## Service Quality Dimension During Open and Distance Learning (ODL) in UiTM

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**Abstract:** This study investigates how students in the Faculty of Business and Management at UiTM perceive the service quality dimensions of their lecturers during Open and Distance Learning (ODL). The study is unique because it is the first time UiTM implemented Open and Distance Learning (ODL) instead of the usual face-to-face learning, due to the Malaysian government's instruction of Movement Control Order (MCO). The servqual model is used to calculate service quality dimensions such as reliability, responsiveness, assurance, empathy, knowledge, and communication. Utilizing quantitative methodology, a survey questionnaire is used to collect data. The implication of this study for policymakers regarding the enhancement of ODL is to maximize student satisfaction by prioritizing essential dimensions. This study's findings can be utilized by ODL universities to enhance pedagogical dimension, management of atypical situations, academic service delivery, and quality, as well as to guide the implementation of effective ODL strategies.

#### Keywords: Service Quality, ODL, MCO, UiTM

### 1. Introduction and Background

COVID-19 compels Universiti Teknologi MARA to continue its education via Open and Distance Learning (ODL) due to a series of Movement Control Order orders from the government. This is essential to ensuring that COVID-19 can be eradicated from the general population. This period of Open and Distance Learning (ODL) necessitates a study of the service quality as perceived by ODL learners, i.e., the students. Setting appropriate service quality standards at ODL University typically depends on management's comprehension of student needs, service quality expectations, and the ranking of service quality dimensions. Commonly, the contents of online classes are presented in a webinar format with high interactivity and recordings of live, in-person sessions with limited opportunities for interaction (Parramore, 2019). These distinctions between synchronous and asynchronous modes of delivery make it nearly impossible to evaluate the quality and efficacy of these classes (Parramore, 2019).

It is extremely difficult for every educational institution to implement online learning for the first time. These obstacles include limited internet access, difficulty disseminating course content and assessing learning outcomes, and unfamiliarity with the used platform (Al-Baadani & Abbas 2020). Inadequate training, facilities, and infrastructure, as well as students' lack of physical and psychological readiness, all hinder the success of ODL (Munezero, Irura, Kirongo, Etiegni & Suhonen, 2016). Therefore, suitable facilities must be provided, and teachers must also receive suitable training to create suitable learning materials for students (Ismail et al., 2020, Kumar & Owston 2016). However, ODL has several positive characteristics, including its ability to reach a global audience (Paul & Glassman, 2017), its unique functionality (Picciano, 2009), accessibility (Kintu, Zhu, & Kagambe, 2017), and its adaptability (Gilbert 2015). It is believed to be a complementary means of not only instilling the concept of lifelong learning but also promoting it (Adnan & Anwar, 2020).

This study aims to examine ODL time and student perceptions of service quality dimensions. The purpose of this study is to evaluate how students perceive service quality dimensions from the perspective of ODL students. The study will assist ODL strategists in determining the areas with the greatest number of ODL learners so that resources can be allocated more efficiently to areas that have a greater impact on service quality. This study will add up pedagogical dimension (Pereira, 2005), and unusual situation management (Sultan & Tarafder, 2007), delivery (Mpine & Asteria, 2019), accomplishment (Sembiring & Rahayu, 2019), cost & time (Perera, Abeysekera, Sudasinghe, Dharmaratne, 2017), behavioral intention (Perera & Abeysekera, 2019) and quality academic service (Šereš, Lukić, & Lukić, 2019).

### 2. Literature Review

Open and distance learning (ODL), also referred to in the literature as Distance Education, is defined by Grif (2016) as a planned teaching and learning process utilizing a small number of technologies as a mode of instruction for learners who are geographically separated from their lecturers. According to Grif (2016), there are two types of online distance learning (ODL) interactions: synchronous and real-time using selected technologies. The second type is asynchronous, or delayed, interaction between students and instructors using the chosen technologies. Internet-based one-way and two-way communication may be among these options for chosen technologies. These transmissions include but are not limited to, open broadcast, closed circuit, cable, microwave, broadband lines, fiber optics, satellite, or wireless communications devices; audio conferencing; or DVDs and CDs if used in conjunction with any of the aforementioned technologies.

