

The Effect of Satisfaction on Trust, Social Identification and Loyalty Amongst International Students in Malaysian Public Universities

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Abstract

This study was conducted to examine the effects of student's satisfaction on student's trust, social identification, and loyalty amongst international students in Malaysian public higher institutions. It was conducted due to low research outputs on these variables among international students in Malaysia. A theoretical literature review was conducted, and an adapted survey of Student Loyalty Model was used to collect the data from four public universities in Malaysia, while regression analysis was performed to check for the effect of satisfaction on other variables. The findings showed that student's trust, social identification, and loyalty can predict student's satisfaction. International student satisfaction has a strong effect on trust ($B=0.401$), but a weak effect on social identification ($B=0.220$) and loyalty ($B=0.131$). The results indicated that the gaps in international students' satisfaction can be minimized by improving the aspects of student loyalty and identification with the university through campus engagement and non-academic programs. The study also recommended carrying out further research within a larger population of students in public and private universities to compare their perceptions and to benefit from the experiences and successes of other international education destinations.

Keywords: Student Satisfaction, Student Loyalty, Student Trust, Social Identification, International Education, Covid-19.

1. Introduction

Meeting the expectations of students has increasingly been the focus of higher educational institutions in the last decades. It places a greater emphasis on studying what constitutes student satisfaction and its influence on other important factors of quality assurance and retention in a higher educational setting (Najimdeen, Amzat & Ali, 2021). The recent developments in globalization, international student mobility, and the Covid-19 pandemic have all strengthen the frameworks of international students' satisfaction and expectation (Aristovnik et al., 2020). Additionally, the role of student trust, commitment, and loyalty in sustaining various higher institutions and keeping them afloat in the age of crisis might increase or decrease the level of demand in the international education market (Jibeen & Khan, 2015).

From the Malaysian perspective, these developments mean that higher institutions are under the pressure of adopting market-oriented strategies to differentiate themselves from competitors to attract as many international students as possible (Sultana & Momen, 2017; Najimdeen, Amzat & Ali, 2021). Yet still, studies on the satisfaction of international students in Malaysia or their level of trust, social identification, and loyalty are relatively low (Aritonang, 2014; Jibeen & Khan, 2015; Napitupulu et al., 2018). Hence, the current study aims to:

1. Investigate if trust, social identification, and loyalty can predict student's satisfaction amongst international students in Malaysian public universities.
2. Explore the effect of student's satisfaction on student's trust, social identification, and loyalty amongst international students in Malaysian public universities.

2. Literature Review

This study is primarily related to the effects of student's satisfaction on student's trust, social identification, and loyalty in the higher educational setting. Hence, reviewing the latest studies and related findings in these fields is of significance.

2.1 Student Satisfaction

Previous works of literature on service quality indicated that customer satisfaction is needed for improvement and to keep them loyal to the

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company (Najimdeen, Amzat & Ali, 2021). The main customers of higher education institutions are students, thus, their satisfaction is an important feature for these institutions as it is related to education and university service quality (Razinkina et al., 2018). Satisfaction is not only concerned with how a service is being delivered to the students but also the quality of the outputs and products they received (Napitupulu et al., 2018).

Hill and Alexander (2017) saw customer satisfaction as a measurement that determines the level of their happiness with products, services, and delivery capabilities. This implies that the focus of a service provider must be to satisfy its customers (Najimdeen, Amzat & Ali, 2021). According to Parasuraman et al. (1998), satisfaction is the feeling of a customer towards the service given to him by a provider. It means that questions related to the level of satisfaction towards a product/service should be directed to customers who have already had an experience of the product/service. Satisfaction could be measured in different ways through expectation and perception models, quality service instruments, surveys, and ratings that can help the service/product providers determine how to best improve their products and services.

Studies on student satisfaction have shown different results based on different contexts (Sultana & Momen, 2017; Napitupulu et al., 2018; Najimdeen, Amzat & Ali, 2021). The common findings from these studies revealed that satisfaction in a higher educational setting is influenced by many factors. Additionally, satisfying students can lead to gaining their loyalty towards an institution and its services (Chandra et al., 2018). Furthermore, Schlesinger, Cervera and Pérez-Cabañero (2017) believed that student satisfaction could be influenced by participation, commitment, and trust, while Barusman (2014) found that student's perceived value had significant positive effects on satisfaction, and satisfaction was also found to mediate between student perceived value and student loyalty. These findings indicate that the key to maintaining customers and secure their loyalty is by keeping their satisfaction as high as possible (Herman, 2017).

