

# Evaluating Lecturers' Satisfaction towards Online Teaching in AHIBS, UTM, Kuala Lumpur, Malaysia

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**Abstract:** Within recent years, online teaching and learning have witnessed an increasingly widespread in the higher education sector. By offering a flexible learning opportunity, online teaching managed to attract more students to the unique learning environment. University of Technology (UTM) was one of the universities that launched an Open Distance Learning (ODL) at the beginning of 2020. Due to the COVID-19 pandemic, UTM, as most of the universities around the world decided to adopt online teaching for almost all the courses. A theoretical model of the determinants of e-learning satisfaction in teaching among UTM lecturers from Azman Hashim International Business School (AHIBS), Kuala Lumpur (KL), was developed. Perception and expectations, preparedness, experience (Course Deliver Phase), and level of satisfaction (Post-Teaching Phase) were the independent variables that were examined. Twenty-seven respondents (lecturers) from AHIBS KL have completed five sections of the questionnaire. The first was demographics; the rest was related to the research questions which consisted of 24 open-ended questions. With regard to the perception and expectations for online teaching, the majority of the respondents reported confidence and competence in the technological and pedagogical skills were required to teach online. By and large, the respondents were welcoming online teaching experience. The respondents were generally divided on whether the online classroom should be continued as a replacement for face-to-face teaching even after the COVID-19 pandemic. This research came up with several recommendations to be considered by lecturers who work in an online environment and sets the stage for further study.



**Keywords:** Lecturers, Online Teaching, Face-to-Face Teaching, Preparation and Expectations, Preparedness, Experience, Level of Satisfaction

Paper type: Research paper

#### 1. Introduction

The transformation of the education industry could happen when lecturers and students synthesize information across subjects and experiences, which critically weigh significantly different perspectives and incorporate various inquire. It can be seen that the changing paradigms in teaching and learning have improved parallelly with technology which has led to increasing competition among universities and starting to shift toward online education (Sebastianellia, Swift, and Tamimi, 2015). Each meets up that requires people from different places to gather for meetings, discussions, and classes have become easier when they could do it online rather than a physical present. Among the top applications that were used for an online class were Google Classroom, Zoom, and Cisco Webex Meeting. Having the characteristic of easy access, uncomplicated to use and various functionality and flexibility have made them appeal to be adopted as learning tools by universities.

In Malaysia, online classes are not a new thing since it has already been practiced by many universities and colleges, especially for open distance learning courses. However, with the movement restriction order (MCO) to mitigate the infection of *COVID-19*, every university has looking for alternative teaching and learning methods to ensure the continuity in academic activities in order to avoid any prolonged interruption to the current semester (Sani, 2020).

On the other hand, business education is growing tremendously in the number of courses and degree programs offered entirely online. In the tech-savvy era, the online class was predicted to be the main channel for delivering courses in the future (Sebastianellia, Swift, and Tamimi, 2015). However, factors related to institutional commitment, faculty support, and leadership were the main issues that determine the quality of online programming. Also, instructors who designed and taught online business courses made several impacts that directly affected students' experience and perception.

In this topic, the root problem that needs to be identified before the effects of online teaching towards students is the lecturer satisfaction towards online teaching on the platform provided by the university, AHIBS KL, UTM, Malaysia was selected for this study. Information and Communication Technologies (ICT) awareness among lecturers were at different levels may be due to gaps between their ages. Support and ongoing training should be provided so that all lecturers will have the basic skills for online learning technologies. Lecturers that have expertise in conducting conventional class should be coordinated with the use of e-learning to enjoy the exciting, interactive, and developmentally appropriate of the technology (Mohamad, Salleh, and Salam, 2015).

Therefore, this study looked into the level of satisfaction of lecturers in online teaching. The fruits of this study will help the university to be aware of the hole that needs to be filled in order to help lecturers in preparation for their online teaching class, as well as recognizing the important factors that will help to make online classes more effective.

