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## An Empirical Study on Brand Image Factors that Influence Students Behaviour

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**Abstract:** The purpose of this study is to examine student behaviour towards brand image of Universiti Utara Malaysia (UUM). Quantitative research design was conducted to collect data for this study. The total of 379 questionnaires outcomes, has been analyzed by using SPSS software version 24. Factor analysis and multiple regression analysis have been used to to achieve the research objective in this study. Result of this study shows that the element of sincerity, competence and identity became the major factor influence the student behaviour. The study found that the element excitement, sophistication and ruggedness dimensions did not have significant relationship towards student behaviour.

**Keywords:** brand image, brand personality, brand identity, student behaviour

### I. INTRODUCTION

In marketing management, brand is a symbol, name, or mark that distinguishes an organisation from others (Aaker, 2009). Image is a complete impression that an individual or a person has about an item (Kotler & Fox, 1995). Thus, brand image is how potential or existing consumers become aware of and view a brand (Keller, Parameswaran, & Jacob, 2011). In addition, brand image is how and what consumers perceive or think (impression) about the specific brand in their attention. Every organisation strongly desires to create a position for their brand that will be seen and kept in the customers' minds for a longer duration. Therefore, brand image is a crucial element for the organisation to eventually form their brand in the mind of their consumers (Keller *et al.*, 2011). According to Biel (1993), the organisation will increase their sales if they gain a positive brand image, but if their brand image is negative, they will gain contrasting results. This scenario happens when the consumer is able to personally assess the quality, usability, and the

durability of the product or service, and perceive the value of the product or service. Therefore, while managing their brand image, every organisation should try to be realistic in gaining a good brand image.

According to Heylen, Dawson, and Sampson (1995), to measure the brand image towards consumer behaviour, there are two facets that can be taken into consideration, including brand identity and brand personality. The scholars defined brand identity as explicitness, which is drive, rationality, and cognitive from the part of the brand that deals with reasoning and thinking, while brand personality is implicitness, which is drive, irrationality, and emotion from the part of the human brain that connects cognitive thoughts with emotions and feelings. Becker and Palmer (2009) stated that the brand identity of the university would be the students' views and impression towards the university brand. It is also conveyed from various aspects, including the brand name, logo, or tagline of the organisation (Aaker, 1996). For the university's brand identity, it derives from anything that the students have visualized of the university brand. Rauschnabel, Krey, Babin, and Ivens (2016) stated that a university's brand personality refers to the qualities, emotions, and feelings of the university brand towards student perspective. Through brand personality, the university can be everything that their brand promotes them to be. According to Aaker (1997), brand personality is the consumer's view towards the brand as a person. Every student has their own feelings and personal assumptions towards the university. Therefore, the brand identity and brand personality of the university should be considered to measure the university's brand image.

On the other hand, Solomon, Russell-Bennett, and Previte (2012) stated that consumer behaviour can be characterised as the physical activity and management development required in getting, assessing, utilising, and discarding services or products. This definition states that it is not only the purchasing of service/product that gets consideration in consumer behaviour, but the practice also begins even before the products have been acquired or purchased. In this study, consumer behaviour is an investigation of how the students as the customers make their decision to spend their available resources (effort, time, and money) or utilise the related perspectives (How much do they pay? What do they get? How is their behaviour?) towards the university. Thus, the university needs to find out what is the circumstance in their management that may influence student behaviour. One of the matters that the university consequently set up is their brand management. Thus, as stated by Alves and Raposo (2010), the brand image of the university influences student behaviour.

## **II. PROBLEM STATEMENT**

The Malaysian Ministry of Higher Education recently explained that the reduction in the provision of higher education in Budget 2017 is in line with the planning under the Malaysia's Education Development Plan 2015-2025. The Minister of Higher Education of Malaysia stated that the plan coincides with the action to reduce the dependence of Higher Education Institutions on the government, which at present is in the range of 80-90% and considered as a dependency that is too high. Accordingly, the higher learning institutions in Malaysia should independently seek additional sources of income as an alternative to becoming an institution of public education that are more flexible, resilient, and sustainable in managing their finances. At the same time, this will give a wider and more equal opportunity to universities to collaborate with other industries for mutual benefit. The overall Budget 2017 for the Ministry of Higher Education has been reduced by 9.3 per cent from the previous year, but of this total expenditure, development has been increased from RM1.6 billion in 2016 to RM2.6 billion in 2017, an increase of 63.6 percent (Source: Malaysia Budget 2017 Report, Ministry of Finance Malaysia).

This is a continuous two years whereby the budget for higher learning institutions have been reduced by the Ministry of Finance Malaysia. This becomes a challenge to universities to survive, as they have to seek their own additional sources of income. Thus, to face this challenge, universities should strengthen their brand image in order to gain customer (student) confidence.

According to Boyd (2012), colleges and universities are a form of business concerning their clients who normally bring about expanded profitability for businesses. Higher learning establishments that wish to draw in and retain their clients (which in this case is the students) should also treat their customers well. Brand image is an influential instrument that can attract consumers by encouraging their behaviour with various strategies that would make them loyal to one brand (Zhang, 2015). Thus, the brand image of a university may influence student behaviour. For Alves and Raposo (2010), their research on the influence of university image on student behaviour measured student behaviour in recommending a university to others by telling positive things about the school or that they would return to further their study based on the university's brand image. In this sense, a university's brand image is an important factor that encourages student behaviour. Such a result in evident university-student relationship, where the student who stays possesses a higher level of public relation perception and satisfaction, noted that the student's awareness of brand image could raise good intention student behaviour towards the university, which would in turn increase income and achieve other university objectives (Hung, 2008). Consequently, this study is to examine the relationship of the brand image of a university towards students behavioural in the university. In short, this study focused on solving two research questions: 1) Is there a positive significant relationship between brand image and student behaviour? and 2) Which dimension of brand image influences student behaviour?.

