Full Length Research Paper

Ethnic group differences regarding choice factor importance in public higher education institution selection

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The main goal of the study was to investigate the relevant importance of choice factors as considered by students from different ethnic groups when selecting higher education institutions in South Africa. A non-probability convenience sample of 1,241 respondents from six South African universities was drawn. A self-administrated questionnaire was used based on a 5-point Likert scale and included 23 choice factors which students had to rank accordingly. Descriptive statistics and hypothesis testing were used to identify the most important choice factors and uncover differences between ethnic groups. Overall the quality of teaching and employment prospects seem to play a very important role in students' decisions to choose an institution. The findings indicated that some choice factors were more important to certain ethnic groups than others such as the multi-cultural nature of the institution and social factors. A proper understanding of the relative importance of choice factors students consider when selecting a higher education institution will enable institutions to allocate funds, time and resources more efficiently and effectively. The results can aid South African higher education institutions in developing effective marketing and recruitment strategies to attract students from different ethnic groups.

Key words: Choice factors, higher education, student, decision-making, marketing, university.

INTRODUCTION

Globally, the higher education environment has undergone several changes in the last decade. Examples include the formation of partnerships (Newby, 2003; Valiulis, 2003), a stronger focus on the global market (Mok, 2003; Kwong, 2000), an increase in competition (Ehrenberg et al., 2006; Farr, 2003; Allen and Shen, 1999) and stricter financial pressures (Baird, 2006; Dennis, 2005; Lee and Clery, 2004; Espinoza et al., 2002). South Africa is also facing many new challenges in the higher education sector, such as an increase in competition (De Vries, 2007; Ntshou, 2002), a decrease

in funding (Van Niekerk, 2004) and transformation in terms of access and redress (Ministry of Education, 2002). While many of these challenges are evident world-wide, it should be remembered that the situation of higher education in post-apartheid South Africa is quite different with regard to the country's distinctive historical, cultural and socio-economic circumstances (Ngqiyaza, 2009; Zuber-Skerritt, 2007). The Minister of Education instructed several institutional mergers in an attempt to create comprehensive universities - institutions where both university and technikon-type programmes are offered under the same umbrella (Department of Education, 2004). One of the driving policies behind the changes in the South African higher education environ-ment is the National Plan on Higher Education (NPHE). This plan sets the agenda for higher education

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restructuring with one of its aims to achieve equity and diversity in the higher education system (Ministry of Education, 2002). Growing student numbers and improved access to higher education, especially for previously disadvantaged students, were seen by the South African democratic government as key to overcoming past injustices and producing high level skills to drive economic growth.

Considering the challenges that higher education institutions (HEIs) face, it is evident that institutions will have to become more marketing oriented. A marketing orien-tation typically refers to the ability of HEIs to match their organisational capabilities with market needs through a thorough understanding of the market (Hay and Van Gensen, 2008). Some believe that a marketing orientation will compel HEIs to focus on marketing techniques employed by profit organisations (Rindfleish, 2003: 147). For example, in order for HEIs to improve access of previously disadvantaged students, they may have to consider market segmentation strategies that focus on the recruitment of different ethnic groups. The successful development of a marketing strategy for different segments (or student groups in this case) includes an understanding of the selection processes of prospective students as well as the choice factors students consider when they make decisions on which institutions to attend (Ballinger, 2005: 37; Hoyt and Brown, 2002: 7; Tonks, 1995: 24). Literature and previous studies do not only report on the choice factors prospective students use, but also suggest that some choice factors may be more important than others (Price et al., 2003: 215; Cosser and Du Toit, 2002, 95). Previous research findings also indicate a possible relation between student groups in terms of their ethnic orientation and choice factor importance (Sevier, 1993: 48-50; Hoyt and Brown, 2003: 3; Cosser and Du Toit, 2002: 2-12).

The increasing importance of choice factors in higher education marketing and the changing environment of higher education globally as well as in South Africa, served as an impetus for this study. The paper begins by examining typical selection processes and the role of choice factor selection. This is followed by a description of the research aim and methodology, after which the results are presented and discussed. Finally, the paper discusses the managerial implications of the study and concludes by outlining the limitations of the study.

