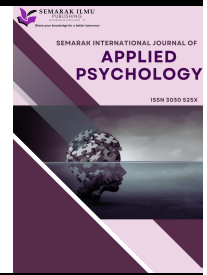# Semarak International Journal of Applied Psychology

Exploring Student's Satisfaction and Loyalty in Private Universities, Malaysia

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ARTICLE INFO	ABSTRACT
            	This study aims to examine and analyze the effect of students' satisfaction and loyalty at private universities in Malaysia. Students' trust and commitment are perceived to be the positive and significant impact on the students' satisfaction and loyalty to these private universities. The objective of this research was to identify the nature and significance of the relationship from student satisfaction that leads to student loyalty. The study was to determine the dimensions of student satisfaction and loyalty and assess the extent to which student satisfaction mediates the relationship of student loyalty. ANOVA and Regression Coefficient Analysis were applied to the research hypotheses to ascertain the influence of the student satisfaction dimension on student loyalty. The variables are highly connected to satisfaction and loyalty. Further findings revealed that a statistically significant relationship existed between student satisfaction and student loyalty. A test of the mediated relationship confirmed that the relationship of student loyalty was partially mediated by student satisfaction, an observation that adds to existing literature by uncovering the mediating effect of student satisfaction on the student loyalty at private universities in Malaysia. This will be useful to universities and the government in planning and providing education infrastructure to attract more foreign students to study in Malaysia.

1. Introduction

This section displays a review of the ideas of student satisfaction and loyalty and understudy dedication the significance and advantages to managing and pulling in steadfast understudies. The idea of loyalty is making long haul speculation and building a decent customer relationship service quality in the private universities and colleges. This is likewise to hold understudies over the time and to expand long haul income to the private universities and colleges. The study will help the improvement of the advanced education divisions in Malaysia, for example, expressing the research issue, demonstrating the exploration goals, introducing the commitment of the study and showing the rundown of the association to the proposition.

The advanced education benefit division is one of the quickest developing enterprises in Malaysia with the fastest development and huge expanding number of understudy enrolment that will build

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the prominence of Malaysia as an instruction centre point by 2020. Henceforth, with the development of aggressive private university colleges and great desire of service quality, understudy fulfilment and corporate image will have the capacity to hold understudies and prompts dedication. In spite of the "service quality" (SERVQUAL) show being broadly adequate in the estimation of service quality, researchers keep criticizing the operational and calculated research [1].

The enthusiasm for measuring corporate image, student satisfaction and understudy retention of student (understudy loyalty). This study will likewise demonstrate the confirmation that great service quality will enhance service quality and aggressiveness.

2. Methodology

Research philosophy is defining as creative work approach while using this knowledge to design new application [2]. Research philosophy refers to the general term that represents the faculty that justifies the establishment of knowledge and nature of the knowledge to research [3]. Positivists carry out theory-based research using deductive reasoning is one of the scientific methods. The theoretical study of reality existence has become the basic category of variables that exists and their relationship between variables are significance. The ontology examines the fundamental belief system as something logical or the elements of the social occurrence that is currently being investigating.

The overall design, structure and strategies of this research, including the choice of data analysis techniques, are offshoots of positivist reasoning, which gives the report a greater sense of objectivity. Moreover, the quantitative method employed in this study, minimizes sampling errors caused by personal prejudices by the respondent or the researcher that may compromise the integrity of research findings. Moreover, the use of Sampling Techniques and Statistical Analysis, would allow potential readers of this paper to make inferences about the evident characteristics and patterns in the population, based on sample results alone. A series of statistical testing including validity and reliability tests is employed to minimize systematic errors induced by human's unpredictable nature, particularly in responding to *'questions about perceptions and feelings'*, as well as to ensure consistency of the surveys, and that the *'Tests'* are used accurately to measure what it purports to measure.

This research also adopts a deductive approach; utilizing and developing theories and hypotheses that are testing with the use of various statistical techniques. The ability of quantitative techniques to make objective suppositions and generalization of results – plus the fact that research subjects, are geographically dispersing in a very wide area - makes this approach suited for this research. This research is to examine the service qualities, corporate image and student satisfaction that lead to student loyalty dimension.