### **III. LITERATURE REVIEW**

#### **(A) Student Behaviour**

In this study, students are regarded as the university's customer. Customer is defined as a person who buys goods or services from a shop or business (The Oxford English Dictionary). According to Bunzel (2007), students paid their fees and it made them as customers. Thus, in order to overcome their consumer behaviour requirement, the university or educational institution need to fulfil their student's needs and wants (as their customer). Hence, through understanding the behaviour of the students helps university in better qualifying their positioning strategy. This can be made through a clear identification of student behaviour because university need to position themselves and focus on their strengths to become excellent (Petruzzellis and Romanazzi, 2010).

In expanding rivalry among universities or educational institutions, its responsibility of the management to identify the factors for put more effort in attract student's interest in making choice. Based on Mazzarol, Soutar and Thein (2000) study, the most essential aspect in student making their choice is the opportunity for them in future employment. On the other hand, location, socioeconomic status, student ability, cost considerations, financial aid and institutional attributes become the factors that influenced student behaviour in making choice (Baksh and Hoyt, 2001). According to Pratt and Evans (2002) study, the elements affecting student behaviour are university's ranked, academic reputation, geographic location, cost, and availability of a program. Moreover, Kotler and Fox (1995) stated student behaviour effect the university or educational institution since the student is the person who decide either to enrol or apply.

The students has become the actual customers for the university or educational institution in educational marketing (Eagle and Brennan, 2007). New study were attempting to comprehend the student behaviour as the student became important for university or educational institution. In Gillespie Finney and Zachary Finney (2010) study, as the student become important, the university management should identify the student demand and the way a university can satisfy student's need and want by planning strategies to rise the student satisfactions. Furthermore, Pop, Bacila, Moisescu and Tirca (2008) described the related information about student behaviour, the management of the university should identify the factors that impact their student satisfaction. In addition, the student performance and behavioural drivers also should be considered in order to manage the student behaviour in university. In order to understand the student behaviour, a university can use the five stages in consumer behaviour that are searching information, purchasing product or service, using, evaluating and disposing (Enache, 2011). By using the five stages (searching, purchasing, using, evaluating and disposing) in consumer behaviour, the management of the university or educational institution can create an opportunity to identify which stages need to be improve in order to satisfy student's need and want. For example, Beerli Palacio, Diaz Meneses and Perez (2002) consider that student satisfaction is an effective response, centred on comparing the result of the service (education) with some standard set prior to the purchase (fees) and measured during or after consumption. Therefore, after the weakness has been detected, the university management could improve their strategies properly without wasting time and money.

On the other hand, according to Illias, Rahman and Razak (2008), one of the function of perceiving a performance and relative level of expectation is the consumer satisfaction. The quality of educational institution is strongly associated with student satisfaction (Jiewantoa, Laurensb and Nellohc, 2012). Kotler and Armstrong (2011) stated that, based on individual expectations, satisfaction is a feeling of excitement that results from evaluating the performance of product or service. Student satisfaction will influence the student concern about their study (Khan, Ahmed, and Nawaz, 2011). To identify whether students satisfy with the service provided by university or educational institution, it can be proved by the effort of student towards their study. Customer (student) would shows their good behaviour if the organization (university or educational institution) perform excellent service (Naik, Gantasala and Prabhakar, 2010). But, the university or educational institution should know the method to handle the student behaviour. According to Ling, Chai and Piew (2010), to concentrate high competition among higher education, the university or educational institution should observed the student satisfaction to increase the positive expectation from the student as their customer toward them. Schiffman and Kanuk (2010) illustrated that, satisfaction is the idea of explanation declaring that the comparison between consumer's perception and expectation. In addition, student satisfaction would assist student in developing their knowledge, skill and self-confidence (Malik, Danish and Usman, 2010). According to Dib and Alnazer (2013), to maintain and attract student in university, the university's management should take students behaviour as a crucial thing in order to satisfy student's need and want.

## **(B) Branding**

The goals of branding is to achieve brand equity thus brands create the brand equity and value for the company (Aaker, 2009). Crosby and Johnson (2001) stated brand equity as different people describe the different perspective towards one thing. Therefore, it is hard to specify a definition of brand equity also to

find a way to measure brand equity. On the other hand, Taylor, Celuch and Goodwin (2004) stated that brand equity can be measured by the concept of consumer attitude and behaviour toward the brand because according to Aaker (2009), brand equity as a set of assets that provided the value of the product were strongly connected with the behavioural and attitudinal loyalty.

### ***Brand image***

Brand is interpreted to be a personal mark, sentence, word, logo or mixture of these items which is utilized by an organization to differentiate their product or service with competitors in the market. Van der Walt (1995) describes a brand as “brands embody dimensions such as the logo, design, smell, shape, sound, colour and communication – these factors all differentiate the brand, although some are often more prominent than others”. Branding is a complex model, and it became a crucial in marketing field. But, brand management is a wide concept which related with various ideas. According to Rosenbaum-Elliott, Elliott, Percy and Pervan (2015), brand management offer manageability and development for an organization with gives methodology to the organization to expand the value of the brand in long-term period. Thus, a brand describe the experience and knowledge of consumer within the particular brand.

Brand image has been defined in various definitions and every definitions is grounded on its formulation on numerous features. According to Keller (2008), brand image is awareness about a brand as reflected by the brand communion held in customer’s minds and with the same concept Aaker (1997) defines brand image as a value of brand that organized in meaningful way. Brand image is the present view of the consumer about a specific brand and it reproduces what the currently value of brand that exist in consumer’s minds either subjective or objective. Brand image also create the basis direct brand experience of customer towards the product or service (Koubaa, 2008). Thus, consumer’s perception while purchasing a brand transforms into the brand image because they are beliefs that a brand would create the basis for brand image. Brand image have passionate elements added to it because it can spread to others by the surrounding customer environment factors such as advertising, usage review, and word of mouth (Biel, 1993). It often automatically developed and cannot be create because it is about consumer’s mentality towards the value of the brand received by them for example fame, functionality, ease to use and product’s appeal.

