

2 ICLEHI 2015 47 Bhasah Abu Bakar

Islamic Religiosity Index among Malay Students of the Secondary Schools in Malaysia

Bhasah Abu Bakar, Norakyairee Mohd Raus,
Maziahtusima Ishak, Sakinah Ahmad, Razak Mohd.
Universiti Sains Islam Malaysia, Nilai, Malaysia
maziahtusima@gmail.com

ABSTRACT

The appreciation of Islamic values among the secondary school students has become an issue that needs to be addressed by society. There are many social problems are now arising, and will probably become epidemic if it is not being checked at the outset. One way to foresee the conditions that may occur in the future is to create a spiritual index that can explain the current situation, which will postulate or predict the future. The formation of Islamic Value Index (IVI) was developed by combining all the components of Islamic practices that were being taught at the primary school and became the basis of Islamic curriculum and an indicator of the future practices. Researchers managed to filter seven components of the Islamic values that had been collected and identified from the curriculum and become the basis of IVI. The instrument used for the IVI studies was earlier developed by Bhasah et al (2010) consisting of twelve components later reduced to seven components, which include: (i) *solat*, (ii) *doa*, (iii) Quran recitation, (iv) memorizing the Quran, (v) *sunatullah*, (vi) Self-commitment and (vii) environment (family, teachers, school and friends). Through the process of factor analysis, the number of items were reduced to 80 with each having a factor loading minimum 0.30 and more than 50 % of these items have factor loadings greater than 0.50. Reliability of the instrument equal to Cronbach alpha of 0.96.

Introduction

Communities often complain that the quality of Islamic practices of our youth who are in their high schools has decreased based on the reports of their discipline in mass media. We do not have a benchmark that can be used as a determinant or indicator of their level of Islamic appreciation. What is the measurement like? Islamic Value Index (IVI) is an index created by a group of researchers at USIM to build an index in order to determine the quality or the level of Islamic adherence to Islamic value by secondary school students in Malaysia today. This is an index that indicates the stability or quality of the implementation of Islamic values among secondary school students nowadays. It is more as a result of the teaching of Islamic education when they were in primary school. A higher value indicates the quality IVI is good and if the value is low, thus indicating poor quality IVI. This index takes into account all the aspects of Islam that has been taught to the students while they are in elementary school. These Islamic values consists of (i) *sunatullah*, (ii) to read the Quran, (iii) to memorize the Quran, (iv) *solat*, (v) *doa*, (vi) environment (teachers, school, family, friends), and (vii) self-commitment.

This IVI index helps to predict the pattern of early Islamic practices of our youth of today for the future. This index can be compared from year to year as a benchmark in determining the practices of Islamic values in our Malay secondary school students. The Muslim students need to realize that what is expected by the MOE is similar to what being expected by their parents from their young children studying at secondary schools. Thus,

Ministry Of Education hopes is consistent with what is expected by the Muslims in Malaysia. This index will reflect or mirror to us about the Islamic culture of the Muslim community in the next 5 to 10 years time.

To date, there had been no study being made to formulate an index to measure Islamic values among the secondary school students in Malaysia. Most of the studies conducted focused on the participants' attitudes towards Islam or the Islam itself (Hanafi et al, 2000; Steven et al., 2005; Rusnah and Devi). Whereas, studies in the West seems to give more emphasis on perception or attitude towards Islam conducted by Muslims or non-Muslims. Perceptions and attitudes are quite different from formulating an index of Islamic values among the Muslims. The measurement of Islamic values are based on the frequency of practicing of Islamic culture itself. While attitude give emphasis on participants' knowledge and understanding of the practices. The participants may not like doing/practising it, but have the perception that one should do it. Thus, this study only focused on Muslim participants, to see the frequency of their practices on Islamic values that they uphold. Hence, the frequency scale formed as an index of their Islamic values appreciation.

Objective of the Study

This study aims to identify the level of Islamic Religiosity among the Malay secondary school students in Malaysia. The index would determine the position of the IVI for a particular year. Based on the level of IVI for that particular year, the Ministry will be able to project the types of youth that will be generated by the Malaysian Secondary Schools in the next 5 to 6 years. The year 2014 is set as the based line year for the determination of IVI - year data being collected for the study. With this value of IVI, the ministry will be better prepared and equipped for the next early youth as to ensure that the quality of the early youth in the future to be more stable and secured.

The Development of Islamic Value Index (IVI)

The index is a composite measurement variable, or a way to measure constructs using multiple items that measure the same trait from various aspects. The index is an accumulation of scores from various types of items measuring the trait. There are four main steps in building an index (Crossman, 2012). First – the selection of items that match or coincide with the trait being measured, second – identifying empirical relationship between them, third – scoring the index and the fourth – make validation. There were few studies had been conducted in the development of indices to determine the inclination of religion, such as the Duke University Religion index (Durel) (Koenig and Bussing, 2010) and the Global Index religiosity that indicate that the peoples of Ghana are very religious while the people from China do not trust very existence of God (myjoyonline.com, 2012). There are various approaches in preparing the measurements of Islamic value acuturation (Safiek, 2009) .

