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Citation of the final article:

This is an Accepted Manuscript of an article published by Taylor & Francis in Journal of Strategic Marketing, on 25 May 2016, available at: https://www.tandfonline.com/doi/full/10.1080/0965254X.2016.1182573

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A Taxonomy of Prestige-seeking University Students: Strategic Insights for Higher Education

This study explores the importance of psychographic characteristics as potential segmentation bases in the higher education sector. In particular, we develop a taxonomy of university students based on their achievement orientation and prestige sensitivity. The study analyses the survey data obtained from 948 respondents using cluster analyses and Multiple Analysis of Variance (MANOVA), indicating interesting findings. Three distinct clusters emerge, namely Strivers, Modest Achievers, and Prestige-seeking Innovators. Findings reveal that Prestige-seeking Innovators have a more positive attitude towards the university, whereas Strivers have the strongest sense of regret over their decision to enrol at their current university and would seize the opportunity to enrol in a more prestigious university. The taxonomy is highly relevant to marketers of higher education institutions as it gives insights into potential bases for segmentation, positioning, and communication strategies targeting the specific characteristics of each segment.

**Keywords**: achievement orientation; prestige sensitivity; segmentation; attitude; cluster analysis; higher education

**Introduction**

Over recent years, a range of disciplines have shown an increasing interest in the ways that students make decisions about which university to attend. This is driven mainly by the increasing importance of the higher education sector across the globe. As the job market becomes increasingly competitive, there is a tendency among young people to rely on higher education as a means of securing their future (Brooks, 2008). The notion of ‘institutional prestige’ has received significant attention in the literature over the past decade as one of the
key drivers of students’ university choice (Draelants, 2012, Baker and Brown, 2007, Bowman and Bastedo, 2009). However, although this topic has increasingly attracted research attention, there are extant gaps in the research particularly on examining whether the effects of institutional prestige on student behaviour are consistent across heterogeneous student segments. Further, most studies in the past have only acknowledged the importance of institutional prestigious image in affecting students’ behaviour such as enrolment and attendance (Angulo-Ruiz and Pergelova, 2013, Belanger et al., 2002, Gallifa, 2009), while little attention has been devoted to examining the role of prestigious image in affecting students’ attitude towards their current university. Hence, several important questions remain unanswered: Are there differences between highly prestige-sensitive and less prestige-sensitive students in terms of their attitude towards their current university? Do highly prestige-sensitive students in less prestigious institutions regret their choice of university? Would prestige-sensitive students seize the opportunity to enrol in a more prestigious institution if they had the opportunity to do so? The present study aims to contribute to the literature by addressing these research questions.

The existing approach to Higher Education segmentation is dominated by the rational-choice perspective and the emotional perspective. From the rational-choice perspective, students are segmented based on the important attributes they expect from universities such as academic reputation (Chapman and Pyvis, 2006, Trahar and Hyland, 2011), career opportunities (Mai, 2005, Clemes et al., 2013), tuition fees (Langa Rosado and David, 2006, Wu, 2009), and location (James, 2001, Hagel and Shaw, 2010). The emotional perspective, on the other hand, segments students based on attributes such as sociocultural influence (Young, 2003, Cunningham et al., 2005), self-image and personal values (Chapman and Pyvis, 2006, Aycan and Fikret-Pasa, 2003), and the romantic/exotic quality
of the institutions (Baker and Brown, 2007). The present study addresses the gap in the literature by suggesting a segmentation approach based on the underlying psychographic factors beyond emotional and rational reasons that affect students’ university selection (Angulo et al., 2010). In particular, in developing the segment profiles, we take into account students’ prestige sensitivity and achievement orientation. We subsequently examine whether there are significant differences between each segment in their attitude towards their current university.

This paper is organised as follows. The second section provides an overview of the literature on drivers of university selection, prestige-seeking orientation, achievement orientation, and students’ attitudes towards their university. The third section outlines the research methodology. The fourth section presents the results, followed by a discussion of study implications, limitations, and future research directions.