#### 2. Literature Review

Generally, every country exercised the same educational methodologies which were traditional classroom education as well as online education. In online education, both information technologies and communications were used in order to transmit knowledge from different places. There were several types of online learning such



as knowledgebase, online support, asynchronous training, synchronous training, and hybrid training (Kvavadze and Basilaia, 2020).

Nowadays, the rapid development of technologies affected the way people live including the way of teaching and learning in the education systems. Recently, people used technologies to endure with the pandemic of *COVID-19*. Meanwhile, in the education system, almost all the countries worldwide suspended their physical classes but still carrying on with their education with online teaching and learning. This is because the pandemic of *COVID-19* takes time to recover; therefore, peoples should adapt to the new norms.

#### A. Roles of teachers

In any education system, educators play vital roles to ensure the teaching and learning process happened. Educators play massive roles in the academic performances of the students. In terms of online teaching, educators not only play their roles as a transmitter of the knowledge, but teachers or lectures also play their roles as a "leader" and "accompanier" through the effective communication as well as guidance. Previous studies have emphasized that the educators' role is different when implementing the two most common modes of online teaching, which is the recorded video or known as asynchronous learning and live broadcasting or called synchronous learning (Yao, Rao, Jiang, and Xiong, 2020).

By exercising synchronous learning, the relationship between educators and students was much closer compared to asynchronous learning as it was quite similar to the traditional way. However, instead of face to face teaching, educators used technologies to pass the information. In terms of asynchronous learning, the educator's role was much more as a content provider as educators provided the best content to ensure that the students fully understand the knowledge. Conversely, in synchronous learning educators acted as guidance and a leader and the interaction between educators and students made the educator's role as an accompanier as well.

#### B. Principles of online teaching

In order to implement online teaching, educators need to ensure that the teaching will be effectively similar to the traditional way. (Horrell, 2016) has shown that some principles should be practiced by educators and students to confirm that online teaching is done effectively ion the previous literature. One of the principles was constructive alignment, which refers to a design in which the environment, methods, curriculum, and assessment should be aligned. Thus, educators should understand the concept of constructive alignment to ensure that online teaching is effective and successful. Besides, the educators should understand the concept, meanwhile, the learners also should play active roles in the online classes to ensure the teaching and learning were successful as it takes two to tango.

However, (Singh and Hurley, 2017) have shown that other principles of online educations and emphasized the efficacy of online education. Efficacy of online education could be achieved by implementing curriculum development and innovation strategies. Besides the efficacy of online education, academic integrity also one of the principles that have been discussed based on the previous findings. In online education, it refers to the online teaching and learning in which they achieved the credibility by maintaining severe standards of faculty expertise, course delivery, and student assessments in order to achieve the same learning outcomes with the traditional method.

#### C. Perception of teachers online teaching

The perceptions of the educators about the satisfaction between teaching face to face and online teaching were discussed based on previous findings. Face-to-face teaching was much better than online teaching as face to face teaching was more dynamic, and it increased the interactions and the chemistry between educators and students. While in the meantime, online education was described as a "cold way of teaching" due to the lack of interactions between educators and students (Downing and Dyment, 2014). Thus, the main concerns of educators regarding online teaching in which the educators worried about the students' capabilities to successfully adapt and engage with the online environment. The second issue that has become one of the



educator's concerns was the ability of online education to facilitate the development of the required characteristics of good educators.

#### D. Benefits of online teaching

The shifting paradigm of human life from traditional teaching to online teaching contributed to many more benefits. Online teaching helped the lecturers to have a weekly checklist in which it assisted the lecturers to complete the syllabus. Besides that, online teaching improved the lecturer's abilities to interact and respond to the student's questions, in the meantime, online teaching increased the awareness of student's needs and methods. It was due to the online teaching, the students will be much more engaged with the lecturers.

Furthermore, online teaching increased the level of communication between students and lecturers whereby it allowed the lecturers to connect with the students at all times. Teaching online not only facilitated the works of the lecturers but also the students who were online teaching and learning that integrated more technology. By practicing online education, helped students to know the details of the assignments such as the submission date, at the same time, it helped lecturers to know who has submitted the works within the timeframe. In addition, online teaching helped to change from teacher-centered to students centered (Graham, 2019).

