

The Impact of Facilities Management on Students' Academic Achievement

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ABSTRACT

Facilities management is one of the important aspects that need to be considered in every educational institution. Literature shows that good management of the facilities in an educational institution can affect students' learning process and subsequently impact the students' academic achievement. Thus, the educational institution must critically understand how to manage the facilities well. The purpose of this research is to investigate the management of various facilities and how it impacts students' academic achievement. This research was carried out in Universiti Teknologi MARA Perlis Branch with the main objective to investigate the management of facilities such as e-learning facility, classroom, library, and hostels and whether they have any effect on the students' academic achievement. Data was collected using questionnaires which were distributed to 217 students. Data were then analyzed using SPSS software and a few analyses were carried out such as descriptive analysis, correlations, and regression analysis. The results have shown that three areas of the facilities have a significant impact on students' academic achievement while only one area does not have a significant impact on students' academic achievement. The results of this study could be used by an educational institution to better plan and manage their facilities and subsequently help students to increase their academic achievement.

Keywords: *Students' Academic Achievement, Facilities Management, E-Learning, Classroom, Library, Hostels.*

INTRODUCTION

The facility can be defined as a building, facility, or equipment provided for a specific purpose and involved in natural order and capability. The facility in Cambridge English Dictionary defined that a facility is a place that includes buildings, equipment, and services provided for a particular activity. Moreover, facilities can be categorized into two types which is a permanent and semi-permanent structure such as laboratory equipment, teaching aid, blocks of the classroom, libraries, toilets, storage space, tools, and consumables (electricity and water) (Akomolafe, 2016; Ainon & Rosmaizura, 2018). International Facility Management Association (IFMA), (2016) clearly defined that facilities management shows how the equipment or tools and services were kept in good conditions in terms of comfort, functionality, safety, and efficiency towards the environment either place, process, and technology. As facilities management continuously develops and becomes an important issue to the

community, it is important to undertake a study on the physical environment especially in educational institutions (Muhammad, Sapri & Sipan, 2014).

Students' academic achievement can be achieved when there is the availability of the facilities in the institutions. Ugwuanyi, Nwachukwu, Ugwuanyi, Okeke, and Nworgu et al. (2020) stated that academic achievement can be referred to as the average marks obtained by an individual in their final examination. The researcher pointed out that campus services, the advancement of technology, and the facilities provided are variables that can measure the satisfaction of students in universities which also could lead towards students' academic achievement (Jalani & Sern, 2015). Students' academic productivity highly depends on the facilities available and services provided to the students by the university. The research explored by Okafor et al. (2016), stated that facilities management in the education sectors such as classrooms, libraries, laboratories, workshops, assembly halls, and toilets can give an effect on the students thus impact their academic achievement and performance.

A research done by Filardo et al. (2018) shows a review from year to year on the impact of facilities management on educational achievement. The researchers mentioned that in 2002, research by Mark Schneider from the U.S. Department of Education stated about the differences of students' achievement towards the standard of the building which is about 5-17% found that poor structural, conditional and aesthetic attributes (lightning, temperature, and others environmental factors) affect students perform low in their learning and achievement. A review in 2017 by Berkeley in Los Angeles Unified School District (LAUSD) claims that schools provided with new facilities able to increase the test result of their students better than in the past.

Prior to this, McGowen (2007) suggested that school or educational institutions should understand the advancement needed for the physical environment of the facility to improve in the learning process. In a study by Ainon and Rosmaizura (2018), variables that impact student's academic in University Malaysia Kelantan (UMK) were divided into three categories which are system management (E-learning and management information system), learning environment (classroom, teaching aid, and library), and infrastructure (hostel, sports facilities, and transportation). Classroom facilities management provides quality of teaching and learning environment towards student attendance and academic achievement in school (Nurul Syakima, 2014). Jamian and Baharom (2012) mentioned that teaching aid is one of the methods that can support students learning. The analysis by Assessment in Action program (AiA) stated that students can achieve higher levels of academic success when they use the library rather than students who did not use the library (Brown & Malenfant, 2017). Hassanain (2008) found that complete hostel facilities that bring satisfaction towards students thus can lead to desirable educational outcomes.