Moreover, a study by Alemu and Cordier (2017) on international students' satisfaction in Korean universities found that about 50.6% of these students are either highly satisfied or just satisfied, while 19% of them are neutral and 10% of them are dissatisfied/very dissatisfied for choosing to study in Korea. It reveals that among the main determinants that contribute positively to the overall satisfaction of international students are academic and education quality, university's ability to effectively

communicate with students before coming to a host nation, adapting to the new environment, number of academic years spent at the current university, and source of economic support such as full or partial scholarships.

These findings are in line with the studies of Khan and Haque (2018) and Najimdeen, Amzat and Ali (2021) who found the factors affecting international student satisfaction in Malaysian public higher institutions and perception of university quality service that international students connect facilities and tangibles, empathy, teaching quality, and e-learning with their level of satisfaction.

2.2 Trust in University Setting

A trust might be defined differently depending on its context. Rotter (1967), for instance, defined trust as a general expectation held by an individual toward another whose word and action can be relied on. Furthermore, Morgan and Hunt (1994) defined trust as the confidence that one party has in the other because of the other's integrity and dependability, while Patrick (2002) saw it as the perceptions or behaviours of customers that manifested when they feel that a provider can be trusted to act in their best interests when he is in full control of a business or its products/service. These definitions imply that social interactions cannot function regularly if the trust factor is overlooked and that customers are ready to be vulnerable to another party if their trust is secured (Abdelmaaboud, Peña & Mahrous, 2020).

Different literature on the relationship between customer and service provider has identified trust to be a predictor of customer satisfaction and loyalty (Gul, 2014; Jones & Afnan, 2019) because when a customer is satisfied with service and loyal to the provider, he is basically trusting it (Latif, Bunce, & Ahmad, 2021). Trust is also considered to be a stronger emotion than satisfaction because it better predicts customer loyalty (Ranaweera & Prabhu, 2003; Ismanova, 2019).

Specifically, empirical studies have found trust in the university setting to increase collaboration between student and school (Mitchell, Kensler & Tschannen-Moran, 2018; Abdelmaaboud, Peña, & Mahrous, 2020), academic performance (Ennen, Stark & Lassiter, 2015; Latif, Bunce, & Ahmad, 2021), healthy school climates and quality school life (Hongwidjojo, Monika & Wijaya, 2018; Jones & Afnan, 2019), collective teacher efficacy (Flood & Angelle, 2017), triadic set of interactions and

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academic optimism (Cansoy & Parlar, 2018), and student identification with school (Mitchell, Kensler, & Tschannen-Moran, 2018).

2.3 Student Social Identification

The concept of social identification could be traced back to the social identity theory of Tajfel and Turner (1979) and the self-categorization theory of Turner et al. (1987). Social identity refers to the aspects of an individual's self-image that are derived from the social categories or groups to which an individual considers him/herself to belong, as well as the importance and emotional meaning associated with his membership in those categories or groups (Tajfel, 1981, Tajfel & Turner, 1979). Social identity is distinct from the personal identity which is "a person's unique sense of self" (Postmes & Jetten, 2006, p. 260). While social identity is more generic, social identification is more specific. Social identification refers to individuals' community membership, which is internalized as an aspect of their self-concept, i.e., individuals should be subjectively associated with the related group (Tajfel & Turner, 1979).

Furthermore, Tajfel (1981) identifies three necessary components for identification to take place: cognitive component (awareness of membership), evaluative component (giving the awareness a value connotation), and emotional component (psychological commitment to both awareness and evaluation). According to Aritonang (2014), the social identification of an individual enables an individual to take part in achievements that are beyond his or her control. Social identification is also connected to the reasons or objectives that an entity represents (Postmes et al., 2019).