**Literature Review**

**Drivers of University Selection**

Students engage in a complex decision-making process when it comes to selecting which university to attend. Some of the prior research on student university choice viewed the phenomenon from an economic perspective. Prospective university students weighed the perceived costs and benefits of universities in their consideration sets and made rational decisions (Obermeit, 2012). Prior research supports this view in part; however, clearly there are other drivers of university choice besides rational economic considerations.

Maringe (2006) found that students primarily chose a university based on labour market effects. That is, students prefer a university that will be most helpful to them in attaining their career goals. The price of attending a university was second in importance.
Ciriaci and Muscio (2014) found that university students who graduated from universities with good research performance had the highest probability of finding employment after graduation. Hence, if a university’s academic performance is a predictor of career success, then students can be expected to place a priority on university academic performance when choosing a university. While a university’s academic performance is an important determinant of university choice, financial considerations such as the cost of tuition, scholarships, loans or grants and the ability to work in addition to studying are also key drivers for prospective students when selecting a university (Clinton, 1990, Galotti and Mark, 1994).

Not only do economic considerations influence student choices, but other factors such as expectations and students’ socioeconomic backgrounds also influence university choice (DesJardins and Toutkoushian, 2005, Paulsen, 2001). From a marketing perspective, the choosing of a university is considered to be a ‘high stakes high involvement buying process’ (Chapman, 1986, p.250). In the literature, the development and application of consumer behaviour models of university choice have gained acceptance. Hossler and Gallagher (1987) developed a comprehensive three-stage model for university choice based on a consumer behaviour framework: predisposition phase, the search phase, and the choice phase. In the predisposition phase, students develop aspirations to attend university. During the search phase, they try to determine the institutional attributes important to them and search for information. In the choice stage, they decide where to apply and subsequently where to enrol. A multitude of factors influence the decision-making process. Amongst them are student characteristics such as their socioeconomic status, their ability, their attitudes and expectations, their race and ethnicity. External factors such as high school background, the encouragement and support of significant persons, attributes of the higher education
institutions and their communication activities also influence the process (Hossler et al., 1989). More recent studies refined these models of university choice by focusing on separate target groups, such as students from different racial and ethnic groups (Hurtado et al., 1997, Kim and Gasman, 2011, Teranishi et al., 2004), or on separate stages of the decision-making process (Hamrick and Stage, 2004, Pitre, 2006). Many students want to go to a college that is attended by people like themselves in terms of ethnicity, religious affiliation or academic ability (Reay, 1998, Whitehead et al., 2006).

University reputation is an important driver of choice (Kim and Gasman, 2011, Maringe, 2006, Pampaloni, 2010, Teranishi et al., 2004). Other quality aspects such as a good faculty and the quality of the program in the intended major are important as well (Clinton, 1990, Maringe, 2006). There is evidence that students with high abilities attach greater importance to the quality aspects (Tierney, 1983). University rankings are used to refine the choice process by deciding which universities to consider and which to disregard (Brown et al., 2009, Kim and Gasman, 2011, Palmer et al., 2004).

The students’ social networks are an influential source of information (Palmer et al., 2004, Pampaloni, 2010). Students generally talk with their parents about their university plans (Kim and Gasman, 2011, Rowan-Kenyon et al., 2008). There is evidence that parents who went to college themselves are of greater help than parents who do not have this treasure trove of experience (Rowan-Kenyon et al., 2008, Galotti and Mark, 1994). Furthermore, the high school attended, thus the school context, which is at least partially affected by the family background, influences the degree of help the students and their parents obtain during the whole university choice and application process (Brooks, 2002). Past studies have found that students with a higher socioeconomic background and better academic abilities apparently have access to and use more sources of information (Litten, 1982, Veloutsou et al., 2004).
This body of prior research has added greatly to our understanding of university choice. However, in addition to knowledge gained from prior research that viewed student choice from an economic or sociological perspective, there is a need to better understand student choice from a psychographic perspective. What are the personality traits that serve as university choice drivers? From a marketing perspective, the better we understand the students we want to attract, the better able we are to identify them and to develop effective recruitment appeals.

