

คุณภาพการบริการ การรับรู้คุณค่าในเชิงตัวเงิน และความพึงพอใจของนักศึกษา: การวิจัยเชิงเปรียบเทียบระหว่างมหาวิทยาลัยรัฐและเอกชนในประเทศไทย

SERVICE QUALITY, PERCEIVED VALUE FOR MONEY, AND STUDENT SATISFACTION: THE COMPARATIVE STUDY BETWEEN PUBLIC AND PRIVATE UNIVERSITY IN THAILAND

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บทคัดย่อ

การวิจัยนี้มีวัตถุประสงค์เพื่อทดสอบอิทธิพลของคุณภาพการบริการและคุณค่าที่เป็นตัวเงินที่ส่งผลต่อความพึงพอใจของนักศึกษาต่อมหาวิทยาลัยและเพื่อเปรียบเทียบขนาดของอิทธิพลของคุณภาพการบริการและคุณค่าที่เป็นตัวเงินต่อความพึงพอใจของนักศึกษาระหว่างมหาวิทยาลัยของรัฐและเอกชนในประเทศไทย การวิจัยนี้เป็นการวิจัยเชิงปริมาณโดยใช้กลุ่มตัวอย่างเป็นนักศึกษาชั้นปีที่ 4 คณะบริหารธุรกิจ มหาวิทยาลัยของรัฐ 2 แห่ง และมหาวิทยาลัยเอกชน 2 แห่ง ทดสอบสมมติฐานด้วยการวิเคราะห์ตัวแบบสมการเชิงโครงสร้าง ผลการวิจัยพบว่าคุณภาพการบริการส่งผลทางตรงต่อความพึงพอใจของนักศึกษาและส่งผลทางอ้อมต่อความพึงพอใจผ่านตัวแปรคุณค่าเชิงตัวเงินอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.01 นอกจากนี้คุณค่าเชิงตัวเงินส่งผลทางตรงต่อความพึงพอใจ อย่างมีนัยสำคัญทางสถิติที่ระดับ 0.01 โดยตัวแปรอิสระทุกตัวสามารถรวมกันพยากรณ์ความพึงพอใจได้ร้อยละ 76.0 ($R^2 = 0.76$) นอกจากนี้ยังพบว่าคุณภาพการบริการส่งผลต่อความพึงพอใจแตกต่างกันอย่างมีนัยสำคัญทางสถิติระหว่างมหาวิทยาลัยของรัฐและเอกชนและพบว่าอิทธิพลของคุณค่าเชิงตัวเงินที่มีต่อความพึงพอใจของนักศึกษาในมหาวิทยาลัยของรัฐและเอกชนแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับนัยสำคัญ 0.01

คำสำคัญ: คุณภาพการบริการ การรับรู้คุณค่าในเชิงตัวเงิน ความพึงพอใจ มหาวิทยาลัย

Abstract

The study aims to examine the effect of service quality and perceived value for money on student satisfaction with their university, and to compare their effects between that of students in public and private university in Thailand. This research is a quantitative research. The data were collected from fourth year students in two public universities and two private universities. The hypothesized relationships were tested by structural equation modeling. The results of the analysis indicate that service quality has both direct and indirect significant effect on satisfaction at 0.01 significant level while perceived value for money is the mediator. In addition, perceived value for money has significant direct effect on satisfaction at 0.01 significant level. These two variables are able to predict satisfaction at 76 percent ($R^2=0.76$). Moreover, the results indicate that the effect of service quality on satisfaction and the effect of perceived value for money on satisfaction are significantly different between student of public and private universities at 0.01 significant level.

