

LINKAGE BETWEEN THE CORE SERVICE AND ACADEMIC ACHIEVEMENT

Shahimi Mohtar
Universiti Utara Malaysia
Malaysia

Abstract

This study investigates the relationship between the core services with academic achievement in private institutions of higher learning. The core service is especially important to the institutions of higher learning in Malaysia as they are gearing themselves to become exporters of premier education services. A research framework was developed and hypothesis was posited and tested. Data was collected using the survey method. Survey questionnaires were hand-delivered to the respondents who volunteered to be participants in this study. A total of 331 representative samples of the population were obtained from the private institutions of higher learning by using the private institutions of higher learning directory as a sampling frame, after dropping numbers of private institutions of higher learning, which had ceased their operations. The data were analyzed by using descriptive statistics and inferential analysis. Statistical analyses used were the Pearson correlation and multiple regressions. Descriptive statistics were also employed. The results revealed that the core service has a relationship with academic achievement. Therefore, it deserves to be monitored and tailored appropriately in order to enhance organizational performance through academic performance. In conclusion, this study provides an insight into further understanding on how to enhance organizational performance by implementing excellent the core service management practices and simultaneously gives due emphasis on the academic achievement.

Keywords: education service, academic achievement, higher learning.

Introduction

This study investigated the relationship between the core services with academic achievement in private institutions of higher learning. This study was conducted in the northern area of Peninsular Malaysia. The principle objective of this study was to examine the relationship between the core services with academic achievement; and to empirically assess or model the relationship between the core services with academic achievement.

Background of The Problem

In the 21st century where competition in the global market has increased, organizations increasingly require knowledgeable and skilful workers to improve their competitive advantage. Therefore, the institutions of higher learning are responsible for providing the education courses that are responsive to the competition and challenges. Malaysia has a large number of private institutions of higher learning compared to other countries in South East Asia. The numbers of private institutions of higher learning have emerged remarkably in recent years. In addition, several leading international institutions of higher learning have also set up branch campuses in Malaysia.

Statement of The Problem

Although there is extensive literature on the core service of private higher learning institutions in the developed nations, there is limited empirical information about it in Malaysia. Private institutions of higher learning in Malaysia are new although the country is in the midst of becoming a developed nation. Since customers of the institutions of higher learning in Malaysia exercise some degree of influence in establishing policies and programmes, it is of great interest to know how they perceive the core service of these institutions.

Purpose of The Study

The purpose of this study is to investigate the customers' perception of the core service in private institutions of higher learning in Malaysia and its relationship with the academic achievement. In general, this study has the following main objective is to examine the relationship between the core service with academic achievement.

Research Question

This study attempts to answer the question: Are there relationships between the core service and academic achievement?

Assumptions and limitations

The following limitations and assumptions of the study have been identified:

- i. The study is limited only to private institutions of higher learning in Malaysia.
- ii. The theme of the instruments is designed to specifically address the issues of private institutions of higher learning in Malaysia.

- iii. Responses were solicited from the customers of private institutions of higher learning in Malaysia, which is a developing country. The perceptions of people in Malaysia with respect to the core service may differ from those of developed countries such as the United States, Britain, or Australia.
- iv. This research project has not adequately addressed the cultural aspects and their implications on the core service.

Literature Review

Core service or service product is customer assessments on the content of a service (Sureshchandar, Rajendran, & Anantharaman 2001, 2002). The core service portrays the content of a service. It is whatever feature offered in a service. The five items proposed by Sureshchandar et al. (2001, 2002) are:

- i. Diversity and range of services.
- ii. Intensity and depth of service.
- iii. Service innovation.
- iv. Availability of most service operations in every branch/department.
- v. Convenient operating hours and days.

Academic achievement is customers' achievement based on a curriculum that has been taught and determined by tests, for example, monthly tests, and semester examinations (Sepian 1981). According to Wallman (1973), academic achievement could be defined as scores and grades that a customer achieves from standard examinations or tests. The marks obtained will indicate whether a customer has passed or failed in that particular subject. Academic achievement is assessed by using the objective indicator of the customer's cumulative grade point average (GPA) across all semesters/quarters. GPA is scored with A=4.0, B=3.0, C=2.0, and D=1.0.

