

## **Mission Group Segments in the UK University Market**

### **Abstract**

*Research Question:* Do the universities that make up the four different mission groups, or types of university in the UK (Russell Group, 1994 Group, Million+ (plus) Group and Alliance Group) constitute different segments in the university market, and do the students who attend these institutions give different reasons for their institution choices?

*Method & Data:* The research is a quantitative cross-sectional survey. Data were collected from a useable sample of 10,723 respondents as part of a national survey of home students attending 140 UK higher education institutions, through an online panel. The researcher carries out Chi Square testing using 27 choice variables, and Binary Logistic Regression modelling using 18 variables. Groupings or segments are based on four different types of universities.

*Key Contributions:* The research relies on primary data from a sample of over 10,000 home students. Prior researchers constantly seek to find out which factors students, as a mass audience, use to choose an institution. The university market is not a one-size-fits-all market; different types of universities operate in different market segments, and the student audience has different needs and expectations. The key contribution is that the research findings show that students from the different types of university have a different set of choice factors for their institutional decisions.

*Summary of Findings:* The four full models containing the 18 predictors are statistically significant and in the case of each of the four segments, the models distinguish between students attending each of the four types of university and all other students in the sample. The model of variance in choice correctly classifies 72.6% of cases (Russell Group), 82.5% of cases (1994 Group), 84.3% of cases (Million+ Group) and 81.7% of cases (Alliance Group).

### **Introduction**

Higher education institutions are facing increasingly complex challenges, such as rapid growth in global competition, changes in funding regimes and greater emphasis on graduate employability which demand a greater understanding of the reasons for the choices

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prospective students make when applying to a university (Simões & Soares, 2010). The focus of research on student choice is largely about which factors influence the decisions applicants make about which institution to attend (Briggs & Wilson, 2007). Authors of prior research often argue that student choice is neither economically-rational, nor linear, but is influenced by numerous situational and contextual factors such as information availability, academic achievement and school experience (Foskett & Hemsley-Brown, 2001), however, researchers constantly seek to find out which factors students, as a mass audience, use to choose an institution. There are two principle problems with this approach, first studies using quantitative survey type methods tend to have an underlying assumption the such decisions are rational (despite evidence to the contrary) and secondly, constantly seeking to identify the factors students use to make choices assumes that there is an elusive single list of predictors for all students. In all other fields of consumer activity marketing academics and practitioners are fully committed to the notion of segments, targeting and market positioning, however, with some exceptions (Angulo et al., 2010) the higher education market is often viewed as a mass market (Pârvu & Ipate, 2012) rather than a segmented market. The higher education sector is a mass system but within the mass market, this author seeks to identify segments with a different needs and preferences. Furthermore, institutions find a market position and seek to meet these needs in competition with other providers – in a similar way to other markets. Furthermore, marketers usually address consumer heterogeneity by grouping consumers into segments consisting of those consumers having relatively similar product or service needs' (Tuma & Decker, 2013 p.2).

The research presented in this article is based on primary data from a national (UK) survey with a large number of respondents (10,723) from 140 higher education institutions (coded

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according to the four distinct segments, based on the university missions groups). The key objectives for this study are to test whether students from these distinct segments – types of university – give a different set of choice factors for their decision. Do the universities that make up the four different mission groups, or types – Russell Group, 1994 Group, Million-Plus Group and Alliance Group – constitute different segments in the university market, and do the students who attend these institutions give different reasons for their choices?

### **University Mission Groups in the UK**

Higher Education Institutions (HEIs) within the UK are aligned to various so called 'mission groups'. At the time of the data collection for this study (2011) there were four mission groups exclusive to the UK HEI sector (there are universities which do not belong to any formal category, and a fifth mission group for university colleges). The groups were formed between the universities on the basis of common interests, particularly towards research and education provision, as well as commonality with an overall mission, size and history (University of Exeter, 2014).

The Russell Group currently represents 24 UK universities, which describe themselves as 'leading universities' and which are 'committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector' (Russell Group, 2014). The Group includes such universities as Oxford University, Cambridge University and University College, London and these universities are generally considered to be the British equivalent of the Ivy League (University of Exeter, 2014). The group has expanded in recent years and in 2012 four additional universities

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were permitted to join the elite group resulting in a current total of 24 universities. Data has been coded based on the membership at the time of data collection.