HIGHER EDUCATION SELECTION IN PERSPECTIVE

The decision-making process in higher education selection

In response to the pressures of the changing higher education environment there have been expanded efforts by HEIs to understand and influence students' selection processes (Espinoza et al., 2002: 20). Several researchers have also devoted attention to the HEI selection processes of prospective students (Ballinger, 2005: 37; Braxton, 1990; Hossler and Gallagher, 1987). Over time different types of models have been used to explain how students select a HEI, namely economic consumer behaviour models, sociological consumer behaviour models and information processing models (Hamrick and Stage, 2004; Cosser and Du Toit, 2002; Cabrera and La Nasa, 2000; Hossler and Gallagher, 1987). The first two model types will be briefly introduced, followed by a broader description of the information processing models.

Economic models focus on the individual charac-teristics of consumers and are based on the concept that consumers maximise value by using a form of cost-benefit analysis. Direct and indirect costs such as tuition fees, textbooks, cost of living and leaving friends and family behind are weighed against the benefits of attending a specific institution such as improved social life, high quality sports programmes or better career opportunities.

Sociological models refer to those factors that influence student choice such as family background, academic ability, significant others, educational aspirations and motivation to succeed. These models focus on the iden-tification and interaction of variables students use when selecting HEIs.

Information processing models can be described as the combination of economic and social factors that affect the individual consumer's decision-making. Building on the work of others, Hossler and Gallagher (1987) created a three-stage information processing model to describe the college decision-making process consisting of a pre-dis-position, search and choice stage. The decision to select a HEI starts as early as the eighth grade and ends when the high school graduate enrols at an institution of higher education (Cabrera and La Nasa, 2000: 5).

The predisposition stage involves the development of occupational and educational aspirations as well as the emergence of intentions to continue education beyond the secondary level. Hamrick and Stage (2004: 151) are of the opinion that the predisposition stage is influenced greatly by family background and school experiences. Many students enter the search stage of the institution selection process during their first few years in high school. During this stage, individuals begin to consider the various options in terms of higher education and the process involves the accumulation and assimilation of information necessary for learners to develop a shortlist of institutions (Hossler and Gallagher, 1987). Learners generally start out by narrowing their options geographically and then consider the specific academic programmes among the institutions remaining in their choice set (Espinoza et al., 2002: 21). The learner's choice set is often highly influenced by parental encouragements and consists of groups of institutions

that the prospective student wants to consider and learn more about before making a decision. During the search stage, prospective students start actively interacting with potential institutions by visiting campuses, searching in brochures and on websites, and talking to friends about the HEI (Attinasi in Cabrera and La Nasa, 2000: 9).

During the choice stage, learners consider factors such as academic reputation, cost and location, and ultimately decide which institution to attend. Learners apply evaluation criteria to their ultimate decision on which institution to attend. Firstly, prospective students determine which factors to consider (evaluative criteria) in making their decisions and secondly, the relative importance of each evaluative criteria that they will use to assess each institution (Kotler and Fox, 1995: 253). In the instance of prospective students selecting a HEI, the evaluative criteria that they use are referred to as choice factors. A better understanding of the evaluative criteria or choice factors that influence institution preference among prospective students can help HEIs to better its marketing efforts in order to attract prospective students by ensuring that their marketing strategy emphasises those important criteria. As this study focuses on the search and choice stages of the decision-making process, various choice factors used by prospective students will now be highlighted.

Choice factors considered in the selection process

A review of previous international studies (mainly conducted in the United States) revealed a variety of potential choice factors considered by students when selecting a HEI. The early eighties listed media, institutional accessibility, academic programmes and non-academic programmes as the main choice factors (Van Dimitrios, 1980: 207). Many years later Bajsh and Hoyt (2001, 3-5) and Bradshaw et al. (2001: 15-22) identified five specific main factors considered by students when selecting a HEI. These include quality and responsiveness of staff, research activities, social opportunities, economic considerations and the size of the institution. Several researchers added additional factors namely campus safety and flexibility in course offering times (Espinoza et al., 2002: 23), academic rating, athletic rating, and news coverage (Arpan et al., 2003: 100) as well as famousness of the university, public relations and stability (Punnarach, 2004: 55).