In this study, academic achievement is assessed using the indicator of the customer's cumulative grade point average (CGPA), the possibility of getting an award, and qualifications across all semesters/quarters.

Research Design and Methodology

This study was conducted with the cooperation of private institutions of higher learning located in northern region of Peninsular Malaysia. A list of the institutions was gathered from the Directory of Higher Education Malaysia (3rd Ed). An introduction letter, information sheet, consent letter, and a letter explaining the details of the research were mailed to the respondents. The population defined for this study consists of students in private institutions of higher learning located in the northern region of Peninsular Malaysia. The unit analysis in this study is students from private institutions of higher learning. The sampling frame for this study is the entire population of the private institutions of higher learning in the northern region of Malaysia. The selection of the private institutions of higher learning is based on their willingness to participate in the study, the existence of the institutions and the number of their customers. A total of 331 usable questionnaires were gathered from customers at various private institutions of higher learning.

In this study, the data are analyzed by using descriptive statistics and inferential analysis. The descriptive analysis takes into account the means, standard deviations and percentages. Correlation and multiple regressions are used in the inferential analysis. The data are analyzed by using Statistical Package for Social Sciences or SPSS. The reliability test of the question is determined by using Cronbach's *alpha* coefficient. The correction on questionnaires with low reliability is developed again before it is distributed to the respondents. Corrections are done in order to increase the reliability of the study. After correcting and testing the reliability of the *alpha* Cronbach's, the questionnaires are distributed to the respondents.

Respondents Profiles

A total of 331 usable questionnaires were gathered from customers at various private institutions of higher learning. The profiles examined include gender, age, marital status, academic qualification, year of study, and field of study. Females (56.2%) slightly outnumber males' respondents (see Table 1). As expected, the majority of respondents' age group are between 18 to 24 years old. Over 90 percent of respondents are unmarried. More than half of the respondents have a minimum Malaysian Certificate Examination qualification, as this is a basic requirement before one can pursue higher education. Forty percent of respondents are in the first year of their study. Only one percent of the respondents are in the fifth and sixth year of study. This is understandable as almost all the study programmes offered by the private higher learning institutions can be completed within three years. Engineering and Information Technology & Computer Science is the favourite field of study among the respondents. Only nine percent of the respondents achieve a cumulative grade average of 3.5 or above. A surprising finding is that more than ten percent (12.4 %) of respondents are under probation (or their cumulative grade point average is below 2.00). The details of the profiles are presented in Table 1.

Descriptive Statistics Summary

Table 2 illustrates that the number of valid samples for core service/service product is 331. The core service portrays the content of a service. It portrays the 'what' of a service. The service product can be the feature that is offered in a service. The mean score for core service is 4.831 and the standard deviation is 0.800. This show that average of the population perceive the core service as on the verge of slightly good. The range for core service is 4.667. This range shows that the difference between the largest and smallest score in distribution is 4.667. A conclusion can be made that the data are normally distributed ranging from 1.933 to 6.600. The variance is 0.640. The Kurtosis value is 0.186. Kurtosis is the characteristic of the distribution's shape. The Kurtosis is reflected in the normal probability plot.

The descriptive statistics of variables understudied are shown in Table 2.

