

# Personal Knowledge Acquisition: Do Educators Acquire New Knowledge during the Movement Control Order?

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## ABSTRACT

The pandemic COVID-19 leads to the online teaching and assessment methods to be adopted by the education institutions in Malaysia. In response to this, questions are raised in terms of whether educators can acquire new knowledge, what new knowledge they gained, and whether demographic profile matters. Online survey was conducted where 151 responses from educators in Malaysia were analyzed. Result shows that majority of the respondents admitted of gaining new knowledge during the MCO period. Furthermore, personal knowledge acquisition does differ in terms of gender, academic qualification, and years of experience. As for what knowledge they gained, thematic content analysis showed that educators learned technical, non-technical, and spiritual knowledge. This research could contribute to the knowledge management process of education institution in Malaysia.

**Keywords:** COVID-19 pandemic, knowledge management, education, training and development, adversarial

## I INTRODUCTION

During the peak time of Covid-19 pandemic, it can be seen that education institutions around the world were closed down. In 18 March 2020, Malaysian government took the same action, disrupting teaching and learning in all types of education institutions – universities, colleges, schools, and kindergarten (Perutusan Khas, 2020). The movement control order (MCO) that led to the closing down of education institutions did not only affect the students' learning, but also the educators' teaching and assessments processes.

In order to ensure learning process continue during MCO period, online teaching and assessments are subsequently conducted by education institutions in Malaysia. However, online teaching and assessments is not without challenges. For example, not all students possess the relevant learning tools and infrastructure such as high speed access to the Internet, computer, tablets or smartphones. The digital gap makes the educators unable to teach effectively and provide just treatment (Wan Ya Shin, 2020). Online learning makes students distracted and uninterested with the teaching and assessment methods (Hassan et al, 2020). This may be due to the feeling of lonely due to the lack of classroom's jokes, nuances, and social interactions. Furthermore, there are also cases where educators unable to cope with the sudden changes from face-to-face to online instructions due to their inability or uncomfortable to handle digital technology in the education system (Bernama, 2020). Besides teaching, educators also have to face the difficulties in conducting students' assessments due to the issue of their dishonesty and commitment (Guangul et al, 2020).

Due to these practical challenges, educators in Malaysia have to scramble to acquire new knowledge on how to manage their online classroom and student' assessments. They need knowledge on how to teach students who cannot be reached online (Jan, 2020). They need to have knowledge to manage interactions with students to develop and maintain their interest (Huang, 2020). They need to acquire the knowledge on how to use various live platforms such as Microsoft Teams, Zoom and Google Meet (Banoo, 2020) to conduct online teaching environment and to select the best teaching platform that suit to their students' needs (Ramlee Mustapha, 2020). They also

need to have the knowledge in conducting the remote assessment (Guangul et al, 2020).

In other words, in response to the changes from offline to online pedagogy, it is expected that educators must acquire new knowledge to help them with the whole new teaching and assessment process – is this true? And if educators gained the new knowledge, what are they? In addition, according to Carley (1986), individual knowledge acquisition is rather limited. Hence, another question raised – is there any different between the demographic profile of educators and the acquisition approach of new knowledge during the MCO? Based on these questions, a small research was conducted and this paper is prepared to present the research findings.

## II LITERATURE REVIEW

### A. Personal Knowledge Acquisition

Knowledge acquisition is a part of knowledge management process, where individuals gain knowledge either through observation, reading or practices. Knowledge acquisition is important as it provides the foundation to respond to the changes in the environment (Khan et al., 2020). As for educators, knowledge acquisition is important because the new knowledge gained enable them to cope with the changes in the teaching and learning environment. That is, by acquiring new knowledge the educators are able to know the various tools and platforms for online classes, how to manage the online interaction with students, and how to conduct online assessment. Overall, new knowledge is crucial for educators to strengthen their capability.

Knowledge gained however can be grouped into two basic types – explicit and tacit (Becerra-Fernandez & Sabherwal, 2010). Explicit knowledge is knowledge that can be put into words, documented and shared. For example, the characteristics of a good educator. Tacit knowledge on the other hand is not easily put into words, documented and shared because it involves intuition and experiences. For example, being an effective educator that able to adapt to students' diverse background and teaching context requires years of interactions, practices, learning from mistakes, and skills.

These mixtures of being an effective educator involve ambiguous relationship and thus are not easy to explain.

### B. Demographic Profile and Knowledge Acquisition

Past studies have been conducted to determine the role of demographic profile on personal knowledge acquisition. But, the findings were contradictory. For example, a study conducted by Jansen et al. (2010) revealed older people had problem with recording of information. Since memory correlates with knowledge (DeMarie-Dreblow, 1991), the study implies that age played a role in knowledge acquisition process. Later, Pacharapha & Ractham (2012) found that whether individuals are expert or novice did contribute to the knowledge acquisition.