A Canadian study determined that students value the location, non-academic services and scholarships when selecting a HEI (Drew and Michael, 2006). A research study amongst Chinese students revealed that they choose international HEIs based on affordability, prestige and quality (Hannukainen, 2008). Findings from an Australian study identified reputation and prestige as important factors, but added that first year students at the University of South Australia also ranked career

preparation, specific academic programmes, distance from home, quality of research programmes and library resources as having a strong influence on their choice of university (Martin, 1994).

In a recent South African study, five sub-groups of choice factors were identified, namely employment possibilities, course content, student experiences, sporting aspects and financial considerations (Bonnema and Van der Waldt, 2008).

Although literature provides an understanding of the marketing framework of the choice factors students usually consider, only a limited number of choice factors are usually investigated when surveying students. Hoyt and Brown (2003) pointed out that there are twenty-seven studies with less than ten choice factors, thus not providing a comprehensive picture to HEIs.

Relative importance of choice factors

Literature and previous studies do not only report on the choice factors prospective students use, but also suggest that some choice factors may be more important than others. The importance that prospective students assign to each choice factor (evaluative criteria) is of great interest to HEIs as an understanding of evaluative criteria is essential for developing and communicating appropriate brand/institutional features when marketing to the target market.

According to several studies across different countries, students attach high importance to institutional and/or academic reputation as a choice factor. One United States (US) study indicated that the reputation of a prestigious institution, together with factors such as the beauty of the campus and good sporting facilities are very important choice factors (Davis, 1998). Findings from a study amongst students in England also cited an overall image and/or good reputation as important (Price et al., 2003: 215). This is also the view of students in Australia together with other important factors such as career preparation and job prospects, as well as the quality of academic and research programmes (Martin, 1994, 36; Soutar and Turner 2002, 42). Previous findings are also supported by findings from South African studies that also indicate academic reputation and image as some of the most important choice factors (Coetzee and Liebenberg, 2004: 71; Cosser and Du Toit, 2002: 95).

Despite most studies citing the importance of academic reputation, some believe that financial factors are a more important choice factor than the institution's reputation (Bers and Galowich, 2002: 80). This is supported by several studies that report on the high importance on financial aid or assistance offered by HEIs. One study indicated that first year students in the US placed a very high importance on financial assistance and low tuition rates, as the majority of students indicated that they selected an institution for financial reasons (Geraghty,

1997, 41). This was confirmed by another US study indicating a high importance when it comes to money matters (Mills, 2004: 29). Cost was also identified as an important consideration to students in England (Price et al., 2003: 215). However, different views were reported in some countries, for example, first year students at the University of South Australia ranked cost as a choice factor very low (Martin, 1994: 36). Also in South Africa, fees were noted as a less important choice factor opposed to other choice factors (Coetzee and Liebenberg, 2004: 71).

Ethnic differences and choice factors

Previous research findings indicate that there is a relation between student groups in terms of their ethnic orient-tation and choice factor importance. Bers and Galowich (2002: 70) noted that studies by Bodfish in 2000 and Cabrera and La Nasa in 2001 suggest that the institution-selection process may differ among ethnic groups. Findings show that African American and Hispanic students in the US were more cost conscious and therefore financial aid and grants were more important choice factors to them (Sevier, 1993: 48-50; Hoyt and Brown, 2003: 3).

There is also evidence that the reputation of the institution is more important to African American students specifically (Sevier, 1993: 48). Teranishi et al. (2004: 527) reported that factors such as cost, financial aid, perceptions of prestige and reputation of institutions differ according to Asian Pacific American student subpopu-lations. In their study, Asian American students varied from other groups in terms of post-secondary decisions, opportunities and destinations, but also within ethnic and socio-economic class subpopulations. A South African study determined that African students were more influenced by parental and peer persuasion than other groups, and that African students were more influenced by sporting facilities and lower fees than the other ethnic groups (Cosser and Du Toit, 2002: 2-12).

AIM OF THE RESEARCH

As inconsistent evidence exists with regard to choice factor importance among prospective students, the aim of the research was to determine the relative importance of the twenty-three choice factors that South African students use to select a HEI. Changes in the higher education landscape suggest that HEIs need to adapt their recruitment efforts to attract specific subgroups of students, including students who have previously been disadvantaged in terms of equity and diversity. The first objective was therefore to determine whether there are differences between ethnic orientations in terms of their importance ratings for the different choice factors.