Table 1 Respondent demographic information

Demographic	Frequency (n=331)	Valid Percent
<u>Gender:</u>		
Male	145	43.8
Female	186	56.2
<u>Age Group:</u>		
18 – 24 years	283	85.5
25 – 34 years	40	12.1
35 – 44 years	5	1.5
45 – 54 years	2	0.6
55 – 64 years	1	0.3
<u>Marital Status:</u>		
Married	32	9.7
Single	299	90.3
<u>Academic Qualification</u>		
Lower Secondary	7	2.1
Upper Secondary	204	61.3
Pre-university	36	10.9
Diploma	66	19.9
Degree	16	4.8
Postgraduate	2	0.6
<u>Current year of study</u>		
First year	134	40.5
Second year	132	39.9
Third year	46	13.9
Fourth year	15	4.5
Fifth year	2	0.6
Sixth year	2	0.6
<u>Field of Study</u>		
Accounting and Finance	51	15.4
Business studies and Management	35	10.6
Information Technology & Computer Science	120	36.3
Engineering	68	20.5
Social sciences	5	1.5
Pure sciences	19	5.7
Law	10	2.7
Others	24	7.3
<u>Cumulative Grade Point Average</u>		
1.0 - 1.49	4	1.2
1.50 - 1.99	37	11.2
2.00 - 2.49	74	22.4
2.50 - 2.99	97	29.3
3.00 - 3.49	89	26.9
3.50 – 4.00	30	9.1

Source: Table was generated based on data from field survey

Table 2 Descriptive statistics

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Stat	Stat	Stat	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
Core service/service product	331	1.93	6.60	4.831	0.044	0.800	-0.293	0.134	0.186	0.267
Academic achievement.	331	2.33	7.00	4.773	0.052	0.955	0.212	0.134	-0.435	0.267

Source: Table was generated based on data from field survey

Reliability and validity analysis

Table 3 shows the value of *alpha* for the variable. The value of *alpha* for variable in the pilot test was compared to actual study. The value of *alpha* in the actual study is 0.874. Overall, the level of reliability for the variable is satisfactory and acceptable because the value of *alpha* was more than 0.80 (Nunnally 1978). Thus, the internal consistency reliability of the measure used in this study can be considered good. The full analysis is shown in Table 3 below.

Table 3 Instrument reliability level

Variables	Cronbach's Alpha	
	Pilot Study	Actual Study
Core service/service product	0.895	0.874
Academic achievement	0.870	0.838

Source: Table was generated based on data from field survey

Table 4 illustrated that the core service has the value of KMO (Kaiser-Meyer-Olkin) more than 0.65. Kaiser-Meyer-Olkin statistic is used to examine whether the number of sample is adequate or not. According to Nunnally (1978), the value of KMO 0.65 or more shows that the number of sample is adequate. The sample adequacy is reasonable in this case. In the next section, Pearson correlation was used in order to achieve the research objectives.

Table 4 Variable Validity

Variables	No of item	KMO Value
Core service/service product	9	0.865
Academic achievement	3	0.712

Source: Table was generated based on data from field survey

Bivariate analysis between the core service and academic achievement

This section tries to the objectives of this research project that is to study the correlation between the core service variables toward the academic achievement. This method was used because it could measure if there was a significant correlation between the variable and the dependent variables (academic achievement). This test also could measure the strength of the correlation if the correlation between these two variables existed. Table 5 shows the Pearson correlation between the independent variables and academic achievement.

Table 5 Pearson correlation between the independent variables and academic achievement

	Core service/ service product	Academic achievement
Core service/service product	1	0.365(**)
Academic achievement		1

** P < 0.01 (2-tailed)

Source: Table was generated based on data from field survey

The hypothesis was stated in the form of the alternative hypothesis below:

H_A There is a correlation between the customers' perception of core service/service product with the level of academic achievement.

There was a significant and positive correlation between the respondents' perception of core service/service product with the level of academic achievement based on the analysis result. Therefore, the alternative hypothesis was substantiated. The coefficient correlation was $r = 0.365$ (value of $p < 0.01$). This showed that the respondents' perception of core service/service product has 37 percent significant correlation with the level of academic achievement. The correlation of 0.365 also indicates that the variables would explain the variance of one another to the extent of 13 percent. The results of this correlation matrix showed that as the respondents' perception of core service/service product increases, the level of achievement will also increase.

