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The role of brand orientation in the higher education sector: a student-perceived paradigm

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Abstract

Purpose – The purpose of this paper is to examine the relationship between perceived brand orientation (PBO), satisfaction, loyalty, and post-enrolment communication behaviour in the Australian higher education sector.

Design/methodology/approach – Two hundred and fifty-eight questionnaires were completed by undergraduate students of a particular university in Australia. Structural equation modeling was employed in this study to examine the associations between the constructs.

Findings – This study provides empirical evidence that PBO has a positive and significant relationship with all dependent variables. The research reveals that students' perception of a university's brand orientation is significantly related to satisfaction, loyalty, and post-enrolment communication behaviour.

Research limitations/implications – The findings may guide the key decision makers in higher education institutions to understand the importance of brand orientation in their corporate strategy to enhance satisfaction, loyalty, and positive WOM, which can be used to differentiate themselves from other institutions in the highly competitive education market.

Originality/value – Past researchers have not looked into the dynamic relationships between PBO, satisfaction, loyalty, and post-enrolment communication behaviour, and hence research is to be called for in this area. The paper is the first to examine brand orientation from the perspective of the students and provide higher education institutions with recommendations to improve service quality through brand orientation.

Keywords Higher education, Customer satisfaction, Customer loyalty, Structural equation modelling, Brand orientation, Word-of-mouth marketing
Paper type Research paper

Introduction

The increasingly competitive environment being experienced by both the commercial and non-profit sector has led to brands being increasingly used as a strategic resource to achieve a competitive advantage. This has led to an extensive research on brand orientation as a possible approach to govern the brand-building process within organisations. Brand orientation is defined as:

> [. . .] an approach in which the processes of the organisation revolve around the creation, development, and protection of brand identity in an ongoing interaction with target customers with the aim of achieving lasting competitive advantages in the form of brands (Urde, 1999, p. 117).

Proponents of brand orientation asserted that while consumer satisfaction is important, consumer needs and wants might not be consistent with a given organisation's brand identity and there is a need to protect the integrity of the brand (Urde et al., 2011). Therefore, companies should reach beyond mere "market orientation" to embrace "brand orientation" as an additional means of achieving market superiority (Urde, 1999).

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Urde et al. (2011) identified three key perspectives of brand orientation in the body of literature: cultural, behavioural, and performance perspectives. The cultural perspective concerns with the way an organisation aligns its vision, culture, and image with the brand identity (Hatch and Schultz, 2001). The behavioural perspective, on the other hand, focuses on the importance given to "living the brand", which is manifested in the organisation's integrated marketing communication, brand equity measurement, corporate identity, corporate design, and the effect of branding on management practice (Urde et al., 2011). Finally, the performance perspective concerns with the positive impact of brand orientation on organisational performance (Napoli, 2006; Wong and Merrilees, 2007).

This study focuses on students' perception of a university's brand orientation and thus focuses on the behavioural perspective of brand orientation within the higher education sector. Due to the intensified competition within the sector, higher education institutions are becoming more "customer-oriented" and resorted to the implementation of integrated marketing approaches to attract enrolments (Wasmer et al., 1997; Wright, 2000). Higher education institutions must focus on developing a strong brand identity as part of their integrated marketing approaches (Judson et al., 2009). While the notion of brand orientation has been linked with organisational performance in commercial (Gromark and Melina, 2011; Bridson and Evans, 2004; Wong and Merrilees, 2008), non-profit (Napoli, 2006), and destination marketing context (Hankinson, 2012), little attention has been devoted to the examination of brand orientation within the higher education sector.

The examination of brand orientation from the perspective of the students is an important topic of research. Previous studies have examined market orientation from customer perspective because "[. . .] the adoption of [an] employee-defined view of market orientation is one-sided and myopic in that it ignores the vital role of customers in terms of value recognition" (Webb et al., 2000, p. 102). Similarly, it can be argued that the examination of an employee-defined view of brand orientation is one-sided and myopic because it ignored the vital role of students (as customers in higher education context) in terms of value recognition. With this research gap in mind, this study focuses on the examination of brand orientation from student perspective ("perceived brand orientation" (PBO)). More specifically, this study examines the impact of PBO on satisfaction, loyalty, and post-enrolment communication behaviour.