#### E. Related framework

User Motivation

Perceived Usefulness

Attitude Toward Using

Perceived Ease of Use

Actual System Use

Figure 1. Technology acceptance model

Source: (Lai, 2017)

The technology acceptance model (TAM) has two key beliefs which are perceived usefulness and perceived ease of use and these two key beliefs depended on the variables, and it will lead to the attitude towards the systems. In terms of perceived usefulness, it was defined as a degree in which individuals believed that by using the technology, it enhanced their productivity. While on the terms of perceived ease of use, it was defined as a degree in which individuals believed that by using the particular system would be free of effort. The attitude of the users towards the systems was being influenced by the two major beliefs mentioned. The attitude towards the systems was defined as the determinant of whether the users will use or rejects the system (Chuttur, 2009).

In order to retain the practice of online teaching and learning, the essential thing was technology. Therefore, the technology acceptance model (TAM) was one of the theories that can be used in this study.



This theory focused on predicting and assessing the user's tendency to accept technology (Cheok and Wong, 2015). This model also can be used as a determinant of the e-learning satisfactions. The satisfaction of students and educators were important to ensure the continued use of online education and the effectiveness of it. When educators could see the benefits and satisfied with online teaching, educators are more likely to use the systems in the future.

The technology acceptance model (TAM) was one of the best theories that can be implemented in online education. The satisfaction of the educators, the preparedness of educators, and the educator's experience were the variables that can be determined by the two key beliefs in the technology acceptance model. The perceived usefulness for educators referred to the productivity of the educators using the technology. For example, technology facilitates educators in their works, such as in the due date and submission. While the perceived ease of use for educators was when educators could easily access the technology regardless of their age.

#### 3. Research Design

#### A. Research context

The research was conducted with lecturers from the faculty of Azman Hashim International Business School (AHIBS), UTM, KL, Malaysia. A survey questionnaire was used as the instrument to collect data from lecturers. The main objective of the survey questionnaire is to investigate the level of satisfaction of lecturers towards online teaching based on the independent variable of perception and expectations, preparedness, as well as experience (Course Delivery Phase) and level of satisfaction (Post-Teaching Phase).

Perception and expectations. In this section, researchers analyzed the core issues and objectives of online teaching from the perspective of lecturers. Due to the pandemic of *COVID-19*, most of the lecturers from AHIBS KL attended a workshop organized by UTM regarding on how to conduct online classes through online learning platforms, and among the most famous ones were, Cisco Webex, Zoom Meeting and Facebook Live. However, what lecturers expected and perceived the situation of an immediate change of teaching methods were analyzed further through the results from data collected.

Preparedness. Researchers analyzed what were the efforts lecturers have done to prepare for online classes in terms of teaching methods, familiar with online teaching platform, and computer setup. All these factors were important to analyze how well a lecturer was prepared for online classes. Nevertheless, despite all the efforts that have been done by lecturers to conduct online classes, some uncontrollable external factors have brought huge impacts on online teaching, particularly, internet access and speed. This is because the Wi-Fi coverage in Malaysia was not fully covered in every state or area, therefore, those states or areas without a better Wi-Fi coverage will find it difficult in conducting online classes as the internet was not stable and the line was breaking at all times.

Experience. Researchers analyzed specifically experience during the course delivery phase in order to have a clear understanding of the effects of online teaching for both lecturers and students as a whole. A few specific elements were discussed in this section, particularly, engagement and interaction between lecturers and students. Engagement and interaction played an important role when lecturers were conducting online classes, as this was where the knowledge transfer being done successfully among lecturers and students to ensure effective and high-quality standards of teaching and learning process.

Level of satisfaction. Researchers analyzed the results from post-teaching-phase and evaluated the level of satisfaction of lecturers towards online teaching. This was to identify the possibility of full adaptation of online teaching for the following semesters, especially when the pandemic is not fully lifted. In addition, this



section served the purpose to investigate the effectiveness of online teaching and assessment methods that would impact on lecturers' satisfaction directly or indirectly as lecturers were the important asset for UTM.