In the context of higher education, empirical studies have shown that students often identify themselves with their institutions based on what the institutions stand for or their specific causes (Aritonang, 2014). Students tend to be satisfied and loyal to these institutions' services when they can identify with the mission of the institutions (Reynolds et al., 2017). Student's identification and belongingness to a higher educational institution have also been shown to be a better predictor of students' perceptions of achievement in their studies than the actual levels of their achievement (Maxwell et al., 2017). They are also associated with the components of students' psychological well-being such as self-esteem, life satisfaction and depression (Postmes et al., 2019).

2.4 Student Loyalty

Quality service and customer satisfaction are antecedents of customer loyalty, while customer loyalty is the strength of a relationship between an individual's relative attitude and his continued patronage of an organization's product (Khadka & Maharjan, 2017). The model of Vince Tinto (1975; 1993) on student drop-out behaviour in the United States of America is considered to have laid the foundation for loyalty and its policies in higher educational institutions. According to Goolamally and Latif (2014) and Aljohani (2016), Tinto's model describes the communication process between students and higher institutions with consideration of student's background, assurance, and assimilation constructs in relation to the commitment of the students to the institution regardless of any outside effort.

Furthermore, Aritonang's (2014) model of student loyalty in his empirical study could be seen as an advanced educational version of the study of Sirdeshmukh, Singh and Sabol (2000, 2002) which linked consumer trust, value, and loyalty to relational exchanges. Aritonang's model also proposed that student loyalty has three main determinants: (1) student satisfaction, (2) student social identification and perception of belonging to an institution, and (3) student's trust towards an institution and its service.

Likewise, the study of Barusman (2014) found that student satisfaction mediated students' perceived value and student loyalty. This is in line with Aritonang's (2014) study who found that social identification, trust, and satisfaction are positive and significant predictors of loyalty. Student's loyalty to an institution has a favourable and positive emotional attitude toward the institution (Binnawas, Khalifa & Bhaumik, 2020). It is also one of the main goals of universities due to its strategic advantage because a group of loyal students will spread the goodwill of the university through word of mouth or other forms of contact, which will lead to retention, and repeated purchase or continuation of using the service (Goolamally & Latif, 2014; Aljohani, 2016).

Based on the literature from previous studies and looking at the current situation of the COVID-19 pandemic which results in low enrolment of international students, and revenue crisis facing many higher educational institutions, there is a need to vie for ways to achieve satisfaction, trust, social identification, and loyalty of the current international students.

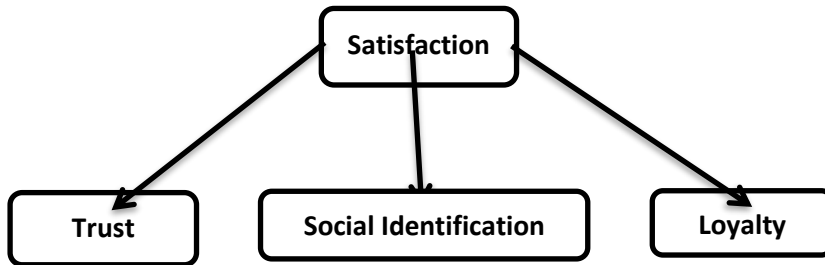
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Exploring this issue is considered important because loyal international students can help in increasing enrolment (Giner & Rillo, 2016), improve the quality of the institution's service (Sultana & Momen, 2017), and represent them on the global stage.

3. HYPOTHETICAL FRAMEWORK

This study focuses on the effect of student satisfaction on trust, social identification, and loyalty based on the perception of international students in Malaysian public higher institutions. Empirical studies linked the effectiveness of service of higher education institutions on student satisfaction and loyalty, and the impact of satisfaction on trust and social identification (Aritonang, 2014; Rather et al., 2019).

Figure 1: Conceptual Framework of the Study



The study's framework above conceptualized that knowing the effect of satisfaction on trust, social identification and loyalty will help universities to realize the most important variables and factors that can be used for improvements and retention. In this sense, students' satisfaction can be used as a tool that can lead to students' loyalty (Khadka & Maharjan, 2017). The loyalty of international students with trust and strong identification with their institution, if achieved, will lead to continuous patronage of service by these students and foster a strong relationship between them and the institution (Sultana & Momen, 2017).

Because of the pandemic impact on education and the competitiveness of modern educational programs, achieving all the above four variables or components is critical. Most of these are governed by the nature of new technologies, market trends, and world politics (Napitupulu et al., 2018; Aristovnik et al., 2020). Hence, this study aims to test the hypotheses below:

H1: International students' trust, social identification, and loyalty predict international students' satisfaction.