Literature review and theoretical framework
Branding in the higher education sector
As universities around the world are expanding their marketing campaign, prospective students undertake a complex consumer decision making process when it comes to selecting a university to attend, and branding becomes a means to simplify their selection process. A study by Sevier (1994) found that "image" is the most important factor which affect prospective students' decision to attend a university. Similarly, Berger and Wallingford (1996) found that "reputation" and "academics" were the two most important selection criteria in choosing a university. Mazzarol and Soutar (2012) mentioned "strong reputation" as one of the key competencies for education institutions to successfully compete in the global market. Sultan and Wong (2012, p. 758) stated that "the image of a university in a competitive global market is important because it determines the marketability of the programs/courses, and affects student attraction, retention and funding opportunities". For this reason, universities expend a significant amount of resources on their brand campaign to establish themselves in the evoked set of prospective students (George, 2000). Many universities also engaged in image reconstruction strategies to re-position themselves in the education market and improve their reputation (Brown and Geddes, 2006).

Although there is a substantial amount of work in the marketing of higher education, the literature on higher education branding seems to be limited (Hemsley-Brown and Oplatka, 2006). Studies in the past have examined brand architecture of universities (Hemsley-Brown and Goonawardana, 2007), development of brand identities (Lowrie, 2007), the role of web sites in university branding (Opoku et al., 2006), and the applicability of commercial branding in higher education settings

(Jevons, 2006). Evidently, there is a need for more research on the topic of brand orientation within the higher education sector (Chapleo, 2007). Whereas there are extensive works on brand orientation in commercial and non-profit sector, there is a need for a student-perceived research on brand orientation which involves students as the study participants. Since previous studies have involved staff as the participants, the findings of the present study will provide useful insights as to how students' perception of brand orientation is significantly related to important factors such as loyalty, satisfaction, and positive WOM.

Perceived brand orientation

The term "PBO" was first coined by Mulyanegara (2011a, b) to refer to the examination of brand orientation from customer/members perspective. The definition of "PBO" offered by Mulyanegara (2011a) is not significantly different to Urde's (1999) definition of "brand orientation" as the difference, mainly lies on Mulyanegara's (2011a) focus on customers' perspective instead of employees' perspective in measuring an organisation's brand orientation.

Mulyanegara (2011b) examined the role of PBO in church context and found that PBO was significantly related to perceived benefits and participation in church related activities. Until recently, the topic of brand orientation is still at its infancy (O'cass and Ngo, 2009) and thus no other studies have been done to examine the construct of brand orientation from customer perspectives. Since Mulyanegara's (2011a, b) study was done in the church context, the generalisability of the findings to other non-profit sectors is debatable as there are specific factors in church context such as spirituality and religiosity which are not applicable in other sector. Therefore, there is a need for more studies of "PBO" in other sectors, including the higher education sector.

Ewing and Napoli's (2005) work on the construct of non-profit brand orientation (NBO) is of significance to the present study in view of the otherwise limited research into the measurement of brand orientation in the literature. Napoli (2006) found a significant relationship between NBO and organisational performance – as measured subjectively in terms of:

. an organisation's ability to achieve its short-term and long-term objectives; and
. its ability to serve stakeholders better than its competitors.

More importantly, the study found that the more brand oriented an organisation is, the more likely it is to be classified as "above average" in its performance (Napoli, 2006).

The present study adapted the NBO scale items of Ewing and Napoli (2005) to examine students' perception of the university's brand orientation based on the following three dimensions:

(1) Interaction. The extent to which the university establishes a dialogue with students and responds to changes in its environment.
(2) Orchestration. The extent to which the brand portfolio and related marketing activities of the university are effectively structured and communicated to both internal (i.e. students) and external (i.e. public) stakeholders.
(3) Affect. The extent to which the university understands whether the brand is liked/disliked by its key stakeholders.

Loyalty

Customer loyalty is defined as:

[. . .] a deeply held commitment to rebuy or [repatrionise] a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching [behaviour] (Oliver, 1997, p. 392).

In the context of higher education, student loyalty consists of attitudinal and behavioural components. The attitudinal component relates to cognitive, affective, and conative elements whereas the behavioural component relates to decisions that students make regarding their options to move to another university for their current or future studies (Henning-Thurau et al., 2001). Helgesen and Nesset (2007) suggested that student loyalty can be related both to the period when a student is enrolled at the university as well as after the student finishes his or her studies. This is important because the goal of universities is not only to encourage students to maintain their current enrolment, but also to encourage them to do further studies at the same university.This study examines the concept of student loyalty on the attitudinal component of the concept in the form of behavioural intentions (Henning-Thurau et al., 2001).