Flowing from this, the second objective was to identify the top ten choice factors for each ethnic group.

Based on the aforementioned discussion, it is hypothesised that:

H_0: Students from different ethnic orientations do not differ significantly regarding the importance they attach to choice factors.

H_1: Students from different ethnic orientations differ significantly regarding the importance they attach to choice factors.

RESEARCH METHODOLOGY

Due to the difficulty of obtaining permission from the Department of Education to approach final-year secondary high school learners for participation in the study, a decision was made to involve first year university students in the study. First year students were considered to be suitable substitutes for high school learners as such students still have a relative accurate recollection of the decision-making process which had preceded their recent entry into higher education (Menon et al., 2007: 711).

A non-probability, convenience sample was drawn from first year Economic and Management Sciences students, enrolled at one of six participating public HEIs in South Africa. The fieldwork was conducted at the beginning of the academic year (February and March) to ensure that students could still recall what influenced their selection process. Respondents were chosen on the basis of being available or accessible on any of the six participating campuses during normal class times. Participation in the survey was voluntary and guaranteed anonymity.

The data was collected by means of a self-administrated questionnaire (consisting of a three-page questionnaire, a cover letter and a consent form). A total of 1 500 questionnaires (250 per institution) were distributed, of which 1 241 were completed and returned, thus an 83% response rate. Two standard questionnaires were used as the basis for the questionnaire namely the Admitted Student Questionnaire (ASQ) and the Cooperative Institutional Research Programme questionnaire (CIRP) (College Board, 2005; Higher Education Research Institute, 2004). As the ASQ make provision for institutions to add additional choice factors, a few factors were added based on findings from other studies and considering the unique South African environment. These factors included safety and security, international links, language policies and flexible study modes. The adapted questionnaire was pre-tested during three focus group sessions.

Section A of the questionnaire measured respondents' opinions on the importance of 23 choice factors namely: wide choice of subjects/courses; quality of teaching; academic facilities; entry requirements; fees; location of the HEIs; sports programmes; social life on-campus; attractiveness of campus; campus safety and security; on-campus housing/hostels; parents went there (tradition); brother/sister went there; friends went there; academic reputation; financial assistance; language policy; links with the industry; multi-cultural/diversity; international links; employment prospects; flexible study mode; and the image of HEIs. Each item was measured using a 5-point Likert scale with five response categories ranging from not important at all (1), of little importance (2), moderately important (3), very important (4) to extremely important (5).

Section B of the questionnaire contained questions to measure the socio-demographic details of respondents such as age, gender, home language and ethnic orientation (black, white, coloured, Indian). At this point it may be worth nothing that the racial

Table 1. Order of importance of choice factors based on mean values.

Order of importance	Variable description	Mean	Standard deviation
1	Quality of teaching	4.51	0.78
2	Employment prospects	4.45	0.83
3	Campus safety and security	4.33	0.95
4	Academic facilities	4.21	0.97
5	International links (study and job opportunities)	4.18	1.05
6	Language policy	4.05	1.15
7	Image of higher education institutions	4.04	1.04
8	Flexible study mode	4.02	1.05
9	Academic reputation	3.99	1.04
10	Wide choice of subjects/courses	3.97	0.97
11	Entry requirements	3.75	1.04
12	Links with the industry	3.71	1.09
13	Fees (cost)	3.70	1.18
14	Financial assistance	3.69	1.36
15	Location of higher education institutions	3.69	1.24
16	Attractiveness of campus	3.51	1.15
17	Multi-cultural/ diversity	3.35	1.22
18	Social life on-campus	3.17	1.37
19	On-campus housing / hostels	3.12	1.52
20	Sports programmes	2.69	1.26
21	Friends went there	2.35	1.31
22	Brother/sister went there	1.93	1.24
23	Parents went there (tradition)	1.83	1.17

categorisation system of black, white, coloured and Indian used in this study is considered to be a valid basis of differentiation, as these are also the classification terms used by Statistics South Africa (StatsSA) to classify race in the country's population censuses.

Data analysis included descriptive statistics to profile respondents and to rank respondents' choice factors in terms of importance. Multiple Analysis Of Variance (MANOVA) was conducted to test the formulated hypothesis. The next section reports on the findings of the study.