H2: International students' satisfaction has a significant effect on students' trust.

H3: International students' satisfaction has a significant effect on students' social identification.

H4: International students' satisfaction has a significant effect on students' loyalty.

4. METHODOLOGY

The data of this study was collected through a questionnaire survey that was distributed to four different Malaysian public universities. The survey questionnaire was adapted from Aritonang's model (2014) on student loyalty. The questionnaire was based on a 5-Point Likert Scale which consists of (1) Strongly Disagree, (2) Disagree, (3) Undecided, (4) Agree, and (5) Strongly Agree. The reliability of the questionnaire was checked through Cronbach's Alpha. The results of the Cronbach's Alpha coefficients are presented in Table 1 below.

Table 1: Results of Cronbach's Alpha

Constructs	Cronbach's Alpha	No of Items
Quality Service of Malaysian Public Universities		
Satisfaction	0.853	6
Trust	0.895	5
Social Identification	0.897	6
Loyalty	0.890	6

Table 1 above showed that satisfaction, trust, social identification, and loyalty have high coefficients above the value of 0.85. They are in line with the recommended value by George and Mallery (2003) which is close to 0.9. Hence, the analysis was then further carried out. For the findings, regression analysis was used to estimate the effect of international students' satisfaction (independent variable) on students' trust, social identification, and loyalty (dependent variables) to their universities. This analysis also helped in revealing the role of the independent variable (satisfaction) without worrying about the other variables (trust, social identification, and loyalty) in this current model.

5. FINDINGS

5.1 Demographic Data

The participants in this study consisted of 775 international students studying in four different Malaysian public universities in the academic year 2020. The regression tables below showed that 415 (n=415) of the respondents have spent two (2) years/below in their university, while 360 (n=360) of the participants are those that spent two (2) years/above in their academic year. Also, 530 of the respondents are male international students, and 245 of them are female international students. This is supported by the report from the Asia-Pacific Association for International Education (APAIE, 2018) which indicates that the number of male international students in Malaysia are more than female international students.

5.2 Effect of Satisfaction on Trust, Social Identification and Loyalty

The results of the general multiple regression analysis in Table 2 below showed that the R² of the model for the effect of international student satisfaction on trust, social identification, and loyalty is 0.625 (adjusted R²=0.623). This indicates that 62.5% of the variance in international students' satisfaction was explained by trust, social identification, and loyalty. The result of the F statistics (F=427.964) was significant at the 0.001 level. Hence, it could be concluded that trust, social identification, and loyalty can predict international students' satisfaction in Malaysian public universities.

Table 2. General Multiple Regression Analyses Results

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	0.937	0.077	Beta	12.126	0.000
Trust	0.401	0.036	0.455	11.230	0.000
Social Identification	0.220	0.040	0.243	5.570	0.000
Loyalty	0.131	0.036	0.144	3.633	0.000
Model Summary					
	R ²	Adjusted R ²	F	N	
	0.625	0.623	427.964**	775	

Note: Dependent Variable: Student Satisfaction; ** p<0.001

Furthermore, the results in Table 2 indicated that all the variables are statistically significant. Trust has the highest effect from satisfaction (unstandardized coefficients B is 0.401, at the sign. T = 11.230), followed by social identification (unstandardized coefficients B is 0.220, at the sign. T = 5.570), and loyalty which has the lowest effect from satisfaction (unstandardized coefficients B is 0.131, at the sign. T = 3.633). Thus, it could be justified that while all three variables are important components and predictors that contributed to satisfaction, the most important component is student trust.

