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Factors Affecting Students' Satisfaction and Academic Performance in Open & Distance Learning (ODL)

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Abstract

The worldwide education systems are crippled, inevitably leading to the near-total closure of school establishments, early childhood educations, colleges as well as universities due to the COVID-19 pandemic. As of May 2021, approximately 1.2 billion students from all over the world were affected. As a result, education essentials dramatically adjust with the distinctive rise of e-learning tools, wherein teaching is now undertaken remotely on digital platforms. Realizing the grave current situation and the importance of education, this study aims to understand the factors affecting student satisfaction; the effect of student satisfaction; and perceived performance with academic performance in an open and distance learning (ODL) environment. The data were collected from 239 respondents via online surveys, which comprises accounting students in the UiTM Perak branch, Tapah campus. The analysis of the findings shows that the course design is the main factor that affected student satisfaction in ODL. In terms of academic performance, the findings revealed that only perceived performance had a positive influence, whereas student satisfaction had no effect.

Keywords: Student Satisfaction, Performance, Course Design, Prompt Feedback, Student Expectation

Introduction

COVID-19 pandemic has dramatically changed the education world. Starting from the initial outbreak of COVID-19 malady in December 2019 in Wuhan, China; in early 2020 it had rapidly appeared in other parts of the world (Sahu, 2020). Due to the nature of the transmission capability of the disease, the World Health Organization (WHO) declared the COVID-19 plague a public health emergency of international concern (Spina et al., 2020). In the same vein, 107 countries had implemented national school closures in response to the

COVID-19 pandemic (Viner et al., 2020). Worldwide, universities have either cancelled all campus events including conferences, workshops, sports, and other programs and have rapidly moved to change many courses and programs from physical to online delivery mode (Gewin, 2020). In the effort to break the malaise transmission and ease the now over-burden of the health system, the Malaysian Government has taken drastic action for school closures as part of the physical distancing policy. Most higher education institutions (HEIs) are unprepared, while other universities that are quick and proactive in response, have their contingency online learning tools at hand. Nevertheless, the online teaching mode is new and requires advance upskill, in some cases, reskill requirements by the academic sector. Prior to COVID-19, there was already high growth and adoption of online education technology. In response to the significant demand, many online learning platforms were forced to move rapidly without proper training, insufficient bandwidth conditions and little hardware-software preparations, hence resulting in poor user experience which is unconducive to sustained quality (Cathy, 2020). Both the students and educators now need to adapt to the new norm of the education environment. Therefore, this study conducts an examination to understand the factors affecting the student satisfaction; the effect of student satisfaction; and perceived performance with an academic performance in an open and distance learning (ODL) environment.

This paper is structured as follows: Section 2 provides previous literature on factors that influenced student satisfaction; student satisfaction and academic performance; and perceived performance and academic performance during open and distance learning (ODL). Section 3 describes the research methodology and includes the data of participants, materials, and data analysis. Section 4 represents the findings. Section 5 provides a discussion, and the last section is a conclusion of the study.

Literature Review

Students' satisfaction factors in Open and Distance Learning (ODL)

Student satisfaction is an essential element to enhance the learning process, especially in the ODL mode. During ODL, classes are conducted via a blend of asynchronous (without real-time interaction) and synchronous (real-time interaction) sessions. Literally, factors affecting students' satisfaction in ODL vary in the past studies.

Quality of instructor

Based on a study done by Mason and Welle (2000) regarding students' satisfaction towards the web course, trying to teach IT skills and expecting students to work collaboratively without face-to-face classes, is going to rely heavily on the quality of its tutors for the satisfaction and success of its students. Meanwhile, a study done by Lee (2014) found that instructors' and content experts' availability was a key component of student effective learning in online Math methods courses. These above arguments have been supported in the literature by different authors such as (Rajabalee and Santally, 2020; Gopal et al., 2021). Gopal et al (2021) indicated that by delivering the course content properly, the instructors may affect the student's satisfaction during online classes. In fact, the initial stage of online education was highly dependent on instructors who played a major role in the educational process (Hamdan et al., 2021).

