

# Institutional Research and Student Recruitment or How do Institutions of Higher Education Know What Attracts Students to their Doors?

## Market Research Can Help

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### Abstract

*In Australia few institutions of higher education have investigated the institutional characteristics considered by students in their choice of a university. This research paper attempts to fill that gap. It summarises the results of a study of first-year undergraduates (n = 774) at the University of South Australia in 1994 into the factors associated with their choice of a post-secondary educational institution. A self administered survey instrument was used which asked respondents to rate their attitudes on a Likert scale on why they chose their selected university. The results show that students ranked the factors 'career preparation', 'specific academic program', 'distance from home', 'academic reputation', 'the quality of research program' and 'library resources' as having a strong influence in their choice of university. Unexpectedly, the role of parents was noted as being very low, although they were used as a source of information. The predominant source of information that the students used to find out about the university was the South Australian Tertiary Admissions Centre (SATAC) guide, then the high school or college, the students' peer group, open days and school counsellors.*

### Introduction

In Australia, university-choice, that is, the decision process that prospective university students go through in reaching a choice about which university to attend, has lately begun to attract researchers (Martin, 1994; Le Claire, 1988; Elsworth *et al*, 1982). Identification of the institutional factors that a potential student considers in choosing one university over another are of importance to university administrators who are concerned with the long-term effectiveness of their institutions enrolment practices. Research of this nature leads to questions about what kind of image the university has in the marketplace and what position it has relative to its competitors.

Research studies have shown that an institution of higher education needs to research its own image characteristics and fit them to characteristics that potential students are seeking. (Williams, 1986; Smith and Cauvsgill, 1984; Kotler and Murphy, 1981; Litten, 1980). A good fit will ultimately result in students who are satisfied with their institution and reach graduation. In the USA, research by Hossler (1987) and Williams (1986) has revealed that a weak, inaccurate choice-set increases the risk of the student choosing the wrong institution to attend, becoming dissatisfied with the institution, and subsequently withdrawing.

The primary objective of this exploratory study is to identify the factors that first year students at the University of South Australia considered in their choice of the university. A second objective was to identify the channels of communication they used to find out about the university. Choice factors which have been identified in a review of the literature as being important in university choice have guided this research.

## Review of Related Literature

The adaptation of private sector marketing practices to the higher education sector has been argued for some time. (Litten, 1982; Chapman, 1981; Kotler and Murphy, 1981). In applying the term 'marketing', Leister (1975) argues that educational institutions offer products which are marketed in the educational markets and that these institutions engage in marketing practices such as pricing, advertising, selling, and product design. Institutions have undertaken activities such as consumer surveys, forecasting, and planning which are part of market research. Litten (1982) defines marketing as a frame of mind in which questions are asked about the optimum relationship between an organisation and its environment, or parts of its environment, and action is taken that is informed by answers to these questions.

A broader definition of marketing is provided by Litten, Sullivan and Brodigan (1983) who define marketing as consisting of a powerful set of concepts, principles and practices designed to increase the effectiveness with which organisations relate to their public to achieve desired social responses. Brooker and Noble (1985) however, broadly define marketing as an exchange process between an institution and society. Within the concept of marketing are two important terms; institutional positioning and image analysis (O'Brien, 1987; Krampf and Heinlein, 1981; Litten, 1980; Leister, 1975). Institutional positioning is a competitive marketing strategy involving the creation of a special place for one's product in the minds of customers relative to other products in the same market. Image analysis or perceptual analysis follows from product position in investigating customers' perceptions of the product or service (O'Brien, 1987). Litten makes a strong point in claiming that the benefit of marketing for the institution is to help uncover misinformation or lack of information in the marketplace (Litten, 1981).