Keywords: Service Quality, Perceived Value For Money, Satisfaction, University

Introduction

The higher education section has become a global business and universities must continuously explore options for exporting higher education services. Quality management is crucial to the sustainability of education in higher education, especially, in globalization which is a vital challenge to business education. Additionally, in the education sector where no true products are involved; service provided will represent the competitive differentiation between universities in terms of their superiority in creating educational experiences (Khodayari & Khodayari, 2011). While research and innovation are parts of competition's outcomes, universities are also expected to deliver high-quality educational service which is relevant to the labor market and leading edge (Yusof, Hassan, Rahman & Ghouri, 2012). In both developed and developing countries, quality assurance in education is an important issue as many educational institutions have failed to provide services up to the expectation of their students (Ilyas, Nasir, Hussain, Malik, Munir, & Sarwar, 2013). Some evidence indicated that there were gaps in service quality perceptions between students and lecturers, the findings of Sandmaung and Khang (2013) showed that there are relatively low correlations between the students as direct users and the lecturers as service providers. In addition, both perceived value and service quality dimensions should be incorporated into customer satisfaction models to provide a complete picture of the drivers of satisfaction (McDougall & Levesque, 2000). Importance of value for money in higher education is also heavily weighted for evaluating the quality of higher education by the several stakeholders' views especially student expectations on value for money for the increasing cost to them of higher education (Hertzman & Ackerman, 2010). For Thailand, almost every university currently offers programs in business administration. In 2015, Thailand became part of the single market system under ASEAN Economic Community (AEC). Business sectors have begun preparing themselves to meet the challenges and opportunities. Education is one of the sectors to be internationalized and to face high competition (Yousapronpaiboon, 2014). Business school in higher educational institutions could prepare themselves for AEC membership by striving to achieve excellence in service quality as well as high value for money.

Objective

This study aims to assess the effect of service quality and perceived value for money on student satisfaction. It also aims to assess the moderating role of the type of the university (i.e., private and public university) on the hypothesized relationships. To overcome the limitations suffered by past research in this domain, a model that includes the two important determinants identified in the recent literature as predictors of satisfaction while the effect of service quality on satisfaction is mediated by perceived value for money. Using multiple groups of respondents to ensure generalizability of the results, a mixed sample of students in four higher education institutions located in two settings in Thailand (Bangkok and upcountry) were used to test this model.

Literature Review

Satisfaction is a complex concept and is influenced by a number of factors. Most widely studied among these factors are perceived value for money and perceived service quality. In the service sector, researchers commonly consider service quality to be the most crucial element

of satisfaction. Related to this, a number of studies have resulted in evidence supporting the notion that service quality has strong direct predictor of satisfaction (e.g., Al-Alak & Alnaser, 2012; Um, Chon, & Ro, 2006). In addition to satisfaction, perceived value has been identified as one of the most important factors in gaining competitive advantages for products and services. The concept of value is often linked to important consumer behaviors such as loyalty and satisfaction. Perceived value influences not only satisfaction but also intentions to recommend and repurchase products or services. Several research studies have confirmed that perceived value for money is a powerful predictor of satisfaction (e.g., Gallarza & Saura, 2006; Mechinda, Serirat, & Gulid, 2009; Petrick & Backman 2002). In addition to its potent direct effect on satisfaction, perceived value for money has also been shown to exert a significant mediating effect on relationships between service quality and satisfaction. Several studies identified that service quality affects perceived value for money (e.g., Hu, Kandampully, & Juwaheer, 2009; Telford & Masson, 2005). From the literature mentioned above, the following hypotheses were made in accordance with the model in Figure 1:

H1: Service quality and perceived value for money have direct effect on satisfaction

H2: Service quality has indirect effect on satisfaction, as mediated by perceived value for money

H3: Type of university (private university, public university) moderates direct effect of service quality on satisfaction (H3-1); direct effect of perceived value for money on satisfaction (H3-2); the direct effect of service quality on perceived value for money (H3-3).