According to Koubaa (2008), as metaphor people say “products are made by companies and brands are made by customer”. When a customer purchasing a product or service, actually they are expect more like, “they buying brand over a generic product”. So, the company or organization should aware also always retain the positive perception and brand image. For example, the company can use communication tools such as packaging, advertising and promoting because these communication tools would become a message that can assist a company to promote positive brand image to customer and at the same time can improve the brand value (Malik et. al, 2010). Therefore, for marketers, whatever their company’s marketing strategies are, the main purpose of their marketing activities is to influence consumer’s perception and attitude toward a brand, establish the brand image in consumer’s mind, and stimulate consumer’s actual purchasing behaviour of the brand, therefore increasing sales, maximizing the market share and developing brand equity (Zhang, 2015).

### ***Brand Identity***

According to Aaker (1996), brand identity is about how the brand wants to be perceived by the consumer. Meanwhile, the brand image is how exactly the brand perceived by the consumer. In other word, brand

identity is an aspirational of people towards the brands. Aaker (1996) also stated brand identity would delivers the meaning, direction and purpose for the brand. To differentiating the brand from competitors, the strong brand identity helps in developing trust by the customer based on how customer experienced the brand (Ghodeswar, 2008). Therefore, researcher assumed brand image similar with brand identity because both kindly likes implies a promise to the consumer. Aaker (1996) describes there are four brand identity perspective (brand as a product, organization, person and symbol) because of the brand is more than just a product.

Brand identity planning model (Aaker, 1996) firstly started with strategic brand analysis which are the brand should be differentiated by customer analysis, competitor analysis and self-analysis. Then, in the identity system stage, the brand identity could be built by considered the brand as a product, organization, person and symbol. According to Ghodeswar (2008), the four elements on the brand identity system stage help the process to making a brand to be very different with each other thus help to guide strategy for a brand differentiate, clarify and enrich an identity. According to Schmitt and Simonson (1997), all of the elements should be considered but not all of the elements are needed to be implemented by the specific brand. The possibility that one or more elements would be used by a brand to described to the consumer or depend on company to express how the brand want to be perceived by people (Wheeler, 2012).

### ***Brand Personality***

According to Aaker (1997), brand personality is “the human characteristics associated with a brand”. Through the human personality and human lifestyle, it’s the same way that a brand could be portrayed. Brand personality becomes essential because its will offer the competitive advantage. For gain more mature brands, brand personality is effective scale to been implemented (D’Astous and Boujbel, 2007). Therefore, brand personality is the human characteristics that were applied in a brand for gain more people’s understanding, attitudes and perceptions toward a brand.

The initial research by Jennifer Aaker (1997) comes out with “the big five” dimensions of brand personality that were based on human personality. The big five model produced by Aaker (1997) were involved brand personality with sincerity, excitement, competence, sophistication and ruggedness. For several industry, the brand personality framework could be utilized for investigating brand attributes and generalized from across product categories. Then, these were resulted the consumer’s experiences with the brand such as unique or exclusive (Rauschnabel, Krey, Babin and Ivens (2016). In every each five dimensions of brand personality, there are more human characteristics were been applicable that similar to the personality of physical person indeed for people more portrayed the brand as a person (Aaker, 1997). These would indirectly influence the customer imagery by how they perceived the brand personally (Rauschnabel et. al, 2016). Therefore, the purpose of brand personality which are to being different with other were been achieved. According to D’Astous and Boujbel (2007), some of the situations that were affected the brand personality are sponsoring activities, age of the brand, and symbol to create identification, were correlate to the way how brand want to be perceived by the people. In addition, the other non-product that were affect the brand personality are celebrity endorser, CEO identification, company image, country of origin, and advertising style or the category of the product it selves that could correlate the people perception.

The Jennifer Aaker (1997) brand personality framework could help company to gain more understanding of people towards the brand and what consumer attitude they have toward the brand.

Consuming brand personality could differentiate the product with other competitors and also could affect the people perceived on advertising or marketing activities. Finally, to achieve the brand equity, the company should create the brand personality (Aaker, 2009).

### **(C) Relationship between brand image and student behaviour**

Ever since the twentieth century, brand image has been contemplated widely because of its significances in constructing brand equity. An organization need a deeper knowledge about consumer behaviour in the increasingly competitive world marketplace for them educate customers about their brand as to create successful market strategies (Zhang, 2015). According to Kusumawati, Yanamandram and Perera (2010), in today education business, the marketing concept is to intend for attract students with using marketing strategies such as effective advertisements, promotions, efficiently communicate with potential students or other marketing tools. The university would receive student awareness if they employ these marketing tools properly. Hence, Goff, Patino, and Jackson (2004) stated that, in student recruitment of the international university, many scholars recognize that marketing plays as important role including strategic marketing (Liu, 1998), relationship marketing (Kittle and Ciba, 2001), the image of the university (Ivy, 2001), marketing universities (Judson, James and Aurand, 2004), direct and database marketing (Tapp, Hicks, and Stone, 2004) and international marketing (Cubillo, Sanchez and Cervino, 2006).

On the other hand, the brand image of a university or does influence the student satisfaction. The research by Palacio, Meneses and Pe'rez (2002) resulted that the brand image is cognitive and affective element that has separate effects on satisfaction and brand image also influence student satisfaction. Hence, its direct impact against expectation, image always seems as one of the factors with greatest influence to constitute the satisfaction with its proving superior indirect influence (Cassel and Eklo'f, 2001). Otherwise, Helgesen and Nettet (2007) stated the student perception of the university's image positively influence the student satisfaction. Directly and indirectly against perceived quality, satisfaction seems influenced by image that tangibly formed by an organization such as advertising, price and word of mouth (Clow, Kurtz, Ozment and Ong, 1997). Furthermore, the research by Clow et al. (1997) on numerous service industries also resulted that for customer perceived quality, organization's image highly influence the customer satisfaction. So, if the student has several knowledge about the university, the university's image indirectly influence the student satisfaction (Arpan, Raney and Zivnuska, 2003). On the other hand, Rauschnabel, Krey, Babin and Ivens (2016) stated that the dimensions of brand personality also might influence the student behaviour in higher education institution but not all of the dimensions convenient for university brand image. Therefore, the university brand management needs to identify which dimension would influence the student behaviour.