In conclusion, the researcher stated that facilities management must be considered as an important part of achieving higher academic achievement especially in maintaining the effectiveness of the facility system (Ainon & Rosmaizura, 2018). Providing good facility management in physical and non-physical aspects can help teachers and students improve their learning process and increase student academic achievement. So, this study aims to investigate the relationship between e-learning, classroom, library, and hostels toward the students' academic achievement.

LITERATURE REVIEW

Students' Academic Achievement

Academic achievement represents the performance outcomes when an individual has achieved their specific goals on some activities specifically when they are in school, college, and university (Steinmayr et al., 2017). A study by researchers stated that student performance is measured by GPA in their previous test result in every semester (Mushtaq & Khan, 2012). In this study, students' academic achievement received an impact from the facilities management provided in

the institutions. Poor services or maintenance toward facilities might bring up to the harmful situation or undesired accidents. Students need to have a comfortable and safe environment as it helps them to have good results in their academics.

E-Learning

Electronic learning (E-Learning) is defined as the use of ICTs such as the internet, computer, telephone, radio, video, and others in a manner that supports teaching and learning activities (Masrom, 2007). In the advancement of technological, students now able to have their learning process through e-learning which they can have their learning process out from their regular learning or traditional learning. Traditional learning refers to the learning process through the classroom while e-learning is a learning process in which students learning from electronic devices. Subsequently, the researchers have been found that e-learning is a part of telecommunications technology for students and educators to access the information on the subject related thus it can help them achieve the teaching and learning objectives (Zare, Sarikhani, Salari & Mansouri, 2016). E-learning provides other ways to learn in the classroom and enables the student to access information anytime and anywhere (Al-Samarraie et al., 2017; Goi & Ng 2009). These new changes could help the student adapt their learning process everywhere they want. For example, in UiTM Teknologi MARA student can receive their learning activities by sign up in MOOCS which the medium for students gains their knowledge about their subject. Other researchers mentioned that students can participate in interesting activities such as games or quizzes when they used MOOCS as their learning platform (Hew, 2016). Apart from that, I-Learn or I-Students platform also is an example of an e-learning system as it makes them able to understand more about their courses and participating in the classroom activity with their educators via online. In conclusion, the advancement in the learning process such as e-learning could help students to gain better results in their academics.

Classrooms

A classroom is a learning place in which students gain skills and knowledge (Ryan, 2013; Ainon & Rosmaizura, 2018). It plays an important part in maintaining students' academic achievement. A study by Suleman & Hussain (2014), stated that students can perform well in their studies if there are a good atmosphere and condition in the classroom. Students became more interesting in their learning process and teachers can easily manage their students with good manners and instructions when there is effective classroom management (Suleman & Hussain, 2014). Other than that, Tsai (2017) stated that it was more efficient to use technology as a teaching aid in the learning process. Researchers have been mentioned that teaching aid is one of the methods that can support students learning (Jamian & Baharom, 2012). Learning with technology is more productive and ease the educators in transferring their lesson to students in the classroom (Ainon & Rosmaizura, 2018). Ainon and Romaizura, (2018) in their studies mentioned that the use of gadgets in education such as smartphones, computers, and search engines is more popular as all of us were using this technology as our social networking. According to Malik and Rizvi (2018), classroom furniture is the most important to be considered by the education institutions as it can bring a huge impact on students' academic achievement. This is because students need a comfortable learning environment to receive their learning and allow them to focus more on their learning. Suleman and Hussain (2014), stated that the physical characteristics of the classroom also need to be considered. Previous researchers have been mentioned that poor facilities in institutions could bring up the negative impact on teacher effectiveness in the teaching process and performance thus give a negative impact on student performance either in academic or non-academic (Earthman, 2002; Nurul Syakima, 2014).