#### B. Population and sampling

Figure 2. Table for determining sample size from a given population

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

S is sample size.

Source: (Krejcie and Morgan, 1970)

According to AHIBS official website, there was a total of 37 lecturers under faculty of AHIBS KL, UTM, Malaysia, and were categorized into three categories which were *business administration*, *accounting or finance*, and *information systems*. Based on the table from (Krejcie & Morgan, 1970), researchers have followed the target population size of 40 with the target sample size of 36 for this study. The target respondents who were lecturers from the faculty of AHIBS KL, UTM, Malaysia were eligible to participate in the research's questionnaires. In addition, the questionnaire website link (Google Form) was sent out through email to target respondents, and follow up procedures were done via WhatsApp.

On the other hand, *non-profitability sampling* was being selected for this research, particularly, *judgmental sampling*. Judgmental sampling refers to the sample of target respondents are selected based on the basis of researchers' knowledge and judgment (Frey, 2018). The reasons researchers have selected judgmental sampling to be implemented in the research were *consuming the minimum time for execution*, *real-time results*, and *directly approachable respondents*.

First and foremost, it *consumes minimum time for execution*. This is because researchers required to finish the research within the time frame given, therefore, by selecting judgmental sampling, researchers were able to finish the research on time by looking for the target respondents directly that match with criteria of the research with no barriers involved and most importantly less time-consuming.



Secondly, *real-time results*. Researchers were able to get an immediate response from target respondents using judgmental sampling. This is because target respondents have sufficient knowledge and understanding of the research title. In addition to that, researchers were as well get additional information from target respondents based on their knowledge and understanding of the research such as insights and recommendations.

Last but not least, *directly approachable respondents*. This allowed researchers to approach the target respondents directly as there was less concern being taking into consideration when selecting for a sample. At the same time, researchers were able to get the desire results by implementing judgmental sampling as researchers were able to communicate directly with the target respondents.

#### C. Measures

Table 1. Constructs and measures

Constructs	Sources
Perception and Expectations	Harrati, Bouchrika, Tari, and Ladjailia (2016)
Preparedness	Eaton, Dressler, Gereluk, and Becker (2015)
Experience	Bao (2020)
Level of Satisfaction	Cheok and Wong (2015)

Table 1 showed the courses for the measures of the constructs used in the research. Researchers used a survey instrument to evaluate the level of satisfaction of lecturers at AHIBS KL, UTM, Malaysia. The survey instrument used a five-point Likert scale for perception and expectations, preparedness, experience (Course Delivery Phase), and level of satisfaction (Post-Teaching Phase) measure where 1 refers to strongly disagree and 5 refers to strongly agree.

#### D. Data analysis

In this section, data collected from 27 respondents from a questionnaire survey will be analyzed and summary tables of each section were provided for a clear understanding. In addition, reliability analysis for Cronbach's Alpha and Multiple Regression were taken in place using SPSS Software.

#### 4. Results

#### A. Response rate analysis

According to Lavrakas (2008), the response rate serves as a tool to calculate the results obtained from the respondents through the questionnaires. In this research, a total of 37 questionnaire forms were sent through email to target respondents (lecturers) from AHIBS KL, UTM, Malaysia. Over two weeks, 27 forms were returned with a response rate of 73%. The challenge that researchers encountered during data collection was insufficient time to collect data from target respondents, as researchers are required to submit the research within the time frame given. In addition, some other challenges would be the surveys were getting caught in spam filters due to the questionnaire's contents, particularly, words and phrases, as well as an email sent by the researcher to target respondents were bounced back due to insufficient of mail storage and target respondent was no longer an employee with AHIBS KL.