Regarding within this study, researcher carried out the student behaviour measurement as suggested by Becker and Palmer (2009) based on Singh, Verbeke and Rhoads (1996). Singh *et. al.*, (1996) stated that the organization could measures their employee behaviour by propensity to leave, job satisfaction, job commitment and job performance which are focus on organizations side. According to Clayson and Haley (2005), other than student as a customer, student also become the internal party that represent the university. Thereafter, Becker and Palmer (2009) adapted the theory by Singh *et. al.*, (1996) to be suitable regarding to measure the student behaviour. Therefore, in this study, researcher adapted the Becker and Palmer (2009) questionnaire for making study on the research area in order to determine the relationship between brand image and student behaviour.

#### **(D) Theories and research framework**

The theories that involved were Brand Identity Planning Model (Aaker, 1996), Brand Personality Framework (Aaker, 1997) and student behaviour measurement (Singh et. al, 1996; Becker and Palmer, 2009). Through the theories, the research framework was developed. Dimensions for the brand image were represented by brand identity and brand personality. This has been suggested by Aaker (2009), the brand identity and brand personality can create brand image in order to achieve brand equity. On the other hand, the dimensions for student behaviour represented the dependent variable were expectation, satisfaction, performance and thought about study time (Becker and Palmer, 2009). Hence, the research were also developed.

The relationships are estimated based on the research framework that were conveyed for the study. Accordingly, the following hypotheses were drawn for this study.

- H1a: There is a positive relationship between excitement and student behaviour.
- H1b: There is a positive relationship between sincerity and student behaviour.
- H1c: There is a positive relationship between sophistication and student behaviour.
- H1d: There is a positive relationship between competence and student behaviour.
- H1e: There is a positive relationship between ruggedness and student behaviour.
- H1f: There is a positive relationship between identity and student behaviour.

#### **IV. METHODOLOGY**

In this study, quantitative research design was employed. According to Punch (2013), quantitative design allows the researcher to collect the data from the respondents in numerical format, to exercise objective judgement, and to achieve high level of reliability and accuracy. Moreover, quantitative design allows the researcher to generalize research findings when the data are based on random samples of sufficient size.

The unit of analysis is at the individual level and the primary data for this study was collected through distribution of questionnaire in this study. Due to the focus of this study is on the dimensions of brand image that influence student behaviour, it is deemed suitable to use students (individual) as a unit of analysis. A total of 26,204 students in UUM were spotted and then only 379 students were used as respondents for this study.

Factor analysis were conducted to summarize and disclose the information contained in a larger number of variables into smaller number of factors. As argued by Hair, Black, Babin, Anderson and Tatham (2006), items are reduced to common interrelated and meaningful dimensions. Hence, through the common interrelated items, the pattern of association would assist researcher to establish interrelationship of variables that belong together. In this study, exploratory principal axis factoring (PAF) with varimax rotation was carried out to simplify a large number of items to a few representative dimensions or factors. This activity is conducted to test the pattern of correlation among items of variables and to establish the goodness of measures for testing hypothesis (Hair *et. al*, 2006). Before conducting factor analysis, there are initial considerations that need to be considered such as data screens and sample size (Field, 2005). Then, researcher needs to consider on the statistical assumptions of Barlett's Test of Sphericity and Kaiser-Meyer-Olkin (KMO). Kaiser (1974) stated that, to provide a meaningful basis for factor and present the



adequacy of the correlations among variables, Barlett's test should be significant at  $p < 0.05$  while KMO values must greater than 0.5 (Field, 2005).

Then, to identify the best forecaster influencing student behaviour in their satisfaction and expectation, multiple regression analysis were applied in this study. In order to achieve the second objective of this study, the dimensions of brand image (independent variables) that are excitement, sincerity, sophistication, competence, ruggedness and identity were tested using multiple regressions. According to Gliner, Morgan, and Leech (2011), in the multiple regression analysis, the independent variables would influence the dependent variables if the value is below the significant level of  $p < 0.05$ . This indicates that no influence between the independent and dependent variables if the value is above the sign value.

## V. RESULTS

Originally, there were twenty-seven (27) items used to measure student behaviour. Due to high cross-loading among factors, 11 items were eliminated for further analysis. Then, the data were rerun for factor analysis. From the results of the Exploratory Factor Analysis (EFA) on the 16 items after discarded eleven items, three factors were resulted. Each factor should carry at least three items and were not cross loaded (0.50) were accepted and kept for further analysis. Thus, due to the factor loading has been set at 0.50, only two factors were used for further analysis. The results of the principal axis factoring analysis with varimax rotation is presented in Table 1.

Meanwhile, the KMO value measuring adequacy of items resulted at 0.920 and this indicated that the items were correlated and formed common factors. Bartlett's Test of Sphericity was found to be significant at  $p < 0.000$  with the Approx. Chi-Square value at 2749.008, indicating the significance of the correlation matrix, and thus provided a reasonable basis for factor analysis.

Furthermore, the eigenvalue of the resulted factors were greater than 1 which explained 58.182% of the variance in the data. The first factor calculated for 44.072% of the total variance with eigenvalue of 7.051. Factor loading for items in this factor ranged from 0.529 to 0.785. Factor one consist of four items and all of that originally from "satisfaction" dimension. As a result, the factor retain named as "satisfaction".

Factor two with eigenvalue 1.247 was represented five items. Factor loading for items in this factor ranged from 0.524 to 0.641 and accounted for 7.794% of the total variance in the data. This second factor consist of items related to three items from expectation dimension and two from satisfaction dimension. Due to majority of items were from expectation dimension, the factor was named as "expectation". While the factor three was represented by two items with eigenvalue at 1.011. The factor loading for this factor ranged from 0.703 to 0.824 and accounted for 6.317% of total variance in data. Since there were two items representing this factor, this factor were discarded for further analysis as recommended by Hair et al. (2006).