Item Selections

The determination of IVI index, used IVI instruments for early teens developed by Bhasah et al (2010). The items for the instrument had been carefully selected from the Islamic Education workbook and textbooks used for students from Year 1 through Year 6. Each selected item has the face validity of the IVI for early teens. These items have been confirmed to measure the early traits of Islamic values for early teens conducted by factor analysis in their item selections. The curriculum of Islamic education has been developed by experts in Islamic Education from the Islamic Education Division, Ministry Of

Education Malaysia which based on the Philosophy of Islamic Education which is also in line with the National Education Philosophy.

Empirical Relationship

In order to ensure that item which fall into each sub-construct and measuring the same trait, factor analysis was run for each of the seven sub-constructs of the Islamic values. The seven sub-constructs are: (i) Performing solat, (ii) *Doa*, (iii) Reading verses of the al-Quran, (iv) Memorization of *surahs* from the al-Quran, (v) *Sunatullah*, (vi) Self and community, and (vii) school and family in addition to the determination of the correlation coefficient between the items.

Index Scoring

Each item constructed is based on the items that are used in the primary school curriculum. It is the Islamic practices that is often practiced in the everyday life of a Muslim. Four-point Likert scale was used: 1=never, 2= sometimes, 3=often and 4=always was used to measure the frequency of Islamic practice. The highest score that a participant would achieved in his everyday Islamic practice which equate to the highest index in the application of Islamic values is 40 point. This is based on 4 points assigned for each sub-constructs, *Solat*, 8 points (2 times weighting), *Doa* has 4 points (1 weighting), Quranic Reading, 4 points (1 weighting), Surah memorization, 4 points (1 weighting), Obligations to Quran and Sunnah, 8 points (2 weighting), Self-commitment, 4 points (1 weighting) and the Environment, 8 points (2 the weight). It can be summarized from the following equation :

$$IVI = 2\beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + 2\beta_5x_5 + \beta_6x_6 + 2\beta_7x_7$$

$\beta_i = \text{weightage}, xi = \text{sub-construct}$

Index Validation

The index has been validated by a group of lecturers from the Faculty of Quranic and Sunnah of National University of Malaysia and Islamic Science University of Malaysia, who have extensive knowledge and experience in the field of Islamic studies. Almost 92% of the *experts* agreed with the items and the weightage proposed by the researchers .

Methodology

Instrument

Researchers used the instrument used by Bhasah et al (2010) to measure the practices of Islamic values among the participants. At the beginning, they found 12 sub-constructs in the establishment of the Islamic values that are based on the Philosophy of Islamic Education, of the Primary School Children in Malaysia. Each sub-constructs was again factor analysed in order to identify the number of factors that made up each sub-construct. Items having factor loading above 0.30 were identified and preserved, hence 2 to 5 items were maintained in each factor. This is to avoid the situation that each sub-construct having more than five items, which is considered to be sufficient to establish the characteristics of each sub-construct (factor). Finally, seven sub-constructs were developed without deleting any traits that belong to the Islamic religiosity construct.

Sample

In order to ensure that the study has adequate sample size, representative and comply with the requirements of the study, the researchers used stratified random sampling based on levels of education, types of school, and the state (location). As such, researchers stratified the samples into classes: Form 1, Form 2 and Form 4. It is the policy of the MOE not allowing participants from Form 3 and Form 5 participate in this research. Next strata is the types of schools, where the schools have been divided into 3 categories: (i) Daily Secondary Schools, (ii) Secondary Boarding School, and (iii) Religious Secondary School (SMKA/SMAT). All these secondary schools were selected at random from all the states in Malaysia according to the proportion and types of secondary schools in each state. A total of 2,407 secondary school students accepted and participated in this study .

Formation of Religiosity Construct

The measurement of IVI has been developed through the use of the affective domain, which involves the appreciation of a value. This takes into account the participation of the five levels of in the Krothwhol Affective Domain, beginning of the response up to an appreciation of the value of respect. This situation in view of the distribution of the participants in a normal distribution based on the respect by making a few modifications. Researchers have set out to select items that have a factor loading of more than 0.30, and became the basis for the selection of items. To ensure that the instrument is to be developed with constructs actually measuring IVI, the researchers decided to include all the factors that form the factor analysis and select a maximum of 5 items for each of the constructs concerned. Almost 90% of the items have factor loading exceeding 0.50. The higher the factor loading of the item, indicating the higher the correlation is with the trait itself. Here, the researchers managed to collect a total of 80 items with reliability of Cronbach alpha of 0.96, which is considered to be high. In the process of determining whether a participant has been able to practice a particular value, the researchers used Krathwohl's affective Likert scale to measure the index-frequency of emulating the practices of our Prophet (Francis, 1978a, 1978b). Researchers used the 4-scale frequency where the scale of 1=Never, 2=Sometimes, 3=Often, 4=Always. Based on the theory of measurement for the score distribution, researchers used a linear distribution as the initial basis for determining IVI.