2.1 Research Design

Research design serves as a research in performing a study with maximum control on factors that could potentially affect with the reliability of the result [4]. The research design is to study a scientific problem and obtain answers on the research questions. Therefore, this research will follow the quantitative research design through the collection of primary data to answer the research question that is raise in this research and to generate the research objectives. This particular research on physical quality, interactive quality, corporative quality, corporate image, student satisfaction and student loyalty have undertaken variable and dependent variable among the selected population.

This is because most quantitative research describe research that aimed at discovering the cause and effect relationship [5].

This research assumes that the satisfaction levels of foreign university students in Malaysia (in a variety of academic components) is Neutral i.e. $\mu_1 = \mu_2$ (the student population's expectations and experiences on certain dimensions of satisfaction is equal). Moreover, it is assumed that if expectations on certain dimensions of satisfaction exceed actual experience i.e. $\mu_1 > \mu_2$ satisfaction is assumed to exist. Alternatively, if expectations are less than the actual experience i.e. $\mu_1 < \mu_2$ dissatisfaction exists. These conjectures are found on the theories [1,6].

The samples (respondents) from this research are assumed to be *'homoscedastic'* depending on the natural characteristics of the data or data group. For example, when comparing sample results of foreign students from different regions, the statistical tests take on a heteroscedastic assumption of the population mean. In other words, it assumes that foreign students coming from different regions have inherently different tendencies and motivations of studying in Malaysia. Technically speaking, it means that the variances and population mean are expecting to be different in both sample groups. On the other hand, assumptions of homoscedasticity – or equal sample means and variances – are applying in inferential statistical tests involving comparison of students from within the same region. It, therefore, assumes that students coming from the same region have similar preferences and tendencies in choosing a private university in Malaysia.

3. Results
3.1 Student Satisfaction - Inner Dimensions

Student satisfaction consists of service quality satisfaction, student experience, teaching staff are excellent and preference over other universities. The author aims to identify the university and reputation that might assist university managers in managing the perceptions of private higher institution education. Therefore, narrative review with systematic techniques or transparent findings is to be considering for practitioners in their decision-making. Therefore, universities have begun to assign more resources to boost their image [7]. There is still little knowledge concerning difficulty managing university image [7]. Fortunately, the study of university image "is a new topic that is receiving greater attention" [8]. Branding is important when it comes to attracting and retaining students in private university.

The relationship among student satisfaction and inner dimensions were testing the first research hypothesis stated below:

H_{1e}: The student satisfaction inner dimensions are correlating to each other

Wilkins *et al.*, [9] agreed that higher education institutions should develop and maintain a positive image. Furthermore, is Firmandani *et al.*, [10] stated that positive image will attracting new students in that particular university.

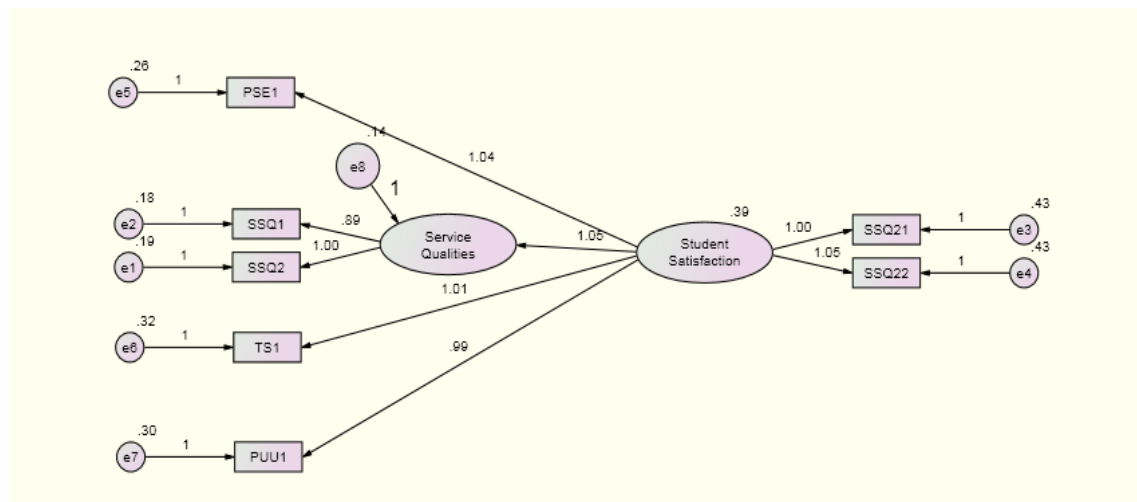**Fig. 1.** Student Satisfaction Dimensions – Theoretical Model

