

**BEING TRUE TO YOUR SCHOOL: A COMPARISON OF STUDENTS'
LOYALTY IN PUBLIC VERSUS PRIVATE UNIVERSITIES**

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ABSTRACT

This study has two objectives: first, it aims to examine the direct and indirect influences of perceived value, university image, and student satisfaction on student loyalty; second, it aims to comparing the effect sizes of student loyalty between public and private universities in Chiang Mai, Chiang Rai, and Lampang provinces located in upper north of The Kingdom of Thailand. The quantitative-based cross sectional survey method was employed in this study. The sample size consists of 600 university students from 3 public universities and 3 private universities. Multistage stratified cluster sampling procedure was used in collecting data. The data was analyzed with the Structural Equation Model (SEM) approach by employing Analysis of Moment Structure (AMOS) computer programming. Results showed that Student Perceived Value, University Image, and Student Satisfaction significantly explained about 75% of variance in Student Loyalty. The results indicated that student perceived value, university image, and student satisfaction all have significant role in influencing to student loyalty. For public university, university image has positively affected to student loyalty, student perceived value that positively indirect affected student loyalty via university image. But, for the private university case, the results showed that only student satisfaction that positively and significantly affected student loyalty, student perceived value that positively indirect affected to student loyalty via university image and student satisfaction. Benefits from this study could be employed to assist formation of student recruitment strategy and marketing of university.

Keywords: Student Loyalty, Student Satisfaction, University Image, Student Perceived Value

INTRODUCTION

In recent years, the competitive situation among higher educational institutions increasing since they are more numbers of higher education institutions in both public and private especially during last 10 years (Office of the Higher Education Commission, 2015). For public institution,

separated extension campus from main campus to be independent campus is a major reason, while for private ones, establishing new ones is another reason.

There had been a successful birth-control program in Thailand during last 30 years (Ministry of Public Health, 1997) has caused less number of young higher education generations (Office of the Higher Education Commission, 2015). This is particularly true in Thailand partly because of shifts in supply and demand - e.g., the number of incoming new university students have been in decline at the same time that educational options, including online programs, has increased (Office of the Higher Education Commission, 2015). The competition situation among them is intensifying when students have more choices to make in terms of which higher education institution to pursue their studies, creating a situation where they have more “bargaining power” (Mohamad, 2009). Student loyalty is therefore one of the major goals of the educational institutions insofar as an indicator for university administrators to concern with, so that strategy of recruiting students annually could be formed properly. And, moreover to retain students on campus, student activities and programs of study could be factors for university administrator goals. Therefore, it is increasingly seen as one of the most important issues for determining the most appropriate strategic management in order to ensure long-term successful performance of both public and private universities.

Early research into this area is encouraging as this premise has received general support by Henning-Thurau et al. (2001) and Rodie&Kleine (2000). Their studies showed that student loyalty was an important factor to educational institution for administration and planning.

More specifically, several potential variables accounting for student loyalty have been identified across loosely-connected spheres of research areas. For example, with regard to competitive performance, student satisfaction was found to be a key antecedent and had expected strong positive correlation with student loyalty (Marzo-Navarro et al., 2005; Schertzer&Schertzer, 2004; Helgesen&Nesset, 2007; Henning-Thurau& et al., 2001). It has also been found that student satisfaction can act as a positive driver of student loyalty (Kunanusorn&Puttawong, 2015). In addition, student satisfaction has been shown to not only positively impact of student loyalty, but also to influence key consequences of university image and student perceived value. For example, Kunanusorn&Puttawong (2015) found that student satisfaction was a mediating variable between university image and student perceived value to student loyalty. Moreover, their findings indicated that student perceived value was the most influential factor to university image and strongly influenced to student loyalty via student satisfaction. Nevertheless, the study and its conclusions pertained only to private universities.