Library

A library is a place that provides a collection of sources of information and similar resources that provides other resources that support learning, teaching, and research to students and lecturers (Edem et al., 2009; Ainon & Rosmaizura, 2018). Meanwhile, according to Akomolafe and Adesua (2016), having poor physical facilities could give a negative impact on students' academic achievement as they do not have the interest to learn. Researchers stated that the library is an essential part of education and as guidance to the readers (Ayaz, Ali, Khan, Ullah & Ullah, 2017). The availability of library facilities can help the learning process be more effective and students or teachers can reach updated information easily (Ayaz et al., 2017). The researcher found that the use of online library resources in educational institutions can help students succeed in their academic achievement (LeMaistre et al., 2018). Besides, the researchers also mentioned that students who used online resources such as databases and e-book provided in the library tend to increase their grade point average (GPA) in academic results. Moreover, some students prefer to study at the library instead of studying in the hostel, rented house, or home as it can help them avoid any interruption. Francis et al. (2010) in their studies, stated that more students achieve a satisfying score in their exam and increase their reading when they visited the library more often. Therefore, the library services are very important and should consider the facilities provided always stayed in the good condition to ease the used by students when they are studying thus affecting the students' academic achievement.

Relationship Between E-Learning and Students' Academic Achievement

A study by Keshavarz et al. (2013), mentioned that using e-learning in the educational system has brought a positive impact on student's academic achievement. The quality of learning became more effective and efficient when there is an e-learning system in the teaching-learning process. As explained by Zare et al. (2016), e-learning helps increase students' self-regulation through their self-directed learning. Students can learn by themselves and be more responsible for what they want to learn. The researchers also stated that e-learning helps students to specified the trends of their learning and control their learning process. Hence, this makes them be able to learn more effectively and increase their academic success (Zare et al., 2016). Previous research by Mahmoodi et al. (2015) also mentioned that e-learning has improved students learning process and became more creative in their studies. In this study, the researcher found that the e-learning system has a positive relationship with students' academic achievement. Using e-learning in the education process has increase student's quality and allows them to perform well in their academic studies.

H1: E-learning has a positive effect on students' academic achievement.

Relationship Between Classroom and Students' Academic Achievement

Previous research has been mentioned that the physical environment which is in the classroom can actively affect students' academic achievement toward their comfort and ability to learn in such environmental conditions. Therefore, students who always feel comfortable with the environment of the class can learn and received the information more than students who cannot study and learn in an uncomfortable environment (Suleman & Hussain, 2014). As explained by Malik and Rizvi (2018), the educational institution should be considered the furniture provided in the classroom are in good condition and well managed to be used by students. Educators can use different teaching methods such as visual aids or picture aids to increase students' interest in learning in the classroom and to improve their academic achievement (Jamian & Baharom, 2012). Next, the researcher stated that overcrowded classrooms and poor conditions of the learning environment bring a negative effect on students' academic achievement (Nurul Syakima, 2014; Earthman, 2002; Suleman & Hussain, 2014). In this study, the researcher found that providing adequate facilities in the classroom have an

impact on students' academic performance thus has a positive relationship with students' academic achievement.

H2: Classroom has a positive effect on students' academic achievement.

Relationship Between Library and Students' Academic Achievement

David, (2014) stated that the library is assistance towards the teaching and learning process and it also provides guidance for individuals to learn. Research by past researchers stated that student's performance increased when there is a library, computer lab, and others were provided in the institutions (Mushtaq & Khan, 2012). In addition, Adomi and Anie (2006) stated that the library has a positive relationship and important for students and teachers in education. The several Assessment in Action program (AiA) campus teams stated that academic success was increased when institutions were providing their students with library facilities. A previous study stated that students became more successful as they gain higher results in their examination results compare to students who did not use the library for their studies (Brown & Malenfant, 2017). Besides, the researchers stated that facilities provided in the library were the main focus of students to engage in the library (Kim-Soon, Mohd Hasbi & Abdul Rahman, 2013). For example, the librarian services at the front desk, printing and computer facilities, the collection of books on the shelf, and the borrowing system. The researchers also mentioned in the study that there is a positive and a significant relation toward library facilities, resources, and services provided in the library with students' satisfaction thus impact their academic achievement.

H3: Library has a positive effect on students' academic achievement.