The 1994 Group of universities was established in 1994, and includes eleven research-intensive universities. Similar to the Russell Group, the 1994 Group of universities are known for doing well in the national and international rankings, and are highly regarded for their research. These institutions tend to be smaller and are more campus-based compared with Russell group institutions which might have multi-campus, colleges or multiple locations. Throughout its history a total of 22 universities have been part of this group, however, following a number of defections and after four universities were admitted to the more elite Russell Group of universities in 2012, the membership declined to 11 by 2013. The group was disbanded in late 2013, but was in existence during the period of this research when there were 19 members (THE, 2013) and the data has been coded in line with this categorisation of universities.

The Million Plus (+) group of universities was originally formed in 1997 but was 'previously known as Campaigning for Mainstream Universities (CMU) and prior to that, the Coalition of Modern Universities (CoMU), the current name for the group was adopted in 2007' (University of Exeter, 2014). Million+ comprises 27 UK HEIs which focus on learning and teaching; 'these 37 institutions educate over half of the UK's higher education students' (University of Exeter, 2014). Their emphasis is less on pure research and more upon working with government and parliament and influencing policy. They aim to 'enable people from every walk of life to benefit from access to universities', and work towards 'facilitating collaboration between universities, business and government' (Million+, 2014).

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The fourth group of universities identified for the study is the University Alliance Group.

The group was established in 2006 and the group members hold a varied yet balanced portfolio of research, teaching, education and innovation (University of Exeter, 2014). The

focus of the Group concentrates on emerging issues in higher education, for example, changes in research assessment methodology and funding for teaching (Alliance, 2014).

These universities are teaching 'over 26% of the UK's higher education students and over 50% of students in these universities are studying the STEM (Science, Technology, Engineering and Mathematics) subjects' (Alliance, 2014).

There are also about 40 universities which are not members of the four main mission groups, many of them located in Scotland, Wales or Northern Ireland (as opposed to England) and some universities belong to the GuildHE group, which comprises 28 higher education institutions including performing arts, agricultural, and creative arts colleges, former HE colleges, and business school institutions. This group was not used for this study due to the relatively small sample of students who attend these institutions in the current research.

## **Review of literature**

There is no single published, definitive list of influential factors in terms of choosing a university, nor would these factors influence every student if researchers were able to identify and map them – different types of students by age, gender, program choice, lifestyle etc., are influenced in different ways by a variety of factors, including the marketing efforts and websites of individual universities (Hemsley-Brown, 2012). Analysis of prior research reveals that a great many authors choose to focus on demographic factors, and their studies are based on differences between categories of students by sex (Becker, 2003;

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Yingui, 2009), racial group (Yingui, 2009), socioeconomic status (Cho et al., 2008), age (González-Arnal & Kilkey, 2009) and family income (Boudarbat & Montmarquette, 2009). Scrutiny of the literature reveals that key **demographic variables** have been extensively researched using secondary data where such variables are readily available (e.g. Drewes & Michael, 2006). Articles also explore factors associated with academic issues including prior qualifications (Callender & Jackson, 2008) and parental education (Yingui, 2009).

There is no conclusive evidence that a single characteristic of universities drives the choices of all students, although academic reputation was the highest ranked factor in a study conducted in the UK (Briggs, 2006). Veloutsou et al. (2004) argue that the most important information that candidates seek is related to image, **reputation, courses and campus**. Imenda et al's, (2004) descriptive study involving two South African universities and two Technikons also reveals that institutional public image plays a significant role in differentiating institutions, in addition to the high standard of entry qualifications, which means some institutions are held in high esteem (Imenda et al., 2004). The finding that choice factors often vary for different groups or segments of students is further supported by Harker et al. (2001) and suggests that institutional factors do not have the same importance for all types of students – they differ in appeal depending upon a range of lifestyle characteristics – different segments of the market, have different needs. Bonnema and Van der Weldt (2008) for example, found that different sub-groups (market segments) in their study rely on different factors associated with the institution in order to make decisions.