RESEARCH FINDINGS

The socio-demographical profile of respondents

The demographic profile of the respondents comprised 64% female and 36% male. The majority of the respondents (75%) were younger than 20 years of age. The large percentage of students between the ages of 17 - 19 years correlates with a typical sample of first year students. The ethnic orientation spread was 46% white, 41% black, nine per cent Indian, three per cent coloured and one percent "other ethnic groups". A decision was made to collapse responses from the Indian, coloured and other ethnic groups into one group labelled as "other" seeing that the small sample sizes of each individual group did not allow for proper group comparisons in further statistical analyses.

The relative importance of the choice factors

The aim of the research was to determine the relative importance of each of the twenty-three choice factors that respondents used to select their HEI. The descriptive statistics (mean and standard deviation) for each choice factor are depicted in Table 1.

From Table 1 it is evident that choice factors differed in importance with the top ten choice factors respondents regarded as important being: quality of teaching; employment prospects; campus safety and security; academic facilities; international links; language policy; image of HEI; flexible study mode; academic reputation; and a wide choice of subjects/courses. The top two factors, quality of teaching and employment prospects, seem to play a very important role in students' decisions to choose an institution as these variables had high mean values with low standard deviations, indicating that respondents had high levels of agreement on the relative importance of these items. The discussion to follow highlights some of the main findings from Table 1.

Respondents attached a very low importance to the fact that their family members (brothers, sisters or parents) attended a certain institution. Interesting to note is that although fees (cost) were indicated as relatively important in terms of the mean value (3.7), it only ranked thirteenth on the list of 23 choice factors.

Results showed a higher importance to academically

related factors such as quality of teaching (mean 4.5), facilities (mean 4.2) and reputation (mean 4.0) as opposed to social factors such as social life (mean 3.1) and sports programmes (mean 2.7). The low importance of sports programmes contradicted the findings of one international study by Davis (1998) that reports that respondents attach high importance to good sporting facilities and it also contradicted the findings of two South African studies (Cosser and Du Toit, 2003: 95; Coetzee and Liebenberg, 2004: 72) that rank sports programmes third and fourth.

In Table 1, academic reputation ranked ninth out of 23 choice factors which is in contrast with other South African studies that identify reputation as the most important factor influencing decisions about an institution for choice of study (Cosser and Du Toit, 2003: 95; Coetzee and Liebenberg, 2004: 72). However, the fact that parents or relatives studied at the institution were ranked last in this study echoes the findings of Coetzee and Liebenberg (2004: 72) where it also rank the lowest.

Views on importance rankings differed the most with regard to the importance of on-campus housing/hostels as the standard deviation is the highest (1.52), followed by social life on campus with a standard deviation of 1.37. The high standard deviation regarding on-campus housing may be due to different value perceptions from residence versus non-residence students. Unfortunately the accommodation situations of respondents were not included in the study.

Differences between ethnic groups

One of the main objectives of the study (Hypothesis 1) was to determine whether students from different ethnic orientations differ regarding the importance they attach to choice factors when selecting a HEI. The significance level for Hypothesis 1 was set at a five per cent significance level ($\alpha = 0.05$). The hypothesis was tested using the MANOVA which assesses the differences between groups collectively rather than individually using univariate tests. The Wilks' lambda was the test statistic used to assess the overall significance of the MANOVA as the Wilks' lambda is one of the tests that is most immune to violations of the assumptions underlying MANOVA without compromising on power (Hair et al., 2006). Because the multivariate test of MANOVA shows only an overall significant difference, where a significant Wilks' lambda result is found, it was followed by univariate analyses where Scheffè post hoc tests were performed to reveal more specific differences between groups on each of the identified choice factors. Therefore, where a significant Wilks' lambda result was found, it was followed by a one-way Analysis Of Variance (ANOVA). Scheffè post hoc tests were also conducted to reveal the groups that differed from one another. Significant results are indicated in bold print in Table 2. The

mean values of the three ethnic groups and the MANOVA results of the hypothesis test are also shown in Table 2.