Table 3. Multiple Regression Results based on The Years Spent in University

Academic Year	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2 Years Below	(Constant)	1.030	0.103		9.976	0.000
	Trust	0.488	0.048	0.572	10.171	0.000
	Social Identification	0.116	0.056	0.128	2.075	0.039
	Loyalty	0.116	0.051	0.130	2.295	0.022
Model Summary						
		R²	Adjusted R²	F	N	
		0.625	0.622	228.498	415	
Academic Year	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2 Years Above	(Constant)	0.849	0.116		7.347	0.000
	Trust	0.300	0.053	0.328	5.684	0.000
	Social Identification	0.327	0.055	0.363	5.923	0.000
	Loyalty	0.153	0.051	0.165	3.011	0.003
Model Summary						
		R²	Adjusted R²	F	N	
		0.636	0.632	206.934	360	

Note: Dependent Variable: Student Satisfaction; ** p<0.001

Additionally, multiple regression analysis was run to check the effects based on the years spent in the university by the international students. The results in Table 3 showed that for the students who have spent 2 (two) years/below, the R² is 0.625 (adjusted R²=0.622). It means that 62.5% of the variance in the satisfaction of students in this group was explained by trust, social identification, and loyalty. The F statistics (F=228.498) is significant at the 0.001 level; hence, it can be concluded

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that trust, social identification, and loyalty are antecedents and predictors of the satisfaction of international students who have spent 2 (two) years/below in their universities.

Based on Table 3 above, the results for students who spent 2 (two) years/below indicated that all the variables are statistically significant. Trust has the highest effect from satisfaction (unstandardized coefficients B is 0.488, at sign T = 10.171), followed by loyalty (unstandardized coefficients B is 0.116, at sign. T = 2.295), and social identification (unstandardized coefficients B is 0.116, at sign. T = 2.075). Thus, it could be perceived that while all the three variables are important components and predictors that contributed to satisfaction of students who have spent 2 (two) years/below, trust is the most important component for this group of students.

Moreover, Table 3 also shows that for students who have spent 2 (two) years/above, the model's R^2 is 0.636 (adjusted $R^2=0.632$). It means that 63.6% of the variance in the satisfaction of students in this group was explained by trust, social identification, and loyalty. The F statistics ($F=206.934$) are significant at the 0.001 level. Hence, it could be said that trust, social identification, and loyalty are antecedents and predictors of the satisfaction of international students who have spent 2 (two) years/above in their universities.

The findings of this study revealed that all the variables under the group of students who have spent 2 (two) years/above are also statistically significant. Social identification has the highest effect from satisfaction (unstandardized coefficients B is 0.327, at the sign T = 5.923), followed by trust (unstandardized coefficients B is 0. 0.300, at sign T = 5.684), while loyalty has the lowest effect (unstandardized coefficients B is 0.153, at sign T = 3.011). These results indicated that while all the three variables are important components and predictors that contributed to satisfaction of international students who have spent 2 (two) years and above in Malaysian public universities, the most important component for this group of students is social identification.

Based on the above findings, it can be concluded that the hypotheses results were all significant and supported by the regression analysis. Table 4 summarizes the results of all hypotheses of this study.

Table 4: Hypotheses Presentation

	Results	Conclusion
H1: International students' trust, social identification, and loyalty are predictors of international student satisfaction.	Yes: (quality (r= 0.66, p < 0.001) <i>Significant</i>)	Supported
H2: International students' satisfaction has a significant effect on students' trust.	Yes: (quality (r= 0.66, p < 0.001) <i>Significant</i>)	Supported
H3: International students' satisfaction has a significant effect on students' social identification.	Yes. Significant (r=0.56, p < 0.001) (r=0.46, p < 0.001)	Supported
H4: International students' satisfaction has a significant effect on students' loyalty.	Yes. Significant	Supported

6. DISCUSSION

This study focused on the effect of students' satisfaction on trust, social identification, and loyalty based on the perceptions of the international students at four Malaysian public universities. It also discussed the critical variables and the best predictor for students in their academic year to make up the retention gap of international students' satisfaction and loyalty. The findings supported the general framework and further confirmed the usability of the student satisfaction and loyalty model.

Firstly, as presented in Table 2, the findings indicated that trust is the most important component to predict student satisfaction amongst international students in the selected public universities. Student satisfaction has the strongest effect on trust, followed by a weak effect on social identification, which could be because of the impact that feeling satisfied has on the process of inspiring confidence and trust, especially when students perceived they are not respected enough by the university's academic and non-academic staffs. This is in line with the studies of Chandra et al. (2018), Schlesinger, Cervera and Pérez-Cabañero (2017) and Abdelmaaboud, Peña and Mahrous (2020), which all found trust and social identification to be an important factor in higher education setting and emphasize on the impact of inspiring trust in education service to increase positive perceptions of satisfaction.