**Psychographic segmentation**

Several theoretical studies have recommended the use of strategic marketing approaches in higher education such as segmentation (Tonks and Farr, 1995, Soutar and Turner, 2002), targeting (Farr, 2003), and positioning (Nicholls et al., 1995, Gray et al., 2003). However, empirical examinations of the segmentation-related topic in higher education are still sparse (Hemsley-Brown and Oplatka 2006). Psychographic segmentation refers to the approach of dividing a market according to lifestyle, interests, opinions, personality, and values (Kotler, 1996). The value of psychographic segmentation has been well-recognised in the marketing literature (Kim and Lee, 2011, Tam and Tai, 1998, Lin, 2002, Wells, 1975) in general and has also been used to segment university students in particular (Adams et al., 2005, Chen and Hsiao, 2009). Adams et al. (2005) utilised the Value and Lifestyle Segments (VALS) questionnaire to segment Hispanic Business Majors and found five psychographic groupings (Sustainer, Survivor, Belonger, Achiever, Emulator), with “Achievers” indicating the strongest desire to pursue graduate studies. To the authors’ best knowledge, a taxonomy of university students on the basis of their prestige-sensitivity and achievement-orientation are
very rare, as most studies in the past have focused on geographic and demographic characteristics when segmenting the higher education market (Tonks and Farr, 1995, Rindfleish, 2003). This study therefore offers unique insights by examining students’ psychographic characteristics as a basis for segmentation. An understanding of the characteristics and attitudes of prestige-sensitive and achievement-oriented students will give marketers insights into how to better plan their marketing campaigns, position their institutions, and target their customers with relevant communication messages.

Prestige sensitivity

Prestige sensitivity refers to individuals’ preference for brands that are widely respected and admired because of perceptions of exceptional quality. For prestige-sensitive consumers, owning prestigious brands is a means of signalling prominence and status to other consumers (Bao and Mandrik, 2004, Lichtenstein et al., 1990). Prestige sensitivity is related to socially visible behaviours and is especially influential for products in which buyers have an ego investment (McGowan and Sternquist, 1998). Individuals with high levels of prestige sensitivity are influenced by how they believe their decisions and behaviours will be evaluated by others.

In the service context, customers form an overall judgment about the prestige of a service provider based on the integration of all available information (Kim and Jang, 2013). Due to the intangible and subjective characteristics of services, customers are more likely to use extrinsic cues than intrinsic cues to judge the prestige of a service provider (Jang and Namkung, 2009). The image and reputation of the university represents the ‘extrinsic cues’ that prospective students rely on when evaluating the university prestige (Nguyen and LeBlanc, 2001). Individuals’ choice of university is an ego-invested decision (Soutar and
Turner, 2002). The prestige and reputation of the university from which individuals graduated becomes an enduring brand association (McAlexander et al., 2006). Individuals’ self-concept and prominence is influenced by the reputation of the university they attended (Cameron, 1999). Thus, individuals with higher levels of prestige sensitivity are more motivated to obtain ego-enhancement rewards from their university association, and thus would prefer to attend a prestigious institution.

**Achievement orientation**

Achievement orientation refers to a personality trait that is characterised by individuals’ need to perform well and to feel competent. Achievement-oriented individuals need to feel that they make good decisions and perform their tasks successfully (Elliot and Harackiewicz, 1994). Deriving a sense of accomplishment and receiving recognition from their superior performance is an important need of achievement-orientated individuals (Kahle, 1983). This need is met when feedback is received indicating success, competence, and task mastery (Dweck and Elliott, 1983). As a consequence, individuals with a high achievement orientation are motivated to attain favourable judgments of competence and avoid unfavourable judgments of competence. Achievement-oriented individuals could attain favourable judgments by attending a prestigious university. Since admission into prestigious universities is very competitive, achievement-oriented individuals may have strong preferences to attend a prestigious university, as this could attract favourable judgments of competence from their social peers and potential employers (Sweetman et al., 2013).