Therefore, the present study seeks to address the following research questions: 1) What are the critical antecedents of university student loyalty? and 2) Do these vary across type of university? In short, we focus our interests on studying how students' perception of an institution's image and institution's value could influence their satisfaction and ultimately their loyalty. As such, we integrate varied streams related to university student loyalty to develop an original conceptual model and then test the strength of the model in both private and public universities. In the following sections, we will survey and integrate the supporting literature, present our conceptual model and research hypotheses, detail our empirical methodology and analyses, and present what

we see as critical implications of the study for university educators and administrative professionals.

RELATED LITERATURE AND CONCEPTUAL MODEL

There are several scholarly streams which inform the focal topic. In this section we present a review and synthesis of related research on university students with a focus on the core concepts of loyalty, satisfaction, university image, and perceived value.

Student Loyalty

Loyalty is defined as faithfulness to something to which one is bound by pledge or duty. It implies a faithfulness that is steadfast in the face of any temptation to renounce, desert, or betray (Merriam-Webster, 2018). One may be faithful to other people or to non-human objects as well as to something that believes according to experience and perception. Loyalty is the highest level of commitment, which represents the previous step of purchase action from a favorable tendency to a repurchase commitment (Oliver, 2014). Customer loyalty involving both attitudinal and behavioral dimensions has four key stages: conative loyalty, affective loyalty, cognitive loyalty, and behavior loyalty (Oliver, 2014). Attitudinal loyalty goes through the first three stages - conative, affective, and cognitive, while behavioral loyalty is considered to be the result of this process (Oliver, 2014).

According to the present study, we therefore define *student loyalty* as the combination between student willingness to provide positive words of mouth about institution and recommendation concerning educational institution to family members, friends, employers, and organizations whenever opportunities are (Athiyaman, 1997; Helgesen & Nettet, 2007; Mohamad, 2009; Thomas, 2011). Student loyalty contains an attitudinal component and behavioral component (Henning-Thurau & et al., 2001; Marzo-Navarro & et al., 2005a). However, with regard to quality of education, the loyalty of students is influenced in teaching quality positively through active participation and committed behavior (Rodie & Kleine, 2000). In terms of behaviors, there were manifest variables about commitment as repurchasing, patronization, recommendation to others, returning to repeat in higher education, and returning to join university activities (Thomas, 2011; Helgesen & Nettet, 2007). However, loyalty on the other hand refers to a deeply held commitment to re-buy a preferred product or service in the future despite situational influences and marketing efforts giving the potential to cause switching behavior (Oliver, 1997).

Student Satisfaction

Satisfaction means a happy or pleased feeling because of something that you did or something that happened to you (Merriam-Webster, 2018). Satisfaction is the “customer’s valuation of a product or service in terms of whether the product or service has met the customer’s needs and expectation” (Zeithaml et al., 2008, p.104). Customer satisfaction refers to customers’ overall subjective post purchase assessment about a service or product, according to their expectation of pre-purchase and experience with a particular organization (Kim & Lee,

2011). It is a vital determinant of and strongly impacts on behavioral intentions (Baker & Crompton, 2000). Customer satisfaction is becoming a popular study area in marketing since it is a critical factor in achieving business goals (Munusamy & Chelliah, 2011).

According to the present study, we therefore define *student satisfaction* as feeling of warmth and acceptance from being part of group, and also feeling of wants and needs are achieved. It had been found that student satisfaction or dissatisfaction leads to intention to stay or to quit which in turn leads to student retention or attrition (Kara & De Shields, 2004). This means that student satisfaction has an important antecedence and is a major driver of student loyalty (Thomas, 2011). There is a general assumption in this and related studies that satisfaction may serve as a predictor of student loyalty (Athiyaman, 1997; Henning-Thurau & et al., 2001; Schertzer & Schertzer, 2004; Marzo-Navarro & et al., 2005b; Helgesen & Nettet, 2007; Brown & Mazzarol, 2006; Mohamad, 2009). Moreover, there is a consistent positive correlation and significant, strong affect between student satisfaction and student loyalty. It was also found that where students have choices, the link between satisfaction and loyalty is linear (Douglas & et al., 2006). However, student satisfaction has the highest degree of association with student loyalty both directly and totally, representing total effect is about three times higher than the effect of image of university (Helgesen & Nettet, 2007). In terms of specific behaviors, there were manifest variables about satisfaction on several dimensions including: quality of academics, quality of administration, quality of infrastructure, quality of social life and quality of support service of university. One finding of studies supported that student perceived of value, image of university, and student loyalty are the core antecedent variables to student satisfaction and the consequences of student loyalty (Ryu & et al., 2008; Mohamad, 2009). As such, the following hypothesis has been formulated:

H1: Student Satisfaction will have a significant direct positive effect on Student Loyalty.

University Image

An organization's image is defined as an overall impression that a person has about an object. It bases on complete information, and it differs from various institutions (Kotler & Fox, 1995). Image has an impact on customer perceptions of communications and operations of firms in many aspects (Gronroos, 2001).

An image can be perceived and defined in various ways, e.g. as "a set of beliefs, ideas, and impressions held regarding an object" ([Lovelock and Wirtz, 2007](#), p. 628), or as a stakeholder group's "summary of the impressions or perceptions of a company" ([Chun, 2005](#), p. 95). Various stakeholders form images about a variety of entities such as products, brands and organizations and even places and countries ([Fombrun & van Riel, 2003](#); [Lemmink et al., 2003](#); [Hosany et al., 2006](#)).

According to the present study, we therefore define *university image* as a factor in which student would experience with and learned from mouth to mouth and from other media. Image consistently appears as one of the variables with the greatest direct influence in satisfaction and also has a considerable influence in loyalty (Alves & Raposo, 2007). Positive images of university

as a qualified production, positive reputation, good governance organization, and proper environment and location for studying all affect the attitude satisfaction and loyalty of students, which would in turn maintain students' motivation to continue further studying in their university (Helgesen & Nasset, 2007). Complementing this, it was also found that the effect of student satisfaction significantly mediates the relationship between university image and student loyalty (Mohamad, 2009; Brown & Mazzarol, 2006; Thomas, 2011). Moreover, in terms of behaviors, there are manifest variables on several dimensions including: student's image of specific study program, student's image of the university, and student's recognitions. As such, the following two hypotheses have been formulated:

H2: University Image will have significant positive direct effect on Student Satisfaction.

H3: University Image will have significant positive direct effect on Student Loyalty.

Student Perceived Value

Perceived value is defined as consumer's overall assessment of the utility of a product or service based on perceptions of what is received and what is given (Zeithaml, 2000). And in marketing, perceived value has been defined as "a consumer's perception of the net benefits gained in exchange for the costs incurred in obtaining the desired benefits" (Chen & Dubinsky, 2003, p. 326). Moreover, perceived value is a trade-off between benefits or what the consumer receives and sacrifices or what the consumer gives up (Chen & Dubinsky, 2003; Woodruff, 1997).

According to the present study, we therefore define *student perceived value* as a student perception of educational institution's facilities and the quality of service provided are among the antecedents most often used. The perceived value of quality of "human ware" (e.g., people and process) and "hardware" (e.g., infrastructure and tangible service elements) has an impact on student perceived value (Brown & Mazzarol, 2009). Studies by Andersen & Lindstead (1998), Hellier & et al. (2003), Yang & Peterson (2004), Wen & et al. (2005), and Arbar & Parvez (2009) showed that the perceived value has been identified as driver of satisfaction. They also found that student perceived value has indirect effect on student loyalty through student satisfaction and university image. As mentioned before, the measurement of student perceived value has been composed of several manifest variables including: net worth of the service, net worth expected, standard of the institution, and social value. As such, the following two hypotheses have been formulated:

H4: Student Perceived Value will have significant positive direct effect on University Image.

H5: Student Perceived Value will have significant positive direct effect on Student Satisfaction.