Choice of **subject**, according to Price et al., (2003) has received considerable attention particularly in the US, and the authors identified subject choice as the top ranked factor in

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university choice. Research by Leslie (2003) focused on the importance of subject choice and choice of university, and found that particular subjects, such as medicine, dentistry and veterinary science attract the best qualified students, who apply to the best – most prestigious – universities. Further research on the link between subject choice and university choice revealed that subject choice was more important than cost considerations and students put choice of subject ahead of cost (Callender & Jackson, 2008). Researchers have also conducted studies to explore the link between **career intentions** and university choice (Germeijs & Verschueren, 2007). One reason for this is articulated by Imenda et al., (2004) who observed that students who choose to study at technical universities in South Africa (technikons) have a clearer idea about the **careers** they wish to follow than those who go to other universities, and technikon education is more career based than university education. Other factors are not considered to be differentiating features for example: Imenda et al's (2004) study reveals that the perceived **quality of staff, teaching and learning facilities, and administration** are considered to be similar, and all the institutions in their study are viewed by students as comparable in terms of **friendliness**, clarity of admissions and registration processes. Proximity to home is, however, key factor affecting higher education choice for some students, particularly older students (Drewes & Michael, 2006). These researchers also note that student with higher grades make very different choices from students with lower grades. On this basis also, universities are largely making the choices from applicants, especially the top ranked universities (Leslie, 2003). The next section covers the methodology for the study where items in the survey covered potential choice factors measured on a dichotomous scale.

## **Methodology**

Data were collected from 10,723 respondents as part of a national survey of students attending 140 UK higher education institutions through a Youth Sight online panel<sup>1</sup>. The SPSS database was made available to this author and includes a wide and comprehensive range of questions relating to demographics – factors in choice of university including attitudes towards and experiences of marketing activities (which is used to compile an annual league table in the UK). All those participating in the study are first year undergraduates attending UK higher education institutions during the academic year 2010/11. The largest number of students from any single institution is 316, and there are 11 universities where fewer than 10 respondents completed the survey. In the original online panel database universities were also categorised using Mission Groups (Russell Group (n=3075), 1994 Group (n=1875), Million+ (n=1679), Alliance (n=1967), and non-membership (n=2127). The test were carried out with Mission Group data coded as dichotomous variables (e.g. Russell Group (n=3075) and not-Russell-Group (n=7560). All other data for this study are self-reported by the respondents during the completion of the online survey. The total number of choice variables measured in the survey is 27 and under broad headings they cover the following areas: subject choice, career choice, location, reputation (image etc.) financial, institutional attributes, marketing related (e.g. word of mouth, welcoming, visit), and personal reasons. (The specific marketing activities such as attitudes to open days, influence of media, website and league tables and other specific types of marketing were measured separately using Likert Scales and are not part of this study). Table 1 shows the top ten ranked 'Yes' responses to the 'Yes' / 'No' questions for all 27 items.

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<sup>1</sup> YouthSight, is part of the Opinion Panel community (<http://www.youthsight.com/>).

The table shows the top 10 items for all students, based on those respondents who gave a 'Yes' answer to the item. (The questions were delivered in two blocks and students were limited to a maximum number of ten for one block and five for the second block to avoid students giving yes answers to all the items.)

**Table 1: Top Ten items by number of 'Yes' responses**

Item	Number of Yes responses*	Percentage of respondents
1. Love the subject	7504	<b>70.0%</b>
2. My best subject	3657	<b>34.1%</b>
3. Helps with my career	2992	<b>27.9%</b>
4. Essential for career	2920	<b>27.2%</b>
5. Leads to well-paid job	2734	<b>25.5%</b>
6. Course programme	2638	<b>24.6%</b>
7. Guarantee graduate job	2337	<b>21.8%</b>
8. Location	2333	<b>21.8%</b>
9. Reputation/status	1713	<b>16.0%</b>
10. Cost of fees	1686	<b>15.7%</b>

\*Does not add up to total number of respondents because respondents could vote for several items

