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Identifying College Choice Factors to Successfully Market Your Institution

Colleges and universities compete with each other for resources, prestige, and students. From a marketing perspective, an institution needs Abstract to (1) establish its image or market position, (2) identify the competition, (3) determine the needs of various market segments, and (4) develop a marketing plan for promoting its educational services (Paulsen 1990). This research draws upon this marketing framework to study the factors that influence student college choice.

he following discussion will proceed first with a literature review on market analyses, market segmentation, and the identification of choice factors important to students. This will be followed by the methods and findings on one institution's image and market position, its competition, and market segments. The analysis concludes with a discussion of the results and how the information is relevant to practitioners. This research contributes to the college choice literature by identifying several factors that are important to consider in college choice surveys and, therefore, expands upon the work of Paulsen (1990).

Market Analysis

Clark and Hossler (1990) explain how institutions position themselves in the educational marketplace. For example, a college can position itself "as an elite college..., a low-cost pathway to upward mobility..., [or] church-related school" (Clark and Hossler 1990, p. 78). According to Kotler (1982) an institution markets itself by "designing the organization's offerings in terms of the target markets' needs and desires, and... using effective pricing, communication, and distribution to inform, motivate, and service the markets" (p. 6).

Colleges and universities use various means to market their services. Although the junior year is typically when students "become familiar with the characteristics of different colleges and universities," students may begin receiving information in their sophomore year of high school (Bradshaw, Espinoza, and Hausman 2001; Chapman 1981, p. 63). Institutions may use the American College Testing Program Student Profile (ACT Profile) information to contact high school students as well as parents when the student lists the institution on his or her choice set. Staff may participate in college visit days with students at local high schools, or contact high school counselors or employers in the area. In addition, the college Web site has become one of the most helpful or influential sources of information (Seymour 2000); student visits to campus have been shown to be an influential factor in student college choice (Jonas and Popovics 1990; Kellaris and Kellaris 1988); and receipt of the semester course schedule in the mail has proven to be highly effective (Lucas 1984). Colleges and universities also inform students via college guides, brochures, and college catalogues sent in the mail (Johnson, Stewart, and Eberly 1991; Jonas and Popovics 1990; Stoyanoff 1980). Other possibilities involve activities or events on campus, literature at work or in the high schools, advertisements in the newspaper, on radio and television, student telemarketing, scholarship interviews, early registration programs, and use of alumni networks (Abrahamson and Hossler 1990; Lucas 1984). The institution may also contact students who applied but failed to enroll at the institution, using data from admission applications.

To effectively publicize services, an institution must first understand its student markets. An understanding of student markets often involves survey research. Institutions may develop their own in-house survey or use one of the standardized instruments available such as the Admitted Student Questionnaire (ASQ) or Cooperative Institutional Research Program Freshmen Survey (CIRP). The Admitted Student Questionnaire Plus (ASQ Plus) also allows institutions to obtain student ratings on competing institutions. The ACT Profile and the College Board's Student Descriptive Questionnaire (SDQ) include information on college choice; however, the number of questions regarding institutional characteristics is more limited as compared with the ASQ or CIRP. Students do not rate the importance of college characteristics on the SDQ, whereas this rating comprises the basic design of other instruments. The National Center for Education Statistics (NCBS), in its National Educational

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Longitudinal Study (NELS), also requests information on college choice factors. Matthews and Hadley (1993) developed the Student Perceptions of Institutional Quality (SPIQ) instrument to compare state institutions on several measures of quality.

The typical information sought from surveys not only includes student perceptions about colleges and universities, but also data on high school preparation, student characteristics, majors, interests, financial aid offers, institutions where students plan to attend, the effectiveness of recruiting methods, sources of information used by students, and the influence of people in the choice process, etc. Researchers may not only ask how important various factors are in a student's choice of an institution, but also the extent to which a specific institution is believed to have these attributes—the expectancy value model (Braxton 1990; Cook and Zallocco 1983; Muffo and Whipple 1982). Other researchers have used the ideal point preference model to measure a student's concept of an "ideal college" and then compare institutions against it (Braxton 1990; Coombs 1964; Kuntz 1987). When the same student rates two competing institutions, the researcher can calculate a difference score. This score is valuable in prediction and is used to display a balance sheet on competing institutions (Litten 1979; Welki and Navratil 1987). The draw rate is a descriptive statistic showing whether a competitor is outdrawing another institution or attracting more students who have both institutions in their choice set (Lay and Maguire 1980; Lolli and Scannell 1983).

