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Perception of Online Learning Experiences during Pandemic among Malaysian Accounting Undergraduates

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Abstract
Purpose: The objectives of the study is twofold, firstly to examine the level of perception towards online learning experiences among accounting undergraduates and secondly to investigate any significant differences exist in their perception of online learning experiences based on the undergraduates' personal and geographical characteristics.
Design/methodology/approach: Given the quantitative in nature, this study employs a survey method that has been virtually disseminated to the accounting undergraduates in one of the top government-linked universities (GLUs) in order to gather their perception on the online learning experiences during the pandemic Covid-19. A total of 102 responses has been obtained and appropriate quantitative analyses have been conducted in order to achieve the objectives of the study.
Findings: There are no significant differences between gender and home locations with all constructs of online learning perceptions variables, except for the accessibility areas and network quality with the instructor-students interaction and preferences of delivery time (synchronous mode of virtual learning)
Research limitations/implications: This study is carried out solely involving accounting undergraduates of the GLU which constitutes a small segment of the university's overall undergraduates. As far as the accounting profession is concerned, however this study could gather some perceptions of online learning experiences from the accounting students during the pandemic whether the limitations of virtual learning could not impede their ability to learn and have independent learning although without the normal state of face-to-face learning environment.
Practical implications: The necessity for universities to improve the virtual learning-based skills for lecturers so that the important aspects in facilitating the students in having their online and self-learning would not be sidelined.
Originality/value: This paper highlights the issues of the perceptions of online learning experiences specifically among the accounting students which are not being discussed in the previous online learning-related studies.
Paper type: Research paper

Keywords: Online learning, Accounting undergraduates, Pandemic, Government-linked university, Malaysia

Introduction

While the aftermath of pandemic hit relentlessly in other countries globally, our country is not spared from battling the severe impacts from this virulent pandemic. Given the COVID-19 pandemic is highly contagious, the government has imposed restricted movement order (RMO) nationwide since March 2020 in order to contain the transmission of the virus. This RMO has caused many people are restricted from performing their mundane activities and meeting physically as various activities including business, social and educational activities are only can be carried out remotely. In the higher education institutions (HEIs), the ministry has made promulgation on the restrictions of the physical convention and interactions with the closure of all on-campus learning and physical activities, as it has shifted to the online learning environment (Malaymail, 2020; Selvanathan, Mohamed Husin & Nor Azazi, 2020). This unusual online learning environment is conducted as to the extent it seems the most ideal way for learning activities as a way to mitigate the risk of transmission of the pathogen.

Although the online learning environment is perceived as flexible and germane alternative to the traditional physical learning method, however it may give great impacts and challenges to those underprivileged and marginalised students with limited access to the virtual learning (Agarwal & Kaushik, 2020). Among the issues of challenges encountered by most of the students in virtual learning experiences include limited accessible to the internet network, improper learning ambience and gadget facilities, disruption network, difficulty in remote interaction and communication, and motivations of self-learning. These plights of online learning experiences may provide adverse implications to the students' learning experience, learning satisfaction and their academic performance. The degree of online learning experience may differ according to the students' characteristics such as demographic backgrounds, network accessibility and IT technical abilities (Smart & Cappel, 2006; Song, Singleton, Hill & Koh, 2004, Lau & Shaik, 2012).

Due to the absence of the traditional face-to-face learning, students should get accustomed with the new online learning environment as they may engage with the different modes of online learning. There are two modes of online learning comprise of synchronous and asynchronous, in which the application of these modes depends on the availability time of interactions (Borup, West & Graham, 2012). The former online learning modes provides the direct interaction between the lecturers and students at a specific of real time, meanwhile the latter online learning provides opportunity for the lecturers and students to interact at flexible time which subject to the respective party's availability through other platform discussion such as emails or online messenger. The online learning helps to facilitate self-learning and developing new technological skills that paved the way towards life-long learning and development of world-class human capital (Selvanathan et al., 2020; Peltier, Schibrowsky & Drago, 2007; Azizan, 2010).