Scaling is an attempt to put an individual's response to a stimulus. Therefore, the researchers used Likert scale to determine the relationship between overt response to a stimulus that has been set. According to Ghiselli, Campbell and Zedec (1981), scaling involves the use of a specific model or formula to analyze the data so that it can have a number that can be matched to a stimulus. Therefore, we can put scale of 1 as never, and a scale of 4 as always emulating a practice. Since researchers have devised a continuum of practice, from never emulating a practice to doing it constantly. Therefore, it is easier to code, 1=never, 2=sometimes, 3=often, and 4=always. Here, researchers are interested in determining the differences in responses between individuals toward certain practices which reflect their commitment to the particular practices. Thus, all participants will make a graded response to the same stimuli from each participant. In addition, this study will also make the scale of the stimulus, where the emphasis is made to assign values to different stimuli based on the response of one or more participants. Value assigned to a stimulus reflects the magnitude of the stimulus on the psychological characteristics examined – in this case is the degree of appreciation of Islamic values. Here the study is to determine the frequency of IVI practice.

Weightage

Weightage is a concepts of determining the importance of one sub-construct as compared with another sub-constructs. Or in other words, it is the determination of which sub-construct is more important based on certain procedure of estimate (Abdul Aziz, 2004). In the context of this study, prayer and *doa* are important practices in Islam. Here, it is described that prayer is more important than *doa*, as prayer is one of the five pillars in Islam. Thus, if prayer is made as principle importance as compared to *doa*, hence it can be said (*only for the sake of argument*) that prayer is twice the importance as compared to *doa*, which is based on the absolute scale only.

Internal Reliability

The internal reliability was measured using Cronbach's alpha coefficient. Kinken (1995) explained that the determination of the internal reliability of an instrument is also part of the establishment of the instrument. Internal reliability can be calculated in various ways, however, the use of Cronbach 's alpha is the most common method used to measure the internal reliability of an instrument (Price & Miller,1986). Internal reliability of this instrument was calculated using Cronbach's Alpha having 80 items comes to a value of 0.96 (The minimum value recommended by Nunnally 1978 acceptable is 0.70) which is a good reliability index (George & Mallery, 2007). Multiple correlation is another item reliability index (validity and homogeneity of the items) indicating the total variance explained in the items with respect to the remaining items .

Data Analysis

The results were analysed using descriptive and inferential statistics depending on the suitability of the study to meet the objective of the study. This is intended to ensure that the study is in line with the goals of this research which is to identify the index of Islamic values among the Malays Secondary School students in Malaysia.

Sample for Demographic Study

Researchers managed to get the total number of secondary schools in Malaysia from the Ministry of Education (MOE). Researchers have received returns of 2407 questionnaires for analysis of IVI among secondary school students. In term of classes, students from Form 1, 750 (31.2%) participants, Form 2, 793 (32.9%) participants and Form 4, 864 (35.9%) participants. Based on the type of school, a total of 1691 (71.1%) were participants from the daily secondary schools, a total of 345 (14.5%) participants from secondary boarding schools and 342 (14.4%) participants from religious secondary schools. A total of 941 (39.3%) participants were male and 1452 (60.7%) were female took part in this study.

Items for each Sub-Construct of Islamic Values

The IVI construction is based on the philosophy of Islamic education for the primary school once a passionate BPI MOE to establish early teens or primary school pupils to become a complete human being submit to religion. The components that make up the Islamic primary school education consists of (i) the recitation of the Quran, (ii) the Hadith, (iii) faith (*aqidah*), (iv) Worship, (v) biography of the Prophet and Islamic Civilization and (vi) Manners and Morals Islamiah (MOE, 2004). Based on these components, researchers managed to develop seven sub-constructs in the development of the Islamic value which consists of: (i) *Solat*, (ii) *Doa*, (iii) reading the Quran, (iv) memorizing the Quran, (v) *sunnatullah*, (vi) Self-commitment and (vii) environment. Participants responded to these sub-scales using the scale of: 1=never, 2=sometimes,

3=frequently, and 4=always. As for sub-construct memorizing the surah of the Quran, the scale used: 1= no memorization, 2=less memorization, 3=not so much being memorized and 4=fully memorized.

Research Questions

Research Question 1: Do the items selected for IVI were appropriate or consistent with the trait being measured?