On the other hand, there were originally forty-six (46) items used to measure brand image. Nevertheless, due to high cross-loading among factors, 3 items were removed for further analysis. Then, the data were rerun for factor analysis. After eliminating three items, eight factors were formed from the result of the Exploratory Factor Analysis (EFA). However, only six factors were used for further analysis due to the factor loading has been set at 0.50. Each factor that carry at least three items and also not cross loaded (0.50) were accepted then were kept for further analysis.

The KMO value on measuring adequacy of independent variable dimension were resulted at 0.959 and were indicated that the items were correlated and formed common factors. Furthermore, Bartlett's Test of Sphericity was found significant at  $p < 0.000$  with the value of Approx. Chi-Square at 10014.835. Therefore, this provide a reasonable basis for factor analysis and indicating the significance of the correlation matrix.

Then, the eigenvalue of the resulted factors were greater than 1 were explained 64.977% of variance in the data. Factor one accounted for 41.817% of the total variance with eigenvalue 17.981. Factor loading for items in factor one ranged from 0.518 to 0.612. This first factor consist of nine items related to seven items from "excitement" dimension and two from "competence" dimension. Due to majority of items were from "excitement" dimension, the factors was named as "excitement".

While for the factor two, with eigenvalue 2.008 and was represented by six items. The items were all originally from "sincerity" dimension. Factor loading for this factor ranged from 0.533 to 0.717 with accounted for 4.669% of the total variance in the data. Since all items in factor two discuss about "sincerity" of personality, the original name of "sincerity" was retained. Factor three (eigenvalue = 1.891) was represented by five items. Four items originally from "sophistication" dimension and one from "excitement" dimension. The factor loading that has been carried by factor three ranged from 0.525 to 0.674 and accounted for 4.397% of the total variance in data. Since majority of items in this factor were from "sophistication" dimension, the factor named as "sophistication".

After that, factor four represented by four items with eigenvalue 1.611. The total variance accounted at 3.746% and the factor loading ranged from 0.535 to 0.655. The factor four was named as "competence" because majority of items in this factor were from "competence" dimension with three from "competence" dimension and one from "sophistication" dimension. Then, factor five was represented by three items and all of the items were from "ruggedness" dimension. Factor five resulted with eigenvalue 1.323 and accounted for 3.078% of total variance. The factor loading in factor five ranged from 0.662 to 0.771 and due to all of items in this factor were from "ruggedness" dimension, the original name were retained for this factor as "ruggedness".

While for the factor six, with eigenvalue 1.076 and was represented by three items. The items were all originally from "identity" dimension. Factor loading for this factor ranged from 0.614 to 0.743 with accounted for 2.503% of the total variance in the data. Since all items in factor six discuss about "identity", the original name of "identity" was retained.

Factor seven was represented by one item only with eigenvalue 1.049. The item resulted with factor loading with 0.542 and accounted for 2.441 of total variance in data. Since there were only one item representing this factor, this factor will not be used for further analysis because according to Costello and Osborne (2011), the lowest number of items should be three items in order to be considered stable for a factor. Consequently, factor eight also were not used for further analysis because all of the items in this factor resulted below 0.50. As recommended by Hair *et al.* (2006) to removed factor that its items were resulted factor loading below 0.50 due it did not brings high relevancy for a factor. So, regarding with this results, only six factors were taken for further analysis.

To identify the best forecaster influencing student behaviour in their satisfaction and expectation, multiple regression analysis were applied in this study. In order to achieve the second objective that is to

**Table 1**  
**Results of Factor Analysis on Student Behaviour**

	1	2
<i>Satisfaction</i>		
I am very pleased with my university.	.785	
My university is better than most other.	.744	
I am satisfied with UUM as a place to study.	.597	
I perceived the high quality at UUM.	.529	
<i>Expectation</i>		
The image of UUM were corresponding to my expectations when I started studying here.		.641
I perceive the high quality of education.		.574
The image of UUM was mainly positive.		.561
I felt satisfied when I started my study with choosing to start at UUM		.538
My education is worth the effort.		.524
<b>Eigenvalue</b>	7.051	1.247
<b>Percentage Variance Explained</b>	44.072%	7.794%
<b>Total Variance Explained</b>	58.182%	
<b>KMO</b>	0.920	
<b>Bartlett's Test of Sphericity</b>	2749.008	

determine the influence of brand image towards student behaviour, the dimensions of brand image (independent variables) that are excitement, sincerity, sophistication, competence, ruggedness and identity were tested using multiple regressions analysis. According to Gliner, Morgan, and Leech (2011), in the multiple regression analysis, the independent variables would influence the dependent variables if the value is below the significant level of  $p < 0.05$ . So, it indicates that no influence between the independent and dependent variables if the value is above the sign value.

**Table 2**  
**Multiple Regression Analysis result**

R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
.757 <sup>a</sup>	.573	.566	.37589	83.223	.000 <sup>b</sup>

a. Dependent Variable: Student Behaviour

b. Predictors: (Constant), identity, ruggedness, excitement, sincerity, sophistication, competence

	Standardized Coefficients Beta	T	Sig.
(Constant)		10.035	.000
excitement	.092	1.589	.113
Sincerity	.187	3.822	.000
sophistication	-.002	-.033	.974
competence	.163	3.069	.002
ruggedness	-.042	-.977	.329
Identity	.480	11.245	.000

a. Dependent Variable: Student Behaviour

Based on the multiple regression result in Table 2, shows that brand image dimension represented by of excitement, sincerity, sophistication, competence, ruggedness and identity jointly explain 57.3% of the variance in predicting student behaviour. The model proposed is significant at 0.00 level. From the six dimensions, only three dimensions were found have statistically significant with student behaviour ( $p < 0.05$ ). The three dimensions are sincerity ( $p = 0.000$ ), competence ( $p = 0.002$ ) and identity ( $p = 0.000$ ). Moreover, the largest beta coefficient obtained among the dimensions was identity with 0.480 and this corresponds with the highest t-statistic of 11.245. Then, it followed by sincerity with coefficients beta 0.187 at t-statistic 3.822 and competence with coefficients beta 0.163 at t-statistic 3.069.