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Table 2. Summary of response rate to survey questionnaire

Initial questionnaires distributed	37
Number of forms not returned	10
Number of forms returned (achievable sample size)	27
Response rate (%)	73
Incomplete forms	0
Number of usable forms	27
Gross response rate (%)	100

# B. Demographics of sample size

Table 3. Summary of demographics of sample size

Demographics		Frequency	Percentage
Age Range			
	Below 35 Years Old	1	3.70%
	35- 40 Years Old	4	14.80%
	41- 50 Years Old	10	37%
	51- 60 Years Old	10	37%
	61-70 Years Old	1	3.70%
	71 Years Old and Above	1	3.70%
Gender	Male	6	22.20%
	Female	21	77.80%
Teaching Experience at University	Less than 1 year	1	3.70%
	2 years to 5 years	2	7.40%
	6 years to 9 years	3	11.10%
	10 years to 14 years	7	25.90%
	15 years to 19 years	4	14.8%
	More than 20 years	10	37%
<b>Duration of Online Teaching</b>	Less than 2 months	8	29.60%
	3 months to 6 months	10	37%
	7 months to 1 year	3	11.10%
	2 years to 5 years	5	18.50%
	6 years to 9 years	1	3.70%
	More than 10 years	0	0.00%
Types of Contact	Full-Time Lecturer	25	92.60%
	Part-Time Lecturer	2	7.40%

Based on the table above, it can be seen from the data that the biggest group of respondents fell under the age groups of both 41-50 years old and 51-60 years old with a percentage of 37%, respectively. In addition, the smallest group of respondents fall under the age groups of less than 35 years old, 61 - 70 years old and



71 years old and Above with a percentage of 3.70%, respectively. On the other side, female respondents covered a large percentage in this research. It can be shown that 77.80% out of 100% were female respondents, whereas 22.20% were male. Furthermore, it can be shown that the majority of the respondents were having more than 20 years of teaching experience with a percentage of 37%. Moreover, respondents with less than 1 year, 2 years to 5 years, 6 years to 9 years, and 15 years to 19 years have a percentage of 3.7%, 7.4%, 11.10%, and 14.8%, respectively. Also, the second highest of teaching experience in university was fall under 10 years and 14 years occupied a percentage of 25.90%.

On the other hand, researchers also asked about their experience in conducting online classes. It can be seen that respondents with less than 6 months experience and from 3 months to 6 months have a percentage of 29.60% and 37%, respectively. Meanwhile, respondents with 7 months to 1 year occupied a percentage of 11.10%, whereas respondents with 2 years to 5 years and 6 to 9 years have a percentage of 18.50% and 3.7%, respectively. There is no respondent with more than 10 years in conducting online classes. Last but not least, it can be shown that 92.60% of the respondents were full-time lecturers, while 7.40% of the respondents were part-time lecturers.

#### C. Statistical value table

Table 4. Summary of the statistical value table

		Mean	Median	Standard Deviation
Perception and Expectations (PE)	I welcome the transition to an online teaching environment.	4.33	4.0	0.78
	Compared to face-to-face teaching, online teaching will reduce my teaching burden.  I have enough technical skills to carry out online	3.26	2.0	1.35
	teaching.	3.78	3.0	0.80
	Pedagogical skills required in an online environment is fully transferable from the face-to- face environment.	3.70	3.0	0.91
	I believe the university is ready to fully transition to the online format of teaching.	3.74	3.0	0.90
	Average Mean	3.76		
Preparedness (PP)	I have adequate pedagogical knowledge to carry out online teaching.	3.89	3.0	0.93
	I have adequate training to effectively carry out online teaching.	3.48	3.0	0.94
	The faculty gives very good technical support for me to teach using the online method.	4.00	3.0	0.68
	I am given all the tools and resources to carry out the online lessons	3.93	3.0	0.73
	I have to completely change my lesson plan to adapt to the online teaching format.	3.85	3.0	0.95
	My computer setup and internet speed are sufficient for online teaching.	3.93	4.0	0.92