An alternative approach to the investigation of university choice is outlined by Chapman (1981) who, among others, has developed a model of student college choice. Chapman expresses some concern with the lack of theory to guide investigations of specific college choice. In his model the focus is the prospective student and the student's decision process rather than the higher education institution and its associated activities, although these are necessarily intertwined. He presents a general conceptual model of student college choice that specifies the important variable sets and their inter-relationships as a means of guiding future inquiries and current enrolment practices. This model takes into account the background and characteristics of the student, the student's family, and the characteristics of his/her college, which he identifies as cost, location, and availability of the program. The model also identifies significant persons who can influence students, namely, the school counsellor, teachers, friends, and parents. Lastly the model identifies efforts by the college to communicate with prospective students. Support of Chapman's model is provided by Hossler and Stage (1991), Le Claire (1988), Litten, Sullivan and Brodigan (1983), Murphy (1981), and Dembowski (1980).

The concept of strategic marketing in the higher education sector has been adopted more slowly in Australia, although the recent creation of the unified national system has led many 'new' universities to pursue corporate planning. However, similar messages were being sent to the Commonwealth from other policy advisers (Gamaut, 1988). The application of private sector practices in the higher education sector is not without its critics, some argue that education should not be viewed as a commodity (Marginsen, 1990). In Australia there are fewer single institutional studies of marketing principles being applied to universities, but see Martin (1994) and Watkins (1979). However, one large multi-institutional study has provided information about the transition process from high school to university. Elsworth and others (1982) studied the transition process from Victorian high schools to the higher education sector.

Their study of 15,042 applicants to the Victorian Tertiary Admissions Centre developed a predictive model which identified the high school certificate score, school type, socio-economic status, and ethnicity, as predictors of whether students accepted offers from higher educational institutions.

The research literature relating to the search process for information about post-secondary options has also received attention from researchers in the USA and Australia. The Carnegie Foundation for the Advancement of Teaching in the USA found that parents influenced college choice more than did friends, counsellors or teachers (Boyer, 1985). These results have been confirmed by other studies in the USA (Astin, 1992; Mathay, 1989; Litten, Sullivan and Brodigan, 1983; Chapman, 1981). In an Australian study of

Year 10-12 students knowledge of, and aspirations for, post-compulsory education and training, DEET found that the following sources of information were identified: all school sources 12%, university sources 37%, Parents, Relatives and Family 22%, Books, Handbooks Pamphlets 21%, Friends 19% and Media Sources/Advertisements 4% (DEET, 1994, P. 15).

Over a number of studies, the factors associated with university choice have been numerous and studies have not always shown consistent findings. In the American studies the factors can be grouped into clusters around: academic reputation, career preparation, location of college, college size, costs of tuition and specific academic programs. Australian studies have shown that career preparation, academic reputation, university location, a student's socio-economic status, school type, and academic merit have been identified as factors influencing university choice. In respect to channels of communication, the high school, school counsellor and university admission guides have been identified as the predominant sources of information.

## Methodology

Research was undertaken at all six campuses of the University of South Australia. Data were gained from a self-administered questionnaire of enrolled first year, first-time students. The questionnaire was developed after an exhaustive literature review and then reviewed with colleagues. A control question identified whether students were repeating the subject or had transferred from another university and these responses were discarded. One question related to the influence of various external factors and the influence of important persons on students' university choice. The respondents answered the questions on a five-point Likert-type scale rating the perceived importance of each item (1 = not important to 5 = very important).

Trialling of the instrument was carried out in December 1993 with a group of 30 students, after which some questions were reworded to make meanings clearer. The reported time to complete the questionnaire was 7-8 minutes. The survey instrument was given at the beginning of each class by the researcher or lecturer over an eight month period in Semester 1 and 2 during April - October 1994. Questionnaires were collected at the end of each class so as to ensure a high rate of return. Convenience sampling was undertaken over six campuses and across 15 programs. Some element of convenience in sampling occurred in the choice of large classes, ( $n > 100$ ) although smaller classes were surveyed at some campuses. Frequency distributions, averages, and chi-squared tests were used to analyse the data. This study is limited by its single institutional focus and the retrospective nature of research. The relative youth of a number of the respondents may also influence the results.