In another interesting finding by Alzahrani and Seth (2021), the study revealed that service quality did not influence students' satisfaction, while information quality and self-efficacy both had a significant influence. This study analyzed the critical factors influencing

students' satisfaction with their continuing use of online learning management systems in higher education during the COVID-19 pandemic.

Course Design

Previous studies such as Mason and Welle (2000); Rajabalee and Santally (2020); Lee (2014) suggested that course design is among the most prominent factors for students' satisfaction. According to Lee (2014), the student satisfaction level is closely associated with two factors: human factors (course instructor's knowledge of materials) and design factors (course structures and technical aspects). In terms of course structure, students highlighted clear assignment rubrics and guidelines as factors for online learning satisfactory. As not all students are experts in using technology, a user-friendly system is believed to be another important factor in their satisfaction level.

In another study done by Li et al (2016), findings indicate that learning design has a strong and significant impact on overall satisfaction in blended and online courses. Learners who are more satisfied with the quality of teaching materials, assessment strategies, and workload are more satisfied with the overall learning experience.

Prompt Feedback to Students

Gopal et al. (2021) defined feedback as information given by lecturers and tutors about the performance of students. This variable is among important factors as suggested by the Satisfaction of Online Learning (SOL) instruments that was established to measure student's satisfaction in online mathematics courses (Davis, 2017) and the Student Experience on a Module (SEaM) questionnaire, where questions were categorized under three themes (overall module, teaching, learning and assessment as well as tutor feedback) in order to explore the construct of student satisfaction (Li et al., 2016; Rajabalee & Santally, 2020). Meanwhile, Sharma et al (2010) discussed that it is a tedious process for an instructor to respond to questions from students' emails. An auto-reply system ought to be able to use information retrieval techniques to summarise frequently asked questions (FAQ), and answer back to new questions with proper answers.

Student's Expectations

Gopal et al (2021) reported that students are expected to perform better in the examinations if their course designs are customized following the student's expectations. Meanwhile, Mason and Welle (2000) highlighted that the level to which the course design fits the students' expectations and learning style are the key factors for students' satisfaction. In line with expectation confirmation theory (ECT) introduced by Oliver (1997; 1980), expectations are defined as the attributes or characteristics that a person anticipates or predicts will be associated with an entity such as a product, service or technology artifact. Therefore, it is important to understand how students think about a course, certainly to determine its implications on their academic experience (Rajabalee & Santally, 2020). Based on previous literature, hence, the following hypothesis is developed:

H1. *Quality of instructor, course structure, feedback to students and students' expectation is positively associated with students' satisfaction during ODL.*

Students' Satisfaction and Academic Performance

Previous literature have seen various studies conducted on the factors influencing students' satisfaction and academic performance in online learning, but little focus was given on the impact of students' satisfaction in online learning itself on academic performance. In this study, students' performance is also observed as a result following their learning satisfaction.

Quality of instructor, course design, feedback and students' expectations are among the factors that are believed to have impacts on student's performance through satisfaction (Gopal et al., 2021; Wei 2020; Sockalingam, 2013). Sockalingam (2013) in his study reported that course content, course design and online discussion have a direct and positive impact on students' assessment satisfaction, which was found to be directly influencing course grades. Gallien et al (2008) in another study revealed that students who received individualized feedback during online courses were more satisfied and performed better academically compared to their counterparts who received merely collective feedback. In terms of expectation, students' computer/Internet self-efficacy for online learning readiness was determined to have a correlation with online learning perceptions, course satisfaction as well as online discussion score (Wei, 2020).

