

A Self-management of E-Learning in COVID-19 Pandemic among Islamic Studies Students in Universiti Teknologi MARA, Shah Alam

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ABSTRACT

Education was impacted by the COVID-19 pandemic in a variety of ways. The e-learning concept was normalized especially in higher education levels. However, the effectiveness of self-management elements in the present pandemic situation is unclear. This study focuses on assessing the self-management efficiency relationship between time, cost, and self-regulation of e-learning in the COVID-19 atmosphere among students of Islamic studies in a Malaysian public institution of higher learning. Students of Academy of Contemporary Islamic Studies in the Universiti Teknologi MARA Shah Alam, Selangor were involved as respondents (n = 457). Data were collected using online questionnaires and analyzed using IBM SPSS Statistics. A reliability instrument test has been conducted. Cronbach's Alpha analysis indicated that the instrument is acceptable for the research ($\alpha = 0.791$). Spearman rho analysis indicated a significant positive moderate and low-level correlation values ($\rho < 0.05$) for e-learning management efficiency between: (a) self-regulation and time ($r_s = 0.499$); (b) time and cost ($r_s =$



0.269); and (c) cost and self-regulation ($r_s = 0.224$). This study suggests that the students of Islamic studies need to give more attention to time self-management as this aspect was indicated as relatively low compared to cost management and self-regulation. Unfortunately, the worldwide scope and pace of today's educational turbulence are unusual, and if it remains, it may result in mental harm and suffering. It is strongly recommended to develop technical, economical, and psychological support for students in facing e-learning in pandemic challenges. A cross-sectional study on the different universities is recommended for further study.

Keywords: *COVID-19 Pandemic, E-learning, Education, Islamic Studies, Self-management*

INTRODUCTION

Education, like other industries, was impacted by the COVID-19 pandemic in a variety of ways. The government has taken measures to reduce the transmission of coronavirus by imposing social interaction restrictions. Many regions have halted face-to-face instruction and tests, as well as imposed limits on foreign students' immigration. Conventional learning is being supplemented with books and textbooks taken from school wherever possible. Instructors and students can communicate through a variety of e-learning channels, and even in some situations, national television programs or social networking sites are used for education. To facilitate plans for this distance-learning situation, several educational systems have declared emergency closures (Gonzalez et al., 2020).

At any level, education is vital. There is emerging evidence that education links to economic development at both the national and state levels (Hanushek & Woessmann, 2012; Hanushek et al, 2015). It's important to distinguish between the word efficiency and effectiveness right away. Efficiency means doing it correctly, while effectiveness means doing the right things (Drucker, 1967). Thus, in the sense of learning, effective use of resources (whether the monetary or inherent capacity of learners) happens when observed educational outputs (such as test scores or value-added) are provided at the lowest cost of resource; successful use of resources means that the balance of educational outcomes sought by society is achieved.

However, the effectiveness of self-management elements in the present pandemic situation is unclear.

The term e-learning refers to learning that is made possible using the internet. It is a repository of expertise, education, networking, preparation, and productivity (Masters & Ellaway, 2008). E-learning refers to a pedagogical process that emphasizes being adaptable, entertaining, and student-centered. It not only differs from conventional learning (i.e., face-to-face learning in a classroom setting) in terms of the process in which knowledge is transferred, but it also has an impact on the teaching and learning methods employed (Childs et al., 2005; Colace et al., 2006; Masters & Ellaway, 2008).

The e-learning concept was normalized especially in higher education levels. However, the effectiveness of self-management elements in the present pandemic situation is unclear. Therefore, this study focuses on assessing the self-management efficiency relationship between time, cost, and self-regulation of e-learning in the COVID-19 atmosphere among students of Islamic studies in a Malaysian public institution of higher learning.

LITERATURE REVIEW

Self-management of e-learning is usually reflected in time management (Adu-Oppong et al., 2014), cost management (Albuquerque de Oliveira et al., 2019), and self-regulation management (Ejubović & Puška, 2019). Change in time management begins with a willingness to change. Setting clear visions might help to attain good time management. All important tasks should be prioritized depending on their level of contribution to an individual's or an organization's goals. Time management assists in prioritizing requirements and preferences and matching them with available time and resources (Ezine, 2008).