Studies in the past have found positive links between perceived images and loyalty (Selnes, 1993; Macmillan et al., 2005). Likewise, the image of a university has been recognised as a key driver of student loyalty (Sevier, 1994; Bush et al., 1998). This study suggests that students' perception of the extent to which their university engages in brand-oriented behaviour could have a significant impact on loyalty. With the intensified competition in the job market, students would want to graduate with a degree from a reputable, well-known university. The university's engagement in brand-oriented behaviour is of significant importance for the students as strong brands will help to enhance awareness of the university's reputation which in turn improves the employment prospect of the students upon the completion of their studies. This leads us to the first hypothesis:

> H1. Student perception of the university's brand orientation has a positive impact on student loyalty.

Post-enrolment communication behaviour. Post-enrolment communication behaviour concerns with the extent to which students spread positive word-of-mouth (WOM) to their friends about their university subsequent to their enrolment. WOM communication is an important source of influence on consumers, as it was proven to be effective in raising awareness and affecting people's decision to try a product or service (Sheth, 1971). Within the service context, WOM was found to have a stronger influence on purchasing decision than other sources of influence (Mangold, 1987). Within the higher education context, Athiyaman (1997) found that student attitude to the university is positively related to positive WOM subsequent to their enrolment (post-enrolment communication behaviour).

This study suggests that students' perception of the extent to which their university engages in brand-oriented behaviour could have a significant impact on post-enrolment communication behaviour. Students may feel more confident talking about their university to their friends if the university has a strong brand which conveys coordinated message about its strength and reputation. This is an important issue for universities as strong positive WOM can enhance the university brand image which may, subsequently, increase student enrolment. The following hypothesis is therefore proposed:

> H2. Student perception of the university's brand orientation has a positive impact on student post-enrolment communication behaviour.

Satisfaction

Consumer satisfaction has been defined as an evaluative, affective, or emotional response that develops along with the experience a consumer has with goods or services over a period of time (Oliver and Swan, 1989). Similarly, within the context of higher education, student satisfaction is perceived as "a short-term attitude resulting from an evaluation of a student's educational experience" (Elliott and Healy, 2001, p. 2). Student satisfaction is considered as an important research topic in higher education due to an increasing competition in this sector. While satisfied students can be a source of positive endorsements for universities, dissatisfied students may engage

in direct and indirect complaining behaviour which could have adverse effects on university reputation (Fitzpatrick et al., 2012). It is therefore important for universities to identify the factors which are significantly related to student satisfaction.

Studies in the past have linked university brand image with student satisfaction.

Palacio et al. (2002) found that affective, cognitive, and overall image of the university is positively associated with student satisfaction. In the context of Australian universities, Brown and Mazzarol (2009) found that satisfaction is affected by the perceived image of the university. This study suggests that that students' perception of the extent to which the university engages in brand-oriented behaviour could have a significant impact on satisfaction. A university with a strong brand will give students a competitive edge in the job market upon the completion of their studies and this in turn leads to satisfaction. While previous studies have provided links between brand image and satisfaction in general, the present study proposes to examine the relationship between "PBO" and student satisfaction. The following hypothesis is proposed:

> H3. Student perception of the university's brand orientation has a positive impact on student satisfaction.

Studies in the past have found strong links between satisfaction and student loyalty (Helgesen and Nesset, 2007; Paswan and Ganesh, 2009; Rojas-Mendez et al., 2009).

Athiyaman (1997) also found that satisfaction is significantly related to post-enrolment communication behaviour. Consistent with the findings of the previous studies, the following hypotheses are proposed:

> H4. Student satisfaction has a positive impact on loyalty.
> H5. Student satisfaction has a positive impact on post-enrolment communication behaviour.

Past studies have demonstrated that customer satisfaction and image affect loyalty in the hospitality sector (Kandampully and Suhartanto, 2000), but little attention has been devoted to the inter-relationships between these constructs in the higher education sector. The conceptual model (Figure 1) proposes satisfaction as the mediating variable between PBO, loyalty, and post-enrolment communication behaviour. According to Baron and Kenny (1986), a variable performs a mediating role if it accounts for the relationship between the antecedents and the results. Accordingly, we contend that although students may have positive perception of the university's brand orientation, their loyalty and post-enrolment communication behaviour are eventually driven by their satisfaction with the university. Universities with strong brand orientation are perceived as being able to offer study experience that are relevant to the needs and expectation of the students. Consequently, those who perceive the university as highly brand-oriented are likely to be satisfied with their study experience. In turn, students who are satisfied are likely to be actively involved in talking about the university with their friends and attend the same university for further education. On the basis of this rationale, the following hypotheses are proposed:

> H6a. Student satisfaction mediates the relationship between PBO and loyalty.
> H6b. Student satisfaction mediates the relationship between PBO and post-enrolment communication behaviour.