Relationship Between Hostel and Students' Academic Achievement

Researchers in their studies mentioned that providing the best quality and properly designed residential facilities can impact the educational outcomes of the students. The hostel must be fully secure, having intellectual stimulation, cooperation, and responsibilities among the students (Hassanain, 2008). For example, in terms of the staircase, electrical wiring, water supply, cafeteria, sanitation system, and security. The result from the previous study done by Memon et al. (2019) states that there was a significant relationship of hostel facilities management in aspects of maintenance in electric supply (lighting and fans), canteen facility, security, and dispensary toward students' satisfaction living in the hostel. This result leads to the students' academic performance as when students were satisfied with the hostel facilities management provided, they were able to focus on their study thus help them to increase their academic achievement. The size of the room in the hostel also could bring impact to students' which students might not able to study in the room as the room were too crowded or noisy. A previous study by Suki and Chowdhury (2015) regarding hostel facility management stated that students achieve their best achievement in academics when they can meet their satisfaction which is the environment of the hostel were quiet, less crowded, and suitable in room sizes. This shows that hostels have a positive impact on students' academic achievement thus gain from their satisfaction with hostel facility management.

H4: Hostels have a positive effect on students' academic achievement.

Figure 1 below depicted the relationships between variables used in this study.

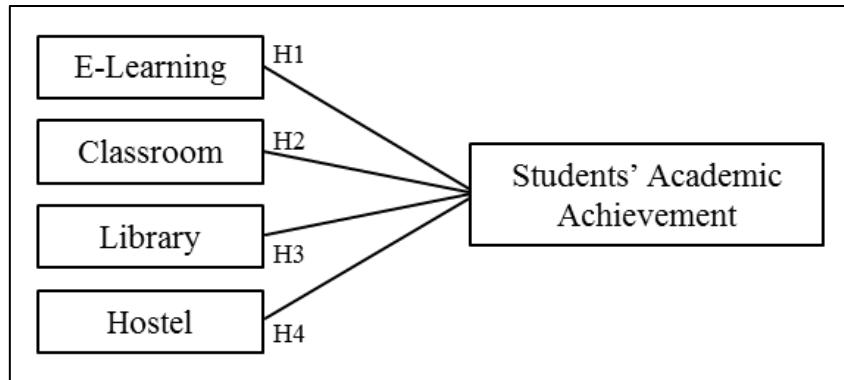


Figure 1: Theoretical Framework of Variables.

MATERIALS AND METHODS

In this study, a quantitative research approach was adopted to identify the factors that influence academic achievement among university students. The researcher used a self-administrated questionnaire survey to gather the data regarding the facilities management provided in UiTM Perlis. The sampling technique used by the researcher is probability-based on stratified sampling which the respondents were classed based on the group. For the sample, the researcher was choosing 217 out of 493 university students from the Faculty of Business and Management in UiTM Perlis. The respondents then were divided into three different groups according to their program code which BA 240 (57 students), BA 242 (214 students), and BA 243 (222 students). The researcher distributed questionnaires to 227 students in the Faculty of Business and Management and 217 questionnaires were returned. Data were analysed using SPSS, Version 25.0 to measure the correlation between variables and regression analysis.

RESULTS AND DISCUSSIONS

This study has answered all the research questions and research objectives of this study which main focus was to examine the effect of e-learning, classroom, library, and hostel (independent variables) towards students' academic achievement (dependent variable). Two tests were carried out, which are the correlation analysis and multiple regression analysis, to determine the relationship between variables and determine the effect of the independent variable on the dependent variable. The results of the analysis are presented below in Table 1.