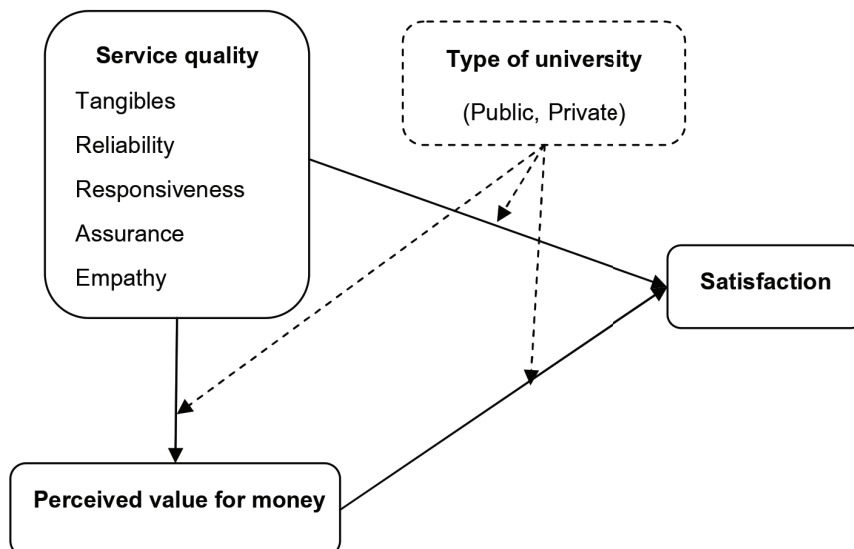


Figure 1 Conceptual framework

Note: Direct effect Moderating effect

Service quality

Service quality is defined as a customer's general impression or attitude toward services they receive (Bitner, Booms, & Tetreault, 1990). The most popular tool for measuring service quality is SERVQUAL (Parasuraman, Zeithaml, & Berry, 1988). Based on the service quality gap model,

they defined service quality as a function of the gap between customer expectation of service and their perceptions of the actual service delivered by an organization. SERVQUAL scale has provided very helpful insight regarding the dimension of service quality. They consolidated the ten variables proposed in 1985 to five broad dimensions: Tangible (appearance of physical elements); Reliability (dependable, accurate performance); Responsibility (promptness and helpfulness); Assurance (competence, courtesy, credibility, and security); Empathy (easy access, good communication, and customer understanding). These five dimensions have been applied in several types of industry including higher education (e.g., Galeeva, 2016; Lampley, 2001; Tan & Kek, 2004)

Perceived value for money

Among the definitions of value given by researchers, the early concept proposed by Zeithaml (1988) is the most widely accepted definition of perceived value. Zeithaml (1988, p. 14) defined value as “the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given.” Oliver and Rust (1994) defined value as some combination of what is received (utility derived from quality) and what is sacrificed (price and other costs). Zeithaml’s work suggests that service value can be considered a trade-off between a customer’s evaluation of the benefits of using a service and its cost. Most value-based models used in recent studies have adopted the economic perspective that “value” truly relates to perceived value. Perceived value, in turn, is defined simply as quality relative to the price paid (Gallarza & Saura, 2006).

Satisfaction

Satisfaction is typically defined as a customer’s emotional state of mind after being exposed to travel experiences (Baker & Crompton, 2000). In this study, satisfaction is measured using the perception/ experience-only approach. This approach suggests that customers are likely to assess certain services based on perceptions or experiences, regardless of their expectations regarding those services (Churchill & Surprenant, 1982; Halstead, Hartman, & Schmidt, 1994). Previous studies that have utilized this approach have argued that perceptions and experiences are the strongest correlates with customers’ future behavior and are reliable predictors of the nature of customer expectations (Crompton & Love, 1995).

Measures

For the purposes of this study, four items from Fornell, Johnson, Anderson, Cha, and Bryant (1996) and Oliver (1980) were adapted to measure student satisfaction. These items are related to students’ unstandardized feelings about their experiences at during their study (i.e., respondents were asked to report their feelings without considering their expectations for their experience). The first two items related to the quality of the experience, and the other two related to students’ emotional state of mind after the experience. To analyze perceptions of service quality related to university services, Cronin and Taylor’s (1992) suggestion to use a perception/ experience-only approach is applied. The “SERVQUAL” framework proposed by Parasuraman, Zeithaml, and Berry (1988) is adopted as a platform for measuring service quality. Further, four items from Mechinda, Serirat, and Gulid (2009) are adapted to gauge perceived value for money.