Methodology

Sample selection and data collection

The respondents in this study were 258 undergraduate students (163 females, 95 males) enrolled in the faculty of business and design at one of the leading universities in Australia. University students were purposefully chosen as the study sample in order to be consistent with the research context of higher education. Most of the participants were aged between 20 and 25 years old (64 per cent), comprising 220 local and 38 international students. An anonymous self-administered questionnaire

was used for data collection. The questionnaires were distributed to participants in four different lecture sessions. The demographic characteristics of the respondents are described in Table I.

Figure 1. Conceptual framework
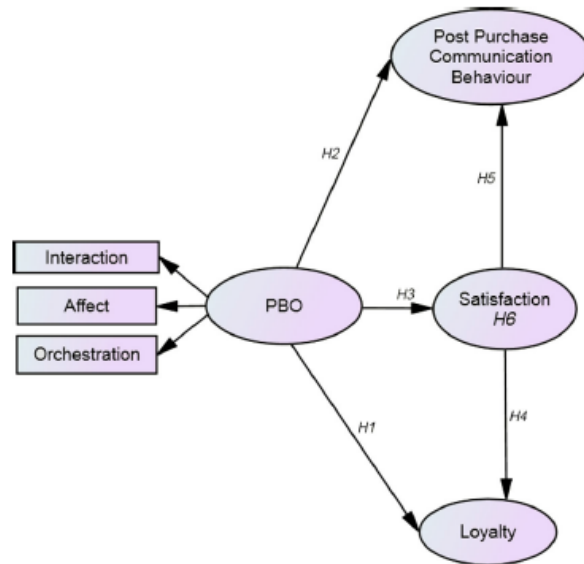
Measures
Perceived brand orientation. The present author adapted the NBO measure of Ewing and Napoli (2005) in developing the "PBO" construct in this study. The adaptation of NBO construct based on students' perspective is a rather complex issue because the assessment of the importance of branding in an organisation's strategy is typically assessed by top managers (Urde, 1999). Consequently, two experts in the area of higher education and brand orientation were consulted in the adaptation process to ensure the content validity of the scale items. The present author referred to the purified 16-item NBOs of Ewing and Napoli (2005) using seven-point scale where respondents indicated the extent to which the university currently engaged in the activity described. A response of 1 reflected to a very little extent, and 7 – to a very great extent.

Table I. Respondent characteristics

Demographics ($n = 258$)	%
Age	
Under 20	29
20-25 years old	64
26 years old and above	7
Gender	
Male	37
Female	63
Status	
Local students	85
International students	15
Length of study at the university	
Less than 12 months	28
12-24 months	42
25-36 months	18
More than 26 months	12
Marital status	
Single	94
Married	1
De facto	4
Widowed	1
Personal annual income	
Under $30,000	88
Between $30,001 and $60,000	8
More than $60,000	4

Loyalty. This study adopted Helgesen and Nesset's (2007) scale items to measure student loyalty. Respondents were asked about behavioural intentions relating to their university using a seven-point Likert scale:

> [. . .] the probability of recommending the university college to friends/acquaintances, the probability of attending the same university college if starting anew, and the probability of attending new courses/further education at the university college (Helgesen and Nesset, 2007,
> p. 45).

A response of 1 reflected highly unlikely, and 7 – highly likely.

Post-enrolment communication behaviour. Respondents' behavioural intention was measured using Athiyaman's (1997) three-item post-purchase communication behaviour scale with the anchors strongly disagree to strongly agree. He reported an a reliability of 0.75 for the scale.

Satisfaction. Respondents' satisfaction with the university was measured with a six-item, student satisfaction scale of Athiyaman (1997). He used a five-point scale and reported an a reliability of 0.92 for the scale. This study used a seven-point scale where respondents indicated their agreement with the statements related to their satisfaction.

Exploratory factor analysis

The 16-item PBO in the present study was subjected to principal component analysis with varimax rotation. The analysis produced a three-factor solution and two items were found to load on multiple factors. These items were subsequently removed from further analysis. The final three-factor solution consisting of 14 items was then subjected to confirmatory factor analysis.