Commonly, the contents of online courses are presented in a webinar format with high interactivity and recordings of live, in-person sessions with limited opportunities for interaction (Parramore, 2019). These distinctions between synchronous and asynchronous delivery modes make it essentially impossible to evaluate the quality and efficacy of these classes (Parramore, 2019). Although the service quality concept was initially introduced and adopted by the marketing industry, it has since gained popularity in other service industries, such as education. In education, service quality is typically associated with student satisfaction.

Parasuraman, Zeithaml and Berry (1985) defined service quality in terms of the disparity between customer expectations and perceptions. When customer perceptions exceed expectations, there is high service quality. To identify and eliminate service quality gaps in organizations, Parasuraman, Zeithaml, and Berry (1988) developed the Gap model of service quality. The purpose of the model was to analyze organizational processes and relationships that may contribute to service quality disparities. Parasuraman et al. (1985) identified five gaps in the data. (1985) can be summed up as follows: i) the gap between ODL learners' expectations and ODL providers' expectations; and ii) the gap between ODL learners' expectations and ODL providers' ii) the discrepancy between the ODL provider's perception of what ODL students want and the service quality specifications iii) the distinction between service quality and actual encounter iv) the gap between experience and the promises made by ODL providers; and v) the gap resulting from the preceding gaps.

After studying banking, telecommunications, insurance, maintenance, and other service industries, Parasuraman et al. (1985, 1988, 1991) created the Servqaul model for measuring service quality. Customer expectations and perceptions are evaluated using the servqual model. However, this investigation is restricted to customer expectations. The original Servqual model comprised ten dimensions; these were later reduced to five: Tangibles, Assurance, Empathy, Dependability, and Responsiveness (Parasuraman et al, 1988). This study will add up pedagogical dimension (Pereira, 2005), unusual situation management (Sultan & Tarafder, 2007)), delivery (Mpine Makoe & Asteria Nsamba, 2019), accomplishment (Sembiring, & Rahayu, 2019), cost & time (Perera, Abeysekera, Sudasinghe & Dharmaratne, 2017), Behavioral Intention (Perera & Abeysekera, 2019) and quality academic service (Šereš et al, 2019). Consequently, this study will examine the service quality provided by UiTM for Open and distance learning.

This study will utilize the questionnaire survey designed by Wong, Ong and Kuek (2012), in which Servqual is measured across six dimensions: dependability, responsiveness, assurance, empathy, knowledge, and communication. Reliability is defined as the ODL provider's ability to effectively deliver the learning, while responsiveness is defined as the ODL provider's capacity to provide timely assistance (Wong et al., 2012). In addition, Wong, Ong and Kuek (2012) define assurance as the knowledge and courtesy of learning providers that instill confidence in the ODL learning process itself, and empathy as the caring attention shown by ODL learning providers to ODL learners. Lastly, the dimensions of knowledge and communication focus on the knowledge of the ODL learning provider regarding the subject matter and the communication process between ODL learning providers and ODL learners, respectively (Wong et al., 2012).

# 3. Methodology

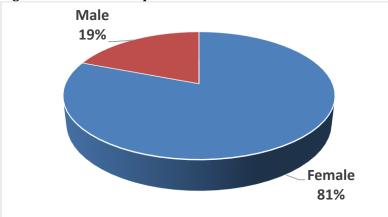
This investigation employed the quantitative research methodology. A combination of methods, including a questionnaire survey, was utilized to collect data. This questionnaire is based on Wong, Ong and Kuek (2012),

who utilized SERVQUAL dimensions. This study adopted the SERVQUAL dimensions of dependability, responsiveness, assurance, empathy, knowledge, and communication (Wong et al., 2012). This SERVQUAL dimension was intended to evaluate the ODL learning experience of students.