Data Collection

Relevant literatures were reviewed to develop the questionnaire used for data collection. Following its development, the questionnaire was subjected to an evaluation of content validity by a panel of two academics and one student. In addition, a pilot study was performed on the questionnaire using 30 students from other campuses of a public university and 30 from a private university. In doing so, ambiguous items were identified, and the scales' reliability was assessed. The questionnaire was refined into five sections, collectively consisting of 32 questions. The first section includes screening questions asking whether the respondents are fourth-year student and study in business administration faculty. The second section contained questions designed to gather demographic information of the respondents. The third and fourth sections were related to service quality and perceived value for money. The fifth section concerned respondents' overall satisfaction with their university. Using convenience sampling method, the survey was self-administered by fourth-year Thai students from two private medium size universities and two medium size public universities located in Bangkok and upcountry during February to April of 2017. In total, 603 completed questionnaires were collected among students in four universities, 596 of which were usable.

Demographic Profile of Respondents

Table 1 summarizes the basic socio-demographic characteristics of the samples. The sample's characteristics show that the sample is generally distributed among groups. Hence, there is no bias in the sample's selection. From Table 1, around 76% of the respondents were female while 23% were male in accordance with the proportion of students in faculty of business administration. The percentage of public and private students was almost equal. The majority of the sample consists of students from management department which comprised 30% of the sample. It could be concluded that these demographic statistics such as gender, university, department were balanced, consisting of various groups of students, thus reducing the possible bias of the sample.

Table 1 Socio-demographic characteristics of the sample

	Characteristics	Respondents (N = 596)	Percentage
Gender	Male	141	23.7
	Female	455	76.3
University	Public University A*	191	32.0
	Public University B**	120	20.1
	Private University C*	200	33.6
	Private University D**	85	14.3
Department	Management	179	30.0
	Finance	73	12.2
	Accounting	80	13.4
	Marketing	63	10.6
	Information system	63	10.6
	Human resource management	24	4.0
	Hotel management	34	5.7
	Computer Business	28	4.7
	Economic	34	5.7
	Business administration	10	1.7
	Others	8	1.3

Note: * = university located in up-country; ** = university located in Bangkok

Measurement Validation

During Confirmatory Factor Analysis (CFA), it is reported that the composite reliability values ranged from 0.90 to 0.92, considerably above the recommended level of 0.60 (Bagozzi & Yi, 1988). All items loaded heavily onto their assigned factors, ranging from 0.75-0.88, indicating convergent validity among the constructs (Dabholkar, Thorpe, & Rentz, 1996). Average Variance Extracted (AVE) values ranging from 0.65-0.73 which are met the stipulated criterion of 0.5 (Bagozzi & Yi, 1988; Hair, Black, Babin, Anderson & Tatham, 2006) (Figure 2).