**Attitude towards university**

**Loyalty**
Loyalty (student loyalty, in our study’s context) refers to students’ devoted attachment to their university. Our definition is derived from Wymer (2013) who defines brand loyalty as “the degree to which an individual or group feels devoted (feels a bond to and an allegiance with the branded object) to the branded object” (p. 8). We conceptualise student loyalty solely as a psychological construct. This conceptualisation of loyalty is consistent with its use in prior research on fan loyalty for a sports team (Funk and James, 2006), loyalty as group attachment (Davis, 1999), and loyalty as commitment (Amine, 1998).

**Satisfaction**

The notion of satisfaction in this study refers to students’ summary affective response to their university. This conceptualisation of satisfaction is adapted to our study context, but it is derived from prior research (Giese and Cote, 2000). We conceptualise satisfaction as an attitudinal outcome, not a process (Yi, 1990). Satisfaction is conceived as a dimension that is separate from dissatisfaction (rather than as polar opposites along a continuum). Hence, satisfaction is appropriately measured using a unipolar scale (Mano and Oliver, 1993, Westbrook and Oliver, 1991).
Positive Word-of-Mouth Comments (WOM)

Positive word-of-mouth comments (WOM) refer to the degree to which university students make positive comments to others about their university (Casidy, 2014). We are examining positive word-of-mouth behaviours in a manner consistent with prior research (Rahman et al., 2014). Prior research has operationalised WOM as either intentions or behaviours (Brown et al., 2005). We operationalise WOM as behaviours since this is a more precise manifestation of the construct than are the behavioural intentions (Feldman and Lynch, 1988).

Involvement

Involvement refers to the relative degree to which the university selection decision is personally meaningful and significant. University students vary with respect to the perceived significance of their university choice (Vaughn et al., 1978). Students who are highly involved in their university selection would perceive more risks and rewards associated with a particular university than those who are less involved. As the perceived importance of choices increases, the ego investment of the decision also increases (Klaczyński and Narasimham, 1998).

Alumni intentions

Alumni intentions refer to the likelihood that currently-enrolled students will join the university’s alumni association after they have graduated. Alumni intentions have been recognised in prior research as an important university student outcome variable (Morrish and Lee, 2011). Intentions to join the alumni association is considered to be a positive
indicator of students’ attitudes toward the university and students’ relationship with the university (McAlexander et al., 2006).

_Cognitive Dissonance_

Cognitive dissonance refers to consumers’ discomfort caused by conflicting post-purchase attitudes and opinions (Kotler, 1996). Cognitive dissonance occurs when the products purchased by consumers do not match their pre-purchase knowledge and beliefs (Hoch and Deighton, 1989). When selecting a university to attend, students come with a set of expectations of what they believe they will experience throughout their studies. Past studies found that students who enrol in universities with unrealistic expectations are more likely to withdraw than those who enter with more realistic expectations (Wiese, 1994). It is the interest of the present study to explore whether the student segments are significantly different in their level of cognitive dissonance associated with their university choice, particularly for those who attend the less prestigious institution.

_Context of study_

The higher education market is a growing sector in both developed and developing countries. As of 2013, there are 199 million higher education students globally, a 22% increase from 2008 (Euromonitor, 2014b). The increased number of higher education graduates is translating into higher incomes and growth of middle class consumers (Euromonitor, 2014a). As the need for higher education increases, spending for this sector increases significantly in many markets, particularly in developing countries.

The present study focuses on the higher education market in Australia, which is considered one of the top-5 study destinations for international students (ABC, 2014). As of
2013, Australian universities enrolled an estimated 1.3 million students, of which 24.8% were overseas students (Magner, 2014). There are 39 universities in Australia with a combined revenue of $27.2 billion in 2014 and a projected annual growth of 4.3% over the next 5-year period (Magner, 2014).