Correlation Analysis

Table 1: Results of Pearson Correlation

| | | Correlations | | | | |
|------------------|---------------------|--------------|--------|--------|--------|--------|
| | | 1 | 2 | 3 | 4 | 5 |
| ELEARNING | Pearson Correlation | 1 | .245** | .396** | .165* | .576** |
| | Sig. (2-tailed) | | .000 | .000 | .015 | .000 |
| | N | 217 | 217 | 217 | 217 | 217 |
| CLASSROOM | Pearson Correlation | .245** | 1 | .522** | .424** | .405** |
| | Sig. (2-tailed) | .000 | | .000 | .000 | .000 |
| | N | 217 | 217 | 217 | 217 | 217 |
| LIBRARY | Pearson Correlation | .396** | .522** | 1 | .474** | .572** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .000 |
| | N | 217 | 217 | 217 | 217 | 217 |

| | | | | | | |
|-----------------|---------------------|--------|--------|--------|--------|--------|
| HOSTEL | Pearson Correlation | .165* | .424** | .474** | 1 | .463** |
| | Sig. (2-tailed) | .015 | .000 | .000 | | .000 |
| | N | 217 | 217 | 217 | 217 | 217 |
| ACADEMIC | Pearson Correlation | .576** | .405** | .572** | .463** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | |
| | N | 217 | 217 | 217 | 217 | 217 |

** . Correlation is significant at the 0.01 level (2-tailed).

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

Table 1 above represented the results of the Pearson Correlation for the independent variables and dependent variable. The results were interpreted using the Pearson Correlation coefficient (r). It shows that e-learning, classroom, library, and hostel are positively related to students' academic achievement. As can be seen, e-learning has the highest positive correlations and strong relationships with academic achievement ($r=0.576$, $p<0.01$). It is also shown in Table 4 that e-learning is statistically significantly related to the dependent variable which p-value ($p<0.000$). This result consistent with the findings by Aion and Rosmaizura (2018) that found there are strong correlations between e-learning and student's academic achievement in their research at UMK. Similarly, studies by Zare et al. (2016) stated that students can learn effectively and increase their academic achievement when they use e-learning as a part of their learning process. Hence, these results indicate that students in the Faculty of Business and Management at UiTM Perlis agreed that e-learning can help them improve their academic achievement and the learning process can be easier when they can be connected with their lecturers anywhere.

Next, the classroom is positively correlated with academic achievement and has a moderate relationship with the dependent variable ($r=0.405$, $p<0.01$). However, these independent variables are not statistically significantly related to academic achievement where the p-value is ($p<0.261$). Besides, the result was in line with previous researchers Aion and Rosmaizura (2018) which stated that there is an insignificant impact between the classroom and students' academic achievement in UMK due to lack of classroom facility. As a result of this study, it can determine students found that the classroom facility provided in UiTM Perlis does not fully utilize their satisfaction to learn and help them gain good grades in their academics.

The third factor which is the library shows that these independent variables were significant and positively correlated with academic achievement ($r=0.572$, $p<0.01$). The result in Table 4 below shows that there is a statistically significant related between the library and students' academic achievement in UiTM Perlis when the p-value is ($p<0.000$). As explained by Brown and Malefant (2017), students who visit and use the library more often tend to increase their academic success due to the availability of the library facility provided. Ayaz et al. (2017) claim that students and teachers can get up-to-date information and the learning process can be more effective when there is a good library facility provided in the university. The outcome from this study shows that students in the Faculty of Business and Management at UiTM Perlis strongly agree that by providing good facility management in library university, they can get any sources of information needed in their study very well. Thus, this can help them improved their studies and achieve a good result in their examination and increase their academic achievement.

The last factor that contributes to this study is a hostel which shows significant and positively correlated with academic achievement with the result ($r=0.463$, $p<0.01$). The results were statistically significant where the level of the p-value is ($p<0.000$) and it statistically significant to influence students' academic achievement in UiTM Perlis. Suki & Chowdhury (2015) hypothesized that good hostel facility management can help students to gain better results in their academic outcomes as they received high satisfaction on the hostel facility provided. Considering this study, it can be concluded that students' in the Faculty of Business and Management at UiTM Perlis found that having well management of hostel facilities in terms of cleanliness, comfortable furniture, safety, and good maintenance services can fulfil their satisfaction to stay in the hostel. In short, this can help them to

study better and achieve good results in academics. In short, all the variables were significantly and correlated positively with students' academic achievement.

