

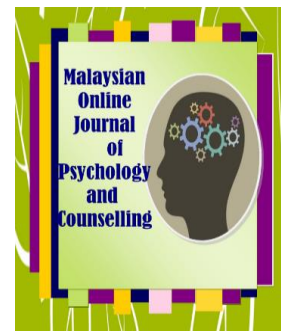
## DEVELOPMENT OF INSTRUMENTS MEASURING LOVE FOR KNOWLEDGE AND EXCELLENT MUSLIM TOWARDS TRANSFORMING HUMAN CAPITAL

Syaidatun Nazirah Abu Zahrin<sup>1\*</sup>, Rezki Perdani Sawai<sup>2</sup>, Nur Hidayah Mohd Abd Malik<sup>3</sup>,  
Joki Perdani Sawai<sup>4</sup>

### ABSTRACT

This study aims to describe the development process of three instruments measuring the characteristics of love of knowledge and excellent Muslims leading towards the transformation of human capital. Design principles and processes presented in accordance with professional standards that have been set for the test and measurements in psychology. Face validity and content validity were collected using the design methodology of the study. Six experts gave their assessment of the content of the test and evaluation of the action plan, based on their qualitative reviews. To test the factors and internal reliability, data were analyzed on 302 students using Cronbach Alpha coefficients and statistical analysis of the factors. Item for the instruments were built in constructs and sub-constructs through the analysis of the theories and concepts gained in literature reviews and data analysis from thematic interviews. Four main construct have been developed, namely A: Love of Knowledge with indicators of Murabbi (Educator) Love, love of reading, love of writing, love of intellectual discourses, Love of truth and justice, and love of intrinsic and extrinsic motivation as sub-constructs. While the B component consists of Excellent Muslims aspects of worship, characters/ethics, leadership and time management. Part C involves the transformation of human capital with sub-constructs of cultural studies, aspects of spirituality, identity and soft skills/generic. Part D consist of the respondents' demographic information such as age, gender, status, type of institution of higher learning (IPT), rank and years of study. The Cronbach alpha for the overall characteristics of the love for knowledge, characteristics of excellence Muslim and transformation of human capital was 0.91 (27 items), 0.91 (19 items) and 0.96 (19 items), respectively. Cronbach Alpha findings indicated that the instruments have high reliability and validity.

**Keywords:** *Instrument, Love for Knowledge, Excellent Muslim and Transformation of Human Capital*



Volume 6 (1),  
June 2019

[1] Pusat Citra  
Universiti,  
Universiti Kebangsaan  
Malaysia, Malaysia

[2] Fakulti Kepimpinan  
dan Pengurusan,  
Universiti Sains Islam  
Malaysia, Malaysia

[3] Institut Islam  
Hadhari,  
Universiti Kebangsaan  
Malaysia, Malaysia

[4] Fakulti Psikologi dan  
Pendidikan,  
Universiti Malaysia  
Sabah, Malaysia

**Corresponding  
Author:**

syaidatun@ukm.edu.my

## INTRODUCTION

The development of psychological instruments or scales in Malaysia is progressing gradually year to year in numerous fields such as in education, management, medical and social sciences. Unfortunately, only few number of Malaysian researchers created the Islamic oriented scale to be used with the Muslim population. Salbiah, Jamil & Mohd Aderi (2016) had identified 11 scales in the Muslim context that have been developed in Malaysia namely Muslim Religiosity Personality Inventory by Krauss (2006), *Skala Penghayatan Pendidikan Islam* (SPPIP-M) by Azma (2006), *Inventori Penghayatan Akhlak Pelajar* by Azhar (2006), Maternal Piety Scale by Siti Aishah, Abdullah, Noriah and Hassan Langgulung (2008), Moral Value Inventory for Muslim Adolescence (MVIMA) (Salhah et al., 2010), Ummatic Personality Inventory (UPI) by Noraini (2011), *Instrumen Pentaksiran Akhlak Berasaskan Rakan Sebaya* (IPAM-RS) by Jimaaain (2012), *Instrumen Penilaian Akhlak Pelajar IPTA* (IMPAK) by Adibah (2013), *Instrumen Penghayatan Akidah* by Norsaleha Mohd. Salleh, Abdul Halim Tamuri & Salleh Amat (2013), *Inventori Taubat al-Ghazali* by Salhah Abdullah, Sapora Sipon, Norhayati Rafida, Saedah A. Ghani, Marina Munira Abdul Mutalib & Noratthiah Nordin (2014) and *Inventori Spiritual Imam Ghazali* by Mohammad Aziz Shah Mohamed Arip, Aslina Ahmad, Mohammad Nasir Bistamam, Martina Amira Azam, Siti Nur Sarah Ab. Aziz (2015). Yet, none of the instruments is measuring the love for knowledge. Concepts such as love for knowledge is relevant and thus had been given attention by the current researcher.

