

# The role of ethnicity in the higher education institution selection process

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## **Abstract**

Changes in the higher education landscape have led to many higher education institutions reassessing their recruitment and marketing strategies. A proper understanding of the relative importance of the choice factors that prospective students consider when selecting a higher education institution will enable higher education administrators and planners to allocate funds, time and resources more efficiently and effectively. The research aimed at identifying the choice factors that discriminate between different ethnic student groups within South Africa when they go through the process of selecting an education institution. A convenience sample of 1 241 respondents was drawn, representing six public South African universities. The findings indicated that the multi-cultural nature of an institution and the opportunities for a social life on campus were the two most powerful discriminators between the two ethnic groups. The results can aid university administrators and planners in developing effective marketing and recruitment strategies to attract students from different ethnic groups.

## **INTRODUCTION**

Higher education institutions in all parts of the world are facing challenges within a changing environment. A decrease in government funding, mergers between higher education institutions, an increase in competition between institutions, a drive to attract quality students as well as global trends of internationalisation have all contributed to a changed higher education landscape (Espinoza, Bradshaw and Hausman 2002; Mok 2003; De Vries 2007; Louw and Mayer 2008). For higher education institutions to survive and grow, they will not only have to keep abreast with changes in their environment, but also exhibit an ability to adjust to these changes. The changing landscape has necessitated the development of a market culture or market orientation among institutions as they have to compete for scarce resources and be more accountable for their actions. A market orientation typically refers to the

ability of higher education institutions to match their organisational capabilities with market needs through a thorough understanding of the market (Hay and Van Gensen 2008). To survive in this dynamic environment, institutions must offer more value to their target market than competitors, which requires both an understanding of the market and the will to be relevant. One way to offer more value is to understand the target market in terms of the choice factors new applicants consider when deciding to enrol at a specific higher education institution.

The purpose of this article is therefore to investigate the choice factors students consider when selecting a higher education institution, with a focus on the differences between different ethnic student groups. First, the article puts higher education in South Africa in perspective; it then provides a theoretical overview of students' selection processes as well as typical choice factors that they take into consideration during their decision-making processes. Next, the aim of the research and the method used are described, after which the results are reported. This is followed by a discussion of the implications of the findings, as well as a brief conclusion highlighting the limitations of the study and identifying future research opportunities.

## LITERATURE REVIEW

### The South African higher education environment

Racial segregation at South African universities was legislated with the passing of the Extension of University Education Act in 1959 (MacGregor 2007). In the 1970s and 1980s, universities began to open their doors to students of all races and have subsequently become multi-cultural places of learning. Headcount enrolments have grown from 473 000 in 1993 to 784 000 in 2008, with numbers expected to reach 837 000 in 2011 (MacGregor 2009a; MacGregor 2009b). During the past few years, South Africa's higher education has undergone even more changes, resulting in many challenges for the education sector (De Vries 2007; Hay and Van Gensen 2008; Louw and Mayer 2008). Some of these challenges have resulted from a decrease in government funding for higher education institutions, enrolment capping due to increased student admissions, a notion of quality assurance to attract quality students, an increase in competition through the emergence of private higher education, mergers of institutions (similar to the mergers in Australia and New Zealand) as well as global trends of internationalisation (Espinoza, Bradshaw, and Hausman 2002; Mok 2003; Akoojee and Nkomo 2007; De Vries 2007; Zuber-Skerrit 2007; Hay and Van Gensen 2008; Louw and Mayer 2008). 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 socioeconomic circumstances (Zuber-Skerritt 2007; Ngqiyaza 2009).

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 higher education institutions across South

Africa (Higher Education South Africa 2008). For South Africa's public universities, as is the case in most publicly funded higher education systems, the government has historically been the most important source of financial support. However, in recent years, public funding for South Africa's higher education has declined, which puts more pressure on higher education institutions to find non-government sources of funding and other resources. This is evident in the lowering of state funding as a percentage of both GDP and total state finance, as well as state funding of higher education adjusted for inflation (Wangenge-Ouma and Cloete 2008). This decline in government funding has left higher education institutions vulnerable, while they are under increased pressure to become more efficient and effective entities.

