

DOCUMENT RESUME

ED 397 744

HE 029 344

AUTHOR Martin, Chris
 TITLE Institutional Research and Student Recruitment or How Do Institutions of Higher Education Know What Attracts Students to Their Doors? Market Research Can Help. AIR 1996 Annual Forum Paper.
 PUB DATE May 96
 NOTE 15p.; Paper presented at the Annual Forum of the Association for Institutional Research (36th, Albuquerque, New Mexico, May 5-8, 1996).
 PUB TYPE Reports - Descriptive (141) -- Speeches/Conference Papers (150)
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Academic Aspiration; College Bound Students; *College Choice; College Freshmen; College Libraries; Foreign Countries; Higher Education; High Schools; *Institutional Characteristics; *Institutional Research; Marketing; Parent Role; Peer Influence; Questionnaires; School Counselors; *Student Attitudes; Student Surveys
 IDENTIFIERS *AIR Forum; Australia; Market Research; *University of South Australia

ABSTRACT

This study investigated the institutional characteristics considered by 774 Australian first-year students attending the University of South Australia in their choice of this university. A self-administered survey instrument asked respondents to rate their attitudes on a Likert scale regarding their reasons for selecting this university. Results indicated that students ranked career preparation, academic program, distance from home, academic reputation, the quality of the school's research program, and library resources as strongly affecting their choice. The role of parents was not rated highly, although students used them as a source of information. The primary source of information that they used to find out about the university was the South Australian Tertiary Admissions Center guide. (Contains 29 references.) (Author/CK)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

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

Market Research Can Help

AE 029 344

Chris Martin
Lecturer in Business (Management)
University of South Australia
Nicolson Avenue, Whyalla SA

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it

Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

AIR

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)



for Management Research, Policy Analysis, and Planning

This paper was presented at the Thirty-Sixth Annual Forum of the Association for Institutional Research held in Albuquerque, New Mexico, May 5-8, 1996. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum Papers.

Jean Endo
Editor
AIR Forum Publications

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. The writer argues that data generated from this form of market research can be used as the basis for the university's promotional activities in the international arena.

BEST COPY AVAILABLE

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 institution's enrolment practices. Research of this nature leads to questions about what kind of image the university has in the market place 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 Causvgill, 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 U.S.A., 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 have 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 customer's 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 longitudinal 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 (Garnaut, 1988). The application of private sector practices into the higher education sector has also attracted its detractors, who 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 studies 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 to 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 U.S.A. and Australia. The Carnegie Foundation for the Advancement of Teaching in the U.S.A. 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 Brodigen, 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/Ad 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 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 8 month period in Semester 1 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 programmes. 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 4% 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 Enrolments by Course (n = 774)	% of Sample	% Female
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	<u>15</u>	60
	100	

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

Table 2 Education of Participants in Previous Year (n = 774)	%
High School/Private College	56
TAFE/Vocational Institute	6
Bridging Course of University	3
Adult Re-entry College	4
I did not study last year	19
Other	<u>11</u>
	<u>100</u> * (Rounding)

BEST COPY AVAILABLE

Factors Considered Important in University Choice

The Respondents' answers to the question relating to factors of University Choice are outlined in table 3 below.

Table 3 The List of Important Factors in University Choice (n=774)

	Rank	Mean	S.D.
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:

Factor	Rank
Career Preparation	1
Specific Academic Program	2
Academic Reputation	3
Distance from Home	4
Library Resources	5
The Quality of Research Programme	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. The frequency for each source provides the ranking order for the list and this is shown as the percent responding to the question. In the survey instrument respondents could tick more than one answer.

Table 4 Sources of Information identified by Students

(n = 777)	Rank	% Responding
SATAC Guide	1	81
High School/College	2	50
Other university students'/friends	3	48
University Open Day	4	22
School Counsellor	5	15
Parents	6	8
Other	7	6
Visit by University Staff to School	8	4
Press/TV Advertisement	9	4
Education Exhibition/Austrade Exhibition	10	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 prospective 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 of university campus from 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 ranked 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, but significantly more 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, and rank them accordingly. 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 in its catchment area in 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 1993 Corporate Plan the university has determined that a major strategy will be to internationalise its teaching, research, and consulting services. Through Market research such as this, it can discover its own sets of strengths and weaknesses as perceived by its current students. It can then position itself to devise appropriate for all its potential students, both in Australia and overseas.