Martinez-Arguelles & Batalla-Busquets (2016) mentioned that quality interactions among instructor-students lead to student satisfaction, and performance reflects such efforts between the two (Mensink & King, 2020). However, in some rare cases, student satisfaction may not have any effect on the grades. Chinomona and Macongue (2021) discovered that the relationship between students' satisfaction and performance is weak, but there is a significant relationship between students' motivation and performance. Shaw et al (2019) found that despite the limited engagement in cognitive learning, students still received high test marks using the online tool. Thus, the following hypothesis is developed:

H2. *Satisfaction is positively associated with student academic performance during ODL.*

Students' Perceived Performance and Academic Performance

Perception may have an influence on the actual outcomes. As stated by Bandura (1994) "*Perceived self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance".* It is proven true by Jensen (2003) where he found that success and perceived self-efficacy had a strong relationship. The current study focuses on students' perceptions of their own academic performance which might have an impact on how well they performed. Conscientiousness, which shapes a person's self-perception, was associated with greater college grades (Noftle & Robins, 2007). This is mediated by increased effort and also positive perceptions of one's academic ability. A study conducted by Abd-Elmotaleb & Saha (2013) which involved 272 undergraduate students in Egypt indicated that there was a significant and positive relationship between perceived academic climate and students' academic performance, with academic self-efficacy as a mediator. The result can be explained with the view that high efficacy students are able to accept challenges, including the ability to adapt with different educational environments. This is aligned with the earlier study by Ferla et al., (2010) where they found that academic performance is affected differently by academic self-efficacy and perceived level of understanding. They also reported that students with high scores of self-perceived competences achieved superior study results.

However, being too confident may result in the uncalled for event. In a different point of view, a study discovered conflicting results that point towards adverse consequences of overconfidence (Navis & Ozbek, 2016). Other than that, few studies also found no causal role

of self-perception of academic competence in academic outcomes (Skaalvik & Hagtvet, (1990), Stringer & Heath, (2008)). Thus, the present study aims to determine the relationship between perceived performance and actual academic performance during open and distance learning among students. Thus, the following hypothesis is developed:

H3. *Perceived performance is positively associated with student academic performance during ODL.*

Research Methodology

Participants

The data for this study were gathered from 239 respondents who are pursuing a Diploma in Accountancy and Diploma in Accounting Information System in UiTM Tapah. The questionnaire was created using Google Form and was distributed to respondents via Whatsapp.

Materials

The research instrument used for the data collection is an online survey that consists of 2 sections. The first section relates to demographic variables such as discipline, current semester, age, and gender. The second section includes the six factors being measured: instructors' quality, course design, prompt feedback, student's expectations, satisfaction, and perceived performance. The measurement of the variables was adopted from Gopal et al. (2021) with some selections made to only include items relevant to the study. In contrast to that Gopal's, this study fills the gap in terms of providing additional literature in Malaysia setting, particularly in the accounting field. The statements in the survey were assessed on a four-point Likert scale ranging from "1 = strongly disagree" to "4 = strongly agree". A total of twenty-two questions were asked in the questionnaire in searching for the focal point of the study.

Data Analysis

Data were analyzed using Statistical Package for Social Science (SPSS) software. Descriptive statistics were used to find out the median (Mdn) value to central value and interquartile range (IQR) to explain the variability of the data. The correlation analysis, then, was conducted to examine the relationship between Quality of Instructor, Course Design, Feedback, Student Expectation, Student Satisfaction, Perceived Performance and Academic Performance (GPA).

Findings

Demographic Information

A demographic profile has been collected from the participants. The profiles included gender, program and age of the students. Based on Table 1, shows that the majority of the students are female (77.0%) while the male (23.0%). According to Program, students from Diploma in Accountancy (AC110) are dominant by 87.4% while the remaining are from Diploma in Information System (AC 120). Majority of the respondents were aged between 18 to 21 years old (97.9%) followed by those aged between 22 to 25 years old (1.3%) and 26 to 30 years old (0.8%).

Table 1
Demographic Profile of the respondent

Variable	Level	Frequency	Percentage (%)
Gender	Male	55	23.0
	Female	184	77.0
Program	AC110	209	87.4
	AC120	30	12.6
Age	18-21	234	97.9
	22-25	3	1.3
	26-30	2	0.8

Descriptive Analysis

A survey has been conducted regarding students experienced ODL session towards six main factors which are Quality of Instructor, Course Design, Feedback, Student Expectation, Student Satisfaction and Perceived Performance. The survey instrument consisted of a total of 22 items that were divided into six main components. All scales for the six components range from (1) Strongly Disagree to (4) Strongly Agree. This survey was answered by the respondents through an e-survey (Google Form). The findings of the survey have been represented in Table 2 until Table 7 below. As the level of measurement for these items are ordinal scale, results on the distribution of the data are = explained using median (Mdn) value to central value, whilst interquartile range (IQR) is used to explain the variability of the data.