However, there are studies that found individual factors did not influence knowledge acquisition. For example, Rotgans & Schmidt (2016) concluded that individual's interest was not a significant predictor of knowledge acquisition.

## III METHODOLOGY

The research objectives were to determine whether educators gained new knowledge during MCO, whether online resources and tools are beneficial, and whether there is any different between the demographic profile of educators and the acquisition of new knowledge during the MCO. This research paper would also like to identify what new knowledge have been acquired by educators in Malaysia. Therefore, the respondents for this research paper were lecturers, teachers, and tutors who worked in the various types of academic institution including public and private universities, colleges, schools and even kindergarten.

Data was collected in May 2020 through online questionnaire, where a total of 151 responses were collected. In the online survey questionnaire, besides their demographic profiles, respondents were asked on whether they have gained new knowledge during the Covid 19 - MCO period to strengthen their capability as lecturers, teachers or tutors, and

whether online resources and tools available aided their online classes. The questionnaire was in categorical format. Hence, descriptive statistics were mainly used to analyze the data.

In order to know what kind of new knowledges gained by educators during the Covid 19 -MCO period, an open-ended question (i.e. “what new knowledge have you gained during the MCO period?”) was asked. Responses were examined using content analysis, and grouped using thematic method.

#### IV FINDINGS

##### A. Demographic Profiles

Table 1 show the frequency of gender, qualification and years of experience of respondents. Results show that majority of the respondents were female (83.4%), hold master degree (58.9%), and have been educators for more than 10 years (70.1%).

**Table 1. Demographic Profiles**

	N	%
Gender		
Female	126	83.4
Male	25	16.6
Qualification		
Certificate	1	0.7
Adv diploma/Diploma	2	1.3
Bachelor	39	25.8
Professional	1	0.7
Master	89	58.9
PhD/DBA	19	12.6
Years of experience		
10-14 years	36	23.8
15-19 years	27	17.9
20-24 years	20	13.2
25-30 years	11	7.3
5-9 years	35	23.2
Less than 5 years	10	7.9
More than 30 years	12	7.9

##### B. Knowledge Acquisition during MCO

Table 2 shows the frequency of educators that gained new knowledge during MCO. The result shows majority of the respondents acknowledged that they had gained new knowledge (92.1%), there was still 7.9% perceived that they did not acquire new knowledge.

**Table 2. Knowledge Acquisition**

	N	%
Yes	139	92.1
No	12	7.9

##### C. Difference between Gender and Knowledge Acquisition

The chi-square test shows significant relationship between gender and knowledge acquisition,  $X^2 (1, N=151) = 16.5, p = 0.000$ . Cross tabulation analysis shows that 58.3% respondents who perceived they did not gain new knowledge were male; whereas 87.1% respondents who answer “yes” were female. Comparing between male and female, 28% males (7 out of 25) and 4% females (5 out of 126) said “no”. The details of cross tabulation result are shown in Table 3.

**Table 3. Gender and Knowledge Acquisition**

		Gain New Knowledge					
		No		Yes		Total	
		N	%	N	%	N	%
Gender	Male	7	58.3	18	12.9	25	16.6
	Female	5	41.7	121	87.1	126	83.4
	Total	12	100	139	100	151	100
Chi-square		16.5					
df		1					
Sig (p) value		.000					

##### D. Difference between Qualification and Knowledge Acquisition

The chi-square test shows significant relationship between academic qualification and knowledge acquisition,  $X^2 (5, N=151) = 12.5, p = 0.029$ . Across qualification, all certificate holders felt he or she did not gain new knowledge. On the other hand, all diploma and professional certificate holders believed that they acquired new knowledge. As for bachelor, master and doctorate degree holders, majority of them learned new knowledge. The details of cross tabulation result are shown in Table 4.

**Table 4. Qualification and Knowledge Acquisition**

		Gain New Knowledge					
		No		Yes		Total	
		N	%	N	%	N	%
Qualification	Cert	1	8.3	0	0.0	1	0.7
	Adv dip / Diploma	0	0.0	2	1.4	2	1.3
	Bach	4	33.3	35	25.2	39	25.8

Prof	0	0.0	1	0.7	1	0.7
Mast	6	50.0	83	59.7	89	58.9
PhD/ DBA	1	8.3	18	12.9	19	12.6
Total	12	100	139	100	151	100
Chi-square	12.5					
df	5					
Sig (p) value	.029					

### E. Difference between Years of Experience and Knowledge Acquisition

The chi-square test shows significant relationship between years of experience and knowledge acquisition. However, the significant value is at 10%, making the relations almost insignificant,  $X^2(6, N=151) = 11.5, p = 0.073$ . By comparing the distribution of “yes” and “no” answer, majority of the respondents from each category (except group of less than 5 years) concurred that they acquired new knowledge during the MCO period. As for respondents that came from less than 5-years’ experience as educators, 30% said “no” and 70% said “yes” to the question of gaining new knowledge. There is an interesting finding when readers or researchers look at the composition of “no” answer; where 25% have experience less than 5 years, and 33.3% have experience between 10 and 14 years. The details of cross tabulation result are shown in Table 5.