Table 1
Student satisfaction contributors

|	Estimate	S.E.	C.R.	P	Standardized	R Square
Service quality satisfaction	0.89	0.03	25.95	***	0.84	0.55
Student Experience	1.04	0.05	19.26	***	0.78	0.47
Teaching staff are excellent	1.01	0.05	18.36	***	0.74	0.71
Preference over other universities	0.99	0.05	18.5	***	0.75	0.75

Figure 1 showed student satisfaction dimension consists of four variables such as service quality satisfaction, student experience, teaching staff are excellent and preference over other universities. As for Table 1 showed the student satisfaction contributors. Factor analysis showed that student satisfaction will leading to student loyalty. The overall variables were evaluating in terms of its ability to predict student loyalty. The model summary of student satisfaction contributors shows the coefficient of determination under service quality satisfaction variable is R^2 = 55 percent, student experience is R^2 = 47 percent, teaching staff are excellent is R^2 = 71 percent and preference over other universities is R^2 = 75 percent. Overall, all contributors provided a relatively average fit in student satisfaction. Therefore, all contributors are standardized and significance as per 'p' value as above. When student satisfaction variables increase, this will eventually lead to student loyalty. The standardized value for service quality satisfaction is 84 percent, student experience is 78 percent, teaching staff are excellent is 74 percent and preference over other universities is 75 percent.

Weerasinghe and Fernando [11] agreed that student satisfaction play a major role in higher education institution. Wilkins *et al.,* [9] also identified that quality of lecturers, quality of physical facilities and effective technology are key factors of student satisfaction. The scholars also emphasized that student satisfaction in universities is largely influencing by quality of classroom, student feedback, lecturer and student relationship, interaction with fellow students, course content, learning equipment, library facilities and learning materials. Added with teaching ability, flexible curriculum, university status and prestige, independence learning, caring of faculty, student growth and development, student centeredness, campus climate, institutional effectiveness and social environments contribute to student satisfaction elements.

Fig. 2. Student satisfaction dimensions – unstandardized coefficients

Figure 2 showed student satisfaction dimension unstandardized coefficients for Malaysian and foreign students by using AMOS software. The regression model is well fitted and shows quite strong relationship and significant among variables in student satisfaction variables. The variances for "service quality satisfaction" (1.05), "student experience" (1.04), "teaching staff are excellent (1.01) and preference over other universities (0.99) indicate direct relationship in student satisfaction dimension. The unstandardized regression coefficient pointed out the total error in this figure with service quality satisfaction (0.18, 0.19), student experience (0.26), teaching staff are excellent (0.32), preference over other universities (0.30) and student satisfaction (0.43).
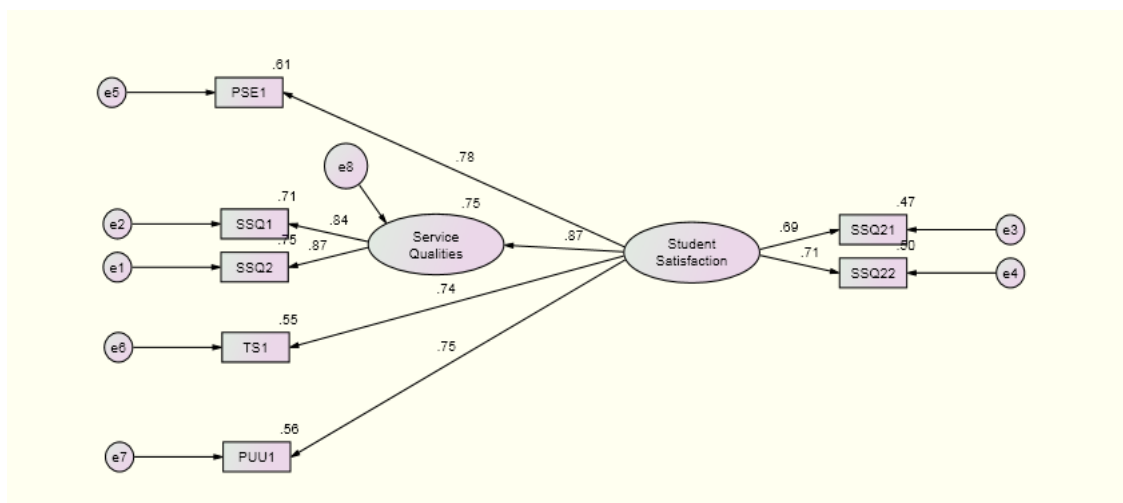
**Fig. 3.** Student satisfaction dimensions – standardized coefficients