The analysis in Table 2 below shows that during the ODL session, 50 % of the respondents agreed that their lecturers communicate effectively (Mdn=3; IQR=3 to 4), were enthusiastic (Mdn=3; IQR=3 to 4), concerned about students' learning (Mdn=3; IQR=3 to 4), accessible for discussion outside of the online classes (Mdn=3; IQR=3 to 4) and personalised interaction with students whenever necessary (Mdn=3; IQR=3 to 4). It was also found that 50% of the students strongly agree their lecturer used suitable online mediums (e.g.: Google Meet, MS Teams, Zoom etc. (Mdn=4; IQR=3 to 4). Meanwhile, the remaining 50% of the students were found to disagree.

Table 2
Descriptive Statistic on Quality of Instructor

Item of the survey	Median	IQR	Interpretation
1. The lecturers communicated effectively	3	1	Agree
2. The lecturers were enthusiastic about online teaching	3	1	Agree
3. The lecturers were concerned about students' learning	3	1	Agree
4. The lecturers were accessible for discussion outside of the online classes	3	1	Agree
5. The lecturers used suitable online mediums (e.g: Google Meet, MS Teams, Zoom etc.) to create a comfortable learning space	4	1	Strongly Agree
6. The lecturers personalised interactions with students whenever necessary	3	1	Agree

The analysis in Table 3 below shows that during the ODL session, 50% of the respondents agreed that 'the courses were well organized' (Mdn=3; IQR=3 to 4), 'the courses were designed to allow assignments to be completed across different learning environments'

(Mdn=3; IQR=3 to 4), 'lecturers facilitated the courses effectively' (Mdn=3; IQR=3 to 4) and 'the courses were designed to allow me to take responsibility for my own learning' (Mdn=3; IQR=3 to 4). In the meantime, the remaining 50% of the students disagreed.

Table 3
Descriptive Statistic on Course Design

Item of the survey	Median	IQR	Interpretation
1. The courses were well organized	3	1	Agree
2. The courses were designed to allow assignments to be completed across different learning environments	3	1	Agree
3. The lecturers facilitated the courses effectively	3	1	Agree
4. The courses were designed to allow me to take responsibility for my own learning	3	1	Agree

Meanwhile, Students' Feedback in Table 4 shows that 50% of the students strongly agree that their lecturers responded promptly to their questions during online classes (Mdn=4; IQR= 3 to 4). It was also found that 50% of the respondents agree that lecturers responded promptly to their questions outside of the online classes (Mdn=3; IQR= 3 to 4), lecturers responded promptly to their questions about courses' assignments (Mdn=3; IQR= 3 to 4) and lecturers motivated students to do their best (Mdn=3; IQR= 3 to 4).

Table 4
Descriptive Statistic on Feedback

Item of the survey	Median	IQR	Interpretation
1. The lecturers responded promptly to my questions during online classes	4	1	Strongly Agree
2. The lecturers responded promptly to my questions outside of the online classes	3	1	Agree
3. The lecturers responded promptly to my questions about courses' assignments	3	1	Agree
4. The lecturers motivated me to do my best	3	1	Agree

The analysis in Table 5 below shows that during the ODL session, 50% of the students expectation were agreed 'lecturers used suitable teaching materials that were understandable' (Mdn=3; IQR=3 to 4), 'used good examples to explain any concept or theory during online classes' (Mdn=3; IQR=3 to 4), 'courses' assignments were at a reasonable difficulty level'(Mdn=3; IQR=3 to 4). In addition, respondents found to be 50% strongly agree that lecturers are extremely good at explaining things to students (Md=4; IQR=3 to 4). Another 50% of the respondents were found to disagree with the propositions on Student Expectation.

