a low multicollinearity that indicates the items can be subjected to factor analysis (Pallant, 2007).

Table 1. KMO and Bartlett's Test of Sphericity

Test	Significance level
Kaiser-Meyer-Olkin (KMO)	0.909
Bartlett's Test of Sphericity	0.000

4.5. Normal Distribution

There are various techniques to test the univariate normality of data which can be categorised into numerical and graphical techniques. Some examples of normality tests with numerical

technique are 1) skewness dan kurtosis value; 2) kolmogorov-smirnov and shapiro-wilk value; and 3) stem-and-leaf plot, whereas some examples of graphical technique are 1) histogram; 2) Q-Q plot; and 3) boxplot. (Chua, 2009). It is not mandatory for a researcher to employ all the techniques to conduct a normality test results. One technique usually suffices. For this purpose, the researcher employed skewness and kurtosis techniques to test data normality. The zero value for skewness and kurtosis indicates normal data distribution of 100. The positive value indicates a right skewed distribution in the graph. Meanwhile, negative skewness indicates the distribution is skewed to the left. Kurtosis describes the shape of a probability distribution. A positive kurtosis value indicates a higher curve (leptokurtic), while a negative kurtosis value indicates a lower curve (platykurtic) (Jackson 2006). In social science and education field, research data with the skewed value between the ranges of $\pm 2.000 \pm 2$ return a normal distribution. Table 2 below describes both skewed and kurtosis value within the range of ± 2.000 , hence the data are normally distributed.

Table 2. Normality test based on skewed and kurtosis statistics

Variables	Min	Std Error	Skew	Std Error	Kurtosis
			Statistics		Statistics
EK	4.3172	0.37320	-0.256	0.105	-0.259

Once all the requirements are met, factor analysis could be conducted. Based on the factor analysis conducted with loading factor

of 0.6 (Adela et al. 2004), 4 factors with eigenvalues greater than 1 were identified (see Table 3).

Table 3. Total Variance Explained

Factor	Initial Eigenvalues		
	Total	% Variance	% Total Variance
1	16.787	23.981	23.981
2	5.835	8.335	32.317
3	3.626	5.181	37.497
4	2.996	4.280	41.777

Table 4 indicates the number of items dropped for every predictor, namely CM2 for the variable classroom management; item TS4 for the variable teaching strategies; ACG1, ACG2, ACG5, ACG6 for the variable academic and character guidance.

Table 4. Factor Analysis

Variable	Original Item	Retained Item	Dropped Item	Coefficient Alpha
Student Participation	SP1, SP2, SP3, SP4, SP5, SP6, SP7	SP1, SP2, SP3, SP4, SP5, SP6, SP7	-	0.906
Classroom Management	CM1, CM2, CM3, CM4, CM5, CM6	CM1, CM3, CM4, CM5, CM6	CM2	0.862
Teaching strategies	TS1, TS2, TS3, TS4, TS5, TS6	TS1, TS2, TS3, TS5, TS6	TS4	0.845
Academic and character guidance	ACG1, ACG2, ACG3, ACG4, ACG5, ACG6	ACG3, ACG4	ACG1, ACG2, ACG5, ACG6	0.993

4.6. Reliability of Instrument

Reliability means how consistent a test measures what it intends to measure Gay & Airasian (2003) from one situation to another (Guilford & Fruchter, 1978). A test that measures a certain variable consistently has a high reliability whereas a test that yields changing scores to measure similar constructs is not consistent and has low reliability. (Akbariah, 2009). Cronbach alpha is the most popular measure of internal consistency of a concept. Cronbach alpha is commonly used in research as it can measure the reliability of dichotomous and non-dichotomous data. On the contrary, Kuder-Richardson can only measure dichotomous data. (Creswell, 2008). Hence, researchers employ the Cronbach Alpha method to yield the reliability index of every element in the research instrument. The reliability value of cronbach alpha is between 0.00 and 1.00. A very low value indicates the low ability of the research instrument items to measure concepts of a research. Nevertheless, there are around 170 factors which influence the cronbach alpha coefficient that determines the reliability value of an instrument. One of the factors is the instrument (questionnaires on personality generally has low reliability compared to an achievement test), the purpose of the research (whether to explore or to arrive at important decisions), and whether the decisions affect individuals or groups (actions that affect individuals demand high correlations compared to actions that affect groups) (Mcmillan & Schumacher 2006).