Studies conducted by the National Library showed a reading culture among Malaysians are very low, which is on average Malaysians read only two books a year based on the study conducted in 1996 and 2005. In the survey by Malaysian National Library (2006) it was found that the literacy rate has slightly decreased to 92% from 93% in 1996. A student who are passionate on learning would surely have the reading habit because reading is the bridge of knowledge. This study reflects the less passion on learning in particular and less passion for knowledge in general. As intellectuals, students must play a real role as a lover of knowledge by studying, researching and reading actively and proactively in their daily lives (Zaini Ujang, 2009). They must equip themselves with knowledge and enhance their skills through participation in leadership activities, self-management and time management skills or other programmes and skills (Darman Egypt, 2006; Wan Zah et al., 2008). Little research has been done in Malaysia on the love for knowledge from Islamic perspective particularly among higher education students.

Among the existing instrument related to love of learning is Motivation Engagement Scale (MES) developed by Martin. It is a 44-item instrument and use for primary school students to university students, yet none we uncovered dealt specifically with characteristics of knowledge lovers among Muslim population. Martin (2005) identified four factors dimensions influencing the motivation and engagement of students adaptive cognition, adaptive behaviour, impeding maladaptive cognition and maladaptive behaviour. Love of learning was also associated with self-directed learning readiness. The person who practice self-directed learning is intrinsically motivated to learn, being independent and always learning, responsible for learning, discipline, has high curiosity, manage time wisely and goal-oriented learning (Guglielmino, 1977). Most of the scales used in education are adapted from the West which do not adequately reflect the characteristics of Muslims' knowledge lovers.

Some of the scales from the eleven (11) Islamic oriented scaled identified by Salbiah et.al have integrated Islamic approach with the western theory, models from respected scholars such as al-Ghazali and contemporary scholars such as Darraz, Sayid Sabiq, al-Faruqi, Naquib al-Attas, and Hassan Langgulung and designed based on general guidelines from al-Quran and Hadith. Some of the

scales also have been developed by combining the models of contemporary scholars with KBSR and KBSM syllabus such as Jimaain, (2012) & Norsaleha et al. (2014). However, in this current study, the items constructed for the Characteristics of Knowledge Lovers Instrument, Excellent Muslim Instrument, and Transformation of Human Capital were based on the content analysis of the Quranic verses, hadith (the saying of Prophet SAW) and the outcome from in-depth interview with Muslim scholars.

Thus, the objective of this study was to develop reliable and valid instrument to assess students' characteristics of the love of knowledge that can enhance excellence among the Muslims youth in Malaysia which will lead to the transformation of human capital. The current paper also aims to presents the results of an exploratory factor analysis of the three scales known as The Characteristics of Knowledge Lovers Instrument (CKLI), the Excellent Muslim Instrument (EMI) and Transformation of Human Capital through the Love of Knowledge Instrument (THC-LKI). These instruments address the question of what are the characteristics of knowledge lovers and Muslims excellent that might enhance the development of human capital.

## **METHODS**

The mixed method (qualitative and quantitative) research designs were employed in this study. The Characteristics of Knowledge Lovers Instrument (CKLI), the Excellent Muslim Instrument (EMI) and Transformation of Human Capital through the Love of Knowledge Instrument (THC-LKI) were developed mainly to measure the Love for Knowledge.