The process of transforming higher education in South Africa has also manifested in significant progress with policy implementation, especially since 1994 (Van der Westhuizen 2007). A number of policy documents on higher education have addressed the issue of expanding access to previously marginalised and disadvantaged students (Makoe 2006). Increased access is evident in the enrolment numbers of (mostly disadvantaged) students, which rose by 268 per cent in the decade to 2006 (MacGregor 2009b). One of the driving policies behind the changes in the higher education environment was the National Plan on Higher Education (NPHE), which sets the agenda for higher education restructuring in South Africa (Ministry of Education 2002). As mentioned earlier, the decline in public funding has forced higher education institutions to adapt to the changed environment and obtain resources elsewhere, especially if they want to achieve the policy goals identified by the NPHE. Typical market sources of income include student fees, investment income, local and international donations, contract research, sales of goods and services, and research grants (Van Heerden et al. 2007).

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.

### **The higher education institution selection process**

Post-compulsory education is characterised by two decision-making situations for prospective students, namely, first, the choice between higher education and employment, and second, the choice of a field of study and a higher education institution from several alternatives (Menon, Saiti and Socratous 2007, 706). If one simply looks at the decision-making process for selecting a higher education institution, this decision alone comprises a multi-stage process involving a series of successive decisions. These decisions culminate in enrolment or non-enrolment at a particular higher education institution and represent a major life decision (Beggs, Bantham and Taylor 2008). The decision by learners to select a higher education institution begins early in their high school career and ends when the high school graduate enrolls at an institution of higher education (Cabrera and La Nasa 2000).

This process is influenced by both internal and external factors. Internal factors include aspects such as demographics (gender and age), perception, learning, motivation, personality, emotions and attitudes. External factors refer to influences such as culture, social class, reference groups, family and organisations' marketing efforts (Hawkins, Best and Coney 2004).

The Hossler and Gallagher (1987) model describes the institution selection process in three stages: predisposition, search and choice. The three stages interact with one another, each affecting the other in subtle and complex ways. The process begins with determining students' predispositions towards higher education institutions, after which they engage in a search for information on higher education institutions, when finally selecting their preferred institution. Students may also decide to apply at more than one institution to increase their chances of being accepted (Ayalon 2007, 886). The predisposition stage involves the development of occupational and educational aspirations as well as the emergence of the intention to further their education beyond the secondary level.

Many learners enter the search stage of the institution selection process during their first few years at high school. During this stage, they begin to consider the various higher education institutions available, while accumulating and assimilating information on these institutions in order to generate a short list of institutions (choice set) from which to make applications (Chen 2007, 761). During the search stage, some individuals rely strongly on the opinions of siblings, peers and relatives (McDonough and Perez 2008), while others expect their high school teachers to play a prominent role in providing information that will help them to make educational decisions (Bird, Kim and Wierzalis 2008).

Learners enter the choice stage when they submit applications to a number of higher education institutions. James (in Menon et al. 2007, 708) found that prospective students are influenced, to a great extent, by certain university characteristics. Learners evaluate institutions on aspects such as academic reputation, cost and location, and ultimately decide which institution to attend. During the process of selecting a higher education institution, the evaluative criteria that learners use are referred to as choice factors. A better understanding of the choice factors that influence institution selection among prospective students can enable higher education institutions to improve their marketing efforts in order to attract students by ensuring that their marketing strategy includes and/or emphasises criteria that are important to these prospective students.

### **The role of choice factors in the institution selection process**

A review of international studies (mainly conducted in the USA) revealed a variety of potential choice factors considered by learners when selecting a higher education institution. Van Dimitrios (1980) identified media, institutional accessibility, academic programmes and non-academic programmes as the main choice factors. Others identified the following five main factors considered by students when selecting a higher education institution, namely quality and responsiveness of

personnel (helpfulness and accessibility), research activities, social opportunities (athletic programmes and social life), economic considerations (location of campus and work opportunities), and size of the institution (Baksh and Hoyt 2001; Bradshaw, Espinoza and Hausman 2001). Espinoza, Bradshaw, and Hausman (2002) identified campus safety and flexibility in course offering times as additional factors to those identified in previous literature. In one US study in 2003, three main factors were identified, namely academic rating, athletic rating and news coverage (Arpan, Raney and Zivnuska 2003). Shin and Milton's findings (2006, 235) showed that tuition cost has a small effect on student enrolments, while findings from a study by Zang (2007) reported an inelastic student responsiveness to changes in fees. Another study determined that first-year students in America placed a very high importance on financial assistance and low tuition rates, as the majority of students indicated that they had selected an institution for financial reasons (Geraghty 1997, 41). Funk (2008) argues that students do not only examine the tuition fees/price, but also consider the cost implications of the location of the higher education institution.