Furthermore, cost management, as well as its proper classification and implementation in the context of education, need a particular level of expertise. Cost management practices is significantly more complex than what is observed in theory. Proper cost management should be used to

help an individual or organization in making the most efficient decisions (Albuquerque de Oliveira et al., 2019).

For the self-regulation aspect, students in an e-learning environment may feel isolated and have difficulty concentrating. As a result, students must rely on their strengths to manage their e-learning to be effective learners. According to self-regulation theory, students must have specific self-regulatory characteristics to obtain in their learning environment. Although e-learning settings differ from conventional learning environments, students would have to be self-regulated for computer-based learning environments to be effective (Ejubović & Puška, 2019).

During the COVID-19 lockdown time in Saudi Arabia, Arshad et al. (2020) carried out a study to evaluate the effects of the epidemic on students at Jazan University's Faculty of Arts and Humanities. Universities are compelled to change their teaching to e-learning and blended learning approaches. According to Arshad et al. (2020), there is a role played in the achievement of instructive material online, appropriate assistance offered to students by instructors and teaching assistants, and a preparedness strategy for resolving unanticipated online educational system difficulties.

Mohamed Nafrees and Rahfath Aara (2021) performed research on undergraduates' experiences and expectations of e-learning during COVID-19 among Malaysian university students from science ($n = 130$), arts ($n = 140$), and management ($n = 220$) backgrounds. They suggest that students were willing to engage in e-learning despite their lack of prior experience. Most of the students are expected to have the required appropriate devices, even though they agreed that the monthly cost of internet access was considerably high. Furthermore, the services provided by the e-learning activities and the university fell short of their expectations. They also discovered that Malaysian undergraduates agreed that e-learning delivers the course resources that students anticipated.

Meanwhile, Kaur et al. (2020) conducted a study to compare the effectiveness and satisfaction of online courses against conventional learning among medical students. According to the findings, students were dissatisfied with this method of instruction, but it was the need of the hour. The report concludes that e-education should be used to complement current educational processes.

During the disease outbreak, the idea of e-learning education became mainstream, particularly in higher education. Students were most pleased with the service offered by teaching personnel and their universities' public relations during the worldwide lockdown and transition to e-learning. Despite this, students were unable to recognize their improved performance in the current classroom setting due to a lack of computing expertise and the impression of a heavier workload. Students were often worried about their potential vocational careers and research, and boredom, fear, and frustration overwhelmed them.

MATERIALS AND METHOD

This research focuses on e-learning in general and does not specifically discuss certain e-learning platforms. To explore and assess the relationship between time, cost, and self-regulation management efficiency of e-learning in the COVID-19 atmosphere among students of Islamic studies in a Malaysian public institution of higher learning, a survey based on specific themes and items (Table 1) has been conducted. Students of the Academy of Contemporary Islamic Studies in Universiti Teknologi MARA Shah Alam, Selangor were involved as respondents ($n = 457$), as the minimum sample size is 302 (from 1413 of population size) using Krejcie and Morgan (1970) sampling technique. The data were collected using online questionnaires and analyzed using IBM SPSS Statistics. A reliability instrument test (Table 2) has been conducted ($n = 30$) in a preliminary study using Johanson & Brooks (2010) sampling technique. Cronbach's Alpha analysis indicated that the instrument is acceptable for the research ($\alpha = 0.791$).

Table 1: The Constructed Themes and Items of Research Instrument.

Themes	Items
Cost	<ul style="list-style-type: none"> • Subscribing to more expensive internet packages. • Buying additional study devices and aids. • Printing learning notes to increase.
Time	<ul style="list-style-type: none"> • Keep up with online classes on time. • Making notes in a short amount of time. • Managing assignments and coursework based on time provided.
Self-regulation	<ul style="list-style-type: none"> • Easily drowsy while following the online classes. • Difficulty focusing on learning content. • Tiredness while following the entire class.