Multiple Regression Analysis

Regression analysis is used when the independent is hypothesized to affect one dependent variable. Regression analysis in this research was done to determine whether the four independent variables which are e-learning, classroom, library and hostel describe significant on the dependent variable which is academic achievement among university students. Multiple regression can determine the results of the model fit, and the relative contribution for each of the total variance in this study.

Model Fit

As can be seen, R represents the value of the multiple correlation coefficient. In this model summary, the value of R is 0.726 and this indicated that the results are good and can be acceptable. Then, based on the results above it shows that the R Square value is 0.527 which means that 53% of the variance in the academic achievement can be determined by the study of independent variables. The adjusted R Square is 0.518. Table 2 below presents the model summary for this study.

Table 2: Model Summary

| Model Summary ^b | | | | |
|----------------------------|-------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .726 ^a | .527 | .518 | .37266 |

a. Predictors: (Constant), HOSTEL, ELEARNING, CLASSROOM, LIBRARY
 b. Dependent Variable: ACADEMIC

Statistical Analysis

In this study, the researcher used ANOVA to analyse the variance. ANOVA stands for Analysis of Variance, which a technique to determine if statistically significant differences of means occur between two or more groups. Table 3 below presented the ANOVA analysis summary for this study. Based on the results from the analysis, the significant F-value shows that the independent variables are significant predictors toward dependent variables ($F=59.113$, $p < 0.01$).

Table 3: ANOVA Analysis Summary

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|-----|-------------|--------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 32.837 | 4 | 8.209 | 59.113 | .000 ^b |
| | Residual | 29.442 | 212 | .139 | | |
| | Total | 62.279 | 216 | | | |

a. Dependent Variable: ACADEMIC
 b. Predictors: (Constant), HOSTEL, ELEARNING, CLASSROOM, LIBRARY

Estimated Model Coefficient

Table 4 below presented the coefficient value of the variables.

Table 4: Coefficient of dependent variables

| Coefficients ^a | | | | | | |
|---------------------------|------------|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .711 | .222 | | 3.212 | .002 |
| | ELEARNING | .335 | .041 | .418 | 8.105 | .000 |
| | CLASSROOM | .060 | .053 | .064 | 1.126 | .261 |
| | LIBRARY | .228 | .055 | .258 | 4.167 | .000 |
| | HOSTEL | .193 | .043 | .245 | 4.431 | .000 |

a. Dependent Variable: ACADEMIC

Based on Table 4 above, the unstandardized coefficient for e-learning is 0.335 which indicated that when one level of e-learning increases, the academic achievement also increases with level value 0.335 represented by the equation $Y=0.335x + C$. In addition, the result for e-learning shows that the significant value of $p=0.000$ and this indicated that it is positively significant with the dependent variable which is academic achievement.

The result for classroom shows that the unstandardized coefficient for the variable is 0.060 and this can indicate that with an increase of one level of the classroom, there is an increase in academic achievement with level value 0.060 which is represented by the equation $Y=0.060x + C$. From the result above, the result for classroom shows that the significant value of $p=0.261$ and this indicated that the variable is positively significant with the model but not related to the academic achievement.

Next, the result of the unstandardized coefficient for the library is 0.228 which indicated that the library has a positive significant effect with the model and the dependent variable as one level of library increase, the level of academic achievement also increases which is 0.228 which is represented by the equation $Y=0.228x + C$. From the result, the library shows that the significant value of $p=0.000$ and this indicated that it is positively significant with the dependent variable which is academic achievement.

For the last independent variable which is the hostel, the result for unstandardized coefficients is 0.193 which indicated that the hostel is positively significant with the model and the dependent variable as one level of hostel increase, the level of academic achievement also increases which is 0.193 represented by the equation $Y=0.193x + C$. From the result of the equation, hostel shows that the significant value of $p=0.000$ and this indicated that it is positively significant of the hostel with the dependent variable which is academic achievement.