Maringa (2006) identified programmes (details of course and field of study), price, place (diversity and campus accommodation) and prominence (reputation) as the four most important choice factors for UK students. While a research report by the University of Brighton (2004) also identified reputation as an important factor, the report highlighted the importance of social life and realistic entry requirements as choice factors for UK students.

Canadian universities (2000) tend to make use of six criteria to assist students to select a Canadian university on the internet, namely programme reputation, social reputation, friends, entry requirements, educational programmes and extracurricular activities. In another Canadian study it was determined that students value location, non-academic services and scholarships when selecting a higher education institution (Drew and Michael 2006). Findings from a study by Chen (2007, 768) determined that Asian students choose Canadian universities on the basis of a university's reputation and quality, as well as the availability of financial aid.

A survey among Chinese respondents revealed that they choose international higher education institutions on the basis of affordability, prestige and quality (Hannukainen 2008). Findings from an Australian study identified reputation and prestige as important factors, but noted 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 strong influences on their choice of university (Martin 1994).

In a recent South African study, five subgroups of choice factors were identified as important, namely employment aspects, course content aspects, student experiences, sporting aspects, financial aspects and the influence of significant others (Bonnema and Van der Waldt 2008).

Some choice factors may be more important than others, as many authors have observed (Mills 2004; Shin and Milton 2006; Sallie Mae 2007). Findings from previous studies also identified sociodemographic differences (specifically with

regard to ethnic background) in terms of the importance learners/prospective students attach to choice factors. One study determined 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 (Hoyt and Brown 2003). The findings of another US study showed that ethnic differences related to factors such as cost, financial aid, perceptions of prestige and reputation of institutions (Teranishi et al. 2004). Braddock, Hua and Dawkins (2007) determined that academic and career issues represented the strongest factor, while social considerations ranked somewhat lower in importance for African American students. A South African study by Cosser and Du Toit (2002) established that African students were more influenced by parents, peer pressure, lower fees and the quality of sporting facilities than are other ethnic groups.

## **AIM OF THE RESEARCH**

Based on the preceding literature review, 23 choice factors were included in the study: wide choice of subjects/courses; quality of teaching; academic facilities; entry requirements; fees; location of university; sports programmes; social life on campus; attractiveness of campus; campus safety and security; on-campus housing; parents went there; brother/sister went there; friends went there; academic reputation; financial assistance; language policy; links with industry; multi-culturality; international links; employment prospects; flexible study mode and image of university.

However, despite various research studies on choice factors conducted over the past two decades, little is known about the importance levels of choice factors for different ethnic groups in South Africa. The focus on ethnic orientation resulted from the notion that students' perceptions are, among other, shaped by their history, traditions, culture and priorities. Furthermore, as mentioned earlier, the NPHE has prioritised higher education restructuring in South Africa, especially in terms of achieving equity and diversity in the higher education system. The objective of the study was therefore to determine whether the identified ethnic groups differed with respect to the choice factors they considered in their higher education institutional selection process, and if so, how well the 23 choice factors discriminated between the ethnic groups within South Africa.

## **METHOD**

### **Sample and measurement instrument**

A non-probability, convenience sample was drawn from first-year Economic and Management Sciences students, enrolled at each of the six participating universities in South Africa. All public universities were invited, of which the following agreed to participate in the study: University of Pretoria, Tshwane University of Technology, University of Johannesburg, University of the Free State, University of Kwa-Zulu Natal, and the University of North West. Because of the difficulty of obtaining

permission from the Department of Education to include final-year secondary high school learners in the study, first-year university students were selected as so-called substitutes for the school learners. As suggested by Menon, Saiti and Socratous (2007, 711), first-year students were considered to be suitable substitutes as they still have a relatively accurate recollection of the decision-making process which preceded their entry into higher education. The data were collected by means of a self-administrated questionnaire (consisting of a three-page questionnaire, a covering letter and a consent form) which was distributed to students in class during normal lecturing periods. A total of 1 500 questionnaires (250 per institution) were distributed, of which 1 241 were completed and returned.