The intial number of items developed for this instruments were 81 items (37 items measure Characteristics of Knowledge Lovers, 24 items related to characteristics of Excellent Muslim and 20 items for measuring the Human Capital Transformation through the love of knowledge). All the constructs and subconstructs as well as the items were developed as a result of the content analysis of the Quranic verses, hadith (the saying of Prophet SAW) and the outcome from in-depth interview with Muslim scholars.

## **Instrumentation**

Respondents rated 73-item of CKLI, EMI, THC-LKI on the extent to which they agreed with each statement using a five-point Likert scale (1 strongly disagree, 2 disagree, 3 not sure, 4 agree, and 5 strongly agree). Example of the items that measure Love for Knowledge are as follows, "I am inclined to produce writing materials", and "I like to be in intellectual discourse". Meanwhile, for the Characteristics of Muslim Excellent, some of the items are, "I pray religiously five time a day", "I'm trying to prevent evil", and "I do not like lying". Some of the items of the Transformation of Human Capital are, "Trying to increase own potential" and "Think positive". The reliability for the three instruments were high (Characteristics of Knowledge Lovers Instrument: 0.91, Excellent Muslim Instrument: 0.91, and Transformation of Human Capital through love of knowledge Instrument: 0.96).

## **Sampling and Data Collection**

Permission to conduct the survey was requested from the Ministry of Higher Education of Malaysia in January 2015. We also contacted the Dean from each representative faculties for information on the number of students in the faculties. The questionnaires were distributed to 302 students from

# MALAYSIAN ONLINE JOURNAL OF PSYCHOLOGY & COUNSELING

---

Universiti Sains Islam Malaysia (USIM), Universiti Teknologi Malaysia (UTM) and Universiti Kuala Lumpur (UniKL) in April 2015. Students took 10 to 20 minutes to complete the questionnaire. Based on the response from the students, it can be said that instructions and items in all sections of the questionnaire is clear and easy to understand. The questionnaires were distributed and collected immediately following completion. Following the pilot test, initial analysis was carried out to determine reliability of the scale.

## **Data analysis**

Descriptive analysis was used to explain the demographic profile of respondent. In order to establish the content and construct validity, the instrument has been distributed to several Islamic scholars and the expert in psychometric field. All of these scholars were identified based on their expertise. In this way we might guarantee of the test was pertinent and relevant for its purpose.

In addition, an exploratory factor analysis was used to determine the subscales of the The Characteristics of Knowledge Lovers Instrument (CKLI), the Excellent Muslim Instrument (EMI) and Transformation of Human Capital through the Love of Knowledge Instrument (THC-LKI). The subscales were arrived at using response distribution, reliability (internal consistency), principal component analysis with varimax rotation and by determining the inter-dimensional correlations between the subscales. The respondents were selected using a purposive sampling technique of undergraduate students from three selected universities in Klang Valley. This study involved students of different gender and field of stud

## **Results**

Psychometric analysis of the CKL, EM, THC-KL instruments

### **Response distribution**

For the scale, Characteristics of Knowledge Lovers, Characteristics of Excellent Muslim and transformation of human through love of knowledge Instruments, demonstrating acceptable levels of skewness and distribution of scores. In addition, exploratory data analysis using histogram with normal curve, boxplots and normality plots also indicated a normal distribution of responses.

### **Internal consistency**

The internal consistency was computed using Cronbach's coefficient alpha for the current sample of university students (n =302). Four main construct have been developed, namely A: Love of Knowledge with indicators of Murabbi (Educator) Love, love of reading, love of writing, love of intellectual discourses, Love of truth and justice, and love of intrinsic and extrinsic motivation as sub-constructs. While the B component consists of Muslim Excellent aspects of worship, characters/ethics, leadership and time management. Part C involves the transformation of human capital with sub-constructs of cultural studies, aspects of spirituality, identity and soft skills/generic. Part D consist of the respondents' demographic information such as age, gender, status, type of institution of higher learning (IPT), rank and years of study. The Cronbach alpha for the overall characteristics of the knowledge lovers, characteristics of excellent Muslim and transformation of human capital through the love of knowledge were 0.91 (27 items), 0.91 (19 items) and 0.96 (19

items), respectively. Cronbach Alpha findings indicated that the instruments have high reliability and validity.