**Method**

**Sample selection and data collection**

We employed a systematic sampling technique in recruiting the respondents from two higher education institutions in Australia. Based on a leading University Ranking guide in 2014, we identified the 1st ranked university and 3rd ranked university in the State of Victoria, Australia. There are over 900,000 undergraduate students enrolled in all Australian universities as of 2013. The two universities that participated in our studies have a combined total of over 80,000 undergraduate students, thus representing 8.8% of the total undergraduate student population in Australia (Universities Australia, 2014).

We sent an e-mail to all undergraduate subject coordinators in both universities to ask for their support in data collection. Fifty-six subject coordinators agreed to put our survey link in their unit learning management system (LMS). For every completed survey, we specified that a $2 donation would be made to support an education program for third world countries. A total of 948 usable responses were collected over a period of six weeks after the survey link was made available. A significant proportion of the respondents (45%) were enrolled in the 1st ranked university. Most respondents are female (69%) local students (77%), aged between 18 – 25 years old (81%).
**Measures of construct**

The questionnaire comprised items adopted or adapted from existing literature, including sections related to prestige sensitivity (Lichtenstein et al., 1993), achievement orientation (Netemeyer et al., 1995), involvement (Schneider and Rodgers, 1996), satisfaction (Helgesen and Nesset, 2007), loyalty (Wymer and Rundle-Thiele, 2009), and WOM (Helgesen and Nesset, 2007). The ‘cognitive dissonance’ scale items were self-developed to assess whether students would seize the opportunity to enrol in a more prestigious university if given the opportunity to “do it all over again”. The alumni intention scale items were self-developed to assess respondents’ intention to maintain association with the university after completing their studies. In addition to the focal constructs, we measure participants’ socio-economic status based on their parents’ income, education background, and occupational prestige (Morgenstern, 1973, Stevens and Featherman, 1981).

**Reliability and validity of measures**

The reliability of the constructs was measured using ‘composite reliability’ (C.R) (Fornell and Larcker, 1981). All constructs were found to have good levels of reliability (.70 and above). The validity of the measures was assessed through the measurement model in AMOS. It was found that the Average Variance Extracted (AVE) for each construct is greater than all related correlations, thus indicating discriminant validity (Fornell and Larcker, 1981). The final measurement model shows acceptable fit with the data as reflected by the fit indices including Comparative Fit Index (CFI) of .947, Normed Fit Index (NFI) of .932, Tucker Lewis Index (TLI) of .936, and Root Mean Square Error of Approximation (RMSEA) of .058.
Analysis and Results

Cluster analysis

Cluster analysis is an exploratory process used to discover groups of respondents that are homogenous and distinct from others (Flavian et al., 1999). This technique makes no prior assumptions about the differences within populations, thus allowing consumer-inspired segments to emerge from the data (Kimiloglu et al., 2010).

The clustering procedure involved two stages: internal validation and K-means clustering based on the cluster solution (Punj and Stewart, 1983). In the first stage, we divide the data randomly into two subsets. Using one set of the data, we conduct a hierarchical cluster analysis using Ward’s method of applying squared Euclidean Distance as the distance or similarity measure. In the second stage, we use the second data subset to conduct K-means cluster analysis based on the cluster solutions (2, 3, and 4) indicated by the hierarchical cluster analysis. Subsequently, we compared the cluster memberships from the K-means analysis on the second data subset with those produced by the hierarchical cluster analysis in order to decide the most appropriate solution (Punj and Stewart, 1983). We consider the three-cluster solution as the most meaningful and subsequently conduct a final K-means cluster analysis with a three-cluster solution. Table 1 shows the final cluster solution.

Cluster descriptors

The analysis reveals that clusters discriminate in terms of their level of prestige sensitivity and achievement orientation, with cluster 3 exhibiting the highest level of scores in three constructs. The labelling of the clusters is done consistently according to the mean scores of each cluster for these three respective constructs. Figure 1 depicts a grid showing how the
three clusters compare in their respective mean scores of prestige sensitivity and achievement orientation.