Thus, according to the result, when the variance explained by all other predictor dimension in the model, this makes the strongest unique contribution in explaining the dependent variables. The hypothesis represented sincerity, competence and identity were the most influence student behaviour in their satisfaction and expectation also were reported significant. However, another three dimensions which are excitement, sophistication and ruggedness were not significant relationship because the significant value above than 0.05. It shows that those dimensions were not influencing the student behaviour and were not the main factors. Notwithstanding, the dimensions of brand image which are sincerity, competence and identity were become the factors to fulfil the student behaviour in their satisfaction and expectation. Table 3 below shows the hypothesis result based on multiple regression analysis.

**Table 5.4**  
**Summary of all Hypotheses**

<i>Hypothesis</i>	<i>Hypothesis statements</i>	<i>Remarks</i>
H1a	There is a positive relationship between excitement and student behaviour.	Not supported
H1b	There is a positive relationship between sincerity and student behaviour.	Supported
H1c	There is a positive relationship between sophistication and student behaviour.	Not supported
H1d	There is a positive relationship between competence and student behaviour.	Supported
H1e	There is a positive relationship between ruggedness and student behaviour.	Not supported
H1f	There is a positive relationship between identity and student behaviour.	Supported

## **VI. DISCUSSION AND CONCLUSION**

The discussion of the study were based on the research objective. From the data analysis, it was found that there were significant relationship between dimensions of brand image with student behaviour. In addition, this study provide evidence about the relationship between the independent variable and dependent variable.

The research objective one is to determine the relationship between brand image towards student behaviour. This aimed to determining if there any significant relationship between the dimensions of brand image which are identity, sincerity, excitement, competence, sophistication, ruggedness and dimensions of dependent variables which are satisfaction and expectation of student towards university. Based on the data analysis, it was found that there were significant differences in brand image dimensions. In fact, the dimensions of brand image have positive significant towards student satisfaction and expectation.

In determining the relationship between dimensions of brand image towards student satisfaction and expectation, identity become the highest factor that significantly influenced. This is because the identification

of a university would affect the perception from the students thus, these outcomes would result in student satisfaction and expectation. Moreover, it is important for a university to adopt the elements of identity for students to perceive the value that promotes by a university such as warmth, closeness, credibility, world class education and world class research. In addition, the accreditation awarded may give a positive impact towards a university's identity. The perception by the student may be biased against the university because of the accreditation. For example, the student would choose the university with accreditation for their purpose of better employment in the future as the graduates from the accredited university were important for industry.

Hence, the study also found that the dimensions of brand image which are excitement, sincerity and competence have a moderate relationship with student satisfaction and expectation. This is because by using these dimensions means a university would continue to develop their uniqueness to satisfy student satisfaction and expectation. A university can use these vital components to create differentiation and enhance competitive advantage in attracting students. This reveals that by being different, the university can build and sustain a strong brand image in the education institution market. In addition, the university also would have an excellent image and reputation.

On the other hand, the sophistication factor found that there is a moderate relationship with student satisfaction and a weak relationship with student expectation. For students, the sophistication in a university may satisfy them but not attract their expectation. Nowadays, sophistication becomes most desirable in human quality and it was not always so. Sophistication in education would attract student satisfaction and it does not influence their expectation. So, a university may sustain its sophistication elements which are upperclass, glamorous, good-looking, charming, feminine and smooth to achieve student satisfaction also they may improve it to achieve student expectation.

This study also found that between the dimensions of brand image, there is a weak significant relationship between ruggedness with student satisfaction and expectation. This is because the university itself as the place for education was not suitable with the element of ruggedness. It may be a competitive advantage if the university management is successful in implementing the element of ruggedness but this element did not give a big impact towards student behaviour. Therefore, the university management could save costs through using the elements of ruggedness in the university brand image. That budget can be distributed for other purposes in order to achieve a better brand image.

The results were supported by the brand identity model by David Aaker (1996) and the brand personality model by Jennifer Aaker (1997). The scholars describe that there is a significant relationship with the dimensions of brand image (brand identity and brand personality) towards consumer behaviour. In addition, the results of this study are supported by Becker and Palmer (2009) research which stated that there is a strong influence of brand identity towards student behaviour but a different result on the importance of ruggedness towards student behaviour. This study gives different results that the ruggedness factor is not important towards student behaviour.

This study was expected that identity to be the important factors that give an impact to the student behaviour towards the university. Meanwhile, the element of ruggedness was the less important factors that give an impact to the student satisfaction and expectation. The university should create its identity to put the knowledge of its brand for students. In addition, it is important for the university to send out or

reveal their identity toward student for the student received more information about their university in order to satisfy their needs and wants. Therefore, in order for university to get the positive brand image, it is important that the student can identify the university's identity with the value and image of the brand.

The research objective two is to determine the influence of brand image toward student behaviour. This aimed to seek facts about factors that influences mostly the student behaviour. The dimensions of independent variables which are identity, sincerity, excitement, competence, sophistication and ruggedness were tested to create a conclusion whether it is there a significant influence of the factors toward the dimensions of dependent variables which are satisfaction and expectation. The sincerity, competence and identity factor were been found significantly influential on student behaviour. Although excitement, sophistication and ruggedness factor were been found positively correlated with student behaviour, these three factors representing the brand image construct do not significantly influence the student behaviour. Therefore, this study emphasizes that these dimensions of sincerity, competence and identity as the most influential and significant predictors on student behaviour.

The all six dimensions of brand image are positively correlated with student behaviour but not all of the dimensions add up to significantly predict the student behaviour. This is because there are another factors would can explains the student behaviour toward university that not involves in this study. The elements of sincerity, competence and identity seems to be suitable with education institution brand image while the elements of excitement, sophistication and ruggedness in not suitable for university brand image as the education place. This discussion were supported by Rauschnabel, Krey, Babin and Ivens (2016) that the elements of excitement, sophistication and ruggedness are not convenient for higher education institution. Thus, the management of the university could draft their cost budgeting strategy by sustain and improve the elements of sincerity, competence and identity in their brand images to achieve better student behaviour. In other hand, they can save budget by remove the elements that not gives impact to university brand image.