Exploratory principal component analysis was conducted using the principal component analysis with a varimax rotation was conducted on the 81-item instrument to determine the individual item loadings and component structure of the to examine the underlying structure of the Characteristics of Knowledge Lovers Instrument, Excellent Muslim Instrument, and Transformation of Human Capital through Love of Knowledge Instrument. A varimax rotation was chosen because it can reduce the number of complex factors by increasing the variance loaded on one factor (Tabachnick & Fidell, 2001).

The Kaiser-Meyer-Olkin measure of sampling adequacy gave a value of .896; .961; exceeding the recommended value of .6 (Kaiser, 1960). Bartlett's Test of Sphericity was highly significant ( $p < 0.001$ ). Most of the inter-item correlations were above .3 but were not above .8, and the determinant was  $> .00001$ , suggested that the sample size and correlation matrix were adequate for conducting the analysis.

In this study, the researchers conducted an analysis of the factors on the dimensions of the characteristics of Knowledge lovers, characteristics of excellent Muslim and transformation of human capital through love of knowledge. Items with a high weighting on only one factor identified as genuine items and items that fit simultaneously on two or more complex items cited factor (Ibrahim, 2007; Tabachnick & Fidell, 2001).

The researchers refer to Hair et al. (2010) pointed out that the standard weighting factor is estimated to be 0.5 or above, and preferably 0.7 or above. However, he also pointed out that if the sample size is about 100 people, so the weighted average is 0.55 or above, the sample size is 50 people ballast factor of 0.75. 00:30 weighting factor is reasonable and significant for the sample size of more than 350 people. Thus, the number of respondents were 302 people, researchers have used weighting 0.30. Results of factor analysis for each dimension dimensional characteristics of knowledge lovers, characteristics of Excellent Muslim and transformation of human through love of knowledge set out in (i) to (iii).

## **Factor Analysis for Characteristics of Knowledge Lovers**

Results of factor analysis shows Dimension for Characteristics Knowledge Lovers items with the weights and the variance contribution of each factor is shown in Table 1. The study also shows the percentage of variance contributed by the first, second, third, fourth, fifth and sixth respectively by 11.90%, 10.86%, 2.10%, 9.55%, 9.22% and 7:33%. These six factors accounted for 58.88% of the total variance in the original matrix. After researching and categorizing each factor hypothetical researcher named Love of motivation (Intrinsic) for the first factor, love of truth for the second factor, Love of motivation (Extrinsic) for the third factor, love of intellectual discourses of the fourth, Love of reading for the fifth and love of writing for factors although a3\_4 sixth item, a3\_5, and a4\_2 changed sub-domain of the original classification developed by the researchers. 1 item was dropped through the analysis of these factors, namely c4\_1 because its characteristics have 3 factors for the subdomain.

# MALAYSIAN ONLINE JOURNAL OF PSYCHOLOGY & COUNSELING

Table 1  
*Factor Analysis for Characteristics of the Knowledge Lovers*

Item	Factor					
	1	2	3	4	5	6
a1_1					.656	
a1_2					.681	
a1_3					.706	
a1_4					.621	
a2_1						.781
a2_2						.438
a2_3						.660
a2_4				.383		
a3_1				.705		
a3_2				.756		
a3_3				.662		
a3_4		.567				
a4_3		.356				
a5_1		.579				
a5_2		.783				
a5_3		.716				
a6_1		.660				
a6_2	.786					
a6_3	.796					
a6_4	.779					
a6_5	.509					
a3_5			.497			
a4_2			.403			
a7_1			.352			
a7_2			.625			
a7_3			.821			
a7_4			.664			
Eigen Value	3.212	2.932	2.705	2.579	2.489	1.980
Percentage Variance	11.896	10.858	10.020	9.551	9.219	7.333
Percentage Cumulative	11.896	22.754	32.774	42.325	51.544	58.876
N=302						
Subdomains	Love of motivation (Intrinsic)	Love of truth and justice	Love of motivation (Extrinsic)	Love of intellectual discourses	Love of Reading	Love of writing