Eighty items were selected for the study. All items selected were factor analysed underlining the Islamic value of the Primary school curriculum, and being practiced by the secondary school students at their early development of personality. Measurement is made on the frequency of the practices in emulating the sunnahs as obligated by Islam. There are seven sub-constructs that make up the traits being measured – Islamic value. All these items were constructed based on practices that have been taught to all Malay students when they were in primary school.

Table 1
Item Statistics on Islamic Value Appreciation.

No.	Variable	N	Mean	Standard Deviation	Factor Loading	Cronbach's Alpha if Item Delete
1	Performing solat zohor	2389	3.24	0.875	0.922	0.956
2	Performing solat asar	2390	3.23	0.882	0.946	0.956
3	Performing solat maghrib	2382	3.33	0.855	0.852	0.957
4	Bathe before going for solat Jumaat	2015	2.37	1.242	0.882	0.958
5	Cut nails before going for solat Jumaat	2004	2.10	1.063	0.761	0.958
6	Wear clean clothes before going for solat Jumaat	1993	2.58	1.277	0.895	0.958
7	Come early to mosque before solat Jumaat	2035	2.01	1.070	0.636	0.958
8	Solat jumaah in mosque or musollah	2393	2.44	0.810	0.704	0.957
9	Go to mosque to perform solat	2359	2.48	0.875	0.677	0.957
1	Recite doa when wake up from sleep in the morning.	2390	1.96	0.820	0.713	0.957
2	Recite doa when entering toilet	2393	2.29	0.985	0.872	0.957
3	Recite doa when leaving toilet	2380	1.97	0.850	0.892	0.957
4	Recite doa for Allah blessing	2393	3.21	0.808	0.713	0.957
5	Recite doa for our leaders	2384	2.43	0.929	0.824	0.957
6	Recite doa for those who give us food.	2385	2.48	0.901	0.765	0.957

No.	Variable	N	Mean	Standard Deviation	Factor Loading	Cronbach's Alpha if Item Delete
1	Recite al-Fatihah (Alhamdullillah hirabbil....)	2391	3.65	0.644	0.719	0.957
2	Recite Surah An-Nas (Kula'uzubirrabbinnas...)	2394	3.38	0.798	0.884	0.957
3	Recite Surah Al-Falak (Kul'auzubiraabbil falak..)	2385	3.20	0.862	0.776	0.957
4	Recite Surah Al-Ikhlas (Kulhuwall hu ahad)	2383	3.34	0.836	0.806	0.957
5	Recite Surah Al-Asr (wal asri, innal innsana.....)	2383	2.66	0.919	0.535	0.957
6	Recite Surah Al-Bayyinah (Lam ya ku nil lazi naka faru...)	2379	2.38	0.837	0.778	0.957
7	Recite surah Al-a'laq (Ikraq bismirab bikal lazi khalaq..)	2379	2.47	0.853	0.750	0.957
8	Recite Surah Al-Laili (Wallaili iza yaghsya....)	2378	2.28	0.838	0.850	0.957
9	Recite Surah As-Syams (Wasysyamsyi, Wadhuhaha)	2376	2.27	0.822	0.859	0.957
10	Recite Surah Al-Balad (Lauksimu, bihazal balad...)	2372	2.13	0.819	0.819	0.957
1	Memorize Surah Fatihah (Alhamdullillah hirabbil....)	2391	3.93	0.330	0.715	0.957
2	Memorize Surah An-Nas (Kula'uzubirrabbinnas...)	2389	3.83	0.522	0.846	0.957
3	Memorize Surah Al-Falak (Kul'auzubiraabbil falak..)	2387	3.58	0.717	0.597	0.957
4	Memorize Surah Al-Ikhlas (Kulhuwall hu ahad)	2387	3.86	0.495	0.737	0.957
5	Memorize Surah Al-Takathur (Al-ha kummuttu takar sur...)	2383	2.87	1.016	0.789	0.957
6	Memorize Surah Al-Qari'ah' (Al Khariah, malkhariah..)	2379	2.75	0.995	0.866	0.957
7	Memorize Surah Al-Adiyah (Al Khariah, malkhariah..)	2368	2.60	1.005	0.898	0.957
8	Memorize Surah Al-Zilalah (Izazulzilatil ar dhu zil zalaha..)	2376	2.68	0.992	0.825	0.957
1	Going into a car, read basmillah	2386	2.86	0.925	0.450	0.957
2	Going into a car, begin with right leg	2375	2.88	0.890	0.764	0.957
3	Start walking with right leg	2374	2.94	0.859	0.704	0.957
4	Close the aurat when leaving a house	2379	3.18	0.874	0.730	0.957
5	Give donation	2380	2.68	0.769	0.727	0.957
6	Practise Sunnah in the month of Ramadhan	2382	2.74	0.797	0.406	0.957
7	Give <i>sadaqah</i> to the poor	2382	2.60	0.758	0.831	0.957
8	Wish subhanallah when	2395	2.39	0.748		0.957