Chi Square tests were carried out using all 27 variables, and each of the mission groups (Russell Group/not Russell Group; 1994 Group/not 1994 Group; Million+ Group/not Million+ Group and Alliance/not Alliance group). Each test that resulted in a significant difference between groups was identified and a list of significant "Yes" responses, and significant 'No' responses was compiled. These results are shown in Table 2 alongside the number of 'votes' for the relevant item ('Yes' in the left hand column, 'No' to the right)

**Table 2: Results of significant Chi-Square tests for each mission group**

Russell Group (Yes)	n	%	Russell Group (No)	n	%
My best subject (Yes)	1279	41.6%	Teaching and staff (No)	3037	98.8%
Reputation/status (Yes)	841	27.3%	Word of mouth (No)	3032	98.6%
Guarantee graduate job (Yes)	731	23.8%	Facilities/resources (No)	3004	97.7%
Matched my grades (Yes)	323	10.5%	Didn't get in elsewhere (No)	2934	95.4%
Feels right (Yes)	82	2.7%	Cost of fees (No)	2841	92.4%
Social life (Yes)	44	1.4%	Location (No)	2538	82.5%

<b>1994 Group (Yes)</b>	<b>n</b>	<b>%</b>	<b>1994 Group (No)</b>	<b>n</b>	<b>%</b>
Love the subject (Yes)	1369	73.0%	Social life (No)	1868	99.6%
My best subject (Yes)	846	45.1%	Guarantee graduate job (No)	1506	80.3%
Reputation/status (Yes)	364	19.4%	Essential for career (No)	1489	79.4%
Matched my grades (Yes)	201	10.7%			
Friendly/welcoming (Yes)	134	7.1%			
Campus/buildings (Yes)	127	6.8%			
Accommodation (Yes)	14	0.7%			
<b>Million+ (Yes)</b>	<b>n</b>	<b>%</b>	<b>Million+ (No)</b>	<b>n</b>	<b>%</b>
Essential for career (Yes)	576	34.3%	Accommodation (No)	1679	100%
Helps my career (Yes)	534	31.8%	Social life (No)	1675	99.8%
Cost of fees (Yes)	493	29.4%	Campus/buildings (No)	1658	98.7%
Location (Yes)	481	28.6%	Friendly/welcoming (No)	1616	96.2%
Didn't get in elsewhere (Yes)	128	7.6%	Family connection (No)	1581	94.2%
Facilities/resources (Yes)	68	4.1%	Reputation/status (No)	1578	94.0%
Teaching and staff (Yes)	42	2.5%	Matched my grades (No)	1564	93.2%
			Guarantee graduate job (No)	1349	80.3%
			My best subject (No)	1315	78.3%
<b>Alliance (Yes)</b>	<b>n</b>	<b>%</b>	<b>Alliance (No)</b>	<b>n</b>	<b>%</b>
Essential for career (Yes)	603	30.7%	Campus/buildings (No)	1923	97.8%
Location (Yes)	555	28.2%	Friendly/welcoming (No)	1885	95.8%
Cost of fees (Yes)	394	20.0%	Reputation/status (No)	1842	93.6%
Word of mouth (Yes)	53	2.7%	Matched my grades (No)	1811	92.1%
			My best subject (No)	1436	73.0%

The ranked lists shown in Table 2 reveal that the top scoring significant 'Yes' items vary for the four different university types. Broadly, there is more importance placed on subject choice and reputation for students choosing Russell group and 1994 group universities, although the overall top factor in choice across the whole sample is 'Love of the subject', it is 1994 group students (73%) who view this as most important. For both Million+ and Alliance group respondents there is a focus on the importance of a career, fees and location. However, location is not a factor which is important for 82% of Russell group students, nor fees, where 94.2% of respondents from Russell group universities answered 'No' for this item. Other factors although significant are only relevant for a small number of students, for example, accommodation (14) and social life (44). Although these pre-tests reveal

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significant differences between these groups of students, it is important to establish whether these differences are significant in terms of whether the students are likely to choose one of these mission group universities based on these factors. What is the best predictor of choice for these universities? The results of the Chi Square tests were used to identify the variable for Binary Logistic Regression analysis since all variables are dichotomous.