The Wilks' lambda value in Table 2 indicated a significant difference (p = 0.000) between ethnic orientation in terms of the importance attached to the different choice factors. The null hypothesis was thus rejected, as there was support for Hypothesis 1. The univariate analyses revealed that the difference between the ethnic orientations were evident in: the quality of teaching academic facilities; entry requirements; fees; location of university; sports programmes; social life on campus; attractiveness of campus; on-campus housing; parents went there; brother/sister went there; friends went there; language policy; links with the industry; and multi-cultural. Scheffè post hoc tests were conducted to uncover the subgroup differences and the following discussion highlights some of the findings from Table 2.

- White students regarded quality of teaching (mean: 4.60 versus 4.41), campus attractiveness (mean: 3.68 versus 3.30) and an institution's language policy (mean: 4.17 versus 3.94) as more important than black students.
- White and other ethnic orientations differed significantly from black orientations in terms of the higher importance attached to the location of a university as well as sports programmes. This result contradicted the findings of Cosser and du Toit (2002) who indicates sports programmes to be more important to black students.
- The black and other groups attached a higher importance to entry requirements, links with the industry and a multi-cultural institution than white student groups.
- Academic facilities as well as university fees were more important to the other group than white or black students. However, when it came to financial assistance, no significant differences were evident between any of the subgroups. This finding contradicted findings by Hoyt and Brown (2003) who report that black students are more cost conscious and attach a higher importance to financial assistance.
- Students from all three ethnic orientations differed significantly from each other in terms of social life on campus, with white students having the highest mean score (3.67) and black students the lowest mean score (2.69). All three groups also differed significantly in terms of on-campus housing with white students attaching the highest importance (mean: 3.48) and students from the other group attaching the lowest importance (mean: 2.33).

To assist institutions to use the most important choice factors when focusing their recruitment efforts on different ethnic orientations, a top ten list has been compiled based on mean values. Table 3 indicates the top ten choice factors for each ethnic orientation.

From Table 3 it is evident that employment prospects and quality of teaching were the two most important factors for all three subgroups. Differences in the ranking

Table 2. Mean values and MANOVA results for different ethnic groups.

Choice factors	Black	White	Other	Univariate analyses	F value	p-value
Wide choice of subjects/courses	4.05	3.90	4.01	0.0890		
Quality of teaching	4.41 [a]	4.60 [a]	4.58 [b]	0.0009		
Academic facilities	4.15 [b]	4.21 [a]	4.46 [a b]	0.0030		
Entry requirements	3.86 [b]	3.62 [a b]	3.92 [a]	0.0002		
Fees	3.73 [a]	3.58 [b]	4.03 [a b]	0.0002		
Location of university	3.55 [a b]	3.76 [b]	3.95 [a]	0.0011		
Sports programmes	2.43 [a b]	2.95 [a]	2.76 [b]	0.0000		
Social life on-campus	2.69 [a]	3.67 [a]	3.07 [a]	0.0000		
Attractiveness of campus	3.30 [a]	3.68 [a]	3.55 [b]	0.0000		
Campus safety and security	4.34	4.33	4.47	0.2480		
On-campus housing	3.05 [a]	3.48 [a]	2.33 [a]	0.0000		
Parents went there	1.83 [b]	1.89 [a]	1.55 [a b]	0.0069		
Brother/Sister went there	1.89 [b]	1.99 [a]	1.67 [a]	0.0210		
Friends went there	2.09 [a]	2.60 [a b]	1.99 [b]	0.0000		
Academic reputation	4.03	3.97	4.09	0.3904		
Financial assistance	3.78	3.65	3.77	0.3713		
Language policy	3.94 [a]	4.17 [a]	4.04 [b]	0.0110		
Links with the industry	3.86 [a]	3.57 [a b]	3.83 [b]	0.0001		
Multi-cultural	3.66 [b]	2.97 [a b]	3.72 [a]	0.0000		
International links	4.23	4.18	4.19	0.7330		
Employment prospects	4.49	4.40	4.50	0.1769		
Flexible study mode	4.10	3.96	4.12	0.0540		
Image of university	3.99	4.07	4.16	0.2031		
Wilks' lambda					11.85	0.000

The results of the Scheffè post hoc tests are indicated with a and/or b. All mean values containing the same letters (for example, a) indicate that the groups differ significantly from one another. All mean values containing different letters (for example, an a or b) indicate that these groups do not differ significantly from one another.

order appeared between white students' opinions on the importance of the language policy (sixth) compared to the other two groups' order of importance. The image of an institution was more important to the other group (sixth) and white students (seventh), while it was only ninth on black students' importance list. While wide choice of subjects/courses was relatively important to black students (seventh), it was only tenth on the white students' ranking list and not even on the other group's list. Fees were a factor that appeared on the other group's top ten list only.