Average mean	3.03		
My overall teaching experience in the online environment is excellent. There is adequate student-lecturer interaction using the online teaching method.	4.11 3.78	4.0 3.0	0.80 0.80
It is easy for me to gauge the student's engagement levels during the online lesson.	3.41	3.0	0.84
I do not experience technical difficulties during the online teaching session.	3.41	3.0	0.93
I require the same amount of time to teach a lesson online and face-to-face environment.	3.15	2.0	1.26
Transitioning to online lessons is a smooth process for me.	3.56	3.0	0.97
I have a private place in my home that I can use for extended periods.	4.03	3.0	1.10
I have adequate time that will be uninterrupted in which I can work on/carry out my online lessons.  Average Mean	4.03 3.70	4.0	0.90
My overall level of satisfaction towards the online			
teaching method is excellent.	3.93	3.0	0.83
improve student learning and engagement.	3.70	3.0	0.91
used during online teaching.	3.78	3.0	0.90
teaching session. I would prefer the current method of online teaching to	3.52	3.0	0.80
	3.40	3.0	1.31
Average Mean	3.67		
	My overall teaching experience in the online environment is excellent. There is adequate student-lecturer interaction using the online teaching method.  It is easy for me to gauge the student's engagement levels during the online lesson.  I do not experience technical difficulties during the online teaching session.  I require the same amount of time to teach a lesson online and face-to-face environment.  Transitioning to online lessons is a smooth process for me.  I have a private place in my home that I can use for extended periods.  I have adequate time that will be uninterrupted in which I can work on/carry out my online lessons.  Average Mean  My overall level of satisfaction towards the online teaching method is excellent. Online learning is an excellent mode of teaching to improve student learning and engagement. I am satisfied with the current assessment method used during online teaching. I am satisfied with the outcome of the online teaching session. I would prefer the current method of online teaching to continue for the upcoming semesters.	My overall teaching experience in the online environment is excellent. There is adequate student-lecturer interaction using the online teaching method.  It is easy for me to gauge the student's engagement levels during the online lesson.  I do not experience technical difficulties during the online teaching session.  I require the same amount of time to teach a lesson online and face-to-face environment.  Transitioning to online lessons is a smooth process for me.  3.41  Transitioning to online lessons is a smooth process for me.  3.56  I have a private place in my home that I can use for extended periods. I have adequate time that will be uninterrupted in which I can work on/carry out my online lessons.  Average Mean  My overall level of satisfaction towards the online teaching method is excellent. Online learning is an excellent mode of teaching to improve student learning and engagement. I am satisfied with the current assessment method used during online teaching.  I am satisfied with the outcome of the online teaching session. I would prefer the current method of online teaching to continue for the upcoming semesters.  3.40	My overall teaching experience in the online environment is excellent.  There is adequate student-lecturer interaction using the online teaching method.  It is easy for me to gauge the student's engagement levels during the online lesson.  I do not experience technical difficulties during the online teaching session.  I require the same amount of time to teach a lesson online and face-to-face environment.  Transitioning to online lessons is a smooth process for me.  I have a private place in my home that I can use for extended periods.  I have adequate time that will be uninterrupted in which I can work on/carry out my online lessons.  Average Mean  My overall level of satisfaction towards the online teaching method is excellent.  Online learning is an excellent mode of teaching to improve student learning and engagement.  I am satisfied with the current assessment method used during online teaching.  I am satisfied with the outcome of the online teaching session.  I would prefer the current method of online teaching to continue for the upcoming semesters.

Average Mean

3.85

Table 4 showed a summary of the statistical value table for the independent variables. Generally, the mean values for perception and expectations, preparedness, experience (Course Delivery Phase), and level of satisfaction (Post- Teaching Phase) were well above 3. This indicates that the majority evaluate in agreement with the statements.

## D. Cronbach's alpha

Cronbach's Alpha is the measure of internal consistency and scale reliability. Also, SPSS Software was used to generate Cronbach's Alpha for the sake of providing the accuracy data of statistics at a glance (Institute for Digital Research and Education, 2020).