Advanced statistics provide further understanding of the data. Researchers may employ regression, discriminant, probit, and logit analysis to predict matriculation at the institution (Maguire and Lay 1981; Perry and Rumpf 1984; Smith and Matthews 1990; Trusheim, Crouse, and Middaugh 1990; Welki and Navratil 1987). Factor analysis (which combines several measures into a construct) is used to identify market segments or to combine several related questions into one factor for prediction (Absher and Crawford 1996; Douglas, Powers, and Choroszy 1983; Maguire and Lay 1981). Multi-dimensional scaling produces a visual map of institutions, which shows the similarity or dissimilarity among competing institutions (Braxton 1990; Coombs 1964; Kuntz 1987; Leister 1975; Litten 1979). Regardless of the methods, the ultimate goal is to gain a clear picture of an institution's image and its position relative to competitors.

Market Segmentation

The purpose of segmentation is to identify differences in the attitudes and perceptions of students in each distinct group to either emphasize those aspects most attractive to the particular segment, or to "adjust the characteristics of the college" in an effort to make the institution more appealing (Paulsen 1990, p. vi). Kotler (1982) identifies several types of segmentation: demographic, geographic, psychographic, and behavioral. The first two involve creating subgroups based on location or student characteristics. "Attitudes and lifestyles" distinguish students in psychographic segments (Braxton 1990, p. 88). "Behavioral segmentation entails the division of markets into groups based on their knowledge, attitude, or use of a particular product" (Braxton 1990, p. 88).

Several studies have been conducted that differentiate among student groups, with demographic segmentation being the most common. For example, research shows that Black and/or Hispanic students are more responsive to grants and scholarships and are more cost conscious in their college selection than White students (Cibik 1982; Johnson, Stewart, and Eberly 1991; Lewis and Morrison 1975, Litten 1982; Smith and Matthews 1990; St. John and Noell 1989). Cibik (1982) reports that, "Black, Mexican American, and American Indian groups all indicated that the 'percentage and kinds of minority students at the college'was more important to them" (p. 101). American Indian students rated admission requirements higher in importance than did other groups. In a study by Hearn (1984), Blacks "were less likely to attend...more selective institutions" (p. 25). He also found a substantial difference in income levels between Black and White students.

Summarizing several studies, Paulsen (1990) reports that academically gifted students are more likely to attend highly selective and out-of-state institutions. The choice factors more important to these students include academic reputation, quality of the student body, availability of honors programs, and scholarship awards (Baksh and Hoyt 2001; Bradshaw, Espinoza, and Hausman 2001; Keller and McKewon 1984; Litten 1982; Litten and Brodigan 1982; Litten, Sullivan, and Brodigan 1983; Maryland Commission 1996). Paulsen (1990) also states that students from low- and middle-income groups are less likely to attend selective and more costly institutions as compared with high-income students.

Research also examines student preferences by age, sex, and religious affiliation. For older and part-time working adults, location and vocational training appear to be more important (Amarillo College 1980). Daigle (1982) finds that older, non-traditional students "are attracted primarily by practical concerns (program availability...convenience, close to home, and work)" (p. 15). However, these studies conflict regarding the importance of cost to older students. Johnson, Stewart, and Eberly (1991) and Lewis and Morrison (1975) cite several choice factors by gender, but a clear pattern does not seem to emerge from the results. Litten and Brodigan (1982) explore religious differences, but the results may be primarily influenced by the economic status of the groups (Paulsen 1990).