University Type

Higher educational institutions in Thailand are classified into three levels - college level, institution level, and university level. They can be either private or public institutions. All public institutions are university level, whereas only college and institution levels belong to private ownership. At institution level, some specialization subjects are offered as specialty subjects. There are some certain regulations to be university level, such as size of premise, graduate study, and more subjects in both arts and sciences.

The public higher education institutions are those maintained by public funds and are located in either capital, provincial or municipal areas. Private institutions are funded by individual or legal entities governed by the private higher education institution law, and may or may not aim for profit. Some are under religious groups established for purpose of non-profit seeking organization but evangelical purpose. The emphasis on the private university is sustaining a financial equilibrium whereas public institutions are mainly depended on annual government budget and numbers of student. Many public universities have been left from totally government-control to be “autonomous university” which is partially government supervision pattern. To attract students, private ones seek strategies of differentiation, which are many times in tune with the immediate demands of the community and companies. Clearly, private universities are giving competition to public universities in term of attracting students (Barral et al., 2018).

There is indeed a difference between private and public universities that have sometimes similar characteristics but also different attributes. Abdullah & Warokka (2011) discovered that the contributing factors that could affect the level of students’ satisfaction were students’ perception on learning and teaching; support facilities for teaching and learning such as libraries, computer and lab facilities, learning environment like rooms of lectures, laboratories, social space and university buildings; support facilities such as health facilities, refectories, student accommodations, student service and external aspects of being a student such as finance and transportation. Student’s perception and thoughts on the learning and teaching were considered essential as this is the basis of higher education. Students must definitely look into receiving good teaching in a conducive environment for learning.

In Malaysia, Naidu & Derani (2015) found that there are not many differences between public and private universities as the undergraduate students in their second year of study. The study reveals that the dimension or variables which affect private and public universities is quality of these universities. However, quality is an essential factor which assists students in determining universities of their choices. If student perceived the quality of university then they would satisfy their universities.

Based on differentiated business education strategies between public and private universities, we infer that the construction of student perceived value, university image, student satisfaction, and student’s loyalty in university depended on the university type.

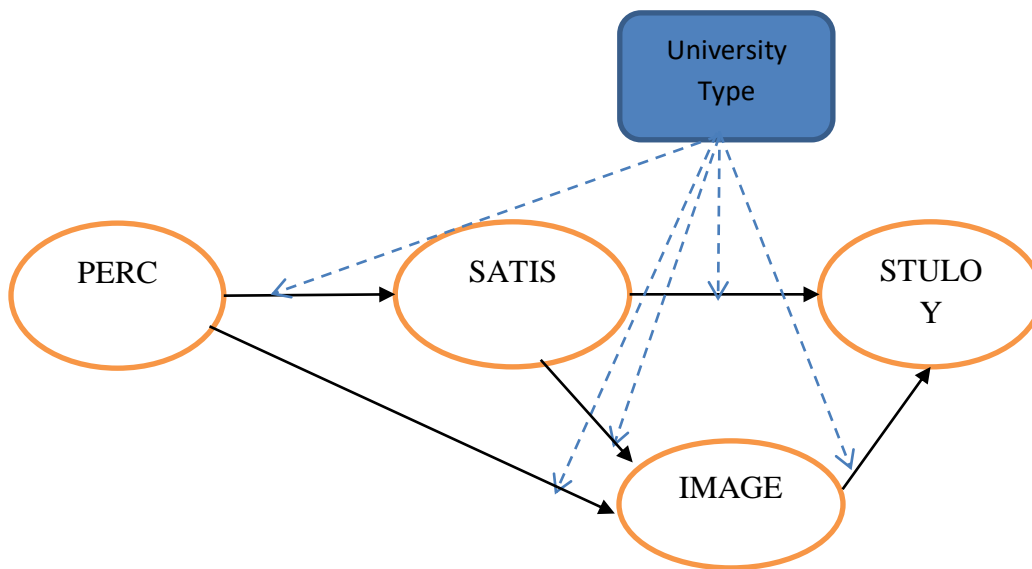
The comparison of the loyalty constructs between public and private universities can be accessed by using moderating effect of the university type. The moderator helps to identify the significant effect on the direction of the relationships (Baron & Kenny, 1986). In this study, we investigate the discrepancy in factors affecting student loyalty which may strengthen their business

education strategies and direction according to public and private university roles in the market. Therefore, we propose the following hypothesis:

H6:University Type will moderate the aforementioned relationships between student loyalty, satisfaction, university image, and perceived value.