The questionnaire was based on an adaptation of two popular questionnaires, namely the Admitted Student Questionnaire (ASQ) and the Cooperative Institutional Research Programme (CIRP) questionnaire (College Board 2005; Higher Education Research Institute 2004). The adapted questionnaire was pre-tested during three focus group sessions. No incentives for completing the questionnaires were offered to respondents and participation was voluntary and anonymous. Respondents' opinions on the importance of 23 choice factors were measured using 5-point Likert scales ranging from (1) not important at all to (5) extremely important. The questionnaire also included questions to measure the sociodemographical status of respondents in relation to factors such as age, gender, ethnic background and home language.

## Data analysis

A stepwise discriminant analysis was conducted in an attempt to identify which ethnic orientation most strongly determined respondents' choice factor importance levels. A stepwise discriminant function analysis was used to build a step-by-step model of discrimination for each of the identified groups. In each analysis, the predictor variables were entered sequentially, based on their ability to discriminate among groups. The predictor with the highest F-ratio was the first to be selected for inclusion in the discriminant function, if it met certain significance and tolerance criteria. A second predictor was then added, based on the highest adjusted or partial F-ratio, taking into account the predictor already selected. The process of selection and retention continued until all predictors meeting the significance criteria for inclusion and retention had been entered in the discriminant function (Hair, Black, Babin Anderson and Tatham 2006).

## RESULTS

The representation of the six institutions in terms of respondents ranged from 11 per cent to 21 per cent. The demographic profile of the respondents comprised 36 per cent male and 64 per cent female. The racial categories included 46 per cent white, 41 per cent black, nine per cent Indian and three per cent coloured. Owing to the small sample sizes of the Indian and coloured students in this study, they could not be included in further statistical analysis. It may be worth noting that the population

statistics for all undergraduate students enrolled at higher education institutions in South Africa are 45 per cent male and 55 per cent female, with a racial spread of 31 per cent white, 51 per cent black, 11 per cent Indian and seven per cent coloured (Department of Education 2008). Unfortunately the sample profile could not be compared with the population statistics for first-year students enrolled at higher education institutions as these numbers are not available. It should be noted that it was not the intention that the sample profile should mimic the population profile since a non-probability sample was drawn. At this point it may be relevant to note that the racial categorisation system of black, coloured, Indian and white 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.

For the discriminant analysis procedure, two mutually exclusive ethnic orientation groups, black students and white students, were established and one discriminant function was estimated. The eigenvalue associated with this function was 0.39011, and accounted for 100 per cent of the explained variance. The canonical correlation associated with this function was 0.52975, indicating that 28 per cent of the variance in the dependent variable (ethnic orientation groups) was explained or accounted for by this model.

Before interpreting the results, the discriminant functions estimated have to be statistically significant. In BMDP, the test of the null hypothesis is based on an F transformation of Wilks' lambda. With a p-value of 0.0000, the resulting Wilks' lambda value of 0.71937 is highly significant, indicating that mean test scores among the two groups are statistically different at significance levels exceeding 0.05. An examination of the absolute magnitude of the standardised discriminant function coefficients provides the relative importance of the variables.

Table 1 summarises the standardised canonical discriminant coefficients of the ten independent variables that met the significance criteria for inclusion and retention. These coefficients describe the relative contribution of each choice factor in determining the selection or non-selection of an ethnic group. The larger the standardised coefficient, the greater the contribution of the respective variable to the discrimination between groups. It is important to note that 13 of the choice factors did not meet the significance criteria for inclusion and retention in the stepwise discriminant function analysis.