Table 5. Cronbach's alpha

Perception and Expectations (PE)  I welcome the transition to an online teaching environment.  Compared to face-to-face teaching, online teaching will reduce my teaching burden.  I have enough technical skills to carry out online teaching.  Pedagogical skills required in the online environment is fully transferable from the face-to-face environment.  I believe the university is ready to fully transition to the online format of teaching.  Preparedness (PP)  I have adequate pedagogical knowledge to carry out online teaching.  I have adequate training to effectively carry out online teaching.  The faculty gives very good technical support for me to teach using the online method.  I am given all the tools and resources to carry out the online lessons.  I have to completely change my lesson plan to adapt to the online teaching format.  My computer setup and internet speed are sufficient for online teaching.  Experience (Course Delivery Phase) (E)  My overall teaching experience in the online environment is excellent.  There is adequate student-teacher interaction using the online teaching method.  It is easy for me to gauge the student's engagement levels during the online lesson.  I require the same amount of time to teach a lesson online and face-to-face environment.	No. of Items
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I have a private place in my home that I can use for extended periods.  I have adequate time that will be uninterrupted in which I can work on/carry out my online lessons.	

Level of Satisfaction (Post- Teaching Phase) (S)						
My overall level of satisfaction towards the online teaching method is excellent.  Online learning is an excellent mode of teaching to improve student learning and engagement.  I am satisfied with the current assessment method used during online teaching.	0.90	5				
I am satisfied with the outcome of the online teaching session.						
I would prefer the current method of online teaching to continue for the upcoming semesters.						

Based on the results, it can be concluded that the reliability of perception and expectations is 0.72%. Following by preparedness with 0.82% and experience (Course Delivery Phase) with 0.82%, as well as 0.90% for the level of satisfaction (Post- Teaching Phase). On the other hand, it can be seen that the majority of Cronbach's Alpha Reliability tests were above 0.70%. However, 0.72% was the least recorded coefficient, the result obtained from perception and expectations. Meanwhile, the highest recorded coefficient goes to the level of satisfaction (Post- Teaching Phase) with 0.90%. Based on (Taber, 2017), the researcher argued that only Cronbach's Alpha value above 0.70 is under acceptable reliability for each scale. However, (Hinton, 2014) stated that the scale in the range of 0.50-0.75 is considered moderately reliable. Therefore, all results generated were well accepted.

### E. Regression analysis

Regression analysis serves the purpose to access the relationship between the dependent variable and independent variables (Gallo, 2015).

Figure 3. Model summary

# Model Summary

Model	R R Square		Adjusted R Square	Std. Error of the Estimate	
1	.912ª	.833	.811	1.39944	

a. Predictors: (Constant), E, PP, PE

Based on the results above, the value of *R* was known as the multiple correlation coefficient. *R* can be viewed as the measure of the quality of the prediction of the dependent variable (Laerd Statistics, 2020). Therefore, a value of 0.912 according to the results generated, indicated a good level of prediction. On the other hand, the *R Square* value was known as the coefficient of determination, where the proportion of variance in the dependent variable can be emphasized by the independent variables (Frost, 2020). It can be shown that from the above results that the *R Square* value was 0.833, this indicated that the independent variables explained 83.30% of the variability of the dependent variable. In addition, there were three predictor variables, and the results for the *adjusted R Square* value was 0.811. This showed that 81.10% of the variance in the dependent variable was emphasized by the predictor variables.



Figure 4. Analysis of variance (ANOVA)

#### **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	E	Sig.
1	Regression	224.076	3	74.692	38.139	.000b
	Residual	45.044	23	1.958		
	Total	269.120	26			

a. Dependent Variable: S

b. Predictors: (Constant), E, PP, PE

The *F-ratio* in the ANOVA table examines the overall regression model whether it is fit for the data (Laerd Statistics, 2020). *Figure 4* showed the independent variables were statistically significant predicted the dependent variable, where F(3.23) = 38.139, p < 0.05. This revealed that the regression model was a good fit for the data.