Taken together, the main concepts underlying this study are drawn from loosely-connected but complementary theoretical frameworks and empirical studies. More specifically, their theoretical integrations were built on a growing stream of research (Kunanusorn&Puttawong, 2015; Thomas, 2011, Mohamad, 2009; Helgesen&Nesset, 2007; Marzo-Navarro et al., 2005b; Schertzer&Schertzer, 2004) which supported the premise that student satisfaction and student loyalty were among the most important key objectives of competitive performance of universities. As a result, our conceptual model illustrates these relationships between the latent variables of university student loyalty as presented in Figure 1:

Figure 1
Latent Variables Relationships Model



RESEARCH METHODOLOGY

In order to test the aforementioned hypotheses, the following multi-stage random sampling technique was employed.

Population and Sample

Data were collected from a total of 600 students across three university levels (second year/sophomore, third year/junior, and fourth year/senior) and across six different universities in upper-north part of The Kingdom of Thailand (ChiangMai Rajabhat University, Chiang RaiRajabhat University, Lampang Rajabhat University, Payap University, North-Chiang Mai University, and Far-Eastern University). First year student level was omitted due to inexperience in advanced degree level and they may drop out to having reexamination again either for the same institution or for others.

Six universities were selected based on multiple criteria of universities in upper-north of The Kingdom of Thailand based on accreditation and geographical representation. The total valid sample of 600 was collected with 100 per cent response rate. For using Structural Equation Modeling (SEM), it is required to have minimum sample size of 500, when the models have a larger number of constructs ([Hair et al., 2008](#)). Respondents are almost an equal split between private university (50%) and public university (50%). This is detailed in Table 1 below.

Table 1
Research Sample

University	Type	Student Level (year)			
		2nd	3rd	4th	Total
ChiangMai Rajabhat University	Public (300)	61	48	33	142
Chiang RaiRajabhat University		45	34	22	101
LampangRajabhat University		22	15	20	57
Payap University	Private (300)	74	62	43	179
North-Chiang Mai University		16	17	11	44
Far-Eastern University		21	43	13	77
Total		239	219	142	600

Measures

This study is a quantitative examination adopted the concepts and constructs in numerous models included (Thomas, 2011; Mohamad, 2009; Helgesen & Nettet, 2007; and Brown & Mazzarol, 2006). For all measurements of independent and dependent variables, we employed seven-point Likert scale type responsive format ranging from “strongly disagree” to “strongly agree”. In total, there were 15 indicator scales used to measure study of latent constructs derived from the aforementioned literature review and synthesis.

First, loyalty is measured using a four-part indicator: repurchasing(loy1), patronization and recommending to others (loy2), returning to repeat in higher education (loy3), and returning to join with university activities(loy4).Second, satisfaction is measured using a four-part indicator related to: quality of academics (satis1), quality of administration (satis2), quality of infrastructure (satis3), quality of social life and quality of support service of university (satis4).Third, university image is measured using a three-part indicator related to: student’s

image of specific study program (ima1), student's image of the university (ima2), and student's recognitions (ima3). Fourth, student perceived value is measured using a four-part indicator: net worth of the service (perc1), net worth expected (perc2), standard of the institution (perc3), and social value (perc4).