Based on the overall results, this study has provided empirical evidence on the relationships between brand image and student behaviour. More importantly, this study has succeeded in answering two main objective; the first main objective was seek to determine the relationship between brand image towards student behaviour; the second was to determine the influence of brand image toward student behaviour.

The first part of the objective all dimensions of brand image have significantly positive influence on student behaviour dimensions which are satisfaction and expectation. Among the six dimensions of brand image namely identity has the highest impact on student satisfaction and expectation. Although, in the second part of the objective, the study confirmed that dimensions of brand image have positive significant influence on student behaviour.

The result of this study suggests that for university management needs to have a strategies in improving their brand image through sincerity, competence and identity in order to enhance student satisfaction and expectation.

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## REFERENCES

- Aaker, D. A. (1996). Building strong brands: Building, measuring, and managing brand equity.
- Aaker, D. A. (2009). Managing brand equity. Simon and Schuster.
- Aaker, J. L. (1997). Dimensions of brand personality. *Journal of marketing research*, 347-356.
- Alves, H., & Raposo, M. (2010). The influence of university image on student behaviour. *International Journal of Educational Management*, 24(1), 73-85.
- Arpan, L., Raney, A. and Zivnuska, S. (2003), "A cognitive approach to understanding university image", Corporate Communications, Vol. 8 No. 2, pp. 97-113.
- Baksh, A., & Hoyt, J. E. (2001). The effect of academic scholarships on college attendance. *College & University*, 76(4), 3-8.
- Becker, C., & Palmér, S. (2009). Branding in Universities identity versus image: a case study of a Swedish University.
- Berli Palacio, A., Díaz Meneses, G., & Pérez Pérez, P. J. (2002). The configuration of the university image and its relationship with the satisfaction of students. *Journal of Educational administration*, 40(5), 486-505.
- Biel, A. L. (1993). Converting image into equity. Brand equity and advertising: Advertising's role in building strong brands, 67-82.
- Boyd, R. L. (2012). Customer service in Higher Education: Finding a middle ground. The Mentor.
- Bunzel, D. L. (2007). Universities sell their brands. *Journal of Product & Brand Management*, 16(2), 152-153.
- Cassel, C. and Eklof, J. (2001). "Modelling customer satisfaction and loyalty on aggregate levels – experience from the ECSI pilot study", Proceedings of the 6th TQM World Congress, Saint Petersburg, pp. 307-14.
- Clayson, D. E., & Haley, D. A. (2005). Marketing models in education: students as customers, products, or partners. *Marketing Education Review*, 15(1), 1-10.
- Clow, K., Kurtz, D., Ozment, J. and Ong, B. (1997). "The antecedents of consumer expectations of services: an empirical study across four industries", *The Journal of Services Marketing*, Vol. 11 No. 4, pp. 230-48.
- Costello, A. B., & Osborne, J. W. (2011). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Pract Assess Res Eval* 2005; 10. URL <http://pareonline.net/getvn.asp>, 10(7).
- Crosby, L. A., & Johnson, S. L. (2001). Branding and your CRM strategy. *Marketing Management*, 10(2), 6-7.
- Cubillo, J. M., Sánchez, J. & Cerviño, J. (2006). 'International students' decision-making process', *The International Journal of Educational Management*, vol. 20, no. 2, pp. 101-115.
- D'Astous, A., & Boujbel, L. (2007). Positioning countries on personality dimensions: Scale development and implications for country marketing. *Journal of Business Research*, 60(3), 231-239.
- Dib, H., & Alnazer, M. (2013). The Impact of Service Quality on Student Satisfaction and Behavioral Consequences in Higher Education Services. *International Journal of Economy, Management and Social Sciences*, 2(6), Pages: 285-290.
- Eagle, L., & Brennan, R. (2007). Are students customers? TQM and marketing perspectives. *Quality assurance in education*, 15(1), 44-60.
- Enache, I. C. (2011). Customer Behaviour and student satisfaction. *Bulletin of the Transilvania University of Brasov. Economic Sciences. Series V*, 4(2), 41.
- Field, A. (2005). Factor analysis using SPSS. Retrieved March, 17, 2009.
- Ghodeswar, B. M. (2008). Building brand identity in competitive markets: a conceptual model. *Journal of product & brand management*, 17(1), 4-12.
- Gillespie Finney, T., & Zachary Finney, R. (2010). Are students their universities' customers? An exploratory study. *Education+ Training*, 52(4), 276-291.
- Gliner, J. A., Morgan, G. A., & Leech, N. L. (2011). Research methods in applied settings: An integrated approach to design and analysis. Routledge.