Figure 3 showed the standardized path coefficients are using causal model to visualize student satisfaction standardized regression coefficients. The regression model was well fitting to the data and show a significant relationship among variables in student satisfaction variables. The variances are as follow: for service quality satisfaction (0.75), student experience (0.78), teaching staff are excellent (0.74) and preference over other universities (0.75) indicating straight relationship in student satisfaction dimension. The unstandardized regression coefficient pointed out the total error

in this figure with service quality satisfaction (0.71, 0.75), student experience (0.61), teaching staff are excellent (0.55) and preference over other universities (0.56) in student satisfaction dimension.

3.2 Student Loyalty - Inner Dimensions

Student loyalty involves preference to university, trust and commitment. The author aims to identify student trust and commitment that enable to increase student loyalty in the universities. Strengthening student satisfaction and loyalty is important strategy to any universities. Thomas, *et al.*, [12] found that student satisfaction and loyalty are the most important roles of private university. They managed to explore that student satisfaction was antecedent and mediating variable to student loyalty. Loyalty of a student refers to student loyalty after alumni time at higher education and produce both short and long- term impact on higher education. Student loyalty is the combination of willingness to provide positive word of mouth and recommendation of their universities to family, friends, employers and business partners when there is any opportunity. However, student loyalty also influences the trust and commitment of the students in their universities.

According to Rodie, [13] the students' loyalty is influencing teaching quality positively through active participation and commitment. It will increase the stability of the universities by sustaining long-term loyalty and satisfaction of students. The positive results will increase in motivation of student loyalty towards higher education. Hence, this research based on student loyalty.
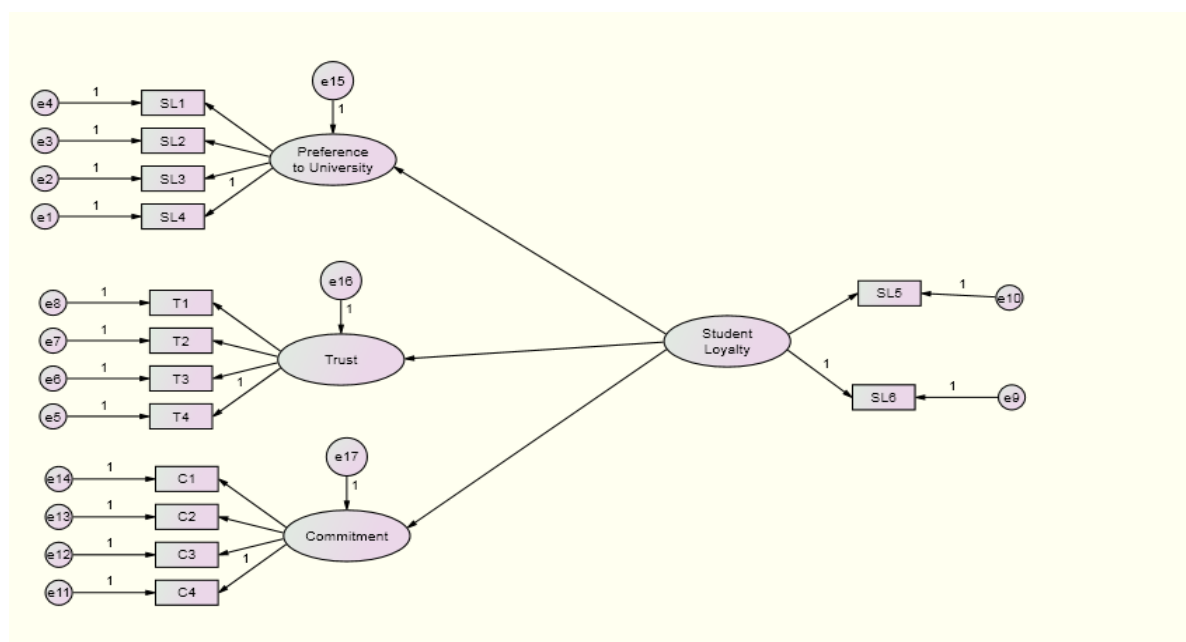