From the analysis above, an equation below is developed to predict academic achievement.

| |
|---|
| $\text{Academic Achievement} = \text{Constant} + (0.335 \times \text{E-Learning}) + (0.060 \times \text{Classroom}) + (0.228 \times \text{Library}) + (0.193 \times \text{Hostel})$ |
|---|

Statistical Significant of Independent Variable

The best significant result is the result of the value of $p < 0.01$. As can be seen, from the four factors of academic achievement the three independent variables are e-learning ($\beta = 0.418$, $p < 0.000$), library ($\beta = 0.258$, $p < 0.000$), and hostel ($\beta = 0.245$, $p < 0.000$) were significantly related to the dependent variables. Only one independent variable which is the classroom ($\beta = 0.064$, $p < 0.261$) were not significantly related to academic achievement (dependent variable).

Hypothesis Testing

The summary of hypotheses testing resulted from the multiple regression is presented in Table 5 below.

Table 5: Summary of the results of hypotheses testing.

| Hypotheses | | Remarks | Results |
|------------|--|--|--------------|
| H1: | There is an effect of e-learning on academic achievement. | Supported ($\beta = 0.418$, $p < 0.000$) | Accepted |
| H2: | There is an effect of the classroom on academic achievement. | Not Supported ($\beta = 0.064$, $p < 0.261$) | Not Accepted |
| H3: | There is an effect of the library on academic achievement. | Supported ($\beta = 0.258$, $p < 0.000$) | Accepted |
| H4: | There is an effect of the hostel on academic achievement. | Supported ($\beta = 0.245$, $p < 0.000$) | Accepted |

E-Learning

Hypothesis H1: ($\beta = 0.418$, $p < 0.000$)

This finding shows that there is an effect of e-learning on academic achievement. Based on the regression analysis, e-learning has a positive significant effect on students' academic achievement as the results showed ($\beta = 0.418$, $p < 0.000$). Therefore, the result for hypothesis H1 is supported thus accepted.

Classroom

Hypothesis H2: ($\beta = 0.064$, $p < 0.261$)

There is an effect of the classroom on academic achievement. Based on the regression analysis, the classroom has a negative significant effect on students' academic achievement as the results showed ($\beta = 0.064$, $p < 0.261$). Therefore, the result for hypothesis H2 is not supported thus not accepted.

Library

Hypothesis H3: ($\beta = 0.258$, $p < 0.000$)

This finding shows that there is an effect of the library on academic achievement. Based on the regression analysis, the library has a positive significant effect on students' academic achievement as the results showed ($\beta = 0.258$, $p < 0.000$). Therefore, the result for hypothesis H3 is supported thus accepted.

Hostel

Hypothesis H4: ($\beta = 0.245$, $p < 0.000$)

There is an effect of the hostel on academic achievement. Based on the regression analysis, the hostel has a positive significant effect on students' academic achievement as the results showed ($\beta = 0.245$, $p < 0.000$). Therefore, the result for hypothesis H4 is supported thus accepted.

CONCLUSION

This research has provided insight into facilities management that affect students' academic achievement. This study was conducted among university students from the Faculty of Business and Management in Universiti Teknologi MARA (UiTM) Perlis Branch and it has been involved with 217 students as respondents. The researcher used various techniques to analyse the data such as reliability test (Cronbach's Alpha Value), descriptive statistics for each item in independent variables, Pearson correlation analysis, and multiple regression analysis to test the relationship between each variable in this study. The results obtained from the regression analysis was useful to determine the overall fit of the model in this study. Based on the research conducted, out of all the variables involved which are e-learning, library, and the hostel is positively significantly correlated and only one independent variable that shows insignificant correlated with the academic achievement which is the classroom. As UiTM Perlis is the third oldest and the largest UiTM branch campus after Shah Alam, the university needs to pay more attention to facility management and services to ensure that students meet their satisfaction in learning. The permanent and semi-permanent structures must be in good condition and safe to use. For that reason, the learning process can be achieved more effectively and efficiently thus encouraging students to achieve academic results more excellently. However, researchers for further study are suggested to larger the scope or population of respondents compare to the selected population of respondents in this study. Besides, the future researcher should include other factors that can affect students' academic achievement than these factors to strengthen the analysis and result findings. To wrap up, the results of findings in this research paper were supported and can help educational institutions or management to improve students' academic achievement thus future researchers or students can use this paper as a reference.

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