Psychographic and behavioral segmentation appear to be less common. Gilmour, Spiro, and Dolich (1981) and Litten (1982) evaluated college choice by grouping students according to parental education level and attendance at private high schools. Hossler, Braxton, and Coopersmith (1989) evaluated students based on their social class. However, demographic segmentation by income level achieved similar findings. Absher and Crawford (1996) used factor analysis to group students as practicalminded, advice seekers, campus magnets, good-timers, and warm friendlies. These students had characteristics that led them to select particular institutions.

Reviewing additional studies using geographic segmentation, Paulsen (1990) reports that students living outside of the local market area are more likely to attend when they are male, the parents have higher levels of education and exhibit higher income levels, and students have higher educational aspirations

and academic ability. Hodges and Barbuto (2002) report that a campus visit may be more of a factor in the college choice decision of rural students than for urban students.

Identifying College Choice Factors

Although the literature review provided an understanding of the marketing framework and analytical methods, it raised concerns about the limited number of choice factors used by many institutions when surveying students. The authors found 27 studies with less than ten choice factors. This was contrasted against studies with 20 or more choice factors (Absher and Crawford 1996; Cibik 1982; Douglas, Powers, and Choroszy 1983; Jonas and Popovics 1990; Maryland Commission 1996; Metlay et al. 1974; Tatham 1979).

Standardized instruments have a limited set of factors. The ACT Profile has six factors with an "other" category. The ASQ Plus details thirteen choice factors on college characteristics with the possibility of entering other individualized factors. The NELS has fifteen choice factors (excluding parents' prior attendance and counting questions centering on location once). The CIRP survey lists seventeen choice factors for rating institutional characteristics (excluding those focusing on the influence of relatives, teachers, high school counselors, private counselors, and the Web site). The SPIQ has eighteen factors (counting measures for quality of faculty once).

A more comprehensive set of factors could result in improved prediction of student college choice and a more accurate picture of those institutional characteristics students believe are important in the college selection process. Therefore, the choice factors used by institutions for in-house college choice surveys were identified in the literature.

The literature review resulted in a total of 22 studies (including the current study) using ten or more factors (Table 1). Using these studies, the number of times a factor placed in the number one spot, top three, top five and top ten was summarized. The factors were then sorted in a spreadsheet so that the factors appearing most frequently in the number one spot were listed first, followed by those factors appearing most frequently in the top three, top five, and top ten. Only choice factors from studies with fifteen or more factors were listed in the top ten category. The studies varied in terms of the scale that students used to rate institutions; thus, the final ranking was used to summarize the findings, regardless of the underlying scale. Standard categories were inductively developed from the alternative ways to ask questions. The studies used different survey methods, sampling methods, and sample sizes, and were conducted on different student populations. The results represent the ratings of 30,614 students in eighteen states.

Nine factors placed in the number one category across several studies (the most frequent listed first): academic reputation, location, quality of instruction, availability of programs, quality of faculty, costs, reputable program, financial aid, and job outcomes. The next twelve most important factors across the 22 studies were: variety of courses offered, size of the institution, surrounding community, availability of graduate programs, student employment opportunities, quality of social life, class size,