Table 5
Descriptive Statistic on Students Expectation

Item of the survey	Median	IQR	Interpretation
1. The lecturers used suitable teaching materials that were understandable	3	1	Agree
2. The lecturers used good examples to explain any concept or theory during online classes	3	1	Agree
3. The courses' assignments were at a reasonable difficulty level.	3	1	Agree
4. Lecturers are extremely good at explaining things to students	4	1	Strongly Agree

The analysis in Table 6 below shows that during the ODL session, 50% of the respondent satisfy with the online classes were valuable (Mdn=3; IQR=3 to 4), 'The online classes improved my understanding in majority of my courses taken for this semester' (Mdn=3; IQR=3 to 4), 'generally given enough time to understand the things we have to learn' (Mdn=3; IQR=3 to 4). However, 50% of the respondents disagreed that 'online learning is the best learning experience I have ever had' (Mdn=2; IQR=2 to 3).

Table 6
Descriptive Statistic on Students Satisfaction

Item of the survey	Median	IQR	Interpretation
1. The online classes were valuable	3	1	Agree
2. The online classes improved my understanding in majority of my courses taken for this semester	3	1	Agree
3. We are generally given enough time to understand the things we have to learn	3	1	Agree
4. Overall, the online learning is the best learning experience I have ever had	2	1	Disagree

Meanwhile, Table 7 shows the result for Perceived Performance, where 50% of the respondents found to agree that 'online classes have encouraged me to develop my own academic interests as far as possible' (Mdn=3; IQR=3 to 4), 'my academic performance during ODL session is satisfactory' (Mdn=3; IQR=3 to 4), 'happy with the learning experience during ODL session' (Mdn=3; IQR=3 to 4), 'helped me in achieving learning goals' (Mdn=3;IQR=3to4) and 'efficient for learning' (Mdn=3; IQR=3 to 4). Another 50% were found to disagree.

Table 7
Descriptive Statistic on Perceived Performance

Item of the survey	Median	IQR	Interpretation
1. Online classes have encouraged me to develop my own academic interests as far as possible	3	1	Agree
2. My academic performance during ODL session is satisfactory	3	1	Agree
3. I am happy with the learning experience during ODL session	3	1	Agree
4. ODL helped me in achieving learning goals	3	1	Agree
5. ODL is efficient for learning	3	1	Agree

Correlation Analysis

Table 8 illustrates Pearson Product Moment of Correlation coefficient significant value between Satisfaction, Quality Instructor, Course Design, Feedback and Students Expectation with the r value is between 0.580 and 0.707. The result shown below will be used to verify Hypothesis 1, Quality Instructor, Course structure, Feedback and Student Expectation is positively associated with students' satisfaction during ODL.

Table 8
Pearson Correlation Coefficient and Level of Significance on Factors Affecting Student Satisfaction during ODL

		Satisfaction	Quality Instructor	Course Design	Feedback	Student Expectation
Satisfaction	Correlation Coefficient	1.000	.580**	.707**	.616**	.631**
	Sig. (2-tailed)		.000	.000	.000	.000
	N		239	239	239	239
Quality Instructor	Correlation Coefficient		1.000	.792**	.788**	.750**
	Sig. (2-tailed)			.000	.000	.000
	N			239	239	239
Course Design	Correlation Coefficient			1.000	.711**	.780**
	Sig. (2-tailed)				.000	.000
	N				239	239
Feedback	Correlation Coefficient				1.000	.737**
	Sig. (2-tailed)					.000
	N					239
Student Expectation	Correlation Coefficient					1.000
	Sig. (2-tailed)					
	N					