No.	Variable	N	Mean	Standard Deviation	Factor Loading	Cronbach's Alpha if Item Delete
9	confronting Almighty creation Salawat for Rasullullah saw as a sign of love to him	2376	2.80	0.781	0.339	0.957
10	Accept full heartedly whatever happen to oneself, its all from God	2383	3.01	0.788	0.640	0.957
11	Close aurat when walking in public	2390	3.25	0.866	0.804	0.957
12	Be patient when receiving hardship/test from Allah	2373	3.01	0.761	0.723	0.957
13	Salawat	2379	2.74	0.786	0.675	0.957
14	Cover the aurat when in games	2353	2.90	0.966	0.740	0.957
15	Patient when something bad happen to ourselves	2383	3.10	0.764	0.666	0.957
16	Read the zikr	2386	2.81	0.804	0.745	0.957
1	Distant ourselves from asking help from syaitan.	2374	3.31	1.000	0.420	0.957
2	Say the <i>niat</i> befor doing anything	2377	2.93	0.848	0.418	0.957
3	Wear slipper or shoes when going out of the house	2384	3.73	0.565	0.463	0.957
4	Admit self weakness	2384	3.14	0.804	0.465	0.957
5	Use the toilet properly	2371	3.40	0.777	0.395	0.957
6	Visit friends who are sick.	2388	2.68	0.774	0.698	0.957
7	Give alm to the poor	2381	2.55	0.794	0.546	0.957
8	Get acquainted with good people	2387	3.12	0.747	0.575	0.957
9	Make friends with those showing good manners	2391	3.19	0.742	0.846	0.957
10	When asking people, ask politely	2389	2.99	0.750	0.429	0.957
11	Visit neighours who are sick	2383	2.58	0.857	0.672	0.957
12	Thankful to the leaders	2383	2.80	0.875	0.668	0.957
13	Show respect to the leaders	2381	3.02	0.829	0.797	0.957
14	Have good affections with our leaders.	2382	2.90	0.859	0.721	0.957
1	Help teachers carry books or heavy materials	2382	2.77	0.818	0.739	0.957
2	Offer oneself to help teachers	2389	2.57	0.863	0.722	0.957
3	Ask permission when going out of the house.	2388	3.49	0.752	0.370	0.957
4	Lower your tones when talking to parents	2390	3.21	0.730	0.598	0.957
5	Help parents	2389	3.65	0.686	0.607	0.957
6	Give salam when leaving friend's house	2387	2.92	0.946	0.440	0.957
7	Help each others among friends	2384	3.17	0.706	0.375	0.957
8	Asking news among friends.	2394	2.93	0.817	0.405	0.957

No.	Variable	N	Mean	Standard Deviation	Factor Loading	Cronbach's Alpha if Item Delete
9	Give salam once reached friend's house	2388	3.49	0.730	0.706	0.957
10	Never interrupt in friend conversation	2369	2.60	0.791	0.590	0.957
11	Never whisper to each other when in group	2384	2.52	0.827	0.526	0.957
12	Request permission before entering friend's house.	2387	3.41	0.745	0.622	0.957
13	Salam first before start playing any game	2380	2.25	0.873	0.408	0.957
14	Do not look around in your friend's house - control your eyes	2382	2.58	0.848	0.506	0.957
15	Use school equipments carefully	2385	3.20	0.729	0.790	0.957
16	Follow instruction when using school equipments	2388	3.19	0.738	0.860	0.957
17	Take good care when using any materials from school	2385	3.25	0.721	0.802	0.957

Research Question 2: What are the weightage for each sub-construct in the Islamic Value Index?

In order to determine the weightage for each subs-construct, an additional questionnaire was prepared and distributed to the selected lecturers in Islamic Faculty of National University of Malaysia and Islamic Science University of Malaysia who are considered to be the expert in the field of Islamic study. A total of 30 questionnaire forms were distributed to the experts, only 26 questionnaires were completed and returned for the researchers to make analysis on the agreement of the weightage that was assigned to each sub-construct of Islamic values. Table 2 shows the number and the percentages of the agreement of the experts with the suggestions made by researchers themselves.