Summary of the findings

The hypothesis was the correlation between the respondents' perception of core service/service product with the level of academic achievement. There is a positive correlation between the customers' perception of the respondents' perception of core service/service product with the level of academic achievement. The level of academic achievement will be improved if the content of a service is improved. The coefficient correlation was $r = 0.365$ (value of $p < 0.01$). This showed that the respondents' perception of core service/service product has thirty seven percent significance correlations with the level of academic achievement. The correlation of 0.365 also indicates that the variables could explain the variance of one another to the extent of 13 percent.

Conclusions and Implications

This study investigated the relationship between the core services with academic achievement in private institutions of higher learning. The starting point of this study is the government's vision to position Malaysia as a regional education hub. The government's vision can be achieved by improving the core service as proposed in this dissertation. The core service is one of the hurdles to surmount for private institutions of higher learning in Malaysia so that Malaysia can establish itself as an international centre of educational excellence. Excellent service will differentiate Malaysian private higher learning institutions from competitors in a way that is important to customers.

In evaluating the extent of customers' perception on the core service and its relationship with academic achievement, this study started by identifying the variables or factors that determine the core service in institutions of higher learning, and academic achievement. The research model and instruments used in this study were adapted from Sureshchandar *et al.* (2002). Sureshchandar *et al.* (2002) research model and instruments was among the most thorough, comprehensive and latest study in the core service. The questionnaire responses provide quantitative data on the characteristics of respondents, the core service factors, and academic achievement factors. The data were analyzed using bivariate and multiple regression analysis.

This chapter summarizes the main findings of the study, research implications, management implications, academic/theory implications, research interpretation limitations, generalization and proposals for future research.

Discussion of results

One of the present government visions is to establish Malaysia as an international centre of educational excellence. In order to achieve its visions, private higher learning institutions play a very important role. They must strive to offer excellent service. Excellent service distinguishes a higher learning institution from competitors in the region namely Singapore and Thailand. However, a strong statement by Wahid (2003) on the conditions of the core service in Malaysian firms is worrying. A newspaper report (Kumar & Termizi 2005) that 123 private higher learning institutions in Malaysia had closed down and another 30 are struggling to survive due to shortage of customers is also shocking. The report became front-page news on a Malaysian daily newspaper.

Present Scenario of Private Higher Learning Institutions in Malaysia

This section provides the present scenario of private higher learning institutions in Malaysia from the customers' perception. The statistical analysis of data found in this study is the basis for the following discussion and conclusions.

The research findings show that the customers perceived the core service/service product level of private higher learning institutions as above average but below slightly good. The perception score of 4.831 showed that the customer perceived it to be just about slightly good. Based on the findings the customers are generally satisfied with the service provided concerning core service/service product. However, it was far off from the excellent perception score. Slade, Harker & Harker (2000) found that students who stayed on at the university to complete their studies had higher expectations of an excellent higher learning institution than those who left before completion of their studies. This shows that there is still plenty of room for improvement. The findings also suggest that the private higher institutions should strive for higher scoring because at present level, they will not be able to compete with the higher learning institutions in neighbouring countries.

From the response to core service/service product items, the customers are generally satisfied with the operating hours of the institutions. Respondents perceived that their institutions are also satisfactory in providing the flexibility of allowing the switching of majors is above average on perception score. On entry requirement, respondents perceived their learning institutions as flexible. Respondents believe that there is a chance that their studies will fulfil their personal needs. On primary knowledge and skills, 95 percent of respondents give a score of average and above. Respondents perceive that there is a chance for them to do well if they work hard. Respondents also give a rating of average and above on the appropriateness of the assessment system.

Research implications

The findings of this study contribute to the existing body of knowledge in the core service management literature, specifically identifying factors which can assist the private institutions of higher learning to sustain and improve the academic achievement. The contribution and implication of this study can be looked at from two perspectives; theoretical and practical. Theoretically, this study has strengthened the past research findings. It has also expanded the knowledge in the core service. Besides that, this study has provided a foundation for future research. Further research is required to explain more on the variance in academic achievement. The next section will discuss further the management and academic implications of this study.