Procedure

A preliminary analysis of the data was conducted to test the multivariate normality, linearity and outliers to meet the basic assumption of normality and ensure the usage of multivariate techniques like factor analysis and Structural Equation Modeling (SEM). An assessment of normality was done through kurtosis and skewness tests. Normally, distributed data have skewness and kurtosis ranges between +2 and -2 (Kline, 2005). Kolmogorov and Shapiro (K-S) method and linearity were measured by Pearson's correlations and a scatter plot (Hair et al., 2008). Outliers were detected using Mahalanobis D^2 measure (Kline, 2005). The results of above tests substantiated that the data were normally distributed and the variables have linear relationships. The Analysis of Moment Structure (AMOS) output of Mahalanobis D^2 measure found no serious multivariate outliers.

The sample was used for Exploratory Factor Analysis (EFA) to develop the theoretical model to identify the underlying factor structure. A preliminary analysis of the data was analyzed by frequency and percentages. Cronbach's alpha coefficient and critical analysis of correlation of the data matrix were computed to ensure the usage of factor analysis and Hair et al. (2009) suggested that Cronbach's alpha should be greater than 0.700. The other statistical prerequisites to continue with exploratory factor analysis are Bartlett test of Sphericity, Chi-square and Kaiser-Meyer-Olkin (KMO) for indicating the suitability of factor analysis.

ANALYSES AND RESULTS

The data analysis is divided into two parts: 1) validating the measurement model and validating the structural model; 2) testing the hypotheses and comparing models.

Structural Equation Modeling (SEM) is used for testing theory associated with latent variable models because it enables the inference of complex relationships among variables which cannot be directly observed (Hair et al., 1998; Awang, 2015). Specifically, Analysis of Moment Structure (AMOS21.0), a leading SEM package, was used in this study.

Validation of Measurement Model and Structural Model

The dimensionality is found to be highly reliable, judging from Cronbach's values ranging from 0.865 to 0.903. The model also evidences a very good fit, larger than 0.6, validating the measurement model. In addition, to test whether the questionnaire items consistently reflect the constructs that they are measuring, Kolmogorov-Smirnov, One-Sample Test, is used in this study. The Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy is also used, gave a KMO value

0.960 and the Bartlett's Test of Sphericity is significant ($p = 0.000$). They indicate each set of variables reflecting enough relationship for Confirmatory Factor Analysis (CFA), while structural model analysis found that the manifest variables had linearity and homoscedasticity, R^2 more than 60 %. From analyses we found that Tolerance is more than 0.10 while Variance Inflation Factor (VIF) is less than 10, and Condition Index (CI) is less than 30, which would not have problem of multi-collinearity.

Measurement Model

It specifies how latent constructs are measured by the observed variables and it assesses the construct validity and reliability of the observed variables (Joreskog&Sorbom, 1989). We found that the manifest variables of the theoretical model are consistent with empirical data, while the component factor has values between 0.740 to 0.921. The accepted thresholds for these indices are: normed chi-square ratio less than 3; the values of GFI and CFI greater than 0.90 according to Hair et al. (1998).

Table 2
Model Fit Summary Produced by AMOS

Model	GFI	CFI	AGFI	RMSEA	Normed chi-square
Default model	.923	.969	.877	.056	2.886
Independent model	.167	.000	.028	.272	45.258

Structural Model

In Figure 2a (Model 1), shows the final model with path loading coefficients significant at the level 0.05. This model explained 83.0% of the variance in the student loyalty through the effect of direct antecedent variable just only with university image, and the indirect effect of the student perceived value. There is the positive direct effect from university image to student loyalty which is 0.659. While there is positive indirect effect from student perceived value via university image to student loyalty, giving a total effect at 0.797. This implies that the university image is a major driver of student loyalty for public university. In Figure 2b (Model 2), the Model 2 demonstrates the same linkage paths in Figure 2a (Model 1) which variance explained in the Model about 81.6%. This model shows that there is the positive direct effect from student satisfaction to student loyalty which is 1.184. The student perceived value also positive correlates via university image and student satisfaction with indirect effect of 0.781, and image

positive correlates to student loyalty with indirect effect of 1.251. This implies that the student satisfaction is a major driver of student loyalty for private university.