Table 2

Agreement on the Weightage for each Sub-Construct in the Development of IVI Composite

Sub-Construct	Agreement of Weightage Suggested		Weightage Accepted
	1	2	
<i>Solat</i>	1 (3.8%)	25 (96.2%)	2
<i>Doa</i>	25 (96.2%)	1 (3.8%)	1
Recitation of Surah	17 (65.4%)	9 (34.6%)	1
Memorization of Surah	23 (88.5%)	3 (11.5%)	1
<i>Sunatullah</i>	3 (11.5%)	23 (88.5%)	2
Self commitment	24 (92.3%)	2 (7.7%)	1
Environment	7 (26.9%)	19 (73.1%)	2

The researchers have transformed 100 as the maximum index for IVI to participants who can truly appreciate the spirit of Islam values in their lives all day. This is to facilitate the understanding on the reading of the index in terms of the number is formed from the calculation of IVI. Otherwise, based on the sub-construct having a scale of 4 and with the predefined weighting, the user need to transform scores to percentage. This is explained from the following table. It is a common knowledge, that participants from Secondary Islamic religious school have higher IVI when compared with their fellow participants from national secondary schools or the boarding schools. From these three types of secondary schools, those from religious secondary schools has and index of 76.9 which is the highest when compared to boarding school participants (IVI = 73.9) and participants of national secondary schools (IVI = 69.9).

Table 3
Mean, Weightage and Islamic Value Score for each Sub-Construct by Type of Schools

Sub-Construct	Types of Schools	Mean	Weightage	Achievement
<i>Solat</i>	NS. Schools	2.566	5.0	12.830
	NS. Boarding Schools	2.920	5.0	14.6
	Sec. Religious Schools	3.037	5.0	15.185
	Sec. Schools	2.683	5.0	13.415
<i>Doa</i>	NS. Schools	2.342	2.5	5.855
	NS. Boarding Schools	2.403	2.5	6.008
	Sec. Religious Schools	2.613	2.5	6.533
	Sec. Schools	2.390	2.5	5.975
Quranic recitation	NS. Schools	2.734	2.5	6.835
	NS. Boarding Schools	2.926	2.5	7.315
	Sec. Religious Schools	3.102	2.5	7.755
	Sec. Schools	2.814	2.5	7.035
Quranic memorization	NS. Schools	3.192	2.5	7.98
	NS. Boarding Schools	3.273	2.5	8.183
	Sec. Religious Schools	3.605	2.5	15.285
	Sec. Schools	3.262	2.5	8.155
<i>Sunatullah</i>	NS. Schools	2.816	5.0	14.08
	NS. Boarding Schools	2.931	5.0	14.655
	Sec. Religious Schools	3.057	5.0	15.285
	Sec. Schools	2.868	5.0	14.340
Self-commitment	NS. Schools	2.999	2.5	7.498
	NS. Boarding Schools	3.082	2.5	7.705
	Sec. Religious Schools	3.101	2.5	7.752
	Sec. Schools	3.025	2.5	7.563
Environment	NS. Schools	2.966	5.0	14.83
	NS. Boarding Schools	3.082	5.0	15.41
	Sec. Religious Schools	3.077	5.0	15.385
	Sec. Schools	2.999	5.0	14.995
Islamic Value Index	NS. Schools			69.908
	NS. Boarding Schools			73.875
	Sec. Religious Schools			76.908
	Sec. Schools			71.478

Table 4 shows the scale used to determine IVI. The scale has been adjusted to the scale being used in Krothwohl Affective Domain. The four scale used in this study has been transformed into five scale with the same magnitude in a linear fashion.

Table 4
Linear Measurement

No.	Scale Used	Score	Explanation*
1	1.00 – 1.60	0.00 – 20.00	Accepting the Islamic practice as is.
2	1.61 – 2.20	20.01 – 40.00	Responding and to and appreciate the Islamic practices by knowing why certain practices have to be implemented.
3	2.21 – 2.80	40.01 – 60.00	Evaluating the on going Islamic practices from the aspects of its suitability with the present environment.
4	2.81 – 3.40	60.01 – 80.00	<i>Organizing the practices systematically and modifying them if necessary to get closer to the Creator</i>
5	3.41 – 4.00	80.01 – 100.00	Appreciating and giving self commitment toward the Islamic practices full heartedly.

*Level of Krothwohl values – effective domain.

In general, we found that IVI for the secondary school students is located on the value of 71.5. Score of 71.5 is situated at the level of *organizing the practices systematically and modifying them if necessary to get closer to the Creator*. This means that, the participants as a whole is still in the process of trying to understand and organize their daily life in order for them to get closer to their creators. If we were to look closer to the types of schools, we will realized that there is no striking differences between the three types of school, be it the national secondary schools or the national secondary boarding schools nor the secondary Islamic religious schools. All of these schools are at the level of still *organizing the practices systematically and modifying them if necessary to get closer to the Creator*.

Research Question 3: What are the reliability for each item selected for the development of IVI ?

Cronbach's Alpha If Deleted was used to increase the quality of reliability for each item in the IVI instrument. Each item used in the determination of IVI, has Cronbach Alpha value exceeds 0.9 which is considered to be high in an investigative research. Table 1 shows the value of Cronbach alpha for each item that is used in IVI. In fact, the reliability of this instrument itself has a Cronbach Alpha of 0.96.