Nonetheless, online learning and self-learning entail for huge challenges and difficulties for accounting undergraduates when they get used to learn calculations-based courses through the traditional face-to-face learning session in the classroom. In fact, the accounting programme that is offered by the Malaysian higher education institutions are well-supported by the accountancy national body which is Malaysian Institute of Accountants (MIA) under the Accountants Act 1967, to provide a pathway in developing future certified accountants. This is due to the primary role of MIA in regulating the national accounting profession. Concerning the regulation of the accounting profession, the delivery methods and learning techniques are very important for both lecturers and students in order to ensure that the quality of accounting programme is in place in producing the qualified professional accountants, although the medium of learning is in remote delivery. Besides, being one of the top GLUs in Malaysia that has been recognised as a private university with remarkable national and international ratings

also contributes the importance of quality in teaching and learning aspect is always in place although in the midst of pandemic. However, considerations also shall be given for the individual students who might encounter problems in remote learning due to their personal and geographical attributes. They might perceive that these flaw attributes seem barriers to the effectiveness of the online learning (Lau & Shaikh, 2012; Song, Singleton, Hill & Koh, 2004; Smart & Cappel, 2006).

There are number of previous literatures have been undertaken in examining the perceptions of students on online learning, either using quantitative or qualitative method. The deliberations of the online learning realm have been gradually increased from several waves of starting from the obtaining perception of students on the university's program structure and nature of mode delivery through remote learning, to the introduction of blended learning by university in adopting dual mode of learning approach in supporting the government's aspiration through 9th Malaysia Plan (2006-2010) and ultimately online learning approach during pandemic Covid-19 since 2020. Given the current state of pandemic with the restriction of movement is imposed by the government for almost all social and economic activities, this give without exception to the higher education institutions and addressing online learning experiences among the undergraduates is pertinent in order to dig in their benefits and challenges from such a remote learning approach. Therefore, the aims of the study are twofold, firstly to examine the level of perception of online learning experiences among accounting undergraduates and secondly to investigate any significant differences exist in their perception of online learning experiences based on the undergraduates' personal and geographical characteristics.

It is expected that this research could provide insightful and fruitful knowledge on the perception of online learning experiences among the accounting students who might find useful information to the affected parties, and also could contribute additional literature to the existing studies in the realm of pandemic-stricken contextual parties including higher education institutions. The remainder of the paper is organised as follows. Section 2 reviews the past literature with regards to the perceptions towards online learning experiences among students, while Section 3 outlines the research design and instrumentation, samples and sampling procedures. Section 4 presents the analysis of findings and the discussion of results. Ultimately, Section 5 concludes and sets out the limitations and provide directions for future research.

Literature Review

The emergence of the online learning has evolved from the existence of the web-based university (i.e., Tun Abdul Razak University, Open University Malaysia) since the late 1990s in tandem with the educational developments by the Malaysian Ministry of Education under the Malaysian Education Blueprint 2015–2025 (Higher Education) in making the online learning as an integral component of higher education and lifelong learning (Malaysian Education Blueprint 2015–2025- Higher Education: E-16). This is following to the initiatives of Malaysian Higher Education Institutions (HEIs) to cater with the surging demand of the online learning demand due to better accessibility and connectivity to various information and knowledge, and long-term flexibility in terms of time and location (Peltier et al., 2007; Azhari & Ming, 2015).

In a transition into the phase of Fourth Internet Revolution (IR4.0), the government has encouraged the local universities to employ web-based learning in addition to the existing traditional form of face-to-face learning approach or is notoriously known as 'blended learning' in order to allow better flexibility and room for improvement for the current single method of traditional learning. As there are number of universities are taking their path towards the blended-learning approach, this dual learning approaches are taking the best from self-learning, instructor-led, distance and classroom delivery to achieve flexible, efficiency and cost-effective

learning. According to Azizan (2010), this is due to the facts that it offers numerous benefits to the instructor and learners in the teaching and learning activities such as enhanced social interaction, improvement in communication and collaboration, offers flexibility and efficiency, better outreach and mobilisation and optimising available cost and time. Although the development of online learning become important phase in the universities, however Selvanathan et al. (2020) and Peltier et al. (2007) stated that some instructors (or lecturers) encountered with several challenges and obstacles in the implementation of online learning given the insufficiency of e-learning devices and poor network connectivity. This goes without exception to the students who some of them were poor computer literacy and self-motivation, which affected them to access the online learning (Bhuasiri, Xaymoungkhoun, Zo, Rhou & Ciganek, 2012). These outcomes suggest that instructors should be carefully planned in their teaching delivery by taking into account on the student' characteristics, course content, and learning context especially during this pandemic. Since the online learning is the best alternative learning method to supersede the traditional physical learning method, most students have taken some times to get familiar with the online learning system. Since human is the social agent in nature, students may find difficulties in virtual learning due to the lack of face-to-face interaction with instructor, longer response time taken and modules completion, and no physical socialisation with colleagues and these predicaments could affect to the students' incentives in having self-learning environment (Smart & Cappel, 2006; Chyung & Vachon, 2005; Bocchi, Eastman & Swift, 2004) especially during this state of pandemic.