### **Binary Logistic Regression**

Binary Logistic Regression was performed to assess the impact of factors on the likelihood that respondents would choose to attend a Russell Group/1994 Group/Million-Plus Group/Alliance Group university. The four models (one for each Mission Group) contained 18 variables ('Love the subject', 'Matched my grades', 'Helps with my career', 'Essential for my career', 'My best subject', 'Guarantees a graduate job', 'Reputation and status', 'Facilities and resources', 'Friendly and welcoming', 'Campus', 'I wasn't offered a place elsewhere', 'Social Life', 'Word of Mouth', 'Accommodation', 'It just feels right', 'Teaching and staff' and 'Location'). The four full models containing all the predictors were statistically significant: Russell Group,  $\chi^2 (18, N= 10,723) = 844.89, p,<.001$ ; 1994 Group,  $\chi^2 (18, N= 10,723) = 376.74, p,<.001$ ; Million Plus Group,  $\chi^2 (18, N= 10,723) = 653.39, p,<.001$ ; Alliance Group,  $\chi^2 (18, N= 10,723) = 334.24, p,<.001$  indicating that all four models are able to distinguish between respondents who chose Russell Group and non-Russell Group universities, 1994 Group and non-1994 Group universities, Million Plus Group and non-Million Plus group universities, and Alliance Group and non-Alliance Group universities (in the case of each of the four groups the models distinguish between students attending that type of university and all other students in the sample).

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The models as a whole explain between 7.6% and 11% (Russell Group), 3.5% and 5.7% (1994 Group), 5.9% and 10.2% (Million Plus Group), and 3.1% and 5.0% (Alliance Group) [Cox and Snell R Square, and Nagalkerke R Squared respectively]. This suggests that although the model is a somewhat better predictor of attendance at a Russell Group university, the factors explain only a small percentage of student choices. The model of variance in choice, however, correctly classifies 72.6% of cases (Russell Group), 82.5% of cases (1994 Group), 84.3% of cases (Million Plus Group) and 81.7% of cases (Alliance Group).

As shown in the following section for each Mission Group, a different set of independent variables makes a unique statistically significant contribution to each of the models.

### ***Russell Group***

Eleven of the 18 independent variables make a unique and statistically significant contribution to the model ('Reputation and Status' (Odds Ratio 3.01), 'Social Life' (2.07), 'It feels right' (1.44), 'My best subject' (1.44), 'Guaranteed graduate job' (1.2), 'Matches my Grades' (1.18), \*Essential for my career (.87), \*Helps my career (.82), \*Not offered a place elsewhere (.81), \*Facilities and Resources (.66) and \*Costs and fees (.38). Variables with an asterisk (\*) are those with negative *B* values, which means that the respondents were more likely to say 'No' to these items. They were less likely than non-Russell group students to consider these factors important in their choice. The strongest predictor of choice of a Russell Group university is 'Reputation and Status' with an odds ratio of 3.01. This indicates that respondents who chose a Russell Group university were three times more likely, than those choosing other universities, to report that the reputation and status of the university was a reason for their choice.

## **1994 Group**

Nine of the 18 independent variables make a unique and statistically significant contribution to the model ('Accommodation' (Odds Ratio of 2.49), 'Campus' (2.05), 'My best subject' (1.54), 'Friendly and welcoming' (1.37), 'Reputation and status' (1.26), \*Essential for my career (.74), \*Location (.64), \*Costs and fees (.48) and \*Social Life (.38). Variables with an asterisk (\*) are those with negative *B* values, which means that the respondents were more likely to reject these items as an influence on their choice compared with non-1994 group students. The strongest predictor of choice of a 1994 Group university is Accommodation with an odds ratio of 2.49. However, the total number of respondents who indicated that Accommodation is important was very small, but it is a strong differentiator in terms of choosing a 1994 group university (for example 100% of students attending a Million+ university rejected accommodation as a choice factor).