Research Question 4: What are the reliability for each sub-constructs in IVI ?

The estimates of internal consistency (Cronbach's alpha) was calculated for factors that have been analyzed from the application of the sub-constructs of Islamic value appreciation. Items having low factor loadings were dropped. The final instrument used to measure IVI consisting of 80 items only. The reliability coefficients for each sub-constructs of IVI is shown in Table 5.

Table 5
Reliability Coefficient – Sub-Construct Appreciation of Islamic Value

No.	IVI Components	No of Items	Reliability Coefficient (Cronbach's Alpha)
1	<i>Solat</i>	9	0.84
2	<i>Doa</i>	6	0.76
3	<i>Sunatullah</i>	16	0.86
4	Reading of Surahs	10	0.90
5	Memorization of Quran	8	0.86
6	Self-commitment	14	0.84
7	Environment	17	0.87
Total		80	0.96

Conclusions and Discussions

IVI determination is not an easy process, as it involves determining of the sub - constructs of Islamic values that make up the composite of the index. Appreciation of Islamic value also involves the appreciation and the practices of the *sunnah* that explain the Islam itself. The belief on certain law and obligation to the Islamic rule can only be measured through the practices that one perform and the *ikrar* being said. It mirrored the Islamic civilization itself. Thus, the researchers have to rely IVI on the Philosophy of Islamic Education which is the basis for the development of Islamic values among early adolescents in Malaysia. This is considered to coincide with the aim of IVI to see the secondary school students be molded following the objective of the Islamic Education Philosophy. This is clearly manifested in the curriculum of Islamic Education for Primary and Secondary Schools. Thus, the teaching of Islamic Education in primary school is the heart of IVI in the development of a *syumul* Muslim. As such, researchers used the curriculum, textbooks and workbooks used by schools in teaching the Islamic Education in ensuring that the teaching of Islam is made in accordance with the philosophy of Islamic education. This task has been made easier with the presence of IAV instrument that has been initiated and researched by Bhasah et al (2011). The Islamic Educational Curriculum had been developed by those experts in the Ministry of Education Malaysia in their respective diciplines, and they know where to lead these adolescence – when they become adults. This situation is quite different from other similar studies conducted elsewhere, where they constructed their own items based on the advice of the scholars of Islam based on their perception of the real essence of Islam (Hisham, 2008) .

IVI Components of Secondary School Students

In identifying the component of Islam value, the researchers used the Islamic Educational objectives that have been implemented in primary schools. This symbolizes the desire of the Ministry of Education (MOE) or the Government of Malaysia in general, undertaken fully by the Islamic Education Department (BPI) in MOE in shaping the religious literacy of students and meet the requirements of Islamic Education. Islam component was the basis for the establishment of IVI. Researchers have managed to identify a total of 7 Islamic Components, with *Aqidah* as an exception that is being taught in primary school. The fact is that the seven components of the Muslim values are the synthesis of the 12 components Islamic values that was originally developed by Bhasah et al. In this context , the seven components that have been taken into account in the formulation of the implementation of the Islamic index as comprised of: (i) *solat*, (ii) *doa*, (iii) reading the Quran, (iv) memorizarion of Quran, (v) *sunatullah*, (vi) self-commitment

and (vii) environment. Here, researchers have to make sure that every factor that emerged as a result of the factor analysis of the component of IVI accepted. Its adoption is very important in order to ensure that the items used really reflect the application of the constructs of Islamic value itself. Maximum number of items accepted from each factor is limited to 5 items (Comrey and Lee, 1992; James Neill, 2013). However, for any factor that has item less than 5, all of the items that make up the factor that will be well taken and used in this study.

Mean Score for Each Sub-Construct in IVI

Mean scores for each sub-constructs of IVI has been already mentioned in Table 6. *Doa* is an Islamic exercise that is least practiced by the secondary school students. It has a mean value of 2.40 and has a very small standard deviation (0.56) among the students. Meaning to say that the *doa* is practiced uniformly among them. For a scale of 4, the mean score of 2.40 can be considered as average for a Muslim to practice *doa* in their everyday life. *Doa* can be practiced anyway and at anytime. It is used to request for forgiveness, ask for something needed from God or anything that can fulfill the desire of individual. However, these secondary school students seem not to take this opportunity from their own creator. Similarly, the subsequent practice is to read the Quran regularly. Our study indicated that the practice of reading al - Quran is not very high, with a mean score of 2.8 only which can be considered as good for the secondary school students to recite the Quran.