Eigen value 3,212 2,932 2,705 2,579 2,489 1,980  
 Percent Variance 11,896 10,858 10,020 9,551 9,219 7,333  
 Cumulative Percentage 11,896 22,754 32,774 42,325 51,544 58,876  
 N = 302

## Factor Analysis for Characteristics of Excellent Muslim

Results of factor analysis for characteristics of excellent Muslim show the items with the weights and the variance contribution of each factor is shown in Table 2. The table shows the percentage of variance contributed by the first, second, third and fourth, respectively, by 18.45%, 16.54%, 14.46% and 14.30%. These four factors contributed 63.75% of the total variance in the original matrix. After studying each of the hypothetical factor, the researchers named the Leadership of life for the first factor, Time management for the second factor, the Personality of the third factor and Worship for the fourth factor even 1\_6, 3\_1 and b4\_5 items changed sub-domain of the classification of the original built by the researchers. Based on the items that are created in the first factor, the researchers had categorized it as "Leadership Spirit" where the focus is on the individual's own leadership in nearness to Allah and the Prophet Muhammad. 6 items dropped through the analysis of these factors, namely b2\_3, b2\_4, b2\_5, b3\_2, b3\_4 and b3\_5 because these characteristics did not conform to the subdomain or in other words, has a number of factors that are more than one.

Table 2  
*Dimensional Factor Analysis of Excellent Muslim*

	Factor			
	1	2	3	4
b1_1				0.610
b1_2				0.721
b1_3				0.723
b1_4				0.681
b1_5				0.683
b1_6			0.763	
b1_7			0.751	
b2_1			0.727	
b2_2			0.742	
b2_6	0.779			
b2_7	0.739			
b3_3	0.816			
b3_6	0.628			
b4_5	0.712			
b3_1		0.544		
b4_1		0.681		
b4_2		0.739		
b4_3		0.811		
b4_4		0.649		
Nilai Eigen	3.506	3.143	2.747	2.717
Percentage of Variance	18.453	16.540	14.457	14.302
Cumulative Percentage	18.453	34.993	49.450	63.752
N=302				
Subdomains	Leadership	Time Management	Personality	Worship

# MALAYSIAN ONLINE JOURNAL OF PSYCHOLOGY & COUNSELING

---

It also shows the adaptive variance percentage contributed by the first and second factors are each as much as 33.95% and 29.27%. These two factors accounted for 63.22% than the amount of variance in the original matrix. After studying and categorizing every factor in this hypothetical, the reviewer called self-identity for the first factor and civilizing knowledge for the second factor although items c1\_3, c1\_4, c1\_5, c1\_6, c1\_7, c2\_0, c2\_4, c2\_5, c2\_6, c2\_7, c2\_8, c2\_9 and c3\_0 changed classification of its subdomain built by the reviewer. 1 item eliminated through the analysis of this factor that is c1\_9 because its characteristics almost simultaneously with questions c2\_6 and c2\_7.

Table 3  
*Factor Analysis for Transformation of Human Capital through Love of Knowledge*

	Factor	
	1	2
c1_1		0.749
c1_2		0.779
c1_3		0.681
c1_4		0.751
c1_5		0.728
c1_6		0.561
c1_7		0.612
c1_8		0.606
c2_0		0.562
c2_1	0.675	
c2_2	0.760	
c2_3	0.730	
c2_4	0.596	
c2_5	0.816	
c2_6	0.802	
c2_7	0.767	
c2_8	0.657	
c2_9	0.685	
c3_0	0.605	
Eigen Value	6.450	5.562
Percentage Variance	33.950	29.273
Cumulative Percentage	33.950	63.223
N=302		
Subdomains	Self-identity	Civilizing Knowledge

## DISCUSSION AND CONCLUSION

There were important limitations to the study that deserve to be mentioned. Firstly, the sample for the study was limited in both scope and number. Although psychometric analysis highlighted above revealed an adequate sample size for running exploratory factor analysis, the sample size of n=302 was limited to all graduates from the selected institution. As such, findings as reported cannot be generalized to other students throughout Malaysia. However, the exploratory factor analysis results



justify expanding the study and through random design and a larger sample size, confirmatory factor analysis should also be conducted.