## ***Million Plus Group***

Fourteen of the 18 independent variables make a unique and statistically significant contribution to the model ('Costs and fees' (Odds ratio of 2.29), 'Staff and teaching' (2.01), 'Facilities and resources' (1.55), 'Not offered a place elsewhere' (1.42), 'Essential for my career' (1.26), 'Helps my career' (1.24), 'Location' (1.19), \*Guaranteed graduate job (.83), \*Matches my grades (.79), \*Friendly and welcoming (.67), \*Feels right (.58), \*Campus (.34), and \*Reputation and status (.32). Variables with an asterisk (\*) are those with negative *B* values, which means that the respondents were more likely to reject these items as an influence on their choice compared with non-Million-Plus group students. The strongest predictor of choice of a Million-Plus group university is 'Costs and fees', with an odds ratio of 2.29. This indicates that respondents who chose a Million Plus group university were between twice and two and a half times as likely (compared with those choosing other

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universities) to report that costs and fees to attend university was an important reason for their choice.

### ***Alliance Group***

As shown in Table 4, 7 of the 18 independent variables make a unique and statistically significant contribution to the model ('Word of mouth' (Odds Ratio 1.7), 'Location' (1.33), 'Costs and fees' (1.22), \*Friendly and welcoming (.74), \*My best subject (.72), \*Campus (.56) and \*Reputation and status (.33). Variables with an asterisk (\*) are those with negative *B* values, which means that the respondents were more likely to reject these items as an influence on their choice compared with non-Alliance group students. The strongest predictor of choice of an Alliance group university is 'Positive word of mouth', with an odds ratio of 1.69. This indicates that respondents who chose an Alliance group university were between one and a half and twice as likely (compared with those choosing other universities) to report that positive word of mouth was an important reason for their choice of an Alliance group university. However, only 2.7% of Alliance group students indicated that 'Word of Mouth' was important in their choice – and therefore although significant and differentiating, this is a small group of students. 'Location', with an Odds ratio of 1.33 is also a predictor and 28.2% of students from the Alliance group indicated the importance of this factor. A summary of the key differentiating factors for the four Mission groups is presented in Table 3. The results from the Binary Logistic Regression are combined with the Chi Square results, so that the factors shown are only those which were significant results for both tests.

There are some key variables which are positive for students attending one type of university, but not attractive choice factors for other students. For example, 'Costs and

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fees' are an important reason for choosing a Million+ university, and also feature in the list for choosing an Alliance university. However, 'Costs and fees' features on the 'No' list for Russell group choosers. To some extent this is based on rational behaviour because the only universities which charge below the maximum of £9,000 in the UK are non-Russell group universities. Reputation and status on the other hand, is on the 'Yes' list for Russell group and 1994 group universities, but on the 'No' list for Million+ and Alliance. This suggests that reputation and status is viewed as a prestige issue and can only be important when choosing top universities. Staffing, teaching, facilities and resources are a key factor for Million+ students, but does not generate significant 'Yes' responses from other students, and for Russell group students facilities and resources generated significant 'No' responses.

**Table 3 Summary of key differentiating factors for the four Mission groups**

<b>Positive differentiating choice factors</b>	<b>Negative differentiating non-choice Factors</b>
<i>Russell Group</i>	<i>Russell Group</i>
<ol style="list-style-type: none"> <li>1. Reputation and Status</li> <li>2. Social Life</li> <li>3. It feels right</li> <li>4. Guaranteed graduate job</li> <li>5. Matches my Grades</li> </ol>	<ol style="list-style-type: none"> <li>1. Not offered a place elsewhere</li> <li>2. Facilities and Resources</li> <li>3. Costs and fees</li> </ol>
<i>1994 Group</i>	<i>1994 Group</i>
<ol style="list-style-type: none"> <li>1. Accommodation</li> <li>2. Campus and Buildings</li> <li>3. My best subject</li> <li>4. Friendly and welcoming</li> <li>5. Reputation and status</li> </ol>	<ol style="list-style-type: none"> <li>1. Essential for my career</li> <li>2. Social Life</li> </ol>
<i>Million-Plus Group</i>	<i>Million-Plus Group</i>
<ol style="list-style-type: none"> <li>1. Costs and fees</li> <li>2. Staff and teaching</li> <li>3. Facilities and resources</li> <li>4. Not offered a place elsewhere</li> <li>5. Essential for my career</li> <li>6. Helps my career</li> <li>7. Location</li> </ol>	<ol style="list-style-type: none"> <li>1. Guaranteed graduate job</li> <li>2. Matches my grades</li> <li>3. Friendly and welcoming</li> <li>4. Campus and buildings</li> <li>5. Reputation and status</li> </ol>