IMPLICATIONS FOR HIGHER EDUCATION INSTITUTIONS

Currently in South Africa, nearly one in five of the school-leavers who pass Grade 12 (final year of high school) enter a higher education institution, with well over 700 000 students studying at 23 different public higher education institutions across South Africa (Higher Education South Africa, 2008). It is therefore recommended that institutions analyse and understand how they perform on the choice factors as a first step in preparing for a

marketing strategy to this heterogeneous market. One way to do this is to focus on the performance areas (choice factors) identified as important by the market (students), and specifically different market segments (student subgroups).

Institutions could focus their recruitment strategies on the choice factors indicated by the respondents as very important (such as the top 10 choice factors identified by the study). In order to satisfy the needs and wants of prospective students these factors must be addressed in an institution's marketing plan. The most important choice factors should be considered and capitalised on in communication and/or recruitment strategies. Institutions should realise that by focusing on specific choice factors that they are important to a specific market segment (e.g. black students) they can create a niche market for the institution.

The discussion to follow provides suggestions on how to use the top three choice factors identified in the study to aid institutions in improving their performance. Although the choice factors are discussed separately, it is important to note that the various factors can and must be combined or integrated as they do influence one another and can not be addressed in isolation. The

Table 3. Top 10 choice factors according to ethnic orientation.

	Black	White	Other
1	Employment prospects	Quality of teaching	Quality of teaching
2	Quality of teaching	Employment prospects	Employment prospects
3	Campus safety and security	Campus safety and security	Campus safety and security
4	International links	Academic facilities	Academic facilities
5	Academic facilities	International links	International links
6	Flexible study mode	Language	Image
7	Wide choice of subjects/courses	Image	Flexible study mode
8	Academic reputation	Academic reputation	Academic reputation
9	Image	Flexible study mode	Language
10	Language	Wide choice of subjects/courses	Fees

discussion also presents recommendations on how to recruit and attract specific groups or segments of students by focusing on the choice factors identified as important by the different ethnic subgroups.

Quality of teaching was indicated as the single most important choice factor when selecting a HEI, with white students reporting the highest mean value. Resources provide the necessary basis and tools to deliver quality teaching and therefore institutions must invest in good quality lecturers, high quality facilities and up-to-date, relevant course content. Institutions need to ensure that their quality of teaching compares favourably with that being offered by competitors. This implies being able to attract and retain qualified staff as well as having well-equipped facilities and other resources for teaching, learning and research. Quality is not just important from a prospective student's perspective, but can also supply a competitive advantage and satisfy governmental requirements. Quality of teaching is also closely related and influenced by two other important choice factors namely academic facilities and academic reputation, and these three factors need to be integrated.

Respondents indicated employment prospects as very important. This emphasises the importance placed on the appeal of job opportunities when enrolling at a HEI. This signals to institutions that their subjects and course content should be relevant to market demand and that liaising with industry to ensure that students with a degree from their institution would have a better opportunity to find employment may be worthwhile. This result mirrors findings from a career decision-making study that suggested stronger links between HEIs and industry (Jordaan, 2009, 387). The inclusion of practical assignments, experiential learning or internships as part of the academic course content can better prepare students to obtain a job as they will have some practical experience added to their theoretical knowledge. The value of such additions lies in getting students work-ready with skills that are useful to employers.

As campus safety and security ranked third out of the list of 23 choice factors, it is especially important that

institutions pay attention to this factor. Given the high crime rate in South Africa it is important that institutions ensure a safe learning environment. This could be accomplished by improving visible policing by security personnel and having toll-free numbers available to report any misbehviour. Adequate transportation for stu-dents living in residences in or around campus could also be considered as well as ensuring that there are safe routes and means of transport - especially when students return from evening classes.