## Data Analysis/Findings

There were 774 responses, which represents 14% of first year enrolled students excluding bridging, post-graduate and distance education (flexible learning) students. A preliminary data analysis of the 774 responses showed a median age of 18, and 54% of the respondents were female. This gender distribution is not significantly different to the total profile of students at the University of South Australia. Table 1 below reveals that the respondent students were enrolled in the following courses:

Table 1

<b>Enrolments by course (n = 774)</b>	<b>% of sample</b>	<b>% female</b>
Accountancy, Marketing, Management	29	50
Nursing Studies	15	95
Engineering, Applied Science, Computing	23	30
Social Work, Counselling	6	70
Education, Teaching	3	50
Other	9	30
Social Studies	15	60

Table 2 shows that the students were studying in the educational institutions listed in the previous year of the study.

Table 2

<b>Education of participants in previous year (n = 774)</b>	<b>%</b>
High School, Private College	56
TAFE, Vocational Institute	6
Bridging course of University	3
Adult re-entry college	4
Did not study in previous year	19
Other	11

### *Factors Considered Important in University Choice*

The respondents' answers to the question relating to factors of university choice are outlined in table 3.

Table 3

<b>Important Factors in University Choice (n = 774)</b>	<b>Rank</b>	<b>Mean</b>	<b>SD</b>
Career preparation	1	4.30	1.03
Specific academic program,	2	3.70	1.22
Academic reputation	3	3.44	1.23
Distance from home	4	3.23	1.44
Quality of research program	5	2.78	1.23
Library resources	6	2.75	1.23
Social life	7	2.60	1.29
Costs	8	2.51	1.47
Consulting profile of university	9	2.49	1.15
Student support programs	10	2.40	1.17
Size of campus	11	2.31	1.22
Access to accommodation	12	2.16	1.48
Parents' or friends' preference	13	1.93	1.13

A principal component analysis with varimax rotation showed that there were associations between 'library resources' and 'quality of the research program'; 'parents or friends preference'; and 'size of campus'; 'social life' and 'distance from home'; and, 'academic reputation' and 'specific academic program'. A two-t test showed that there were no differences between males and females to this question, except for 'academic reputation' - where females placed a higher importance on the factor and 'access to accommodation' - where females also placed a higher emphasis on the factor. Males responded differently to females on the factor 'social life', placing more emphasis on this response.

In the above table the means of the Likert-Scale responses provide a basis for the ranking for the factors. The standard deviation (SD) shows the degree of variability around the mean. The approach adopted here, following Cook and Zalloco (1983) was to find those attributes that were perceived as being either strongly or weakly associated with university choice. This was accomplished by first finding the mean for all the scores. Those attributes with mean scores above the median were considered to be closely associated with the university, while those attributes with a median score below the median were considered only weakly associated with university choice. Using this decision criterion, the following factors are closely associated with studying at the University of South Australia:

<b>Factor</b>	<b>Rank</b>
Career Preparation	1
Specific Academic Program	2
Academic Reputation	3
Distance from Home	4
Library Resources	5
The Quality of Research Program	6

The following factors were weakly associated with university choice; social life, costs, consulting profile, student support programs, size of campus, access to accommodation, and parents' and friends' preference.

## Predominant Sources of Information

The predominant sources of information that students in this study used to find out about the university are listed in table 4 below. In the survey instrument respondents could tick more than one answer.

Table 4

Sources of information identified by students (n = 777)	% responding
SATAC Guide	81
High School or College	50
Other university students or friends	48
University Open Day	22
School Counsellor	15
Parents	8
Other	6
Visit by University Staff to School	4
Press or TV Advertisement	4
Education Exhibition or Austrade Exhibition	1

In the list above, only 50 percent of respondents mentioned the high school while 15% mentioned the high school counsellor. Notice that the universities admission guide (the SATAC guide) was mentioned by a majority of respondents. A chi-square test on these frequencies showed significant differences between males and female responses for the 'Other university students and friends' and 'University Open Day'. In all other dimensions there were no differences between male and female responses.