The initial findings provide a positive indication that the three instruments are reliable, however, additional construct validity testing should be undertaken to ensure that the scale and its sub-constructs are measuring factors influencing workplace learning. As the scale was developed for students of Malaysian population, exploratory component analysis is important to identify the component structure. Items for the scale were developed through the analysis of the theories and concepts gained in literature reviews and data analysis from thematic interviews.

One ongoing criticism of the field of education is the lack of empirical evidence capturing its usefulness to educational institution and how it influences the individuals in the institution. This study is a humble attempt to help address this deficit by reporting out on the early development of an empirical instrument for measuring characteristics of knowledge lovers influencing the motivation to learn among an under-researched population.

Accordingly, instruments such as the characteristics of Knowledge lovers, characteristics of excellent Muslim and human capital transformation through love for knowledge can help to identify factors influencing the facilitation of learning which can be useful toward enhancing the love of learning among individuals. Thus, these three instruments are a valuable contribution to the field of education. And it is an important reminder of the characteristics of knowledge lovers required for developing thoughtful students, as well as for building the generations of thoughtful leaders who believe in their power to change themselves and the nation. The present study findings, though exploratory, hope to further our understanding of love for knowledge in enhancing the human capital.

The results of this study also supported the usefulness of these instruments. The instruments are brief, reliable and psychometrically sound scales for Love for knowledge. It is recommended to future researchers to conduct CFA.

## ACKNOWLEDGMENT

We would like to thank Dr Hayrol Azril Mohamed Shaffril for his valuable comments on the article and all respondents of this research. This work was supported by Fundamental Research Grant Scheme from Ministry of Higher Education, Malaysia (FRGS/2/2013/SS02/UKM/03/1).

## REFERENCES

- Adibah Abdul Latif, (2013). Pembangunan Instrumen Penilaian Akhlak Pelajar di institusi pengajian tinggi awam. Phd Thesis. Universiti Teknologi Malaysia.
- Al-Ghazali, Abu Hamid. (2009/1909). *The Alchemy of Happiness*. USA: WLC Books.
- al-Jauziyyah, Muhammad bin Abi Bakr. (1997). *Taman Orang-orang yang Cinta dan Rindu (menurut al-Quran dan Sunnah)*. Trans. Kathur Suhardi. Batu Caves: ALBAZ Publishing and Distribution Sdn. Bhd.
- Azhar Ahmad. (2006). Strategi pembelajaran pengaturan sendiri pendidikan Islam dan penghayatan akhlak pelajar sekolah menengah. Ph.D Thesis. Universiti Kebangsaan Malaysia.
- Azizi Yahaya & Asiah Suari. 2007. Hubungan di antara temu janji, cinta, perlakuan seks dan masalah sosial dalam kalangan pelajar sekolah menengah. Kertas kerja untuk Scientific Committee of the 7th Asian Association Psychology (AASP), Kota Kinabalu, Sabah. Julai 25-28, 2007.