Students from the Faculty of Business and Management at UiTM Cawangan Selangor were the ODL students. According to Krejcie and Morgan's (1970) sampling method table, the sample size for a population of 6,000 is 361. Thus, the sample size for the Faculty of Business and Management was 361 students. The selection of these students was based on techniques for random sampling. The questionnaire survey was based on a 5-point Likert scale from Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree. The questionnaires were sent via WhatsApp and Telegram to all first-through-sixth-semester students from all programs in the Faculty of Business and Management. The questionnaire survey was distributed over the course of three months so that students had ample time to respond. The analysis of survey data utilized SPSS and examined the mean of the responses from the students. This is to gauge the student's learning experience during the MCO.

# 4. Results

This section of the findings presents an overview of the respondents who took part in the study. A demographic profile of the respondents which includes information on gender and place of ODL was discussed, followed by a discussion of the study's means and regression. As shown in Figure 1, the statistic indicates that the majority of the respondents in the study were female, comprising 81 percent of the total. Conversely, only 19 percent of the respondents were male. This finding draws attention to the fact that this distribution of female to male respondents closely mirrors the gender distribution among students at the university. This suggests that the study's sample aligns with the actual gender distribution of the university's student population.



# **Figure 1: Gender of Respondents**

Source: Author's Tabulation

According to Figure 2, the majority of online students were located in Selangor, followed by UiTM Kampus Puncak Alam and Kuala Lumpur with a total of 220, 37, and 31 students, respectively. This is also consistent with the admissions policy of the UiTM degree program, which gives priority to students who live closer to the campus rather than those who live further away. As for those who attended online classes in the UiTM Puncak Alam campus, this is a mechanism for assisting students who had difficulty with ODL during the time they were home.

The findings in Table 1 indicate that the course content offered by UiTM during MCO is rated by the students. Most of the respondents rated mean between 2.21 to 2.31 which indicates that the respondents were almost neutral to disagree with the construct on the course content during the MCO. The respondents were almost neutral to disagree that the course contents were clear, well organized, appropriate and allowed students to fully participate. The findings might be anticipated because this was the first time, UiTM has conducted all learning as ODL, which during the MCO. Thus, there is vast room for improvement in delivering the course content during the ODL.

## Figure 2: Respondent's Place of ODL during MCO



# Table 1: Course content during MCO

2.22	1.352
2.21	1.358
2.31	1.297
2.28	1.351
	2.21 2.31

Furthermore, the findings on reliability dimensions, as in Table 2, revealed almost similar findings where the respondents rated the mean between 2.22 to 2.31 which indicates that the respondents were almost neutral to disagree with the construct on the reliability. The respondents were almost neutral in disagreeing with the reliability of the lecturer's time and promises made during the MCO. This finding reiterated the fact that the lecturers needed time to adjust to the new environment of ODL, thus there could be some hiccups in the reliability of services provided by the lecturers.

#### **Table 2: Servqual Dimensions of Reliability**

Statement	Mean	Std. Deviation
My lecturers provide their services at the time they promise to do.	2.22	1.360
My lecturers tell me exactly when services will be performed.	2.27	1.379
My lecturers perform services right the first time.	2.22	1.360
When my lecturers promise to do something by a certain time, they do so.	2.31	1.365
Source: Author's Tabulation		

The findings on the responsiveness, as in Table 3, reveal almost similar findings where the respondents rated mean between 2.15 to 2.32 which indicates that the respondents were almost neutral to disagree with the construct on the responsiveness. The respondents were almost neutral in disagreeing with the responsiveness and promptness of the lecturer to the student's request. It should be noted that with the new technology where everything is on the finger, every student's request can be channeled and escalated quickly. However, previous findings relate to this finding where adjustments of the lecturers hinder the promptness and responsiveness of lecturers to these requests.