In the context of accounting programme, most of the courses are related with calculations which requires understanding on basic principles and application of such principles for further computations. In this case, the interaction between an instructor and students through online learning environment is perceived as less effective as it takes more time and effort since most of the interactions generally would take place via formal and informal medium of interactions such as e-mail, chat rooms, and even voice or video calls. These kinds of communications are crucial for creating student connectedness to the virtual learning community (Drago & Peltier, 2004). In fact, Peltier et al. (2007) also conceded that the members of virtual online classrooms (or also known as virtual learning community) in the sharing knowledge session among students would rely on the superior information content and effective delivery methods by the instructor. Since the students need to be well-managed in their self-learning, the instructor shall make plan in sharing course syllabus, teaching plan and course materials in advance and make it available to students at the beginning of the course (Selvanathan et al., 2020; Peltier et al., 2007).

Students may notice that learning treatment in the virtual learning may have a streak different relative to the traditional classroom learning. In this situation, the instructor plays significant roles to ascertain that they could be more creative, energetic and active in generating more vibrant and participative online learning ambience. The roles of the instructor shall be not undermined in providing guidance and teaching delivery for students throughout course learning process, as the university may provide directives to instructor in equipping themselves with various web-based techniques and methods in delivery of virtual learning. Since the teaching authority is held in the hands of instructor, online learning generally requires a change in teaching style and shall be supportive, provide a proper guidance, good rapport, and motivation to their students (Conaway, Easton & Schmidt, 2005). Drago and Peltier (2004) and Bochi, Eastman and Swift (2004) also advocated that the students are more likely to participate and be motivated to learn when the course content and its delivery method is seen could facilitate them in their independent learning during the pandemic. Thus, this is important for students to assess their accessibility towards the quality and reliability of the virtual learning environment.

Although instructors have put substantial efforts to ensure that the quality of teaching delivery is in place, however they also should concern about their students' obstacles faced during the virtual learning. Given the precarious learning environment, those students with underprivileged or marginalised socio-economic backgrounds would have to soldier on with various of challenges and plights during the virtual learning process. For instance, Adnan and Anwar (2020) found that majority of the students in Pakistan have reservations about online learning due to two major aspects, which are technological accessibility and formal interaction. The former aspect includes inaccessibility to internet facilities, improper interaction between students and instructors and ineffective technology, meanwhile the latter aspect refers to lack of campus socialisation, lack of group study and instructors' feedback time. Adnan and Anwar (2020) also reported that traditional classroom learning was more effective as compared to the virtual/online learning, in other words the preference to traditional physical learning could be attributed to inability of online learning in producing effective results especially in the underdeveloped countries. In a similar vein, Selvanathan et al. (2020) also stated that the geographical and personal attributes provide disparities in students' level of perception towards their virtual learning experiences, since such remote learning environment provides more advantages to those students who are dwelling in the urban relative to those in rural areas. The similar findings also are supported by Song et al. (2004) who found that students with different backgrounds have may different preferences on the synchronous and asynchronous online course due to the possibility of disruption of network, challenges in student-instructor interactions and details of explanation by instructor. Therefore, based on the above arguments it is expected to develop the following hypotheses:

H1: Do the accounting students with different gender have different perceptions towards online learning experiences?

H2: Do the accounting students with different network quality have different perceptions towards virtual learning experiences?

H3: Do the accounting students with different accessibility areas have different perceptions towards virtual learning experiences?

H4: Do the accounting students with different home location have different perceptions towards online learning experiences?

Methods

This study is a quantitative research design in nature, which employed a primary data collection via the questionnaire survey. The questionnaire items that related to students' perceptions towards online learning experiences were adopted from a few existing literatures, such as Selvanathan et al. (2020), Lau and Shaik (2012) Peltier et al. (2007). The structured questionnaire consisted of two sections, which comprised of the socio-demographic data of respondents meanwhile section 2 is created for collecting the respondents' perception towards their online learning experiences during the pandemic. This study is carried out in one of the Malaysian private universities whose is owned by the giant utility government-linked company. The population of the study is approximately 305 accounting undergraduates from the range of first year to fourth year of study, and based on Krejcie and Morgan (1970)'s sample size determination table in Piaw (2020), the estimated sample size of the population is 169. The self-administered questionnaire has been distributed virtually based on the sample size which the range of year of study is taken into account in the distribution of the survey. Taking into account the cross-sectional data, the 5-likert scale survey has been distributed during the 1st week of May 2021. Of 169, only 102 respondents were willing to respond and complete the survey, which constituted 60.4% of the sample size. Reliability test has been performed to test

the reliability of the data, and the results of the reliability test indicate the acceptable level of internal consistency of the data.