Therefore, it is found that the determination of reliability value in research methodology books differ at times due to these factors. In one instance, Ramli et al. (2018) believed the coefficient reliability of 0.60 or

greater is acceptable. Ramli et al. (2018) believed that the value of less than 0.60 is deemed low and unacceptable, the alpha value between “0.60 to 0.80” is acceptable, and an alpha value greater than 0.80 is deemed good. Others believed the alpha value of 0.65 and lower is weak (Mcmillan & Schumacher 2006). This is collaborated by Ramli et al. (2018) who suggested that the value between “0.65 to 0.85” is good and acceptable. In addition, according to Pallant (2007), alpha value is sensitive to the number of items. If the number of items is few (for example less than 10 items), it is common for the alpha value to be low. (For example 0.5). Hence, he suggested that for the sub constructs with the lower alpha value, the inter-item correlation is investigated. If the interitem correlation is at 0.2-0.4, the item should be retained (Briggs & Cheek, 1986). Some researchers are of the view that alpha value 0.7 and greater, is an acceptable reliability coefficient value. This includes translating instruments which are perceived as a new instrument. Hopkins (1998) placed a higher value of a minimum of 0.90 for an item to be seen as reliable. Reliability value of 0.70 is also acceptable in studies measuring personality, attitude and perception (Mcmillan & Schumacher 2006). However, most researchers suggest alpha coefficient value greater than 0.8 will normally yield a high reliability adequate for a questionnaire. (Aiken, 2000).

For the purpose of classification, the Cronbach alpha coefficient value used in this study, is classified based on the reliability classification index by Ramli et al. (2018) as seen in Table 5.

Table 5. Cronbach Alpha Reliability Classification Index

Indicator	Cronbach Alpha Value
Good	> 0.80
Mid (acceptable)	0.60 – 0.79
Poor (Unacceptable)	<0.6

4.7. The Reliability of Self Efficacy Instrument

Table 6 shows the cronbach alpha reliability index for every sub construct of the self-efficacy instrument for Islamic Education teachers. The cronbach alpha reliability index for sub construct student participation' (7 items) is at 0.844, sub construct teaching strategies (5 items) is at 0.843, sub construct classroom management (5 items) is at 0.814 and sub construct academic and character guidance (2 items) is at 0.845. The reliability index for the construct of Self-efficacy Instrument for Islamic Education teachers (19 items) is at 0.947.

Table 6. Cronbach alpha reliability index for every sub construct under the Self-efficacy Instrument for Islamic Education Teachers

Sub Construct	No. Item	Cronbach alpha	Interpretation
Student Participation	7	0.844	Good
Teaching Strategies	5	0.843	Good
Classroom Management	5	0.814	Good
Academic and Character Guidance	2	0.845	Good
Overall	19	0.947	

5. CONCLUSION

This study has reported the validity and reliability process of the self-efficacy instrument for Islamic Education teachers adapted from The Teacher Sense of Efficacy Scale (TSES) developed by (Tschannen & Woolfolk, 2002). The validity process includes face, content and constructs validity. Based on the factor analysis conducted, with the loading factor 0.6, 4 factors were identified with the reliability value of; student participation (0.844), classroom management (0.843), teaching strategies (0.814) and academic and character guidance (0.845) respectively. The validity and reliability gained have enabled the instrument to be adopted for the actual study.

6. ACKNOWLEDGEMENT

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