In a separate question 53% reported that they had not attended an open day, 30% had gone to one open day, 11% had gone to two open days, while 7% had gone to more than two open days. Those who attended open days were predominantly from high school and more females attended open days than did males.

## Discussion

One of the aims of this study was to determine the factors that students considered in their choice of university. The data show that students ranked 'career preparation' first before 'specific academic program', 'academic reputation' and the 'distance of the university from their home'. The order of these results is unlike that found in Astin's American study (1992) which highlighted 'academic reputation' before 'career preparation'. The results of this study confirm the results achieved by the author in an earlier study limited to a single campus of the university (Martin, 1994). This ordering of factors probably reflects the nature of the institution under review and its unique position statement *Educating Professionals - Applying Knowledge - Serving the Community*. It may also reflect the students' rather instrumental view of higher education, that is, as providing an entrance path into a professional career. It would be of interest to compare the results of this study with its focus on the University of South Australia, a post-Dawkins university, with that of a more traditional university in South Australia.

Australian university students are characterised by their propensity to study in universities within the major cities in which they live. The closeness of a university or university campus to the students' home usually sets the context for the decision of which university to attend. In this study, the factor 'distance from home' is ranked at number three position which largely reflects the predominance of suburban based students. For students at the regional campus at Whyalla, however, the ranking for this factor moves to number two. For these rural students two other factors also became more important: 'access to accommodation' and 'costs'. In this study, the factor of costs is ranked low at eight, unlike the American studies, where costs are ranked higher in students' consideration. At present Australian students pay only 20% of the full cost of their course. It will be interesting to see if this relative low ranking changes in the future with any increases proposed for costs in the level of HECS payments.

In a departure from expected results, the role of parents or friends was rated very low. Indeed it was ranked last in the list of 13 factors. This is unlike studies in the United States which show that parents play a very important role in encouraging their children into a specific college (Astin, 1992, Boyer 1986). In a following question, only 61 students identified their parents as a source of information, compared to 117 responses for the school counsellor. This result may be explained in part by the fact that only 56% of the first year student cohort came from a high school or private college. What seems clear is that the very diverse nature of the student population of the university is reflected in the many different means used to gain information about the university. However, the respondents showed little concern for more pragmatic concerns such as the student support programs and the size of the campus, which again is unlike American studies (Astin, 1992; Webb, 1987; Chapman, 1981).

In this study, the respondents identified the South Australian Tertiary Admissions Centre guide as the most predominant source of information in their choice of universities. The guide is distributed to all secondary schools in South Australia in August-September of each year in preparation for the application deadline, usually near the end of September. Since completion of the SATAC application form is a requirement for acceptance to university, it is to be expected that it should rank so highly as an information source. However, these results are unlike that of the DEET study (1994) which found a negligible influence for admissions guides, and more influence for the careers advisor or careers class. The high school and college still remain the second highest noted source of information for the respondents. In this study the respondents have been able to differentiate between the influence of the high school (or college) and the role of the school counsellor. Also the peer group remains a strong influence. The implication of this result for the university is that it should continue targeting high schools and colleges within its catchment area as part of its broad promotional strategies.

While this study is limited by its single institutional focus, the results support other Australian and overseas studies that prospective undergraduate students do consider a range of attributes which are associated with the selection of an appropriate university. In its Corporate Plan (1993 - 1998) the university has determined that a major strategy will be to internationalise its teaching, research and consulting services. Through market research such as this, the University can discover its own sets of strengths and weaknesses as perceived by its current students. It can then position itself to devise appropriate strategies for all its potential students both in Australia and overseas.

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