# MALAYSIAN ONLINE JOURNAL OF PSYCHOLOGY & COUNSELING

---

- [www.eprint.utm.my/2263/1/Aziziyahaya\\_Fenomena\\_Cinta\\_Janjitemu%2C\\_dan\\_Perlakuan\\_Seks.pdf](http://www.eprint.utm.my/2263/1/Aziziyahaya_Fenomena_Cinta_Janjitemu%2C_dan_Perlakuan_Seks.pdf) [12 Januari 2012].
- Azma Mahmood. (2006). Pengukuran tahap penghayatan pendidikan Islam pelajar-pelajar sekolah menengah di Malaysia. Ph.D Thesis. Bangi: Fakulti Pendidikan, UKM.
- Bontis, N. (2001). Assessing knowledge assets: A review of the models used to measure intellectual capital. *International Journal of Management Reviews*, 3(1), 41-60.
- Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, 20(1), 141-151.
- Fatin Hazwani Siran, Syaidatun Nazirah Abu Zahrin & Nur Hidayah Mohd Abd Malik. (2014). Kebahagiaan keluarga dan cinta rabbani pemangkin individu yang bertamadun dalam sistem sosial masa kini. *Prosiding Seminar Tamadun Islam & Tamadun Asia dan Hubungan Etnik (SeTH) 2014*, 33-43.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. 2010. *Multivariate Data Analysis*. Fourth Ed. New Jersey: Prentice Hall.
- Hasnah Shuhaimi, Norasiah Harun, Saidatul Akmar Ismail, Saiful Farik Mat Yatin & Mansor Ibrahim. (2014). Professional competencies: Challenges for library and media teachers. *Proceeding of the National Postgraduate Conference on Education*, 1-7. Retrieved from <http://ipnproceeding.weebly.com/uploads/4/1/6/5/41655287/001-npcedu.pdf>
- Ibrahim Mohamed Zin. (2007). Membina dan mengesahkan Instrumen Pentaksiran Kecerdasan Pelbagai. Phd Thesis, Universiti Kebangsaan Malaysia.
- Jama Hmi Mow Nayan. (2006). Knowledge management at national library of Malaysia (Master Thesis). Retrieved from [http://repository.um.edu.my/225/1/Knowledge %20management %20at%20National%20Library%20of%20Malaysia.pdf](http://repository.um.edu.my/225/1/Knowledge%20management%20at%20National%20Library%20of%20Malaysia.pdf)
- Jimaain Safar. (2012). Pembinaan Instrumen Pentaksiran Akhlak berasaskan rakan sebaya pelajar sekolah menengah. Ph.D Thesis, Fakulti Pendidikan UKM.
- Krauss, S. E. (2006). Development of the Muslim religiosity-personality inventory for measuring the religiosity of Malaysian Muslim youth. Phd Thesis, Universiti Putra Malaysia.
- Ministry of Education. (2012). *Malaysian Education Blueprint 2013-2025*. Ministry of Education Malaysia.
- Mohammad Aziz Shah Mohamed Arip, Aslina Ahmad, Mohammad Nasir Bistamam, Martina Amira Azam, Siti Nur Sarah Ab. Aziz. (2015). Pembinaan, kesahan dan kebolehpercayaan Inventori Spiritual Imam al-Ghazali (ISIG). *Jurnal Bitara Edisi Khas (Psikologi Kaunseling) Vol.8*
- Mohd Fauzi Hamat & Mohd Khairul Naim Che Nordin. (2012). *Akidah dan Pembangunan Modal Insan*. Kuala Lumpur: Penerbit Universiti Malaya.
- Mohammad Hossein Faryab. (2012). *The status of knowledge in Islam. Message of Thaqaalayn*. Translated by Fatemeh Soltan Mohammadi. 13(1), 73-100.
- Muhammad Shahid Farooq. (2013). An inclusive schooling model for the prevention of dropout in primary schools in Pakistan. *Bulletin of Education and Research*, 35(1), 47-74.
- Muhaya Mohamad. 2014. An interview session at Prof Muhaya Eye & Lasik Centre, Pearl Avenue Kajang. 22 August 2014.
- Murphy, J.B. (2004). Against civic schooling. *Social Philosophy & Policy Foundation*. USA, 221-265.
- Nooraini. (2011). Eksplorasi dimensi ummatic personality (UPI) sebagai alat pengukuran personaliti psiko-spiritualiti islami. *Ulum Islamiyyah Journal*.
- Norsaleha Mohd. Salleh, Abdul Halim Tamuri & Salleh Amat. (2013). Kesahan dan kebolehpercayaan Instrumen Penghayatan Akidah. *International Journal of Islamic Thought*, 3, 71-80.
- Norshazweena Kamaruddin. (2014). An interview session at Aminuddin Baki College, Universiti Kebangsaan Malaysia. 10 Oktober 2014.