**Table 5. Experience and Knowledge Acquisition**

		Gain New Knowledge					
		No		Yes		Total	
		N	%	N	%	N	%
Years of Experience	<5y	3	25.0	7	5.0	10	6.6
	5-9y	1	8.3	34	24.5	35	23.2
	10-14y	4	33.3	32	23.0	36	23.8
	15-19y	3	0.0	24	17.3	27	17.9
	20-24y	0	8.3	20	14.4	20	13.2

25-29y	1	0.0	10	7.2	11	7.3
>30y	0	0.0	12	8.6	12	7.9
Total	12	100	139	100	151	100
Chi-square	11.5					
df	6					
Sig (p) value	.073					

### F. Types of New Knowledge Acquired

Based on the content analysis, responses from the open-ended question about “*what new knowledge acquired...?*” can be categorized into three themes:

#### 1. Technical knowledge

During MCO, educators learn about digital platforms, software, gadgets and other hardware that enhance online teaching and assessments such as WebEx, Google Meet, Zoom, and even internet infrastructure.

According to one of the respondents, “*belajar buat tandatangan digital*” (learn of how to make digital signature) is one of the new knowledges that she gained. Another respondent said that she learned on how to make online documentations.

#### 2. Non-technical knowledge

During online classes throughout MCO period, respondents also gained knowledge on how to deal with their students that came from diverse background because communication through physical and online interactions are not the same. And respondents agreed that they became more patience and had higher sense of empathy. Thus, they learned on managing their emotion better.

One of the respondents stated that “*masa tu, saya belajar bagaimana deal dengan pelajar OCD dan ADHD*” (during that time, I learned on how to deal with students with ‘obsessive-compulsive disorder’ and ‘attention deficit hyperactivity disorder’).

#### 3. Spiritual knowledge

It seemed that two respondents had learned unique new knowledge as compared to other respondents. One of them discovered that he still has lots of things to learn in order to become a better educator (self-awareness). Another one had learned on

how to appreciate his family relationship during MCO period, and thus gained new knowledge about the value of family relationship.

## V DISCUSSION AND CONCLUSION

Result shows that there are differences between demographic profiles and acquiring new knowledge during Covid 19 - MCO period. In this case - gender, academic qualification, and years of experience as educators played an important role in acquiring knowledge.

*Gender.* More males did not gain new knowledge. This may be due to the nature of males who are interested in understanding how things work, and knowing general knowledge since early age (Baron-Cohen, 2003; Su et al., 2009). Since internet of things and technology fall under those particular interests, it is postulated that male educators have already equipped with the necessary digital skill before MCO period.

*Qualification.* Only educator with certificate qualification did not gain new knowledge, compared to other group where majority acquired new knowledge. However, since there is only one respondent out of 151 with certificate, deduction on finding is difficult. If the respondent work in higher education institution, the reason may be because his or her teaching responsibility did not require much of high-level knowledge. If the respondent teach technical content, maybe there is not much materials and tools available during MCO to help him or her. Consequently, he or she felt that no new knowledge was acquired.

*Years of experience.* Interestingly, among those who answer “no”, albeit 8%, majority of the respondents either work less than 5 years, or between 10-14 years. Based on situational leadership theory, this may be because of the willingness and ability level of the respondents (Hersey and Blanchard, 1977). For those who were less than 5 years’ experience, they may be incapable to learn new knowledge as they are still lacking the necessary knowledge and skills to search for new knowledge, and did not know what to do. As for those who have been educators for 10 to 14 years, while capable, they may be at a situation of complacency and unwilling to acquire new knowledge.

In term of the kind of new knowledge gained, analysis showed that educators acquired technical, non-technical and even spiritual knowledge. Some of these knowledges such as

the type of media and solutions to help teaching and assessment are considered as explicit knowledge as they can easily learned and shared. But knowledge such as identifying the right mix and mode of hardware, solutions, and channels; and metacognitive knowledge such as discovering oneself position and values, requires experimentations and reflections. These knowledges are tacit in nature, which will be difficult to be learned by others.