### **Table 3: Servqual Dimensions of Responsiveness**

5 1.214
5 1.346
5 1.300
2 1.385
5

Source: Author's Tabulation

According to Table 4, the findings recorded the lowest rated mean between 2.01 to 2.36 which indicates that neutral to almost disagree with the assurance. The respondents were neutral to almost disagree that the lecturers were courteous, had confidence, and acted professionally. This is because the fact the screen relationship has some limitations where the trust could not be enhanced and shown between the respondents and the lecturers.

#### **Table 4: Servqual Dimensions of Assurance**

Mean	Std. Deviation
2.19	1.274
2.26	1.279
2.36	1.366
2.01	.932
	2.19 2.26 2.36

Source: Author's Tabulation

Table 5 indicates that the majority of respondents gave a high mean rating, as compared to previous constructs, between 2.39 and 2.49, indicating that they were nearly neutral on this empathy construct. Respondents were almost evenly split on whether the lecturer gave personal, individual attention in the best interest to meet the student's specific needs. Because this was the first time UiTM conducted all learning as ODL during the MCO, the results should be appraised to see that lecturers are likely to be more accommodating during MCO. However, there is significant room for improvement in empathy during ODL.

#### Table 5: Servqual Dimensions of Empathy

Mean	Std. Deviation
2.39	1.168
2.46	1.139
2.49	1.179
2.43	1.205
	2.39 2.46 2.49

Source: Author's Tabulation

In addition, the findings on the dimensions of knowledge, as shown in Table 6, were nearly identical, with mean ratings ranging from 2.24 to 2.44, indicating that respondents were neutral to the knowledge construct. Respondents were almost evenly split on whether the lecturer had good knowledge in teaching areas, was involved in research and was able to give practical illustrations of the reality. This finding reaffirmed the fact that a lecturer's knowledge is less likely to be affected by the MCO.

<b>Table 6: Servgual Dimensions of Knowledge</b>
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1.392
1.334
1.392

Table 7 shows that the majority of respondents gave this communication construct a high mean rating compared to previous constructs, between 2.36 and 2.44, indicating they were nearly neutral on this construct. Respondents were nearly split down the middle on whether or not the lecturer communicated well with the students and was able to provide a review of the student's development. Because this was the first time UiTM

conducted all learning as ODL during MCO, the results should be evaluated and emphasized that physical communication would not be able to replace communication via gadgets. The hybrid communication between physical and online communication should be optimized to achieve a more satisfactory learning experience.

#### Table 7: Servgual Dimensions of Communication

1.334
1.407
1.313

The findings on responsiveness, as shown in Table 8, revealed a mean score between 2.17 and 2.28, indicating that they were almost neutral as opposed to the responsiveness of the instructor during the MCO construct. Respondents were nearly neutral or opposed to the lecturer's responsiveness in terms of stimulating class learning, class periods and grading. It should be noted that with the new technology, where everything is at the student's fingertips, every request can be quickly routed and escalated. However, previous research indicates that adjustments made by lecturers inhibit their promptness and responsiveness to these requests.

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Statement	Mean	Std. Deviation
The instructor was an effective lecturer/demonstrator	2.21	1.340
Presentations were clear and organized	2.17	1.321
Instructor stimulated student interest	2.28	1.310
Instructor effectively used time during class periods	2.26	1.336
The instructor was available and helpful	2.24	1.348
Grading was prompt and had useful feedback	2.25	1.315
Source: Author's Tabulation		

Source: Author's Tabulation

The study then proceeded to employ regression as a key methodological approach in its subsequent investigative phase. The results of the regression analysis unveiled a noteworthy revelation regarding the statistical significance of the various items under investigation. A considerable proportion of the examined items exhibited an absence of significant statistical evidence.