Confirmatory factor analysis

Structural equation modeling (SEM) was employed to perform a confirmatory factor analysis on the proposed model. The measurement model was tested using the incremental modification approach of Segars and Grover (1993) and Cheng (2001). The model was revised by deleting some indicators with low factor loadings, squared multiple correlations, and those that attempted to load on more than one dimension as reflected by high modification indexes (Cheng, 2001). The deletion of the variables was also done one by one as the elimination of one variable in the model may concurrently affect other parts of the model (Kline, 2005). The final PBO construct, as shown in Table III, consists of nine items which reflect the "interaction", "orchestration", and "affect" dimensions of Ewing and Napoli's (2005) NBO construct.

Table II shows means, standard deviations, and inter-correlations of all of the measurement variables. As depicted in the table, the AVE for each construct is greater than all related correlations, thus indicating discriminant validity (Fornell and Larcker, 1981). The final measurement model demonstrated good fit with the data as reflected in the fit indices including $x2$ (48) = 114.888 (p = 0.000), NC (2.394), RMSEA (0.074), TLI (0.952), CFI (0.965), and NFI (0.942).

Discriminant validity was established through an examination of the square root of the average variance extracted (AVE) and correlation between constructs (Hulland, 1999). The reliability of the constructs was measured using "composite reliability" (CR) (Fornell and Larcker, 1981). As shown in Table III, the CR value of all constructs is above 0.75, indicating good construct reliability.

Analysis of the structural model

A full structural model (Figure 2) was employed to examine the relevant hypotheses under examination. In this structural model, "satisfaction" was incorporated as the mediating variable. An observation of the GOF indices suggests that the structural model is statistically significant and possesses construct validity. Although the $x2$ was found to be statistically significant ($x2$ = 131.675, df = 49, p = 0.000), the normed $x2$ (2.687) is within the recommended range. Other indicators

including RMSEA (0.067), TLI (0.942), CFI (0.957), and NFI (0.934) are all above the recommended fit level. The bootstrapping method was used to estimate the standard error. The effects were calculated at a confidence level of 95 per cent and the bootstrap was set to equal to 500.

Test of hypotheses

Our conceptual model specifies that satisfaction mediates the effects of PBO on loyalty and post-enrolment communication behaviour. In order to examine the two mediation hypotheses, we followed Baron and Kenny's (1986) criteria to establish whether the conditions for mediation exist. First, we ran a structural model to determine that there is a relationship between PBO (as the antecedent) and "loyalty" and "post-enrolment communication behaviour" (as the outcome variables). As can be seen in Table IV under: "Mediation test stage I: independent to dependent variable", PBO was found to have a statistically significant relationship with "loyalty" (b = 0.557, p < 0.001) and "post-enrolment communication behaviour" (b = 0.718, p < 0.001). Thus, the first condition of mediation is fulfilled and support was found for H1 and H2.

Next, we ran a structural model to establish that there is a relationship between the PBO and "satisfaction" (as the mediator variable). PBO was found to have a significant relationship with "satisfaction" (b = 0.553, p < 0.001). Thus, Baron and Kenny's (1986) second condition of mediation is met and support was found for H3.

The third condition of mediation specifies that the mediator must have significant relationship with the dependent variable. We ran another structural model to examine the relationship between "satisfaction" and "loyalty" as well as "post-enrolment communication behaviour". The results suggest that there is a significant relationship between satisfaction – loyalty (b = 0.795, p < 0.001) as well as satisfaction – post-enrolment communication behaviour (b = 0.503, p<0.001), thereby lending support to H4 and H5, respectively.

Table II. Correlation matrix

	Mean	SD	1	2	3	4
1. PBO	4.39	0.89	0.77			
2. Post-enrolment communication	4.47	1.30	0.565*	0.80		
3. Satisfaction	5.24	1.25	0.435*	0.585*	0.78	
4. Loyalty	4.92	1.36	0.470*	0.658*	0.779*	0.84

Notes: Significant at: *0.001 level; SD – standard deviation; average variance extracted are in italics