Fig. 4. Student loyalty dimensions – theoretical model

Table 2
Student loyalty contributors

|	Estimate	S.E.	C.R.	P	Standardized	R Square
Preference to university	1.02	0.04	25.00	***	0.83	0.64
Trust	0.82	0.03	26.52	***	0.81	0.68
Commitment	1.03	0.04	25.62	***	0.83	0.62

Figure 4 showed student loyalty dimension comprise of three variables such as preference to university, trust, and commitment. Table 2 showed the student loyalty contributors as per above stated. Factor analysis showed that student loyalty plays important factors for student satisfaction. The overall variables were evaluating in terms of its ability to predict student loyalty. The model summary of student loyalty contributors shows the coefficient of determination under preference to university variable is R^2 = 64 percent, trust's R^2 = 68 percent and commitment is R^2 = 62 percent. Overall, all contributors provided a relatively average fit in student loyalty. Therefore, all contributors are standardized and significance as per 'p' value as above. The standardized value for preference to university is 83 percent, trust 81 percent and commitment is 83 percent.

Moreover, there is a positive correlation and significantly strong affect between student satisfaction and student loyalty. The link between satisfaction and loyalty is linear whereby, when there is an increase of satisfaction, loyalty also increased. Both dimensions are representing higher total effect than the effect of corporate image of universities. The findings of the research support the literature that corporate image, student trust and commitment to university are the variables to student satisfaction and loyalty.
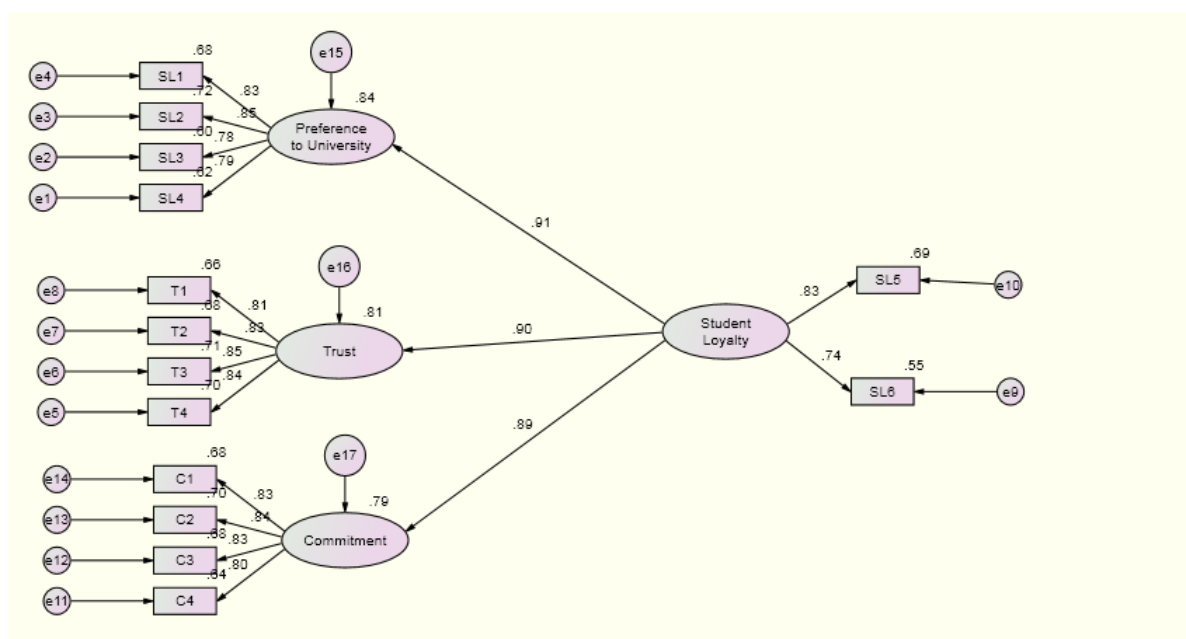
Fig. 5. Student loyalty dimensions – unstandardized coefficients