From the aspect of adhering to the Sunnah and obedient to the messenger of Allah, students practice can be considered as good as well, because the mean value obtained was 2.9, which describes a practice that is quite often in following the practice the Sunnah and obey Allah. The next practice which is thought to be a frequent practice among the secondary school students is praying. Islam has set prayers as main component of its *ummah*. for those who do not pray even one rakaat, it is said that a person may lost is Islamic entity at that time, and he has to qadha the pray if he forgot or unintentionally do not perform the pray. From the aspect memorizing the verses of the al-Quran as being set in the Islamic Education curriculum, students practice can be classified as good. The mean score for memorization of al-Quran is considered high, with a score of 3.3 and its standard deviation equal to 0.65. Teaching of Islamic studies in primary school has been able to ensure that the secondary school students can still remember surahs which has been memorized verbatimly when they were at primary schools and can still maintain memory of their memorization. This is very important especially in conducting the *solat* where an individual needs to read one or two surahs from the holy Quran. From the aspects of self commitment and with the society around the communities, those Islamic values seemed to have been increased. The Islamic values for the secondary school students can be considered as high.

References

- Abdul Aziz Jemain (2004). Penentuan wajaran dalam pembinaan indeks pelbagai kriteria. (Determining weight for multicriteria indexes) *Matematika*. Jilid 20, bil. 1, hlm 77-85. Jabatan Matematik UTM.
- Bhasah Abu Bakar, Rsoni Samah, Noor Azizi Ismail, Azharuddin Sahil, Maziahtusima Ishak dan Sakinah Ahmad (2010). *Penerapan nilai Islam dalam kalangan awal remaja*. Kertas Penyelidikan USIM. PPP/FBU-04-10808.
- Crossman, Ashley (2012). *Index construction. The four main steps involved in creating an index*. <http://sociology.about.com/od/Research-tools/a/index.--ZB.htm>(18-08-2012)
- Francis, L.J (1978). *Attitude and longitude: A study measurement. A Character potential: a record of research*, 8, 119 – 130.

- Francis, L. J (1978). Measurement reapplied: Research into the child's attitude towards religion. *British Journal of Religion Education*, 1, 45-51.
- Ghiselli, Campbell dan Zedec (1981). *Measurement theory for the behavioural science*. W.H Freeman and Company. New York.
- George, D., & Mallery, P. (2007). *SPSS for windows step by step: A simple guide and reference* (6th ed). New Delhi: Pearson Education.
- Hanafiah M Salleh, S Mohamed Hatta, Mohd Idris M Nor, Khadijah Shamsuddin, Kasmini Kasim, Rohani Ismail dan Nurmalayati Moktar (2000). Hatta Islamic religiosity scale 1996 (HIRS96) – A reliability and validity study. *Malaysian Journal of Psychiatry*, March 2000, Vol. 8, No. 1: 5-14.
- Harold G. Koenig and Arndt Bussing (2010). The duke university religion index (durel): a five-item measure for use in epidemiological studies. *Religions*. Vol. 1, 78-85, DOI, 10.3390/rel11010078.
- Hinken, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, Vol. 21, No. 5, 967-988.
- Hisham Abu Raiya (2008). *A psychological measure of islamic religiousness: evidence for relevance, reliability and validity*. A PhD. Dissertation submitted to the Graduate College of Bowling Green State University in partial fulfillment of the requirement of the degree Doctor of Philosophy.
- Kementerian Pelajaran Malaysia (2004). *Huraian sukatan pelajaran pendidikan islam. Kurikulum bersepadu sekolah rendah. Tahun 6*. Dewan Bahasa dan Pustaka. Kuala Lumpur.
- Kartono (1990). <http://belajarpsikologi.com/batasan-usia-remaja/> Retrieved on 8 November 2012.
- Nunnally, J.C. (1978). *Psychometric theory*, (2nd ed). New York: McGraw-Hill.
- Price, J. L., & Mueller, C. W. (1986). *Handbook of organizational measurement*. Marshfield MA: Pitman Publishing.
- Rusnah Ahmad dan S.Susela Devi (2006). *Religiosity and the malay muslim investors in Malaysia: an analysis on some aspects of ethical investment decision*. University Malaya, Kuala Lumpur.
- Safiek Mokhlis (2009). Relevancy and measurement of religiosity in consumer behaviour research. *International Business Research*. Vol. 2, No.3 July 2009.
- Steven Eric Krauss (Abdul Lateef Abdullah), Azimi Hj. Hamzah, turiman Suandi, Sidek Mohd Noah, Khairul Anwar Mastor, Rumaya Jauhari, Hasnan Kassan, Azma Mahmoud dan Jamiah Manap (2005). The muslim religiosity-personality measurement inventory (MRPI)'s religiosity model: Towards filling the gaps in religiosity research on muslims. *Pertanika Journal Social Science & Humanity* 13 (2): 131-145.
- <http://edition.myjoyonline.com/pages/news/201208/91933.php>. Published on 10 August 2012