**Table 1:** Standard canonical discriminant function coefficients and mean values

<b>Choice factors</b>	<b>Coefficients</b>
Multi-cultural / diversity	0.64328
Social life on campus (eg. RAG, music festivals, campus dances)	-0.60721
Quality of teaching	-0.24079
Financial assistance (eg. bursaries, loans)	0.22238
Friends went there	-0.22230
Flexible study mode (eg. evening classes, use of computers)	0.21647
Entry requirements	0.18717
On-campus housing / hostels	-0.18261
Language policy	-0.18179
Sports programmes	-0.17853

The findings from Table 1 indicate that the multi-cultural nature of an institution (0.64328) and a social life on campus (-0.60721) are the two most powerful discriminators among the 10 choice factors under consideration. For black students, diversity, financial assistance, flexible study mode and entry requirements were the most important factors. For white students, factors such as a social life on campus, quality of teaching, friends who attended the institution before, on-campus housing, language policy and sports programmes seemed to be more important.

Considering the magnitude of the standardised coefficients in Table 1, black students value an institution that addresses diversity, whereas white students place a very high value on a social life on campus. Overall, the choice factors relating to entry requirements, on-campus housing, language policy and sports programmes appear to make smaller contributions to discrimination between the two groups. An inspection of the mean discriminant scores (centroids) for each group reveals acceptable discrimination, as the mean values vary considerably (0.72067 for the black group and -0.54016 for the white group).

The final criterion for assessing the discrimination value is the percentage share of cases that would be classified correctly on the basis of the discrimination functions. Table 2 depicts the results in a classification matrix.

**Table 2:** Classification matrix

<b>Actual group</b>	<b>Predicted black group (%)</b>	<b>White group (%)</b>
Black (n=401)	71.1	28.9
White (n=535)	23.2	76.8

Results from Table 2 indicate that for the black group, 71.1 per cent of the variables were correctly classified and for whites, 76.8 per cent were correctly classified. The variables indicate a relatively high degree of successful prediction as to which ethnic group will select the 10 identified choice factors, and which will not, with these groups being accurately classified 74.4 per cent of the time.

Since it has been suggested that the classification accuracy achieved by discriminant analysis should be approximately 25 per cent greater than that obtained by chance (Malhotra 2004), the following calculations were made to determine whether the model in Table 2 has satisfactory predictive power. Firstly, the proportional chance criterion was calculated to evaluate model validity. This criterion scored a value of 51 per cent  $[(401/936)^2 + (535/936)^2]$ , while 74 per cent of cases were correctly classified with this function. This means that overall classification accuracy was higher than the proportional chance criterion value ( $74\% > 51\%$ ). The chance criterion was then used to evaluate whether the present function achieves a 25 per cent margin. Similarly, the percentage of cases correctly classified in the present model was higher than the chance criterion ( $74\% > 63\% = 51 \times 1.25$ ).

According to Hair et al. (2006), the maximum chance criterion should be used to evaluate the validity of the present function. This criterion was 57 per cent (535/936), given that it represents the percentage of cases accurately classified if all of the observations were included in higher occurrence probability groups. Again, the percentage of cases correctly classified in the present model was higher than the maximum chance criterion ( $74\% > 57\%$ ), and higher than the maximum chance criterion plus a 25 per cent margin ( $74\% > 71\% = 57 \times 1.25$ ).

## **MARKETING IMPLICATIONS FOR HIGHER EDUCATION INSTITUTIONS**

The findings of the research revealed that 10 of the 23 choice factors discriminate between black and white students. These differences are in line with the findings of other studies, which show differences between groups of dissimilar ethnic backgrounds (Cosser and Du Toit 2002; Hoyt and Brown 2003; Teranishi et al. 2004; Braddock, Hua and Dawkins 2007; Cross and Johnson 2008). The findings therefore suggest that higher education institutions could view black and white students as two market segments with different needs and preferences that require unique marketing strategies. Such tailor-made strategies will also guide South African higher education institutions in their attempts to address the National Plan on Higher Education's goal of achieving diversity in the higher education system.