- Goff, B., Patino, V. & Jackson, G. 2004, 'Preferred information sources of high school students for community colleges and universities', *Community College Journal of Research and Practice*, vol. 28, no. 10, pp. 795-803.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6). Upper Saddle River, NJ: Pearson Prentice Hall.
- Helgesen, O. and Nettet, E. (2007). "Images, satisfaction and antecedents: drivers of student loyalty? A case study of Norwegian University College", *Corporate Reputation Review*, Vol. 10 No. 1, pp. 38-59.
- Heylen, J. P., Dawson, B., & Sampson, P. (1995). An implicit model of consumer behaviour. *Journal of the Market Research Society*, 37(1), 51-68.
- Hung, C. H. (2008). The effect of brand image on public relations perceptions and customer loyalty. *International Journal of Management*, 25(2), 237.
- Ilias, A., Rahman, R. A., & Razak, M. Z. A. (2008). Service Quality and Student Satisfaction: A Case Study at Private Higher Education Institutions. *International Business Research*, Vol. 1, No. 3.
- Ivy, J. (2001). 'Higher education institution image: A correspondence analysis approach', *The International Journal of Educational Management*, vol. 15, no. 6/7, pp. 276-282.
- Jiewanto, A., Laurensb, C., & Nellohc, L. (2012). Influence of Service Quality, University Image, and Student Satisfaction toward WOM Intention: A Case Study on Universitas Pelita Harapan Surabaya. *Procedia - Social and Behavioral Sciences*, 16 – 23.
- Judson, K. M., James, J. D. & Aurand, T. W. (2004), 'Marketing the university to student athletes: Understanding university selection criteria', *Journal of Marketing for Higher Education*, vol. 14, no. 1, pp. 23-40.
- Keller, K. (2008). *Strategic brand management – building, measuring and managing brand equity*, third edition. Prentice Hall, New Jersey.
- Keller, K. L., Parameswaran, M. G., & Jacob, I. (2011). *Strategic brand management: Building, measuring, and managing brand equity*. Pearson Education India.
- Khan, M. M., Ahmed, I., & Nawaz, M. M. (2011). Student s Perspective of Service Quality in Higher Learning Institutions; An evidence Based Approach. *International Journal of Business and Social Science*, Vol. 2 No. 11.
- Kittle, B. & Ciba, D. (2001). 'Using College Web Sites for Student Recruitment: A Relationship Marketing Study', *Journal of Marketing for Higher Education*, vol. 11, no. 3, pp. 17-37.
- Kotler, P. & Armstrong, G. (2011). *Principals of marketing*. (13th ed.). Upper Saddle River: Pearson.
- Kotler, P. & Fox, K. F. A. (1995). *Strategic Marketing for Educational Institutions*, Second, Englewood Cliffs, New Jersey, Prentice-Hall.
- Koubaa, Y. (2008). Country of origin, brand image perception, and brand image structure. *Asia Pacific Journal of Marketing and Logistics*, 20(2), 139-155.
- Kusumawati, A., Yanamandram, V. K., & Perera, N. (2010). University marketing and consumer behaviour concerns: the shifting preference of university selection criteria in Indonesia.
- Ling, K. C., Chai, L. T., & Piew, T. H. (2010). The Inside-out and Outside-in Approaches on Students Perceived Service Quality: An Empirical Evaluation. *Management Science and Engineering*, Vol. 4, No. 2.
- Liu, S. S. (1998). 'Integrating Strategic Marketing on an Institutional Level', *Journal of Marketing for Higher Education*, vol. 8, no. 4, pp. 17-28.
- Malik, M. E., Danish, R. Q., & Usman, A. (2010). The Impact of Service Quality on Students Satisfaction in Higher Education Institutes of Punjab. *Journal of Management Research*, Vol. 2, No. 2.
- Mazzarol, T., Soutar, G. N., & Thein, V. (2000). Critical success factors in the marketing of an educational institution: A comparison of institutional and student perspectives. *Journal of Marketing for Higher Education*, 10(2), 39- 57.
- Ministry of Finance (MOF). (2015). 2016 Budget Report. Putrajaya: Ministry Finance of Malaysia. Retrieved from <http://www.treasury.gov.my/index.php/en/budget/annual-budget.html>



- Ministry of Finance (MOF). (2016). 2017 Budget Report. Putrajaya: Ministry Finance of Malaysia. Retrieved from <http://www.treasury.gov.my/index.php/en/budget/annual-budget.html>
- Naik, C. N. K., Gantasala, S. B., & Prabhakar, G. V. (2010). SERVQUAL, Customer Satisfaction and Behavioural Intentions in Retailing. *European Journal of Social Sciences*, Vol. 17 Issue 2.
- Petruzzellis, L., & Romanazzi, S. (2010). Educational value: how students choose university: Evidence from an Italian university. *International Journal of Educational Management*, 24(2), 139-158.
- Pop, M. D., Bacila, M. F., Moiescu, O. I., & Tirca, A. M. (2008). The impact of educational experience on students' satisfaction in the Romanian higher education system. *International Journal of Business Research*, 8(3), 188-194.
- Pratt, P., & Evans, D. (2002). Assessment of the utility of parents as sources of information about the college decisions of their children. *College & University*, 77(4), 9-12.
- Punch, K. F. (2013). *Introduction to social research: Quantitative and qualitative approaches*. Sage.
- Rauschnabel, P. A., Krey, N., Babin, B. J., & Ivens, B. S. (2016). Brand management in higher education: the university brand personality scale. *Journal of Business Research*, 69(8), 3077-3086.
- Rosenbaum-Elliott, R., Percy, L., & Pervan, S. (2015). *Strategic brand management*. Oxford University Press, USA.
- Schiffman, L., & Kanuk, L. (2010). *Consumer Behavior*". 10th edition.
- Schmitt, B., & Simonson, A. (1997). *Marketing aesthetics: The strategic management of brands, identity, and image*. Free Press.
- Singh, J., Verbeke, W., & Rhoads, G. K. (1996). Do organizational practices matter in role stress processes? A study of direct and moderating effects for marketing-oriented boundary spanners. *The Journal of Marketing*, 69-86.
- Solomon, M., Russell-Bennett, R., & Previte, J. (2012). *Consumer behaviour*. Pearson Higher Education AU.
- Tapp, A., Hicks, K. & Stone, M. (2004). 'Direct and database marketing and customer relationship management in recruiting students for higher education', *International Journal of Nonprofit and Voluntary Sector Marketing*, vol. 9, no. 4, pp. 335-345.
- Taylor, S. A., Celuch, K., & Goodwin, S. (2004). The importance of brand equity to customer loyalty. *Journal of product & brand management*, 13(4), 217-227.
- Van der Walt, A. (1995). Branding: the good, the bad, and the indifferent. In: Cant, M., Machado, R. and Brink, A. (eds). *Marketing Success Stories – Cases and Readings*. Southern Book Publishers, Johannesburg.
- Wheeler, A. (2012). *Designing brand identity: an essential guide for the whole branding team*. John Wiley & Sons.
- Zhang, Y. (2015). The Impact of Brand Image on Consumer Behavior: A Literature Review. *Open Journal of Business and Management*, 3(01), 58.