Table III. Measurement properties

Items	Standardised loading	SE	t	CR	VE
PBO – interaction					
VAR40: the university keep "in touch" with the students' needs	0.845	0.170	7.469	0.81	0.59
VAR38: the university has a system in place for getting students' comments to the people who can initiate change	0.704	0.196	7.913		
VAR41: the university keep "in touch" with the current market conditions	0.755	0.166	7.641		
PBO – orchestration					
VAR46: the university designs its integrated marketing activities to encourage students and staff to promote the university courses to others (e.g. prospective students)	0.886	2.191	2.222	0.88	0.79
VAR47: the university designs its integrated marketing activities to encourage direct applications from prospective students	0.857	2.029	2.223		
PBO – affect					
VAR50: the university develops detailed knowledge of what the students like about its brand	0.793	0.298	5.947	0.90	0.80
VAR51: the university develops a good understanding of the images/associations that the students make with its brand	0.706	0.272	5.866		
VAR52: the university develops a good understanding of the images/associations that the students make with its brand	0.813	0.269	5.985		
VAR53: the university develops a good understanding of the successes and failures of its brand's marketing program before implementing changes	0.840	0.276	6.026		
Loyalty					
VAR85: recommend the university to friends/acquaintances	0.881	0.408	6.628	0.88	0.72
VAR86: attend the same university if starting anew	0.871	0.437	6.610		
VAR87: attend new courses/further education at the same university	0.771	0.390	6.404		
Satisfaction					
VAR79: I am satisfied with my decision to attend this university	0.829	0.298	7.274	0.87	0.63
VAR80: if I had to do it all over again, I would NOT enrol in this university (R)	0.553	0.284	6.14		
VAR81: my choice to enrol in this university was a wise one	0.885	0.294	7.416		
VAR83: I think I did the right thing when I decided to enrol in this university	0.866	0.313	7.37		
Post-enrolment communication					
VAR76: I like talking about my university to my friends	0.866	0.278	7.504	0.79	0.65
VAR77: I like helping potential students by providing them with information about my university and its courses	0.741	0.225	7.197		

Figure 2. Full structural model
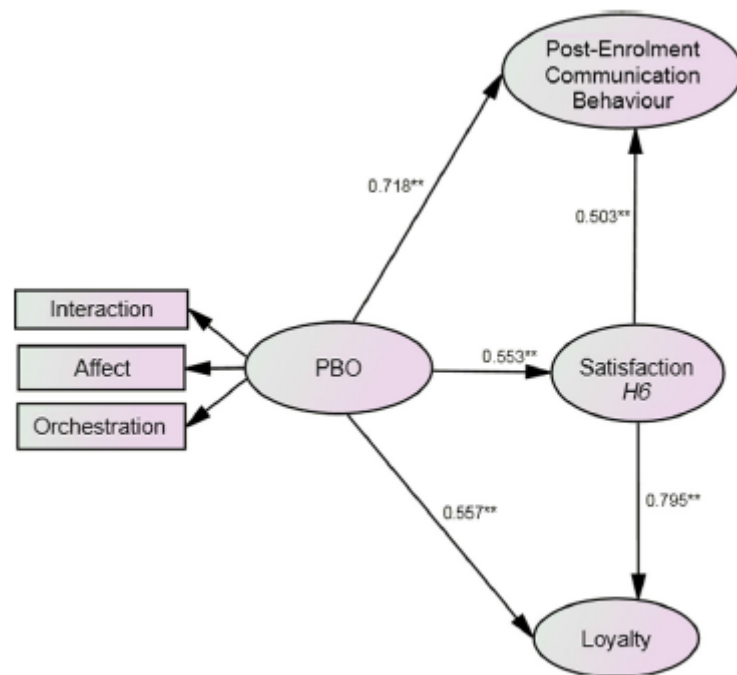
Note: **Significant at: 0.001 level

Table IV. Results of hypotheses testing

	Hypothesised relationships	Standardised coefficients	
		β	t-value
	Mediation test stage I: independent to dependent variable		
H1	PBO → loyalty	0.557*	7.562
H2	PBO → post-enrolment communication behaviour	0.718*	9.273
	Mediation test stage II: independent to mediator variables		
H3	PBO → satisfaction	0.553*	7.359
	Mediation test stage III: mediator variable to dependent variable		
H4	Satisfaction → loyalty	0.795*	11.798
H5	Satisfaction → post-enrolment communication behaviour	0.503*	7.172
	Mediation test stage IV: direct, indirect, and total effects		
H6a	PBO → loyalty		
	Direct effects	0.139ns	1.36
	Indirect effects	0.437*	5.34
	Total effects	0.576*	6.49
H6b	PBO → post-enrolment communication behaviour		
	Direct effects	0.457*	3.93
	Indirect effects	0.277*	4.36
	Total effects	0.734*	7.91

Note: Significant at: *0.001 level

Indirect effects

Based on the approach suggested by Baron and Kenny (1986), the mediation effects were assessed through an examination of the size and significance of the indirect effects. The indirect effects on the structural model were measured as the product of the structure coefficients involved (Kline, 2005). As shown in Table IV, PBO was found to have significant indirect effects on "loyalty" (b = 0.437, p <

0.001) and "post-enrolment communication behaviour" (b = 0.277, p < 0.001) through "satisfaction" as the mediating variables, thereby lending support to H6.