Findings

Descriptive Statistics

Based on the Table 1, the descriptive statistics data revealed that majority of the respondents were among female accounting students (73.5%), being in the 2nd year of study and underwent the virtual learning at their respective hometown following to the recent MCO due to the rising 3rd wave of Covid 19 in nationwide since January 2021 which urged the respondents to be in off-campus. Most of the respondents were hailing from central region or in the vicinity of the Klang Valley (i.e., Kuala Lumpur and Selangor). Majority of the students' hometown were located in the urban area (72.5%), and they experienced such a good network connectivity (51%). Most of the respondents were not hampered by some network glitches as it only occurred occasionally (52%) during their virtual learning. However, for those who were dwelling in the rural area (27.5%) are more likely to experience a severe network disruption and mediocre network quality. Regarding the ownership of the devices used for online learning, most of the respondents confessed that their learning device is self-owned and only 7.9% are owned by family members, either their parents or siblings.

Table 1: Demographic Profiles of Respondents

Characteristics	Categories	Number	Percentage
Gender	Male	27	26.5%
	Female	75	73.5%
Place of online learning	On-Campus	10	9.8%
	Off-Campus	92	91.2%
Year of study	1	29	28.4%
	2	47	46.1%
	3	18	17.6%
	4	8	7.9%
Home location	Central region	46	45.1%
	North region	13	12.7%
	East-coast region	28	27.5%
	South region	14	13.7%
	East Malaysia	1	1.0%
Accessibility area	Urban area	74	72.5%
	Rural area	28	27.5%
Network quality	Very Good	13	12.7%
	Good	52	51.0%
	Fair	31	30.4%
	Poor	6	5.9%
Frequency of network disruption	Very often	9	8.8%
	Often	9	8.8%
	Occasionally	53	52.0%
	Seldom	4	3.9%
	Rarely	27	26.5%
Ownership of device (laptop/desktop)	Self	94	92.1%
	Parents	5	4.9%
	Siblings	3	3.0%

Table 2: Descriptive Findings for Each Construct Item

Items based on construct	Likert scale				
1. Material content & self-preparation	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Item 1-shared material earlier before class	0	1	8	47	46
Item 2-material notes with attractive design/contents	-	-	8	62	32
Item 3- print out material notes for class preparation	0	3	23	32	44
2. Interactive delivery					
Item 1-presentation with attractive and interactive contents and design forms	-	-	7	52	36
Item 2- initiative using drawing tablet device for technical calculations	-	-	7	62	33
Item 3 -well explanation through illustrations	-	-	5	53	44
3. Instructor-student interaction					
Item 1- good communication with lecturer during real-time session	-	3	27	52	19
Item 2- lecturer's response on students' queries	-	-	5	56	40
Item 3-personal message with lecturer	-	3	27	52	19
Item 4- prefer shared exercise answers with verbal explanation	8	6	29	43	15
4. Delivery time					
Item 1-prefer real time online class	0	6	49	26	22
Item 2-prefer synchronous online class for calculation subjects	13	26	41	12	12
Item 3- prefer synchronous online class for theory subjects	3	9	40	35	17

The table 2 above depicted the descriptive findings for the items underpinning for each construct of the study. The first construct is pertaining to the shared learning materials by lecturer with students and the self-preparation of students before the online learning took place. Most of the respondents were agreed with those items of the construct to indicate that their lecturers are putting good efforts to ensure that material contents were not only shared on timely basis, but also concerned with the attractive and interactive layout and design of the material contents as a way to increase motivation of the students in having the virtual learning. Meanwhile, those items which underpinning the second construct of interactive delivery are regarding the interactive explanation and illustration using the appropriate device by lecturers, and the importance of such learning device to enhance the understanding of the students through online learning. Majority of the respondents were giving a nod for the interactive technical explanation by their lecturer during the online learning took place. Given the limitation of the interaction during pandemic which could only occurred through online messaging platform, majority of the students agreed that they had good communication with their lecturers during online learning and lecturer's responses to their personal message were very important to them to enhance better understanding on the course. However, they seem disagreed that they had personal message with their lecturer to seek for better explanation

regarding a particular lesson. They also gave a nod on the preference to have shared answers of exercises with verbal explanation from lecturers. In general, there are almost equal number of respondents who preferred to have real-time (synchronous-typed) of online learning. However, they were largely neither agreed nor disagreed to have synchronous type of virtual learning specifically concerning for calculation subjects. On the other hand, most of the respondents preferred to have synchronous online class for reading (theory) subjects. The reasons might be due to some of them encountered the plights of learning calculations-related accounting subjects virtually and perceived that calculation subjects are only appropriate to be learnt through face-to-face mode of learning in order to have profound understandings and to keep their hand in the application of calculation techniques/methods relative to reading (theory) subjects. Unlike those accounting subjects which require for understanding and technical application of calculations, reading (theory) subjects are perceived manageable to cope it up by having independent reading as further discussions can be made through personal communication with their lecturers.