Figure 5. Regression coefficients

#### Coefficients<sup>a</sup>

		Unstandardize	d Coefficients	Standardized Coefficients			95.0% Confider	nce Interval for B
Mode	el.	B Std. Erro		Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	-1.537	1.753		877	.390	-5.163	2.089
	PE	.322	.160	.282	2.016	.056	008	.652
	PP	.090	.120	.094	.753	.459	158	.339
	E	.395	.093	.606	4.252	.000	.203	.588

a. Dependent Variable: S

Unstandardized coefficients show how much the dependent variable different from an predictor variable when all predictors variables remained constant (Statistics Solutions, 2020). Based on the results above, the unstandardized coefficients, *B*, for perception and expectations (PE), Preparedness (PP), and Experience (E) were 0.322, 0.090, and 0.395, respectively. It can be concluded that for every single change of PE will result in 0.322 change towards the dependent variable. Meanwhile, every single change of PP and E will result in 0.090 and 0.0.395, respectively change towards the dependent variable. On the other side, both PE and PP were not statistically significant as the *p-value* of the predictor variables was greater than the standard significance level of 0.05, which were 0.056 and 0.456, respectively. Only E was statistically significant as the *p-value* (0.000) lower than the standard significance level of 0.05.

#### 5. Discussion

This study aimed to evaluate the lecturers' satisfaction towards online teaching, where it was designed and developed based on previous research suggestions using the lecturer's perceptions and expectations, preparedness, experience (Course Delivery Phase), and level of satisfaction (Post- Teaching Phase). Primarily, the result obtained through the conducted survey shows that the variable is sufficient to express the satisfaction level of lecturers for teaching via an online platform. Consequently, the result of satisfaction



scores reported through questionnaires distributed to a group of lecturers that potentially have different interpretations of their level of satisfaction. In the recent study, a similar argument has been confirmed on the relationship between lecturer assessment and their perceptions and expectations (Michalco, Simonsen, and Hornbaek, 2015). Based on the achievement of satisfaction scores compared to the data, it is recommended to evaluate the level of satisfaction based on the level of satisfaction (Post-Teaching Phase) where the lecturers aware of their success rates in delivering the tasks.

The results have shown that the experience (Course Delivery Phase) in online teaching including the experiences in using the technologies. For other factors, the younger lecturers have shown better skills and experiences in using the technology while the older lecturers have difficulty using the online platform and needed a guide. This was based on the survey regardless of the reported ratings. This is in alignment with some previous studies that come to the same conclusions (Bringula, 2013) and (Wagner, Hassanein, and Head, 2014) have argued that the lecturer's age factor has a significant impact on the teaching platform performance. However, other studies by (Mentes and Turan, 2012) and (Page, Uncles, and Robson, 2012) argued that gender was a factor that influencing lecturer's performance, the results obtained in this study confirmed that both genders have similar usage metrics with marginal differences with the exception that female lecturers have expressed better self-content with the online teaching compared to male lecturers.

The results showed that the lecturers have struggled to interact with students and technical problems such as the connections, computer setup, and others during the online teaching period. This suggested the usefulness of the lecturers' interface that must be improved during the experience (Course Delivery Phase) where most of the lecturers were not satisfied with the way they delivered the task to the students compared to delivering the task via face-to-face teaching. Meanwhile, minimum interfaces proved to be better in terms of achieving the goal easily and consistently to conclude the correlation between the complexity of the task and facilities required during online teaching. Furthermore, some lecturers have expressed their satisfaction in using online teaching platforms in the future for online teaching as they have demanded more training and guidance on how to use the online teaching platforms. So, this will be easy for the lecturers to deliver the tasks to the students.

#### 6. Conclusion

The positive preparedness and experiences (Course Delivery Phase) was important for online education for the acceptance, satisfaction, and efficiency of lecturers in delivering the tasks via online teaching. This study was conducted to evaluate the satisfaction level referred to on how the lecturers interacted or engaged with the online teaching environment system based on the assessment given that describes the level of interactivity and engagements with the students. To evaluate the interactivity with the students and the level satisfaction, the various tasks were given by the lecturer and mini discussion was computed. The study has revealed that preparedness key measure for expressing the true acceptance and satisfaction of lecturers for using online teaching platforms. For future avenues to explore within this research, the usability of other modules of the online teaching platform can be assessed through engagements between lecturers and students. This is because the questionnaire was anonymous, researchers could not correlate between the lecturer's and student's engagement, this could be explored in future research to evaluate the lecturer's level of satisfaction that related to the engagement.

# 4

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