Total effects
An examination of the total effects suggests that PBO has a significant relationship with "loyalty" (b = 0.576, p < 0.001) and "post-enrolment communication behaviour" (b = 0.734, p < 0.001) through the mediating effect of "satisfaction".
In order to determine the extent of mediation (full or partial), we examined the relationship between PBO, loyalty, and post-enrolment communication behaviour before "satisfaction" was included as the mediating variable in the model. For full mediation to occur, the direct paths from the independent variable to dependent variable should be non-significant when the mediating variables are included in the model (Baron and Kenny, 1986). A comparison between the PBO – loyalty – post-enrolment communication model and the full structural model reveals that the direct effects between PBO and "post-enrolment communication" was reduced but remains significant (b = 0.457, p < 0.001) after the introduction of "satisfaction" as the mediating variable. This indicates that "satisfaction" performs a partial mediating role on the relationship between PBO and "post-enrolment communication behaviour".
On the other hand, an examination of the direct effects between PBO and "loyalty" reveals that the relationship between the two constructs became non-significant (b = 0.139, p > 0.05) after "satisfaction" was introduced as the mediating variable. This indicates that "satisfaction" performs a full mediating role on the relationship between PBO and "post-enrolment communication behaviour".

Discussion
This study contributes to a better understanding of the role of brand orientation in higher education. Until recently, the topic of brand orientation is still at its infancy (O'cass and Ngo, 2009) and only one study has been done to examine the concept of brand orientation from the perspective of consumers (Mulyanegara, 2011a). This study attempts to fill this gap by examining the brand orientation from the perspective of the students and investigate its impact on satisfaction, loyalty, and post-enrolment communication behaviour.

The final nine-item PBO construct in this study reflects the three NBO dimensions of Ewing and Napoli (2005): "interaction", "orchestration", and "affect". The analysis has addressed the research hypotheses relating to the role of PBO in the conceptual framework and three important findings were identified.
First, it was found that PBO has a positive impact on student loyalty. However, the full structural model reveals that satisfaction performs full mediation effects on the relationship between PBO and loyalty. This implies that students' perception of a university's brand orientation alone does not affect their loyalty to the university. Rather, it is only through satisfaction that students eventually "transform" their positive perception of a university's brand orientation to stronger commitment to the university. This has provided further empirical support on the link between university branding and student loyalty as discussed in the literature (Bush et al., 1998; Sevier, 1994).
Second, the analysis found a significant association between PBO and post-enrolment communication behaviour. This implies that the more positive perception students have about the university's brand orientation, the more likely they will talk about the university to their friends. This is consistent with Athiyaman's (1997) findings, which suggests that students' attitude to the university is related to positive post-enrolment communication behaviour. The analysis also found that the mediating effects of satisfaction on the relationship between PBO and post-purchase communication behaviour is only "partial", which implies that students will be likely to talk about their university to their friends if they perceive the university to be brand-oriented, regardless of their level of satisfaction with the university. The "partial" nature of the mediating effects may be

due to the fact that even dissatisfied students may spread positive WOM about their university to their friends to reduce their cognitive dissonance. Past studies have found that customers often resorted to positive WOM to reduce cognitive dissonance associated with their purchase as a means to convince themselves that they have made the right purchase decision (Wangenheim, 2005). Finally, the positive association PBO, satisfaction, loyalty, and post-purchase communication behaviour found in the present study further highlights the central role of student satisfaction in the higher education sector. It was found that PBO is significantly related to student satisfaction, which implies that students' positive evaluation of the extent to which the university engages in brand-oriented behaviour leads to higher level of satisfaction, thereby providing further support for previous studies on this topic (Brown and Mazzarol, 2009; Palacio et al., 2002). Satisfaction was also found to be significantly related to loyalty and post-enrolment communication behaviour, which is consistent with the findings of previous studies (Helgesen and Nesset, 2007; Paswan and Ganesh, 2009; Rojas-Mendez et al., 2009).