Figure 2a (Model 1 -Public University)

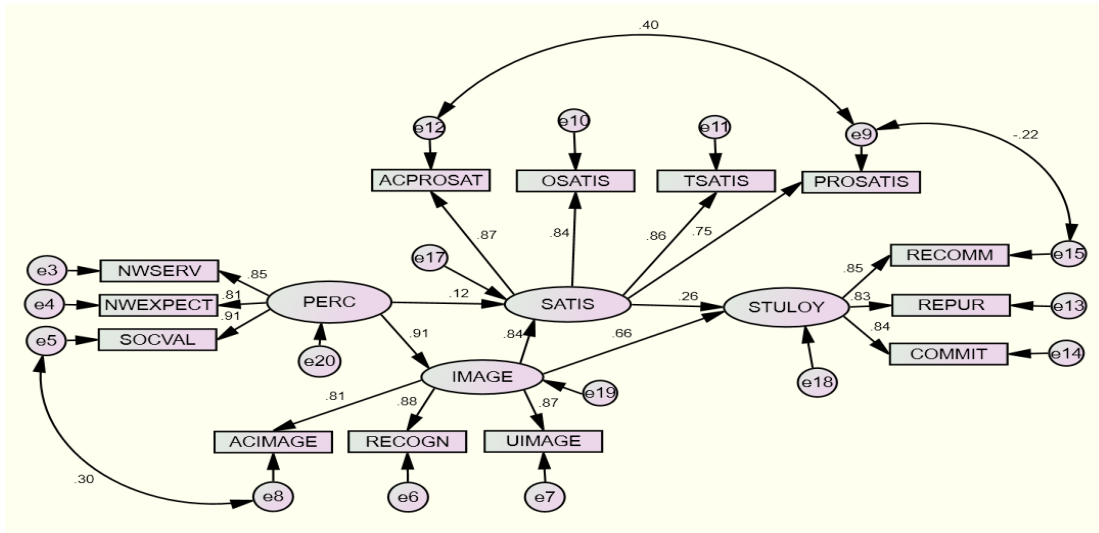
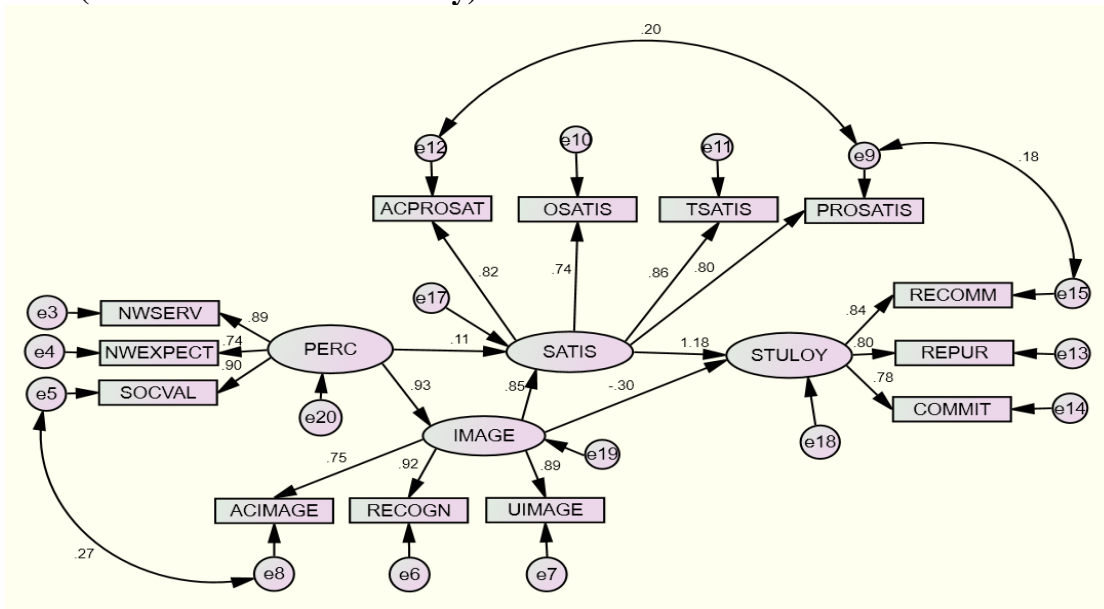