Figure 5 showed student loyalty dimension unstandardized coefficients for Malaysian and foreign students in calculating private university in Malaysia achievement from perceptions by using AMOS. The regression model is well fitted and shows strong relationship and significant among variables in student loyalty variables. The variances are as follow: for preference to university (0.91), trust (0.90) and commitment (0.89) indicating direct relationship in student loyalty dimension. The unstandardized regression coefficient pointed the total error in this figure with preference to university (0.84), trust (0.81) and commitment (0.79). The student loyalty has two inner dimensions unstandardized regression that produce coefficients of 69 percent and 55 percent respectively.
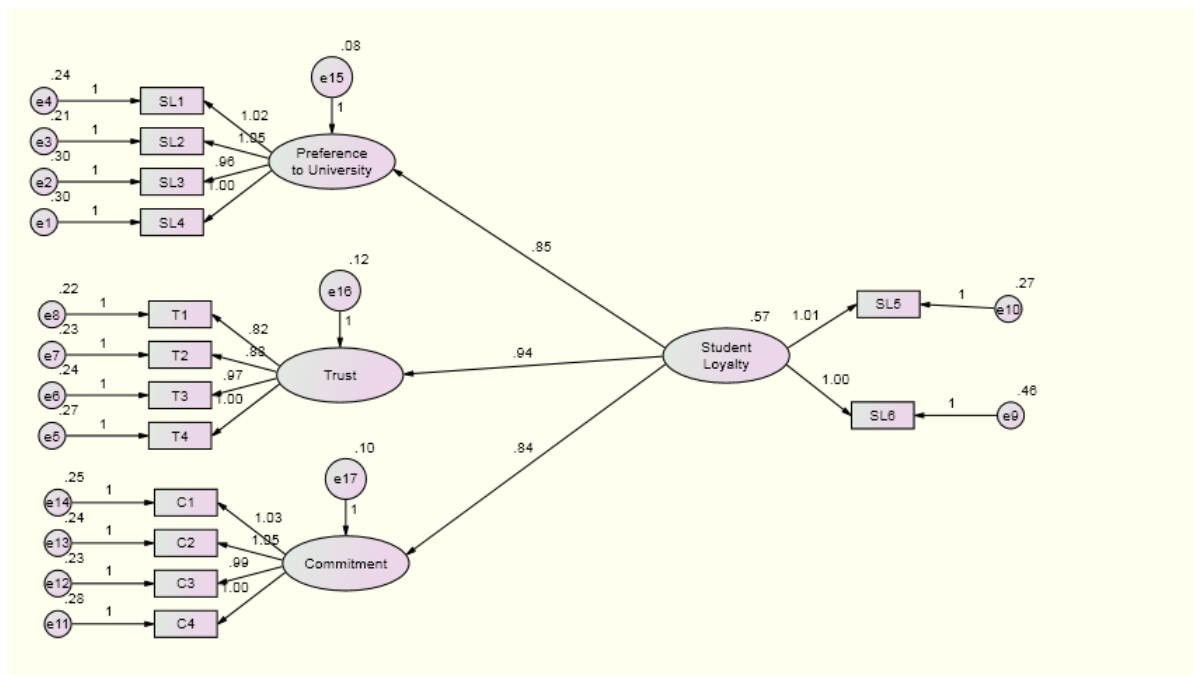
Fig. 6. Student loyalty dimensions – standardized coefficients

Figure 6 showed the standardized path coefficients are using causal model to visualize student loyalty standardized regression coefficients. The regression model was well fitted the data and show a significant relationship among variables in student loyalty variables. The variances are as follow: for preference to university (0.85), trust (0.94) and commitment (0.84) indicating strong relationship in student loyalty dimension. The unstandardized regression coefficient pointed the total error in this figure with preference to university (0.08), trust (0.12), and commitment (0.10) in student loyalty dimension (0.57).