Recruitment strategies and communication messages to black students should focus on the existence of a multi-cultural climate at the institution – as the results indicate diversity to be the most powerful discriminating factor between black and white students. This finding most probably supports comments by Higher Education of South Africa (HESA) that some institutions still have alienating institutional cultures (MacGregor 2009b). The term diversity typically represents a mix of characteristics that has traditionally been associated with race, gender and culture differences – anything that gives the student an identity (Cross and Johnson 2008). Diversity in the context of this research relates to whether an institution can be seen as multi-culturally diverse in its policies and actions and whether individuals (in this case black students who represent individuals from culturally or economically disadvantaged backgrounds) will feel that they have a rightful place at an institution

with a value system that promotes diversity. Since the findings show that black students select a higher education on the basis of their perceptions of the multicultural nature of the institution, higher education institutions should create a sense of acceptance and inclusion to enhance the recruitment of black students. It is also important that higher education institutions provide black students with opportunities to realise their potential and balance issues of institutional autonomy against the national imperatives of efficiency, equity and redress (Akoojee and Nkomo 2007).

Regarding the remainder of the discriminating factors, higher education administrators and/or planners could include the following factors in their recruitment strategies aimed at black students: availability of financial assistance, flexible study mode options and information on entry requirements. Many South African universities have adapted to the decrease in public funding by adjusting (increasing) their tuition fees. This is supported by findings from a study by Wangenge-Ouma and Cloete (2008) that identify tuition fees as one of the fastest growing sources of non-government revenue for higher education institutions in South Africa. Furthermore, as tuition fees are determined by the specific higher education institution, study programmes are differently priced across institutions. The expanded participation of black students in higher education may explain the need expressed for financial assistance by this group in this study, given that these students are generally from low income groups that are price sensitive. In South Africa, this need has been addressed by providing support for students from lower family deciles through the National Student Financial Aid Scheme (NSFAS) in the form of loans and bursaries (Wangenge-Ouma and Cloete 2008). However, while NSFAS supported about 120 000 of the 735 000 university students in 2007 (and 125 000 in 2008), loans and bursaries do not cover the full costs of study, leaving poor students struggling to meet living and other expenses (MacGregor 2007). On the positive side, R1.8 billion (US\$180 million) was allocated for loans and bursaries in 2008 and the Minister of Finance announced in his 2009 budget speech, that R330 million will be made available to the student financial aid scheme to enable more disadvantaged students to secure university bursaries and loans (MacGregor 2009a; MacGregor 2009b).

The findings also indicate that black students have expressed the need for changes in learning and teaching through the provision of flexible study modes. World-wide there seems to be a tendency to move away from the traditional (pen-and-paper) mode of knowledge production and application to a more interdisciplinary and practice-oriented approach that has greater relevance for the community (Zuber-Skerritt 2007). Flexible study modes, such as distance education and other technologies like online learning, will make the programmes offered by higher education institutions 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 the 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). Distance education also gives poorer students access to

higher education as fees for distance education are generally lower. Higher education institutions will have to adapt to the changing framework of learning and teaching if they want to recruit black students and be on a par with the transformational change in South African society. There is evidence that black students show poorer levels of adjustment to tertiary education compared to their white counterparts (Sennet et al. 2003; Akoojee and Nkomo 2007). 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).

A recruitment strategy for white students should focus mainly on providing opportunities for a social life on campus, but could also include information on quality teaching, on-campus accommodation, language policy and sports programmes. Findings from a previous study by Cross and Johnson (2008) also indicated that the needs of students are fragmented in terms of sociocultural activities, leisure and recreation activities and sports. It is clear from the results that the provision of a social programme, as part of the overall student life experience, is the strongest discriminator for white students. The findings 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. This, however, does not imply that HEIs should exclude certain basic institutional criteria in their marketing strategies such as excellence of academic programmes or the fact that providing top-class education to students remains a priority.