[Insert Table 1 Here]

[Insert Figure 1 Here]

Cluster 1: Strivers
This is the largest of the three clusters and includes 42% of the sample. A majority of respondents in this cluster (55%) are currently enrolled in the lower-ranked university. In comparison with the other clusters, respondents in this cluster have the lowest scores on achievement orientation. These students, however, have a higher level of prestige sensitivity compared with those students in cluster 2. Given their score, these students may be the least concerned group with regards to their academic achievements. However, they would be proud to attend a prestigious university, and believe that others make judgments about them based on the university that they are attending. Students in this cluster somewhat resemble the profile of Strivers (Mitchell, 1984): they are concerned about the opinions and approval of others and are not content with their current situations.

Cluster 2: Modest Achievers
Respondents in this cluster have a moderate level of achievement orientation. A majority of respondents in this cluster (64%) are currently enrolled in the lower-ranked university. In comparison with the other clusters, respondents in this cluster have the lowest scores for prestige sensitivity. Given their score, one distinguishing feature of this cluster is their belief that others do not make judgments about them based on the university they are attending.
The characteristics of the students in this cluster are similar to the profile of Achievers (Mitchell, 1984): they are goal-oriented and motivated by achievement. We label this cluster as ‘Modest Achievers’ due to their moderate score for prestige sensitivity.

*Cluster 3: Prestige-seeking Innovators*

Respondents in this cluster have the highest scores for all prestige sensitivity and achievement orientation variables. These scores indicate that this cluster has a strong belief that others make judgments about them based on the university they are attending. Students in this cluster have characteristics that are similar to the profile of Innovators (Mitchell, 1984): they are successful, sophisticated people with high self-esteem who place importance on image as an expression of their personality. We label this cluster as ‘Prestige-seeking Innovators’.

*Cluster validation*

In this study, we assess the external validity of the clusters using age and university rankings via Chi-Square tests. Findings report that age ($\chi^2 = 2.623$, df = 4, $\rho > 0.05$) does not discriminate, but university ranking ($\chi^2 = 13.028$, df = 2, $\rho < 0.001$) discriminates the clusters. Therefore, in terms of age, all clusters have a more or less equal ratio between age groups. In terms of university ranking, most of the respondents in cluster 3 (Prestige-seeking Innovators) are currently enrolled in the top-ranked university.
**MANOVA between three clusters on attitude towards the university**

In this section of the findings, the three segments derived from the cluster analysis are investigated further with respect to the respondents’ attitudes towards their university. To test the differences between groups, a multivariate analysis of variance (MANOVA) was performed with 6 attitudinal items as the dependent variables, whereas the resulting cluster was entered as the independent variable.

The analysis found that there was a statistically significant difference in attitude towards the university, $F (12, 1880) = 6.725, p < .001$; Wilk's $\Lambda = 0.919$, partial $\eta^2 = .041$. The Tests of Between-Subjects Effects indicate that the resulting clusters have a statistically significant effect on 6 attitudinal items towards the university. Prestige-seeking Innovators demonstrate a higher level of involvement, loyalty, and positive WOM compared with the Strivers and Modest Achievers. Strivers are notably less satisfied with their university experience and have a higher level of cognitive dissonance compared with the Prestige-seeking Innovators. With regards to future behaviour, Prestige-seeking Innovators demonstrate a stronger intention to remain associated with their university following the completion of their studies.

In addition to the attitudinal variables, we also found significant differences between the clusters in terms of family educational background with Prestige-seeking Innovators demonstrating higher scores than Strivers and Modest Achievers. This is consistent with the results of prior studies with regards to the positive influence of college-educated parents on their children’s motivation regarding education achievement (Rowan-Kenyon et al., 2008, Galotti and Mark, 1994). No significant differences were found between clusters in terms of the other socio-economic indicators of income and occupation.
Discussion

This study has made important theoretical contributions by extending the scope of prestige-sensitivity research to the not-for-profit context of higher education and developing a taxonomy of university students on the basis of prestige sensitivity and achievement orientation.