Despite the substantial prevalence of items that did not attain statistical significance, it is imperative to underscore that a distinct subset of nine items emerged as compelling exceptions. These nine items represented only five constructs of Servqual in this study. The constructs are reliability with a single item, assurance with a single item, empathy with a single item, knowledge with a single item, and the skills and responsiveness of the instructors during MCO with the highest five items.

The majority of five items of 3 servqual constructs indicate a significant positive relationship with the course contents offered during MCO. These 3 constructs with significant positive relationship are reliability with a single item, knowledge with a single item and skill and responsiveness of the instructor with four items. The other 2 constructs of assurance and empathy revealed a significant negative relationship with the course content offered during MCO.

Variables	Coefficient	Standard Error	Significance	VIF
Constant	0.144	0.157	0.360	
Reliability [My lecturers provide their services at the time the promise to do.]	<sup>y</sup> 0.174	0.060	0.004***	2.767
Assurance [My lecturers instill confidence in me.]	-0.139	0.060	0.021**	2.470
Empathy [My lecturers give me personal attention.]	-0.133	0.068	0.051*	2.633

### Table 9: Regression Result of the Study

Knowledge [My lecturers have good knowledge about the teaching areas.]	0.112	0.053	0.036**	2.334
Skill and responsiveness of the instructor during MCO [Instructor was an effective lecturer/demonstrator]	0.155	0.074	0.038**	4.191
Skill and responsiveness of the instructor during MCO [Presentations were clear and organized]	-0.134	0.068	0.049**	3.416
Skill and responsiveness of the instructor during MCO [Instructor stimulated student interest]	0.205	0.068	0.003***	3.358
Skill and responsiveness of the instructor during MCO [Instructor effectively used time during class periods]	0.119	0.063	0.059*	2.996
Skill and responsiveness of the instructor during MCO [Grading was prompt and had useful feedback]	0.216	0.073	0.003**	3.869
Legend *** significant at 10% ** significant at 50% * significant at 10%				

*Legend-* \*\*\* significant at 1%, \*\* significant at 5%, \* significant at 10%, Source: Author's Tabulation

### 5. Conclusion

Through the Open and Distance Learning (ODL) offered to all students, this study contributes to our understanding of managing education in the face of the unavoidable effects of the COVID-19 pandemic. The study found that the course content offered by UiTM during the MCO was clear, well-organized, and appropriate, and allowed students to fully participate. However, there was room for improvement in delivering the course content during the MCO. The reliability and responsiveness constructs showed that respondents were almost neutral to disagree. In addition, the assurance and empathy constructs showed that respondents were neutral to almost disagree with the lecturer's courteousness, confidence, and professionalism. However, the screen relationship had limitations where trust could not be enhanced. Furthermore, the knowledge and communication constructs showed that respondents were neutral indicating that lecturers' knowledge is less likely to be affected by the MCO and the lecturer communicated well with students and provided reviews on their development. The responsiveness dimensions revealed that respondents were almost neutral as opposed to the lecturer's responsiveness during the MCO. The new technology allowed for quick-routed and escalated requests, but previous research indicates that adjustments made by lecturers inhibit their promptness and responsiveness to these requests. The study employed regression analysis and found that reliability, assurance, empathy, knowledge, skills and responsiveness of instructors had significant positive relationships with the course content offered during the MCO.

These findings supported Parasuraman et al. (1985) which can be summed up as follows: i) the gap between ODL learners' expectations and ODL providers' expectations; and ii) the gap between ODL learners' expectations and ODL providers' ii) the discrepancy between the ODL provider's perception of what ODL students want and the service quality specifications iii) the distinction between service quality and actual encounter iv) the gap between experience and the promises made by ODL providers; and v) the gap resulting from the preceding gaps.

**Acknowledgment:** The authors would like to express our gratitude to UiTM's Faculty of Business and Management (UiTM's FBM) (600-TNCPI 5/3/DDF (FPP)(015/2020) for providing the research grant for this project.

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