Conclusion
Theoretical implications
This study has made at least three important implications to the body of literature concerning the role of brand orientation in higher education sector.
The first implication relates to the positive impact of students' perception of the university's brand orientation. To the best of our knowledge, this is the first and only study done to examine the construct of brand orientation from the perspective of the students. Within the realm of market orientation literature, Deshpande et al. (1993, p. 27) have observed that: "[. . .] the evaluation of how customer oriented an organisation is should come from its customers rather than merely from the company itself". In a similar manner, this study has argued that the evaluation of how brand oriented a university is should come from its students rather than merely from the university itself. In light of the limited literature on the topic of brand orientation, particularly in the higher education sector, this study has provided an insight on the significance of brand orientation in affecting students' satisfaction, loyalty, and post-enrolment communication behaviour.
The second implication relates to the adaptation of NBO construct to fit the "student-perceived paradigm" in the present study. In the adaptation process of the scales, two experts in the area of higher education and brand orientation were consulted to ensure that the changes were reasonable and that the scale could accurately reflect what it intended to measure. The PBO scale in the present study is the first one to capture students' evaluation of the extent to which the university engages in brand-oriented behaviour.
The final theoretical implication relates to the central role of student satisfaction in the relationship between all constructs. Although many studies have been done in the area of student satisfaction (Athiyaman, 1997; Brown and Mazzarol, 2009; Carter, 2009; Petruzzellis et al., 2006), this study is the first to examine the mediating role of satisfaction on the relationship between PBO, loyalty, and post-enrolment communication behaviour.

Implications for higher education institutions
The competition within the higher education sector has intensified in recent years due to the growing internationalization of education providers. University brand image has been recognised as an important factor which affects prospective students' decision to attend a university (Berger and Wallingford, 1996; Sevier, 1994). This study has provided a further insight to the role of branding within the higher education sector. Students not only perceive brand image to be important, but also the extent to which the university engages in brand-oriented behaviour. A strong university brand could have a significant impact on the employability prospect of the graduates. Therefore, higher education institutions should ensure that all brand-related activities are thoroughly coordinated to maximise awareness and encourage enrolment. Higher education institutions should also develop detailed knowledge of students' perception of their brand and encourage inputs from

the students in the design and promotion of the brand. Although the executive decisions regarding brand identity are made at the executive level, ultimately it is the students that will "experience the brand" and thus their extent of participation in the design and promotion of the brand is imperative. The university management need to put in place a brand orientation framework that directs the desired brand elements to be experienced via various brand oriented action plans which will lead to satisfaction, loyalty, and positive post-enrolment communication behaviour.

Previous studies have highlighted image and satisfaction as the antecedents of student loyalty and post-purchase communication behaviour (Athiyaman, 1997; Brown and Mazzarol, 2009; Carter, 2009; Petruzzellis et al., 2006). This study adds further depth by revealing the central role of student satisfaction in the relationship between PBO and loyalty. With the intensified competition in the higher education sector, many universities resorted to "internal marketing" to promote further courses for their current students (IBISWorld, 2012). Universities should therefore keep in touch with the needs of the students and ensure that they have a system in place for forwarding students' comments to the people who can initiate change as this will lead to a greater level of satisfaction which in turn strengthens student loyalty.

Limitations and directions for future research

Two main limitations of the study are identified. First, the use of convenience sampling to recruit the students has some weaknesses. Although the students were informed that the survey was anonymous in nature, they were notified that a summary of the study findings would be reported to the university executives to evaluate the university brand. Hence, respondents' evaluation of the university's brand orientation might be biased towards giving socially desirable responses. There is also unequal distribution in terms of gender, as the majority of respondents are female.

The second limitation relates to the sampling frame of this study, which is confined to the students of the faculty of business and design who may be more knowledgeable with the concept of branding as compared to students of other faculties. Students from other faculties may have different level of knowledge of the branding concept and this may affect their overall perception of the university brand orientation. Consequently, a replication of this study in other faculties and campuses can be an avenue for future research. It will also be interesting to compare the perception of on-campus, online, and offshore students in regards to the university's brand orientation and how these affect their satisfaction, loyalty, and post-enrolment communication behaviour.

Future research can also attempt to examine the relationship between market orientation and brand orientation in the higher education sector. It will be interesting to see the link between different orientations and examine which construct has the strongest effects on satisfaction, loyalty, and post-enrolment communication behaviour.

Concluding statement

With the limited number of studies on brand orientation within the higher education sector, this study has provided significant theoretical and managerial implications for higher education institutions in terms of enhancing the satisfaction, loyalty, and post-enrolment communication behaviour of their students through their engagement in brand-oriented behaviour. Consistent with the results of this study, universities and other education providers alike should strive to engage in brand-oriented activities to develop a strong university brand with relevant appeals to its existing and prospective students. It is expected that this study would encourage further research in this important topic.

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