In order for the institution of higher learning to be a successful service company, the management should;

1. Place the core service at the centre. The core service has become a field for strategic development, an important ingredient in the business idea as well as a central management task at all levels.
2. Focus on the customers. The management of institutions of higher learning should map and understand their customers' articulated and unarticulated needs and the factors that steer the customers' desired or adequate services respectively.
3. Produce a dialogue with internal as well as external customers. Quality improvement is everybody's responsibility. Each co-worker has the knowledge, resources, and authority to provide the right quality. In this situation, the customers will confirm their satisfaction or dissatisfaction.

This study also provides other theoretical implications by proposing a model for the relationship between academic achievement and the core service. This model is the impetus toward further research to explain more on the variation in academic achievement. Further research is necessary to explain more of the variance in academic achievement.

This study has also provided a foundation for future research. More in-depth research will have to be conducted in the future to strengthen and improve these two models. The next section will discuss the research interpretation, limitations, and proposals for future research.

Proposals for future research

The phenomenal growth of private institutions of higher learning in Malaysia and the intriguing aspects of the core service in the context of creating value hold the attention. The exploratory nature of this research provides a variety of possible directions for future research to be pursued. This piece of research has tried to extend research on the core service and to assist the institutions of higher learning with the assessment of the core service within their practices. Because many of the issues that rose are still unsettled, the research agenda will encourage all interested researchers to address those issues and add to the core service literature in a constructive manner. Nevertheless, further research has to be performed in order evaluate the competitiveness of Malaysian private higher learning institutions in terms of the core service and academic achievement. In addition, further research may be dedicated to

develop and to apply the models proposed in this study. This research project also had several limitations. It is thus suggested that future research overcome these limitations.

Further research is necessary to explain more of the variances in academic achievement. Topics of immediate interest that attract research attention include:

1. Analyzing the relationship between the core service and academic achievement as a whole is required to confirm the results of the current investigation.
2. Investigating and trying to understand the relationship between the core service with academic achievement in private institutions of higher learning from the secondary customers (such as parents and employers) perspective.
3. Investigates and tries to understand the relationship between the core services with academic achievement in private institutions of higher learning from the international student's perspective.
4. Investigating and trying to understand the relationship between the core services with academic achievement in private institutions of higher learning from the internal customers' perspective.
5. Common factors of influence that favourably affect cross-customer perceptions of the quality of service.

References

- Kumar, S. A. and Termizi, A. T. (2005), "Langkah selamatkan institusi pengajian tinggi", *Utusan Malaysia*, Saturday 4th of June 2005, p. 1
- Nunnally, J. (1978), *Psychometric Theory*, 2nd Ed., McGraw Hill, New York.
- Sepian, N. W. (1981), "Conception educational achievement", *Educational Researcher*, Vol. 19, No. 3.
- Slade, P., Harker, M. and Harker, D. (2000), "Why do they leave, why do they stay? Perceptions of service quality at a new university", *ANZMAC 2000 Visionary Marketing for the 21st Century: Facing the Challenge*, pp. 1197-1200.
- Sureshchandar, G.S., Rajendran, C. and Anantharaman, R.N. (2001), "A holistic model for quality service", *International Journal of Service Industry Management*, Vol. 22, No. 4, pp. 378-412.
- Sureshchandar, G.S., Rajendran, C. and Anantharaman, R.N. (2002), "Determinants of customer-perceived service quality: a confirmatory factor analysis approach", *Journal of Services Marketing*, Vol. 16, No. 1, pp. 9-34.
- Wahid, R.A. (2003), "Improving service quality", *New Straits Times (Malaysia)*, April 19, 2003, Appointments; p. 2-EX.
- Wallman, B.B. (1973), *Dictionary of Behavioral Science*, Van Nostrand Reintold Company, New York.
- Yahoo-education [Online], Available: <http://education.yahoo.com/reference/factbook/my/index.html> [Accessed: 10th of February 2004].