<i>Alliance Group</i>	<i>Alliance Group</i>
<ol style="list-style-type: none"> <li>1. Word of mouth</li> <li>2. Location</li> <li>3. Costs and fees</li> </ol>	<ol style="list-style-type: none"> <li>1. Friendly and welcoming</li> <li>2. My best subject</li> <li>3. Campus and buildings</li> <li>4. Reputation and status</li> </ol>

More importantly though, the findings show that students attending the four different types of university, are claiming that different factors were important for them in choosing the institution they are attending. Therefore, these mission groups can be viewed as different segments, with different needs and expectations.

## **Discussion**

The four mission groups define themselves in different ways and so there is, to some extent, an expectation that they serve different segments. However, the mission group characteristics – as defined in the mission statements for each of the groups – do not match closely with the factors students consider important when choosing these universities, despite their uniqueness as segments. Some authors have also argued that when students are asked to give the reasons for their choice they often taken from the claims made in the promotion for that university, and by the universities in each mission group (Hemsley-Brown, 2012). Indeed, advertising serves many purposes, one of which is to provide confirmation of a good decision and post-hoc justification (Hemsley-Brown, 1999). Nonetheless, the key message is that different types of universities operate in different market segments, and the student audience has different needs and expectations: a one size-fits-all mass market approach to higher education is unlikely to produce a single definitive list of decision-making factors, although a small number of top factors are likely to emerge. If such a list is provided - Table 4.1 in this study – then it masks the variations and segments in the market.

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The key strengths and characteristics of a Russell group university are that they are involved in the best research, offer an outstanding teaching and learning experience and have unrivalled links with business and the public sector, however, the key differentiating features from this research are: reputation and social life. The reputation and status characteristics are closely linked to the mission group's claims, and provide a concise summary of their prestige and high reputation as research-driven universities. Other factors define the types of students who are attracted to the prestige of these universities, and the grade match and expectation of securing a graduate job after graduation suggests self-confidence in their achievements, largely built on the high entry qualifications expected for entry to a Russell Group university.

In terms of the 1994 universities, which tend to be smaller and are more campus-based compared with Russell group institutions and are usually single campus rather than multiple-site campuses. These features are also reflected in the significant choice factors emerging from the research. The factors, accommodation, campus and building, friendly and welcoming all match this key feature of the 1994 group universities, but in addition the reputation and status of the university is recognised and valued by these respondents. There is a further key difference between the Russell group and 1994 group although for a small, but significant group of respondents: social life is important for Russell group students but is not a choice factor for the 1994 group suggesting that the students' lifestyles are also different. For those attending Million+ and Alliance universities the picture is very different: these two groups are responsible for teaching about three quarters of UK students, and both groups focus on teaching and learning rather than research. The factors in Table 3 show that for Million+ students, factors associated with teaching and learning and

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facilities are important to them in addition to the lower entry qualifications and the lower fees. For these students, their specific career choice is important, and one of the mission commitments of the Million+ group is a focus on links with industry. In strong contrast to 1994 group respondents, the campus and the welcome are not viewed as important in their choice. In the Million+ group there is a clear focus on work for students who have lower qualifications and who are more price sensitive. Finally for students attending Alliance universities there is a strong focus on location and word of mouth. Alliance universities focus on STEM subjects and also cater for substantial numbers of taught students, many of whom are local to their chosen university, and are mature students. (An Independent t-tests reveals that students attending Alliance universities are older compared with students at other universities.) Further research is needed using the same database to establish whether other segments can be identified from the data. The best approach to this would be to use Cluster Analysis which enables researchers to identify groups of objects (in this case: students) that are very similar with regard to their cost sensitivity attitudes to reputation and status, and assign them into clusters (Springer, 2014).

### **Limitations**

Despite the large number of cases on the database, which offers considerable advantages to the researcher, there are a number of limitations. First the data is collected only in the UK, second, the data was collected in 2011 and is three years old, which means that the mission groups have changed since then, and finally the students answered their survey after they had been studying at their destination institution for about three months.

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