Significant differences between the ethnic groups were found for 15 of the 23 choice factors, signaling that ethnic groups differ on the importance they attach to choice factors. This suggests that HEIs could view black and white students as separate market segments with needs and preferences that require different recruitment strategies. Although this may complicate the marketing strategies of HEIs, it has the advantage that such stra-tegies will be much more effective in reaching a diverse student market.

It is suggested that institutions make use of the top 10 choice factors identified for each ethnic group as this information will aid institutions to better understand the needs of these groups. For example, recruitment stra-tegies and communication messages to black students could focus on the multi-cultural nature of the institution, flexible study modes and the wide choice of subjects available - as the results indicated that these were more important to black students than the other groups. Res-pondents' importance ranking of the choice factor relating to the multi-culturality of the institution probably supports comments by the Higher Education of South Africa (HESA) that some institutions still have alienating institutional cultures (MacGregor, 2009b). This also emphasizes that higher education institutions should create a sense of closeness, acceptance and inclusion to enhance the recruitment of black students.

The findings also indicated that black students have a need for change in learning and teaching through the provision of flexible study modes and a variety of subject choices. Flexible study modes, such as distance

education and other technologies like online learning, can make the programmes offered by HEIs not only accessible to more students, but also relevant to the needs and aspirations of the African population (Braimoh, 2003, 13). Distance education, as a flexible study mode, was identified as a system that could provide access to disadvantaged black students who do not have the opportunity to study full-time because of personal and/or social circumstances, geographical distance or inadequate prior learning experiences (Makoe, 2006). The need expressed for flexible study modes may result from a perception that some higher education institutions still have a 'white-oriented examination system' that leads to high dropout rates in the other-than-white sector (Akoojee and Nkomo 2007). In fact, a total of 40 per cent of South African students drop out of university in their first year, with 'first generation' students from low income, less educated families being the most likely to drop out (MacGregor, 2007). There is evidence that some HEIs have addressed the flexible study mode need by offering well-developed bridging programmes and vocationally-oriented centres (mainly aimed in assisting previously disadvantages groups), and in so doing, have extended the available study options for students (MacGregor, 2009a).

As for recruiting white students, an institution could focus on communicating the social choice factors such as sports programmes, social life on the campus, attractiveness of the campus and on-campus housing as these were more important to this group than any of the other groups. Findings from a previous study by Cross and Johnson (2008) also indicated that the needs of students are fragmented in terms of socio-cultural activities, leisure and recreation activities, and sports. The results suggest that the provision of a social programme, as part of the overall student life experience, is a discriminator for white students. The finding therefore indicate that strategies need to be implemented to become more responsive to student needs (specifically those of white students) in terms of a social life coupled with residence life as well as sports and recreation services.

LIMITATIONS OF THE STUDY

Several limitations of the study should be noted. Due to the nature of non-probability sampling the respondents used in this study are not representative of the broad South African student population. The study had a retrospective focus, as the sample population was first year students who had to report how they have made their selection the previous year. The role of economics and socio-cultural background in restricting choice in the South African context was not included in the study. Despite these limitations, the findings from this study provide guidance to HEIs on the choice factors in the institution selection process. This topic may justify a

longitudinal study where students' choice factors are tracked over time to assist HEIs to adapt their marketing and communication strategies. Future research could also investigate the selection process of students from other fields of study to determine if there are similarities with the main findings of this study, as well as determining the similarities or differences between South African students and students from other countries. Future studies might also investigate the current state of marketing activities within HEIs to determine to what degree current strategies fulfill the needs of the market.

Conclusion

The process of transformation of higher education in South Africa puts pressure on higher education institutions to deliver the badly needed graduate numbers while simultaneously addressing equity and diversity. One way to achieve this is to gain a better understanding of the student market in terms of the choice factors they consider when selecting a higher education institution. It is evident that not all choice factors are equally important to students and/or student subgroups. The findings can give marketing educators an indication of the relative importance of choice factors in selecting a HEI, and could enable higher education institutions to use their limited funds more efficiently to attract quality students from different ethnic groups, create a unique position and gain a competitive advantage. Although HEIs increasingly realise the importance of having sound marketing strategies to stay competitive, they must base their strategies on customer needs, with better efforts made to fulfill those needs. Market segmentation will enable HEIs to understand their customers better and position the institution in line with customer expectations.

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