Figure 2b (Model 2 -Private University)



Hypotheses Testing

The four main concepts of the research model (student loyalty, student satisfaction, university image, and student perceived value) are likely by five path estimates that are all hypothesized to be positive. Looking at the Model 1 in Table 3, there is fail to accept the first hypothesis (H₁) which states that student satisfaction has no direct effect on student loyalty. However, a finding of the Model 1 found that university image significantly mediates the relationship between student perceived value and student loyalty. In the Model 2, there is fail to accept the third hypothesis (H₃) and fifth hypothesis (H₅) which states that university image and student perceived value has no direct effect on student loyalty. These findings suggest that the student satisfaction is a mediating variable between student perceived value and student loyalty.

Table 3
Path Analysis for all constructs in Model 1 and Model 2

Path	Model 1 (Public University)				Model 2 (Private University)			
	Estimate	S.E.	C.R.	P-value	Estimate	S.E.	C.R.	P-value
H ₁ : Student satisfaction -> Student loyalty	.260	.215	1.143	.253	1.184	.289	3.712	***
H ₂ : University image -> Student satisfaction	.841	.148	6.581	***	.848	.190	6.158	***
H ₃ : University image -> Student loyalty	.659	.251	2.874	.004	-.299	.383	-.972	.331
H ₄ : Student perceived value -> University image	.912	.043	18.396	***	.932	.044	16.759	***
H ₅ : Student perceived value -> Student satisfaction	.125	.17	1.079	.281	.114	.137	.904	.366

Note: *** significant at 5% level

DISCUSSIONS AND RECOMMENDATIONS

This study provides better understanding about the influence of core factors towards student loyalty. In addition, it supports the effect sizes of the mediating construct of university type on these factors' effects on student loyalty between public and private universities. First, across both models, the results indicated that student perceived value, university image, and student satisfaction are all important roles in influencing to student loyalty in higher education for public and for private universities. Second, on the public university model, it was demonstrated that only university image positively, directly affected student loyalty, and that student perceived

value positively indirect affected student loyalty indirectly via university image. Third, and in contrast to this, on the private university model the result shows that only student satisfaction positively, directly affected student loyalty at a significant level and that student perceived value positively indirect affected to student loyalty via university image and student satisfaction.

These findings clearly have important implications for university educators and administrative professionals. For private universities, they should emphasize in retaining students by creating means of satisfaction such as to improving their service quality and quantity as mentioned in a study by Thomas (2011). They might do this by providing scholarships or attractive programs such as international travelling activity to learn in different culture.

Meanwhile, for the management of public universities, an important implication is to maintain a favorable university image. This would induce students to feel loyalty to their universities and as according to Mohamad (2009), in gaining its outgoing undergraduates loyalty, might translate to them becoming paying customers of the postgraduates at the same university. However, to do this, universities should plan strategically for building up attractiveness and means to gain number of new students. Some actions which might facilitate such outcomes include public relations and contacting high schools directly to providing seats for quota students.

Of course, there are limitations endemic in the current study which may constrain generalizability. For instance, the research focused on universities and students in The Kingdom of Thailand and may apply more or less depending on the cultural similarity or dissimilarity. Future research should seek to evaluate this, especially taking into account the dimension of individualism versus collectivism (Hofstede, Hofstede & Minkov (2010). In addition, these universities are located in northern Thailand where culture is different from other locations and they are clustered in upper-north provinces of the country in which unique culture is strong and important.

However, in the current highly-competitive educational climate that creates unfavorable supply and demand theory for many universities, the current study identifies and validates several critical success factors that can be used for increasing their students' loyalty and thus their short-term and long-term reliabilities.

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