The tests produced several interesting findings. First, the three resulting clusters are uniquely distributed among the top-ranked and lower-ranked university students. The majority of Modest Achievers are currently enrolled in a lower-ranked university, and generally do not view attending prestigious universities as something of which to be proud. On the other hand, the Strivers, most of whom were from the lower-ranked university, would be very proud to attend a prestigious university, even though they do not have an outstanding academic record. Family educational background was found to be an important variable in this study. Those who exhibit the highest level of prestige sensitivity and achievement orientation (Prestige-seeking Innovators) tend to come from highly educated families.

There is one attitudinal item, cognitive dissonance, where Strivers scored significantly higher than Modest Achievers. The analysis found that Strivers could not get into a more prestigious university and thus express a stronger desire to enrol in a more prestigious university if they ‘had to do it all over again’. It is interesting to note, however, that there are no significant differences between Strivers and Modest Achievers in terms of their satisfaction with their current university.

There are several important managerial implications for university marketers. The Strivers, the least achievement-oriented group, were most likely to have the least desirable
outcomes. They were least satisfied with their university, least likely to make positive comments about their university, least likely to develop an attachment to their university, and least likely to continue their relationship with the university after graduation by joining the alumni association. They were most likely to regret attending their university. It appears that the Strivers segment would be an attractive student segment to attract for top-ranked universities as this segment, given the opportunity, is likely to switch to a more prestigious institution. Consequently, universities could target the Strivers segment by developing specific marketing communication strategies about university transfer opportunities.

In contrast to the Strivers (the lowest achievers), the Prestige-seeking Innovators (having the highest achievement orientation) had the most positive outcomes from their university experience. They were most satisfied with their university. They were most likely to make positive comments about their university. They were most likely to develop an attachment to their university. They were most likely to join the alumni association. It appears that the Prestige-seeking Innovators would be the most likely student segment to be attracted to top-ranked institutions. Given their high achievement orientation and their positive response to their university, this student segment would be most likely to complete their university programs, most likely to promote the university to others, and most likely to support the university in the future. However, Prestige-seeking Innovators seek universities that meet their prestige and achievement needs. University marketers, then, need to have a long-term strategy for achieving prominence. The enhancement of a university’s reputation needs to be part of a continuous improvement management mind-set. Decision-making should take into account the effect of decisions on the university’s reputation and prestige. Once a university is perceived to be elite, then it can more effectively recruit the most competitive students.
Finally, while the global university ranking systems remain an important benchmark for students to compare the prestige of universities (Amsler and Bolsmann, 2012, Collyer, 2013), there are some students who are least concerned about the prestige of their institutions. In our study, it appears that the Modest Achievers could be the most attractive segment for lower-ranked universities. Marketers of lower-ranked universities could target the Modest Achievers by emphasising attributes such as the university experience, practical knowledge, industry engagement, quality teaching staff, and interactive learning approaches, all of which could make up for the lack of recognised positions in global university ranking systems. For example, some lower-ranked Australian universities emphasise their strong industry engagement which offers students practical experience throughout their studies (Universities Australia, 2014).

**Limitations and Future Research**

Every study has limitations and ours is no exception. First, the cluster analysis employed in this study emphasised the within-cluster homogeneity as opposed to between-cluster heterogeneity. In the context of the Australian education sector, the findings represent an initial effort that paves the way for further studies that may produce larger groups/clusters involving more universities in various positions in a global university ranking system. The two universities involved in the present study represent only 8.8% of the total undergraduate student population in Australia. A larger-scale study involving all 39 universities in Australia could serve to enhance the sampling reliability and further validate the segment characteristics found in the present study.

Second, the findings of this study apply to the selected cluster variables of prestige sensitivity and achievement orientation. Therefore, these findings should be considered
carefully in terms of their particular context; future replication efforts should take into 
account the context in which the study will be conducted. Future research could incorporate 
other psychological measures that could be applicable to students’ selection of universities. 
For example, students who exhibit a high level of need for cognition, long-term orientation, 
need for uniqueness, and attention to social comparison information may have strong 
preferences for highly-ranked universities. Therefore, segmenting students on the basis of 
those psychological measures could generate richer strategic insights for marketers of higher 
education institutions.
References