# MALAYSIAN ONLINE JOURNAL OF PSYCHOLOGY & COUNSELING

---

- Nur Hidayah Mohd Abd Malik., Syaidatun Nazirah Abu Zahrin & Fariza Md. Sham. (2015). Budaya cinta ilmu dalam kalangan mahasiswa dan hubungannya dengan personaliti mukmin. *Proceedings of the Malaysian International Psychology Congress*, 241-253.
- Nurul Iman Mohamad Anuar Kamal. (2014). An interview session at Masjid Universiti, Universiti Kebangsaan Malaysia. 13 November 2014.
- Onta, P. (1996). Creating a brave nepali nation in British India: the rhetoric of j̄ati improvement, rediscovery of Bhanubhakta and the writing of B̄ir history. *Studies in Nepali History and Society*, 1(1), 37-76.
- Peterson, C., & Seligman, M. E. P. (2004). *Character Strengths and Virtues: A Classification and Handbook*. New York: Oxford University Press.
- Salbiah Mohamed Salleh, Jamil bin Ahmad, and Mohd Aderi bin Che Noh. 2016. "Systematic Literature Review of Islamic Oriented Scale in Malaysia." *International Journal of Academic Research in Business and Social Sciences* 6(11): 342-350.
- Salhah Abdullah, Sapora Sipon, Norhayati Rafida, Saedah A. Ghani, Marina Munira Abdul Mutalib & Noratthiah Nordin. (2014). Model taubat al-ghazali (M-TaG). *'Ulum Islamiyyah Journal*, 13, 19-37
- Sidek Baba. (2014). An interview session at Centre of Education, International Islamic University Malaysia. 21 October 2014.
- Siti Aishah, Abdullah, Noriah, Hassan Langgulung. (2008). Measuring the unmeasurable: maternal piety scales. *Pertanika Journal of Social Sciences*, 16(1), 95-105
- Stevens, J. (1992). *Applied Multivariate Statistics for the Social Sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Suzana Mohd Hoesni. (2011). Subjective meanings and expressions of marital love among soon-to-be married urban Malay. *World Applied Sciences Journal* 12: 25-28.
- Syaidatun Nazirah Abu Zahrin. (2013). *Kefahaman Remaja Melayu Terhadap Konsep Cinta Dalam Islam dan Hubungannya Dengan Pemikiran Rasional dan Akhlak Percintaan* (Psychology Doctoral Thesis). Universiti Kebangsaan Malaysia.
- Syaidatun Nazirah Abu Zahrin, Fariza Md. Sham, Fazilah Idris, Mashitoh Yaacob, Shahizan Shahrudin, & Nur Hidayah Mohd Abd Malik. (2015). The culture of love for knowledge among higher learning institutional students and its relationship with the personality of mukmin. *Proceedings of the ASEAN Community Conference 2015*, 107-118.
- Tabachnick, B. G. & Fidell, L. S. (2001). *Using Multivariate Analysis*. 4th. Ed. Boston: Allyn and Bacon.
- Thaib, L. (2013). Human capital development from Islamic perspective: Malaysia's experience. *European Journal of Management Sciences and Economics*, 1(1), 11-23.
- Umi Nadzrah Ali Othman. 2012. Corak cinta remaja dalam kalangan pelajar institusi pendidikan guru dan hubungannya dengan akademik serta kualiti keluarga. Tesis Sarjana Psikologi Pendidikan, Universiti Malaya.
- Wan Zah Wan Ali., Aida Suraya Md. Yunus., Ramlah Hamzah., Rosini Abu., Rohani Ahmad Tarmizi., Sharifah Md. Nor., Kamariah Abu Bakar., & Habsah Ismail. (2008). Kemahiran pengurusan masa pelajar universiti tempatan: status dan hubungannya dengan pencapaian. *Jurnal Teknologi*, 49(E), 49-64.
- Wani, Zahid Ashraf & Maqbool, Tabasum. (2012). The Islamic era and its importance to knowledge and the development of libraries. *Library Philosophy and Practice (e-journal)*, Paper 718. Retrieved from <http://digitalcommons.unl.edu/libphilprac/718>.