Word Count: 3943

REFERENCES

- Astin, A.W. (1992). This Year's College Freshmen: Attitudes and Characteristics. Chronicle of Higher Education, Jan.22, pp.A30-33.
- Boyer, F. (1986). Smarting the Transition from School to College. Phi Delta Kappan, Dec., pp. 283-287
- Brooker, G. and Noble, M. (1985). The Marketing of Higher Education. College and University, Vol.60, No.3, pp.191-201.
- Chapman, D.W. (1981). A Model of Student College Choice. Journal of Higher Education, Vol.52, No.5, pp.490-505.
- Cook, P. and Zallocco, R.L. (1983). Predicting University Preference and Attendance: Applied Marketing in Higher Education Administration. Research in Higher Education, Vol.19, No.2, pp.197-209.
- Department of Employment, Education and Training (1994). Young People's Attitudes to Post-Compulsory Education and Training. AGPS, Canberra.
- Dawkins, J. (1987). Higher Education : A policy discussion paper. AGPS Canberra.
- Dembowski, F.L. (1980). A Model for Predicting Student College Choice. College and University, Vol.55, No.2, pp.103-112.
- Elsworth, G., Day, N., Hurworth, R. and Andrews J. (1981). From School to Tertiary Study : Transition to College and University in Victoria. ACER, Hawthorne.
- Garnaut, R. (1989). Australia and its North East Neighbours. Canberra, A.G.P.S.
- Hossler, D. (1987). Enrollment Management : Institutional Applications. College and University, Winter, Vol.62, No.2, pp.106-116.
- Hossler, D. and Gallagher, K.S. (1987). Studying Student College Choice : A Three-Phase Model and the Implications for Policymakers. College and University, Vol.62, No.3, pp.207-221.
- Kotler, P. and Murphy, P. (1981). Strategic Planning for Higher Education, Journal of Higher Education, 52, pp.470-89.

- Krampf, R. and Heinlein, A.C. (1987). Developing Marketing Strategies in Higher Education Through Target Market Research. Decision Sciences, Vol.12, pp.175-192.
- Le Claire (1988). Higher Education Choice in Australia : Processes and Impediments. Higher Education, Vol.17, pp.333-349.
- Leister, D.V. (1975). 'Identifying Clientele: Applied Metamarketing in Higher Education Administrations'. Journal of Higher Education, Vol.51, No.1, pp.40-59.
- Litten, (1980). Marketing Higher Education : Benefits and Risks for the American Academic System. Journal of Higher Education, Vol.51, No.1, pp.40-59.
- Litten, L.H. (1982). Different Strokes in the Applicant Pool : Some Refinements in a Model of Student College Choice. Journal of Higher Education, Vol.53, No.4, pp.383-402.
- Litten, L.H., Sullivan, D. and Brodigen, D.L. (1983). Applying Market Research in College Admissions. New York, College Entrance Examination Board.
- Mathay, E. (1989). A Critical Study of the College Selection Process. School Counsellor, May, Vol.36, pp.359-370.
- Martin, C.D. (1994). How do Rural Students Choose a Campus : A Case Study of the University of South Australia; Whyalla Campus. Rural Society, Vol.5 No.2, pp.28-36.
- Marginson, S. (1990). The Culture of the White Paper. Discourse, Vol.10, No.2, pp.23-35.
- Murphy, P. (1981). Consumer Buying Roles in College Choice. College and University, 57, pp.141-150.
- O'Brien, P. (1987). The Case for Higher Education Marketing : Scouting the higher ground. Journal of Tertiary Educational Administration, Vol.9, No.2, pp.145-154.
- Smith, L.R. and Cavusgil, S.T. (1984). Marketing Planning for Colleges and Universities. Long Range Planning, Vol.17, No.6, pp.104-117.
- University of South Australia.(1993). Corporate Plan 1993 - 1998.
- Webb, M.W. (1985). College Choice Factors of High School Juniors Selecting Engineering as an Academic Major. College and University, Summer pp.323-331.

Watkins, D. (1978). A Note on Student Satisfaction with University. A Case Study. Education Research and Perspectives. Vol.5, No.2, pp.45-53.

Williams, T.E. (1986). Optimising Student Institution Fit. New Directions for Higher Education. No.53, pp.35-46.