Table 3
Summary of hypotheses H_1e to H_1f

	Inner Dimension	Hypothesis	Star	Accepted/Rejected
	Service Quality Satisfaction	H_1e (i)	***	Accepted
Student Satisfaction	Student Experience	H_1e (ii)	***	Accepted
	Teaching Staff are Excellent	H_1e (iii)	***	Accepted
	Preference over other Universities	H_1e (iv)	***	Accepted
Student Loyalty	Preference to Universities	H1f (i)	***	Accepted
	Trust	H_1f (ii)	***	Accepted
	Commitment	H_1f (iii)	***	Accepted

Table 3 showed the acceptance summary of hypotheses from H_1e to H_1f as a significant relationship among inner dimensions in student satisfaction and student loyalty.

4. Conclusions

4.1 Student Satisfaction in Universities

Arif *et al.*, [14] quoted that satisfaction is a state felt by a person who has experienced performance or an outcome that fulfil his or her expectation. Therefore, satisfaction can be measuring as an overall feeling with the elements of transaction of satisfaction. In this study, student satisfaction dimension covers namely: positive student experience with the university, overall satisfaction with the service quality of university, excellent teaching staff and preference of university over other university as part of the exposure and experience from the students in a private university. Sapri [15] agreed that student satisfaction plays an important factor in determining the accuracy and authenticity of the services being providing by any universities.

Providing authentic services can boost students' loyalty and reduce the student attrition rate in that particular university. Students are eager to mention how good their university is through word of mouth and it will spread very fast among relatives, friends and the social media. Hence, students' overall service experience from post purchase evaluation is an effective state of feeling reaction in which students' needs, desires and expectations in their encounter with service experiences have been met or exceeded. Grossman [16] also pointed out that students are customers and education providers are expecting to prioritize and meet the expectations of their students.

4.2 Student Loyalty in Universities

Loyalty is associated with a customer's commitment to continue patronizing a specific firm over an extended duration of time. It is commitment to re-patronise a preferred product or service consistently in future in the face of threats from situational influences and marketing efforts by competitors to cause the customer to switch patronage. Hennig-Thurau *et al.*, [17] the component be perceived as being related to decisions that students make regarding their mobility. Hence, the researcher of this study has added a student loyalty dimension consisting of items such as student loyalty in the university, trust and commitment to prove strong relationship between student satisfaction and student loyalty. As for an example, loyalty of a former student may be more important than that other antecedents of the university because students' loyalty is not a short-term effect and it may take many years to build up that loyalty in students. To ensure loyalty, students have to show positive behaviours that must have a feeling of trust and commitment to that particular university they enrolled. According to Helgesen [18], loyal students will become good ambassadors who will recommend the university to others through word of mouth. Word of mouth is a very powerful marketing tool to promote any universities. Hence, this study is examining the effect of private university service quality on student satisfaction, corporate image that leads to student loyalty.

4.3 Summary of Findings

The preceding data analysis and discussion on the study findings pointed at theoretical and managerial implications. The implications of this research not only contribute to the scholarly body of knowledge in this area but also to managers and other industry players in higher institutions of learning in Malaysia. This study hypothesized the existence of a significant correlation amongst service quality (physical qualities, interactive qualities and corporative qualities) and corporate image that leads to student loyalty, mediated by student satisfaction in the Malaysia private university context.

The results confirm the existence of three dimensions in service quality by uncovering the mediating effect of student satisfaction and student loyalty amongst university students. The results indicate that the relationship between service quality and student loyalty is significant and positive; it is also enhancing by student satisfaction through the building of the institutions' corporate image. These findings contribute to general knowledge on service quality and the linkages among four isolated constructs - service quality, corporate image, student satisfaction and student loyalty prove the existence of a meaningful correlation among the four dimensions.

Furthermore, the study also provides a scale for measuring the levels of student satisfaction and student loyalty in private universities in Malaysia. This study questions the comprehensiveness of the SERVQUAL scale and process of dimensionality and variable composition. This situation is supported by Owino, Sultan *et al*., and Abdullah [19-21].

The findings demonstrate the positive results as a measuring tool for student satisfaction as mediating and loyalty in the place of disconfirmation process. This study discovered that the theories of service quality dimensions are incomplete and more dimensions can be uncovered in different service contexts. The study exposes three dimensions in the university's service quality that measured their predictive power in the following order: physical qualities, interactive qualities and corporative qualities antecedents. This study shows a smooth process flow has positive significant influence on student satisfaction that leads to student loyalty; therefore, its role in the service quality theory should not be overlooking.

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