**. Correlation is significant at the 0.05 level (2-tailed).

The result showed that there was a significant moderate positive relationship between Satisfaction and Quality Instructor (r=0.580, p_value=<0.05), Feedback (r=0.616, p_value=<0.05) and Student Expectation ((r=0.631, p_value=<0.05) while strong positive relationship with Course Design (r=0.707, p_value=<0.05). Thus, Hypothesis 1 was accepted. Meanwhile Quality Instructor found to be approximately strong relationship with Course Design (r=0.792, p_value=<0.05), Feedback (r=0.788, p_value=<0.05) and Student Expectation (r=0.750, p_value=<0.05) respectively. In addition, the relationship between Course Design and Feedback (r=0.711, p_value=<0.05) and Students Expectation (r=0.780, p_value=<0.05) also were found to be significantly strong positive relationship. Lastly Feedback also results significantly strong positive relationship with Student Expectation (r=0.737, p_value=<0.05). By referring to Satisfaction, the strongest relationship defined was Course Design since it shows the highest correlation value among the other factors (Quality Instructor, Feedback and Student Expectation). It indicates that the higher quality of course design provided to the student will lead to higher satisfaction of the students during ODL.

Table 9 shows the result of the study to verify Hypothesis 2, satisfaction is positively associated with student academic performance. The academic performance is measured by Grade Point Average (GPA) during ODL implementation. The GPAs from previous semesters

within ODL sessions were analysed among Part 2 until Part 5 students. Part 1 students were excluded from the analysis since they have not sat for any final examination yet. Notably, the result shows, there is no significant evidence to indicate that student satisfaction is related to the academic performance of AC110 and AC120 students since the result shows that there is a very weak relationship between student satisfaction and academic performance (r=0.086, p_value>0.05). Hence, H2 was rejected.

Table 9
Pearson Correlation Coefficient and Level of Significance on Student Satisfaction and Academic Performance (GPA)

		GPA	Satisfaction
GPA	Pearson Correlation	1	.086
	Sig. (2-tailed)		.188
	N	239	239

**. Correlation is significant at the 0.05 level (2-tailed).

Table 10 shows the result to verify Hypothesis 3, that perceived performance is positively associated with student academic performance. The result shows that there is a positive relationship between perceived performance and academic performance (r=0.165, p_value<0.05). It can be concluded that there is significant evidence to indicate that perceived performance is related to the academic performance of AC110 and AC120 students, thus, H3 was accepted.

Table 10
Pearson Correlation Coefficient and Level of Significance on Perceived performance and academic performance (GPA)

		GPA	Perceived Performance
GPA	Pearson Correlation	1	.165*
	Sig. (2-tailed)		.010
	N	239	239

*. Correlation is significant at the 0.05 level (2-tailed).

Discussions

The findings of this study indicated that all four factors were determined to have a positive relationship with students' satisfaction during the ODL session. However, this study found that the course design is the main factor that influenced students' satisfaction. The findings are consistent with those of Kim and Kim (2021); Alqurashi (2018), who discovered that the most important predictor and a key element for enhancing student satisfaction is course structure. Kuo et al (2013) further stated that content structure, document style, and accessibility of accessing online content may impact learners' involvement with course content since they may spend the majority of their time reading and digesting content via thinking, elaboration, and reflection.

Meanwhile, the second factor which affects students' satisfaction is student expectation. This is consistent with findings by Mason and Welle (2000). Students were satisfied when the course design met their expectations and may perform well during examination (Gopal et al., 2021). In addition, prompt feedback to students is found to be the third factor that affects students' satisfaction. This finding is consistent with the findings of

Eom et al. (2006), who found that feedback is a motivation for many students and should be integrated into the design and teaching of online courses. Lastly, the quality of instructors also affects the students' satisfaction, which is consistent with prior studies by Gopal et al (2021), who discovered that teachers' enthusiasm and ability to deliver course content appropriately improve the quality of online learning and thus influence students' satisfaction. Furthermore, effective content delivery during online classes may result from efficiency in lecturing and understanding student psychology.