Table 2: (a) Case Processing Summary; and (b) Reliability Statistics

			<i>n</i>	%
(a)	Cases	Valid	30	100.0
		Excluded*	0	.0
		Total	30	100.0
(b)	Cronbach's Alpha		<i>n</i> of Items	
	.791		9	

*Listwise deletion based on all variables in the procedure.

Cross-tabulation of respondents (Table 3 and Figure 1) shows two main groups of respondents, bachelor's degree of Muamalat ($n = 133$) and Halal Industrial Management ($n = 324$) were involved.

Table 3: Cross Tabulation of Respondents

		Gender		<i>N</i>
		Male	Female	
Courses	Muamalat	45	88	133
	Halal Industrial Management	71	253	324
<i>N</i>		116	341	457

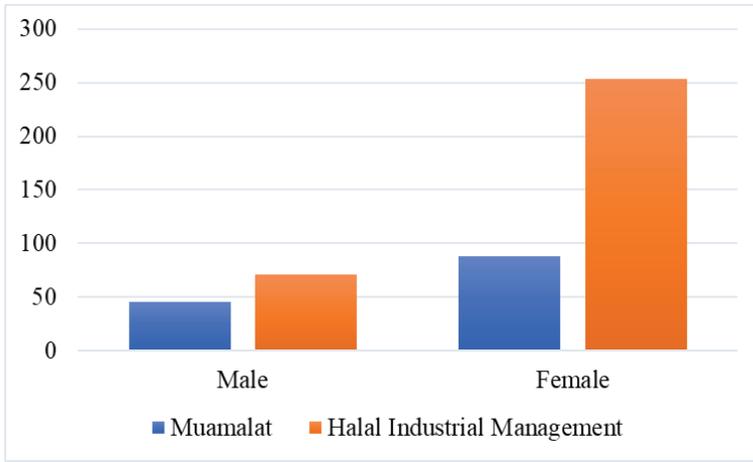


Figure 1: Gender and Frequencies (n = 457)

RESULTS

Descriptive statistics show the frequencies between cost, time, and self-regulation in e-learning self-management aspects (Table 4 and Figure 2). The self-regulation aspect of e-learning self-management is indicated as very high in self-management efficiency ($n = 246$) compared to the cost aspect of e-learning self-management which is indicated as moderately high ($n = 144$) and the time aspect of e-learning self-management which is indicated as relatively low ($n = 138$).

Table 4: Frequencies of Selected Variables (n = 457)

Efficiency Levels	Self-Management Aspects		
	Cost	Time	Self-regulation
Very Low	86	97	35
Moderately Low	133	138	58
Moderately High	144	132	118
Very High	94	90	246

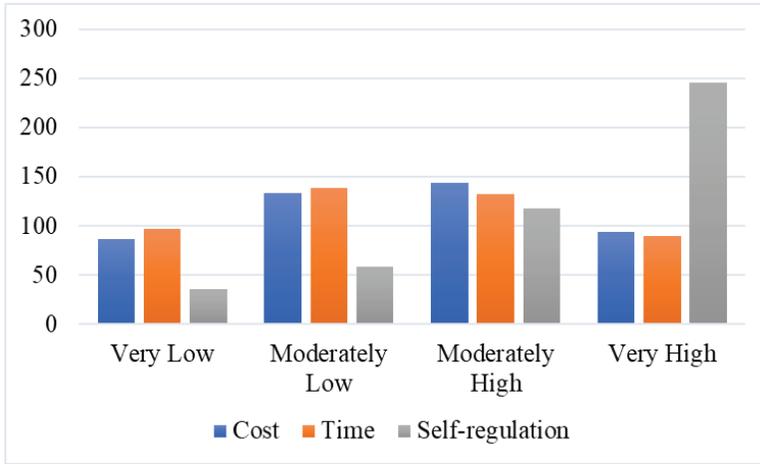


Figure 2: Frequencies and Efficiency Levels of e-Learning Self-management (n = 457)

Spearman rho analysis (Table 5) indicated a significant positive moderate and low-level correlation values ($\rho < 0.05$) for e-learning self-management efficiency between: (a) self-regulation and time ($r_s = 0.499$); (b) time and cost ($r_s = 0.269$); and (c) cost and self-regulation ($r_s = 0.224$).