Nevertheless, majority of the respondent gained new knowledge. Adversarial growth theory proposes that individuals grow and develop themselves to cope with adversity event (Linley, 2004). Research findings concurred with the theory where educators strived to gain new knowledge to be better educators in responding towards adversity situation – the turnaround of teaching and assessment processes from physical to online during the MCO period.

Knowledge acquisition is just a part of the knowledge management process. Hence this research is merely an exploratory study and the preliminary stage of knowledge management process for the education institution in Malaysia during Covid 19 pandemic and new norms practices. Future research may focus to expand into retaining and dissemination of personal knowledge, which could complement education institutions’ knowledge management practices.

## REFERENCES

- Banoo, S. (August 17, 2020). Education – Education disrupted. The Edge Markets. Retrieved from <http://www.theedgemarkets.com/article/education-education-disrupted>
- Baron-Cohen, S. (2003). The essential difference: men, women and the extreme male brain. Penguin.
- Becerra-Fernandez, I. and Sabherwal, R. (2010). Knowledge management: systems and processes. M.E. Sharpe, Inc.
- Bernama. (May 16, 2020). Virtual education and its challenges for teachers. The Sun Daily. Retrieved from <http://www.thesundaily.my/local/virtual-education-and-its-challenges-for-teachers-HB2416944>
- Carley, K. (2986). Knowledge acquisition as a social phenomenon. Instructional Science, 14(3/4), 381-438. Retrieved from [www.jstor.org/stable/23369065](http://www.jstor.org/stable/23369065).
- DeMarie-Dreblow, D. (1991). Relation between Knowledge and Memory: A Reminder That Correlation Does Not Imply Causality. Child Development, 62(3), 484-498. doi:10.2307/1131125
- Guangul, F. M., Suhail, A. H., Khalit, M. I. and Khidhir, B. A. (2020). Challenges of remote assessment in higher education in the context of COVID-19: a case study of Middle East College. Educational Assessment, Evaluation and Accountability. <http://doi.org/10.1007/s11092-020-09340-w>.
- Hassan, M. M., Mirza, T. and Hussain, M. W. (2020). A critical review by teachers on the online teaching-learning during COVID-19. International Journal of Education and

- Management Engineering, 5, 17-27.  
<http://doi.org/10.5815/ijeme.2020.05.03>.
- Hersey, P. and Blanchard, K. H. (1977). Management of organizational behavior: utilizing human resources. Prentice-Hall.
- Huang, J. (2020). Successes and challenges: online teaching and learning of Chemistry in higher education in China in the time of Covid-19. *Journal of Chemical Education*, 97(9), 2810-2814.  
<https://doi.org/10.1021/acs.jchemed.0c00671>.
- Jan, A. (2020). Online teaching practices during COVID-19: an observation case study. Manuscript under review. SSHO-D-20000181. Available at SSRN: <http://ssrn.com/abstract=3584409>
- Khan, M. S., Saengon, P., Cheungsirakulvit, T., and Kanchanathaveekul, K. (2020). The moderating effect of strategic fit enhances business performance: empirical evidence from the telecommunication industry. *Business Strategy and Development*. Retrieved from <http://onlinelibrary.wiley.com/doi/epdf/10.1002/bsd2.146>
- Linley, P.A. (2004). Psychological processes in adversarial growth [Philosophy in Psychology Thesis]. University of Warwick.
- Pacharapha, T., and Ractham, V. V. (2012). Knowledge acquisition: the roles of perceived value of knowledge content and source. *Journal of Knowledge Management*, 16(5), 724-739.
- Perutusan Khas (Mac 16, 2020). Perutusan khas YAB Perdana Menteri mengenai COVID-19. Retrieved from <https://www.pmo.gov.my/ms/2020/03/perutusan-khas-yab-perdana-menteri-mengenai-covid-19-16-mac-2020-2/>
- Ramlee Mustapha (June 1, 2020). Challenges of online teaching. *New Straits Times*. Retrieved from <https://www.nst.com.my/opinion/columnists/2020/06/596794/challenges-online-teaching>
- Rotgans, J. I., and Schmidt, H. G. (2016). How individual interest influences situational interest and how both are related to knowledge acquisition: a microanalytical investigation. *The Journal of Educational Research*, 111(5), 530-540.
- Su, R., Rounds, J., and Armstrong, P. I. (2009). Men and things, women and people: a meta-analysis of sex differences in interests. *Psychological Bulletin*, 135(6), 859 -884.  
<http://doi.org/10.1037/a0017364>
- Wan Ya Shin. (April 8, 2020). Pendidikan sepanjang krisis COVID-19. Institute for Democracy and Economic Affairs. Retrieved from <http://www.ideas.org.my/pendidikan-sepanjang-krisis-covid-19>