The weak effect that satisfaction has on social identification and unsatisfactory effect on loyalty might be because of the weak perception of inclusion, commitment, and sense of belonging to the universities due to these students' low contribution and participation in university activities,

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campus engagement, and media/social campaign. The study of Abdelmaaboud, Peña and Mahrous (2020) showed that student's identification with his university, satisfaction, and trust are key influential factors in determining a student's advocacy intentions in his/her university, and a low level of student's satisfaction with university services will most likely lead to a low level of loyalty.

Secondly, the findings of this study revealed that there are different predictors or components considered important between the international students who have spent 2 (two) years/below and those who spent 2 (two) years/above. For students who have spent two years/below in their universities, the most important component or variable is the trust which has the highest effect from satisfaction. The weak effect of loyalty and social identification for this group of students might be because of the little years they have spent or their weak perceptions after comparing the services they expected with what they just received from the universities. This finding supports various literature and studies on the influence of service quality on student's loyalty (Yaumiddin, 2011, Chandra et al., 2018; Azam, 2018), determinants of student loyalty, and student satisfaction and dissatisfaction in higher education based on student's year of study (Yan, 2017).

Finally, this study showed that for the international students who have spent 2 (two) years/above, social identification is the most important component and variable. It has the strongest effect on satisfaction. The low level of the effect of satisfaction to loyalty also indicates a weak perception of satisfaction toward the university's service which has a little effect on the loyalty of these students to their institutions. Spending two years and above might also allow the students to evaluate the product or service they received based on their interaction with local students, experience with academic and non-academic services, trending programs and courses in other education hubs, or based on the delivery system in other international education markets. These all are supported by the assertions of previous studies like Aritonang (2014), Goolamally and Latif (2014), Maxwell et al. (2017), Postmes et al. (2019), and Binnawas, Khalifa and Bhaumik (2020).

7. CONCLUSION

This study has shown that student satisfaction has effects on trust, social identification, and loyalty. While the effect of satisfaction on loyalty

is weak, it is strong and moderate on trust and social identification respectively. This is because to achieve students' satisfaction that can impact loyalty, a university must build trust with its students through quality service and programs and enhance students' social commitment and identification through caring and individualized attention, staffs' willingness to help, and provide prompt services. Adding an international dimension of courses/degrees based on quality contents and market output, capacity-building activities designed to help students academically and professionally, and interaction between different groups of students with consideration of their different cultural backgrounds will not only impact students' satisfaction positively but also reinforced their loyalty towards the university.

Conclusively, the results of this study may help future research in the field of international student retention and service delivery satisfaction in public higher institutions. Hence, it is recommended to have further research with a larger population of international students in public and private universities to compare their perceptions and benefits from the experiences and successes of other international education destinations.

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Research Questionnaire on International Students' Loyalty

No	Statement	SD	D	U	A	SA
Satisfaction						
1	I am satisfied with the overall quality of my university services.					
2	I am satisfied with the university compared with others outside Malaysia (e.g., fees, research & supervision).					
3	I choose the right choice by studying my course at this university.					
4	I talk positively about my course to others.					
5	My university is ranked worldwide.					
6	My university has a good image outside Malaysia.					
Trust						
1	My university has practices (e.g. cultural awareness, diversity & tolerance) that indicate its respect for the international student.					
2	My university's staff develop an atmosphere of caring and trust.					

- 3 The university acts as if the student is always right.
- 4 I have full confidence in my university.
- 5 The service my university provides is trustworthy

Social Identification

- 1 I feel uncomfortable when someone criticizes my university.
- 2 I am very interested in what others think about the university.
- 3 When I talk about the university, I usually say we rather than they.
- 4 The university's successes are my successes.
- 5 When someone praises the university, it feels like a personal compliment.
- 6 If a story in the media criticized the university, I would feel embarrassed.

Loyalty

- 1 I consider my university my first choice when enrolling for my current academic programme in Malaysia.
 - 2 In comparison to other universities I know, my university is growing in popularity.
 - 3 I feel attached to my university.
 - 4 I plan to continue using the services of the university in the future.
 - 5 I plan to continue my study at this university due to the quality of education.
 - 6 I intend to recommend my university to others.
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