Table 5: Spearman Rho correlation analysis between Time, Cost and Self-regulation Self-management Efficiency in e-Learning (n=457).

Self-management Aspects	r_s	P
Time - Cost	0.269	0.000
Self-regulation - Time	0.499	0.000
Cost - Self-regulation	0.224	0.000

* r_s : correlation coefficient, p : significant level (2-tailed)

Based on this analysis, it can be interpreted that the positive high correlation between self-regulation and time aspects in e-learning self-management efficiency are the main factors in enabling successful e-learning in the COVID-19 pandemic atmosphere. Surprisingly, the cost factor in e-learning self-management performance is likely to be a stand-alone factor, with students paying more for more reliable internet connectivity and larger storage capacities. However, in this pandemic case, it is impossible to resist

providing continuous and reliable internet connectivity to participate in e-learning.

DISCUSSION AND CONCLUSION

This study is consistent with Alqahtani and Rajkhan (2020), who identified significant reliable factors for e-learning during the COVID-19 in terms of improving the learning system. During the COVID-19 pandemic, educational institutions around the world were closed, affecting over 60% of Islamic studies students and causing a massive disturbance to the education sector. Alqahtani and Rajkhan (2020) suggested that the crucial reasons for e-learning during COVID-19 were infrastructure management, managerial sponsorship, enhanced awareness to use e-learning programs, and a sufficient level of information technology from instructors, students, and institutions. E-learning was the better educational system to put into operation. These findings showed that, regardless of how advanced the infrastructure of an academic institution is, the preparation of e-learning implementation is a significant part of enhancing the learning system during the COVID-19 pandemic.

Adnan and Anwar (2020) discovered common self-management efficiency influences in e-learning during the COVID-19. Because of the pandemic, educational services are being used more effectively. Few efforts have been made to assess the costs of inefficiency in education. The sudden shift to e-learning became an indicator of institutional strength (Wu, 2020), with higher educational institutions focused on the transition of instructional knowledge to the modern world rather than on online instruction and distribution methods directly. Despite that, it served as a reminder of the scarcity of funding in academic institutions and the socioeconomic marginalization of students, where unreliable internet access and affordability, as well as a shortage of cutting-edge technologies, hindered institutional responsiveness and students' preference to get involved in e-learning (Zhong, 2020).

Another significant situation of e-learning is an inadequate discourse with instructors. Concerns with the online course material are normally shared with the appropriate course instructors via email, which demands

a response time (Zhong, 2020). Online classes would not be appealing to students who prefer to learn in person. Conventional learning socialization is another important missing in e-learning. Students seldom engage in person with their peers and mainly interact with them virtually. As a result, in today's learning environment, real-time interchange of ideas, skills, and information is limited (Britt, 2006).

COVID-19 has an impact on conventional learning techniques at academic institutions across the world. As a solution to pursuing education, universities have decided to offer e-learning. Even though e-learning is advantageous in terms of safeguarding students' well-being in the presence of the COVID-19 epidemic, it is less successful than conventional learning since many students are unable to use the reliable internet owing to technological and budgetary constraints. Back then, students thought conventional learning was more effective than e-learning (McCarthy, 2020).

In conclusion, this study suggests that the students of Islamic studies need to give more attention to time self-management as this aspect was indicated as relatively low compared to cost management and self-regulation. Moreover, the temporary closure of educational institutions owing to an emergency is not a new phenomenon. Unfortunately, the worldwide scope and pace of today's educational turbulence are unusual, and if it remains, it may result in mental harm and suffering. It is strongly recommended to develop technical, economical, and psychological support for them in facing e-learning in pandemic challenges. A cross-sectional study on the different universities is recommended for further study.

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