One of the other discriminating factors identified in this study is the need expressed by white students to select a higher education institution that offers quality teaching. It may be that one needs to view this result against concerns regarding a possible deterioration in the quality of education in terms of policies to increase minority access to higher education institutions (Garrun 2008; Odendaal and Deacon 2009). Some even believe that there is a 'possible flight of the white students' from universities to private higher education due to concerns about the quality of education (Makoe 2006). Although the *apartheid* education ideology has been officially abandoned, the quality of education is generally poor in black communities, with the quality and qualifications of 'non-white' teachers at schools and universities seen as lower than those prevailing in the white institutions. This may have contributed to the emphasis on quality teaching as a choice factor (Makoe 2006; Akoojee and Nkomo 2007). It has been said that around one in three of South Africa's higher education students are graduates from substandard schools and from low-income families (MacGregor 2009b; Witten 2009). Statistics show that seven out of 23 institutions met the success rate norm of 80 per cent in terms of students who passed their course, but that there were huge disparities between black and white students in terms of performance,

with black students making up less than 25 per cent of all graduations in regulation time (MacGregor 2009b). Thus, the increased access of previously disadvantaged students as a political imperative as outlined in the Education White Paper of 1997 (Akoojee and Nkomo 2007) may contribute to the strong focus on quality of teaching expressed by the white respondents. A solution to the needs expressed by the white students will be for South African higher education institutions to maintain or better their own quality standards, and even align them with globally acceptable quality assurance standards, or as a minimum, at least communicate the quality standards clearly to the concerned group.

In general, the findings of this study could help educational institutions and/or administrators to consider students' views on choice factors as relevant input for improved marketing and/or recruitment strategies. The findings may provide insights for higher education institutions in countries that also have a diverse student market consisting of different ethnic groups.

### **LIMITATIONS AND FUTURE RESEARCH RECOMMENDATIONS**

Several limitations of the study should be noted. The findings of this study cannot be generalised to the South African population, as the composition of the sample only included six universities in South Africa. Furthermore, respondents were selected with the aid of a non-probability convenience sample, and because of time and money constraints, the study was also limited to first-year Economic and Management Sciences students. Another limitation relates to the small sample sizes of Indian and coloured students, resulting in a study that was limited to two ethnic groups, namely black and white students. It is also worth noting that first-year students were selected as so-called substitutes because of an inability to gain permission for access to school learners, resulting in questions on institutional selection being answered after-the-fact. This may have influenced the results in that respondents who have experienced student life may have been influenced in their responses by having spent a few months at the higher education institution. Furthermore, the study did not identify students who were not accepted at their institution of choice and how this may have affected their choice criteria. Finally, it is important to recognise that the role that economics and socio-cultural background play in restricting choice in the South African context was not included in the study. Despite these limitations, the findings from this research should provide useful guidance to HEIs on the importance of choice factors in the institution selection process.

Future research on choice factors could focus on gaining a better understanding of the diverse nature of South African students when selecting an educational institution, similar to the American CIRP surveys. This could help higher education administrators and planners to address transformational issues and gain a better understanding of their students' needs so that they could deliver superior customer value through tailor-made communication during the stage of the decision-making process when prospective students are searching for information. Future studies may

also want to segment learners according to their needs and the importance they attach to certain choice factors. In general, the South African higher education institution environment is in need of more conceptual and empirical research on the similarities and/or differences between student groups and the importance they attach to choice factors in the higher education selection process. It is also suggested that more research be conducted on individual choice factor variables such as how the variable ‘multi-culturality/diversity’ is interpreted and understood by prospective students.

## CONCLUSION

Financial need, low success rates and the inability of the school system to produce enough academically prepared students undermine access and equity goals in post-apartheid South Africa and are some of the higher education sector’s major challenges (MacGregor 2009b). In response to these unique pressures, higher education administrators and planners must attempt to influence the selection process of students in an attempt to attract quality students. It is evident that students from different ethnic groups differ in the importance they attach to the choice factors. The findings provide pointers for higher education administrators and planners as to which choice factors discriminate best between black and white students during their higher education selection process. This understanding of group membership may enable higher education institutions to use their limited funds more efficiently when focusing on the factors relevant to a specific group. Supplying prospective students with relevant information will also enable them to make informed decisions and thus prevent cognitive dissonance which could result in low academic performance or high student turnover. It should be noted that transformational issues, especially that of diversity versus quality, are far more complex than adapting marketing strategies according to institutional selection criteria.

## ACKNOWLEDGEMENTS

The assistance with data analysis by Ms. Rina Owen, part-time statistician at the Faculty of Economic and Management Sciences at the University of Pretoria is hereby acknowledged.

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