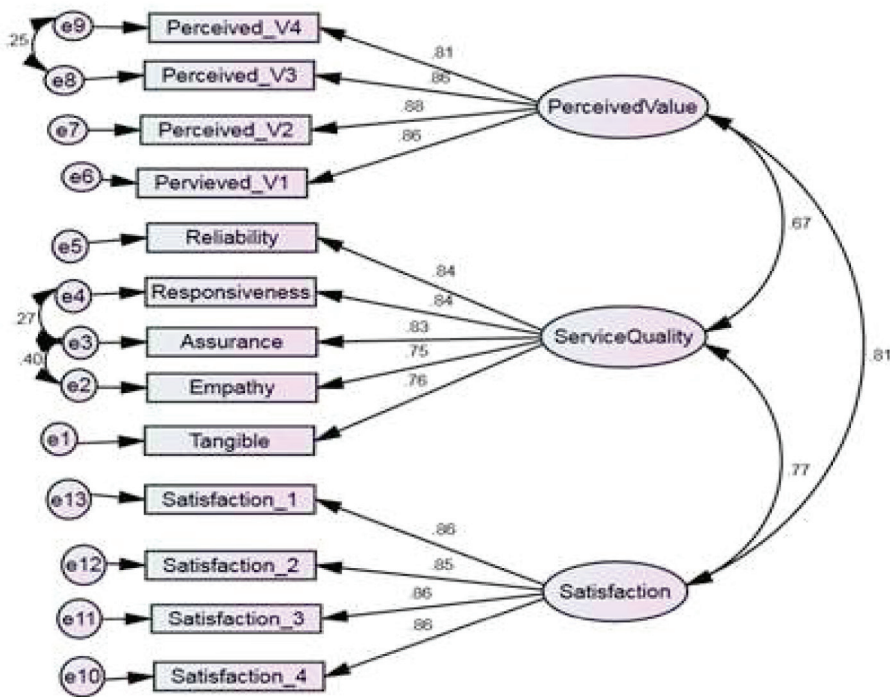


Figure 2 Measurement model

In this study, the Goodness-of-fit Index (GFI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA) and Chi-square test were reported to indicate the degree to which the measurement model fit the data as suggested by Hair et al. (2006). Acceptable fit for the GFI and CFI require values over 0.9, while acceptable fit for the RMSEA requires a value lower than 0.1 (Hair et al., 2006; Kline, 1988). The fit indices of the initial model were not satisfactory, as the χ^2 /df values were above the recommended level ($\chi^2 = 293.543$, $df = 62$; $p = 0.00$; GFI = 0.926; CFI = 0.964; RMSEA = 0.079). Further, it was noted that the model could be significantly improved by permitting the errors to correlate between items (Saris, Satorra, & Sorbom, 1987). In improving the fit of the measurement model, modification indices suggested that the model fit could be improved by correlating items Perceived_V3 and Perceived_V4 in perceived value for money. As these two items are in the same construct, intuitive sense that the two items are associated. In the similar vein, it was considered appropriate to re-estimate the model with the error covariance between other items specified as free parameters as shown in the modified measurement model. These steps proved beneficial, as the final measurement model was shown to have an acceptable fit to the data ($\chi^2 = 188.576$, $df = 59$; $p = 0.00$; GFI = 0.953; CFI = 0.98; RMSEA = 0.061).

Structural Model

After validating the measurement model, we used the χ^2 value, GFI, CFI, and RMSEA to evaluate the fit of the structural equation model (see Table 2). Although the χ^2 test was unable to determine that there was a significant difference between the predicted and actual model,

most researchers generally agree that the χ^2 value should be used as guide rather than a strict fit index due to its sensitivity to sample size ($N = 596$) (Anderson & Gerbing, 1988). Given this, it is important to assess other fit indices. The structural model demonstrated an acceptable fit to the data in terms of the GFI and CFI indices (both were above the recommended level of 0.90). In addition, its RMSEA was beneath the acceptable level of 0.1 (Hair et al., 2006; Kline, 1988). The squared multiple correlation coefficients (SCM) indicated that 76% of the variance in satisfaction could be explained by service quality and perceived value for money. Given these results, we judged the structural model to be a good fit to the data.

Table 2 Structural mode fit statistics

Model Fit Statistics					
χ^2	df	P value	CFI	GFI	RMSEA
293.543	62	0.000	0.964	0.926	0.043

Results of Hypothesis Tests

The results of the analysis illustrate that service quality predicts perceived value for money. In turn, perceived value for money predicts satisfaction. Perceived value for money also directly affect satisfaction. Of these two factors that significantly predicted satisfaction, perceived value for money exerted the strongest effect ($\beta = 0.54$), followed by perceived service quality ($\beta = 0.42$) at the 0.01 significance level. The strengths of these relationships (as indicated by standardized path coefficients) are indicated in Table 3. Therefore, the results provide support for H1. In addition, perceived value for money was a mediator between service quality and satisfaction. Therefore, H2 is supported.

Table 3 Comparison of structural parameter estimates between public and private

Hypothesized relationship	Standardized path coefficients			$\Delta\chi^2$ (Δdf)
	Structural model	Moderating effect		
	Total (n= 596)	Public (n=311)	Private (n=285)	
Service quality → Satisfaction	0.42***	0.903***	0.891***	16.33(1) ***
Perceived value for money → Satisfaction	0.54***	0.328***	0.489***	12.44(1) ***
Service quality → Perceived value for money	0.67***	0.557***	0.497***	6.63(1) ***

Notes: *** $p < 0.01$

To examine the moderating role of type of the university on the relationships between service quality, perceived value for money, and satisfaction, multiple group analysis (MGA) for SEM was applied. First, the respondents were divided into groups according to type of university (i.e., public and private). To investigate significances in relationships among construct across these

groups, MGA was conducted using a χ^2 -difference approach as suggested by Byrne (2013). The result revealed that type of university significantly moderates the direct effect of service quality and perceived value for money on satisfaction. It is concluded that H3-1 and H3-2 are supported. Type of university also moderates the direct relationship between service quality on perceived value for money. Hence, H3-3 is supported.