The study further aims to determine the effect of student satisfaction on academic performance during ODL. Martinez-Arguelles and Batalla-Busquets (2016) and Mensink and King (2020) discovered that excellent interactions between instructors and students led to student satisfaction and improved performance. Unlike previous studies that confirm the relationship between students' satisfaction and academic performance (Gopal et al., 2021 & Wei, 2020), this study found no significant relationship exists between these two variables. It indicates that student satisfaction has no influence on academic performance. Chinomona and Macongue (2021) discovered the strongest relationship between student motivation and performance, as well as the weakest relationship between student satisfaction and performance. On the contrary, rather than motivation, commitment to academic activities (Wang & Degol, 2016) has a significant effect on academic performance. Students will be able to focus on what they have learned since ODL provides a flexible teaching and learning environment through asynchronous sessions using video, leaflets, articles, and PowerPoint presentations utilising the Learning Management System (LMS) (Rindaningsih et al., 2021). Furthermore, using video for learning purposes led to positive emotional engagement (Kort & Reilly, 2002) and a pleasant learning environment (Strobel & Van Barneveld, 2009), which was helpful to their motivation to study, learning process, and outcome (Meyer & Tuner, 2002).

The last finding is regarding the relationship between perceived performance and academic performance. The result indicates that there is a positive influence of perceived performance towards academic performance. This is supported by Ferla et al. (2010), who found that students with high levels of self-perceived competence outperformed their peers in terms of academic performance. Furthermore, actual academic performance is related not only with the teachers' expectations of students' abilities (De Boer et al., 2018) as well as student's own expectations (Mateos, et al., 2021)

Conclusion

This paper describes the factors affecting student's satisfaction and academic performance in ODL. The study found that four factors significantly affect the students' satisfaction in ODL environment, namely (i) quality of instructors, (ii) course design, (iii) prompt feedback and (iv) students' expectations. In brief, it was found that the course design is the main factor that influences students' satisfaction in ODL, followed by students' expectations, prompt feedback to students, and lastly, the quality of the instructor. This is consistent with findings by Kim and Kim (2021); Alqurashi (2018), who stated that the course structure is the most important predictor and a key element for enhancing students' satisfaction.

The study also reveals that the students' satisfaction does not influence the outcome of their academic performance in ODL environment. This finding is inconsistent with findings by Gopal et al (2021); Wei (2020), Martinez-Arguelles and Batalla-Busquets (2016) and

Mensink and King (2020) where they found that there is a significant relationship between students' satisfaction and academic performance.

Nonetheless, it is found that the students' perceived performance has a positive influence on academic performance, which is consistent with study by Ferla et al. (2010), where students with high levels of self-perceived competence outperformed their peers academically. In brief, it is found that the students who have high-level of self-perceived performance traits, such as those who (i) view that ODL encourages them to develop their own academic interests, (ii) believe that their performance is satisfactory in such environment, satisfy with the learning experience which ODL offers, (iii) feel that ODL assist them in achieving their learning goals, and (iv) feel that ODL is an efficient way of learning, is found to be excel academically.

In general, it can be concluded that although the elements such as course design, students' expectation, prompt feedback to students and quality of instructors are essentials to enhance the learning process in ODL environment during COVID-19 pandemic period in this study, such elements somehow do not improve the students' performance. Nevertheless, students who have high-level of self-perceived competence were found to excel academically in ODL environment. It is possible that students with such self-perceived performance traits are easily adopted to any new norm or change of environment, and hence, able to perform well academically in type of any condition or environment.

In addition, the findings of this study will enable us to identify the factors that affect students' satisfaction during ODL which may assist educators, either in primary, secondary or tertiary level, to improve the quality of online learning during ODL sessions. In addition, based on the finding of the study, it is also important for the educators to understand that not all students are able to perform in ODL, hence, to find a mechanism to identify such students, and subsequently device a mechanism or method to ensure that they are not left behind in ODL environment.

The current study, however, has certain limitation. Amongst the limitation is in terms of sampling, where in the study, the respondents are only limited to the accounting students at UiTM Tapah. In order to have a meaningful outcome, future research should use a larger sample size. In addition, as the study does not find any significant influence of students' satisfaction on their academic performance, it is suggested that future research may look into the study on the impact of motivation towards students' performance. Thus, the contribution of additional variables, such as student motivation, may allow for a more in-depth analysis of the connection with student performance, as well as a comparison with pre-ODL performance.

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