Table 3: Tests of Significant Differences between Independent and Dependent Variables

3.1 Gender

Construct of variables	Mean square	F	Sig
Material content & self-preparation	2.56	.138	.910
Interactive delivery	2.215	.076	.303
Instructor-student interaction	6.519	1.105	.542
Delivery timing	24.671	.697	.700

3.2 Network quality

Construct of variables	Mean square	F	Sig
Material content & self-preparation	2.56	1.272	.288
Interactive delivery	2.215	1.026	.384
Instructor-student interaction	6.519	2.904	.039
Delivery time	24.671	6.310	.001

3.3 Accessibility area

Construct of variables	Mean difference	F	Sig
Material content & self-preparation	2.56	.029	.013
Interactive delivery	2.215	.549	.136
Instructor-student interaction	6.519	.571	.027
Delivery time	24.671	.652	.049

3.4 Home location

Construct of variables	Levene statistic	F	Sig
Material content & self-preparation	2.281	.740	.567
Interactive delivery	1.794	.496	.739
Instructor-student interaction	1.162	1.302	.274
Delivery time	1.017	1.30	.275

Based on the T-tests and Anova test results above which are used to find if there are significant differences exist between the independent and dependent variables, it revealed that there are

not significant differences between each construct of variables and gender, and home location across national regions (measured by central region, north region, east-coast region, south region and East Malaysia). However, the significant differences do exist for a specific item(s) of the construct across the quality of network connectivity (measured by ascending order -poor, fair, good and very good) and accessibility area (measured by urban vs rural area). The significant differences do occur between the level of network quality and accessibility areas with the instructor-student interaction and delivery time. This implies that level of network quality and the students' whereabouts may have disparities in perceptions towards online learning experiences to have better interaction between lecturer and students and preference towards type of online learning. In other words, the significance findings met the hypotheses of the study, and these findings have similarity with previous studies by Adnan and Anway (2020) and Selvanathan et al. (2020). Nonetheless, the level of network quality and accessibility area would not provide any variation in material contents and interactive delivery constructs.

Discussion and Conclusion

Following to the restriction of movement orders by the government has initiated the online learning to be conducted among the higher education institutions' students. The absence of physical learning environment would have variation in students' perceptions towards online learning experiences as they might face a number of plights and challenges throughout the virtual learning sessions. The findings of the study revealed that majority of the respondents were agreed with the efforts putting by their lecturers to make sure that the shared material contents and interactive learning delivery are in place in a way to facilitate the students in their self-learning environment during the pandemic. Given the different personal and geographical attributes, the students might experience somewhat differences in their online learning experiences especially in the form of lecturer-students interactions and the preference type of online learning. These two variables are likely being influenced by the level of network quality and accessibility area, but none by the home location and gender attributes of the respondents. Nonetheless, gender and home location attributes failed to have significant differences in material contents and interactive delivery constructs of variables.

Practical and Social Implications

Since this study involves with the breadth of online learning environment, it could give some practical and social implications to the universities, students, lecturers and even to the national professional bodies. Given the accounting profession is regulated by the MIA, the process of learning environment during this pandemic could give huge challenges to the students especially when the mode of learning is virtually held. The virtual learning environment is expected should be not impeded by some limitations encountered by the students due to their personal background and geographical locations. Meanwhile, the universities also shall equip their respective lecturers with adequate online-learning based trainings to improve their online teaching skills and web-based learning tools. Perhaps the medium of virtual learning could be enhanced by learning facilities provided by the lecturers could not limit the feasibility of the learning process, in an endevour to produce a number of recognised professional accountants in the future.

Limitations and Suggestions for Future Research

This study only focuses on examining the perceptions of online learning solely among the accounting undergraduates from the prominent GLU in Malaysia. Perhaps, this limitation could be enhanced by an extension of future study by involving accounting undergraduates from

other universities including public and private universities which offer an accounting program, so that perceptions of online learning experiences could be more generalised by the larger sample of respondents.

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