Results and Discussion

Research examining the relationship among service quality, perceived value for money and satisfaction in Thai higher education are sparse. This study shows that, in Thai higher education context, service quality has a strong direct effect on student satisfaction. It is suggested that student satisfaction result from students' assessments of their service experiences offered by a number of service units at the universities such as lecturers, supporting staffs, as well as the environment and physical facilities. Hence, integrated management of universities service units can strengthen student satisfaction. The findings also demonstrate that service quality also exerts indirect influence on satisfaction through perceived value for money. The finding that service quality is a strong predictor of satisfaction is largely consistent with previous studies on service industry (e.g., Ali, Zhou, Hussain, Nair, & Ragavan, 2016; Hasan, Ilias, Rahman, & Razak, 2009).

Table 3 indicates that perceived value for money has the strongest direct effect on satisfaction. This is consistent with findings produced by Alves and Raposo (2007) and Gallarza and Saura (2006). The significant mediating role and the strong direct effect of perceived value for money in the development of satisfaction inform university management to focus more heavily on perceived value for money as student's satisfaction seems difficult to achieve without it. The results of this study also indicate a strong link between perceived value for money and service quality, suggesting that students' perception of service quality are heavily contingent on their evaluations of what they received at the university, as well as the money they paid for it. This suggests that management of universities should also seek to improve students' perceptions of the value they receive for the money they spend at their universities. It also suggests that measuring quality of the service alone may not be sufficient for inducing student satisfaction; it is also necessary to monitor and improve the perception of value for money created by the university. This suggestion is in accordance with the results of a study conducted by Dlacic, Arslanagic, Kadic-Maglajlic, Markovic, and Raspor (2014) among undergraduate students in Bosnia Herzegovina and Croatia. Their results show that perceived service quality has a positive and significant impact on customer-perceived value.

The significant moderating role of type of university in this study suggests that public and private university's management needs to consider the desires of student differently in their operations and marketing effort. Though research on moderating role of type of university is rare, this finding is in agreement with Leslie and Brinkman (1987) who suggest that students in public and private university exercise their preference differently. In the context of public university, students are more likely to base their satisfaction on whether service provided by university matches their internal desire. Students evaluate the depth of customer-orientation in university services based on their perceptions of multiple factors such as the structure, design, and delivery of international programs. For private university, student base their satisfaction on what they received compared

to the money they have paid for. Hence, private university management should focus on their pricing strategy. They should ensure that the service offered by the university suitable for the student's cost such as tuition, registration fee, as well as living expenses in the campus.

Conclusion and Recommendation

Despite an extensive literature on the satisfaction and service quality, this study represents a first attempt to explore the mediating role of perceived value for in building satisfaction in Thailand higher education. The model proposed in this study extends the understanding of how to develop student satisfaction. Validated with empirical data from both public and private universities in Thailand, the model also contributes to the existing literature by comparing the strength of these relationships between public and private university. The analysis indicates that service quality simultaneously contributes to the formation of student satisfaction both directly and indirectly. These findings may have practical implications for university management in Thailand. To develop a student satisfaction, university management should seek to establish high levels of service quality among them. They should also continuously improve and gauge student satisfaction with their experiences and perceptions of service quality. The analysis also provided evidence that perceived value for money is a statistically significant mediator of service quality and satisfaction. This significant mediating effect suggests that despite the importance of service quality, students will not fully satisfy if they are perceived that what they received does not worth the money they have paid for. Specifically, university management should attempt to influence perceptions of value for money. The significant moderating effect of type of university suggests that, in order to develop satisfaction, a similar strategy may not be applicable in every type of university. The results of this study suggest that public university should focus on building higher service quality while private university should focus on creating student's perception of value for money.

Limitation

Despite its valuable insights, the results of this study must be qualified in light of some limitations. First, this study was limited to universities in Thailand; its results may not be applicable to universities in other countries. To increase the external validity of the findings, replicating this study in other cultural contexts would increase the generalizability of these findings.

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