Table 1: College Choice Studies Summary								
Author(s), Year	Factors1	Institution	Location	Respondents	Survey Method	Sampling Method	Sam pling ²	
Absher and Crawford, 1996	23	Community colleges	Alabama	College students	In-class	Random	675, NR	
Alaska Commission, 1983	13	High schools	Alaska	HS seniors	_	Population	3,505, 60%	
Amarillo College, 1980	11	Community college	Texas	College students	Mailed	Population	3,013, 76%	
Brookdale Community College, 1983	12	High schools	New Jersey	HS seniors	In-class	Random	71 2, NR	
Canale, Britt, and Donahue 1996	11	Local high schools	New York	HS juniors/seniors	_	_	543, NR	
Cibik, 1982	30	High schools	Arizona	HS students	HS visits	Random	708, NR	
Cook and Zallocco, 1983	15	Colleges	Ohio	Freshmen	_	_	241, NR	
Cunningham and Fickes, 2000	18	State college	Pennsylvania	Non-attendees	Mailed	Population	851, NR	
Current Study, 2002	24	State college	Utah	New freshmen	Phone mailed	Random	494, 45%	
Daigle, 1982	16	Colleges	California	College students	In-class	Random	8,564, NR	
Douglas, Powers and Choroszy, 1983	28	High schools	Ar izo na	Gifted HS seniors	Mailed	Population	165, 52%	
Johnson, Stewart and Eberly, 1991	13	University	Midwest	Freshmen	Orientation	Population	3,708, 55%	
Jonas and Popovics, 1990	21	Independent college	Wisconsin	Freshmen	Mailed	Population	100, 43%	
Lucas, 1984	18	Community college	Illinois	College students	Mailed	Random	44 0, 88 %	
MacKenzie, 1985	15	University	California	Admitted students	Phone	Random	726, 7 8 %	
Maryland Commission, 1996	21	High schools	Maryland	HS seniors	Mailed	Population	366, 61%	
McCullagh, 1989	17	University	Iowa	Undergraduates	In-class		205, NR	
McMaster, 1984	14	Community college	New Jersey	Non-attendees	Mailed	Population	228, 22%	
Metlay <i>et al.</i> , 1974	32	University	New York	Freshmen/ transfers		Population	1,211, 29%	
Smith and Matthews, 1990	14	University	Southwest	Freshmen	Phone	Random	5 44, 71%	
Tatham, 1979	20	Local high schools	Kansas	HS juniors & seniors			2,000, NR	
Terkla and Wright, 1986	12	University	Massachusetts	Admitted students	Mailed	Population	1,615, 55%	

¹ Only factors measuring institutional characteristics are included in the total.

 $^{^2}$ The sample size is listed first followed by the response rate, NR = response rate not reported.

admission to graduate school, extracurricular programs, friendly/ personal service, affiliation (with another reputable institution), admission requirements, and attractiveness of campus facilities.

Several of these choice factors are not included on standardized instruments discussed above. Factors included on the standardized instruments also never made the top ten ranking for studies in the review. Due to these results, the researchers believe that more work is needed to fully develop a standardized instrument for studying college choice. The authors also believe that in-house instruments provide useful information that supplements national data sets.

Methods

The Office of Institutional Research (OIR) at Utah Valley State College (uvsc) (a large, predominantly White, open-admissions four-year institution) developed its own in-house instrument. The process entailed collecting surveys from other institutions, developing a draft instrument, and reviewing it with the student recruitment officers on campus. The OIR did not include the following relevant choice factors, which were found to be important in other studies: job outcomes, surrounding community, admission to graduate school, friendly/personal service. Despite failing to include these variables, the OIR study ranks among research considering the most college choice variables (twenty or more).

ACT provided data on all high school students who completed the ACT exam and had UVSC in their choice set during the 1999–2001 school years. The data were joined with information from the National Student Loan Clearinghouse (NSLC) [now known as the National Student Clearinghouse], the Utah State Board of Regents (USBR), and a private university in the area (BYU) to identify the college that students selected for their college career. These data were also joined with other information available from the uvsc Student Information System (SIS).

The final sample for the survey was taken from all 2001 Utah high school graduates who had uvsc in their choice set and attended college in the state. Of the 1,098 randomly selected prospective students, the OIR obtained responses from 494 students (45 percent overall response rate). The OIR selected four samples using stratified random sampling by geographic area with the following results: (1) live outside Utah County, matriculants (N = 148, response rate 44 percent), (2) live outside Utah County, non-matriculants (N = III , response rate 38 percent (3) live in Utah County, matriculants, (N = 129, response rate 52 percent, and (4) live in Utah County, non-matriculants (N = 106, response rate 48 percent). The goal was to achieve at least 100 respondents in "each major subgroup and 20 to 50 in each minor subgroup" as recommended by Sudman (1976) and Borg and Gall (1989, p. 233). The OIR gave non-matriculants a free Blockbuster movie pass to encourage their response to the mailed survey and follow-up phone calls.

The analysis utilized market segmentation. Students were grouped by geographic location, gender, degree aspirations (I = bachelors or higher, O = other), and academic ability using composite ACT scores: (1) ≤ 19 Low Ability, (2) 20-23 Average Ability, and (3) ≥ 24 High Ability. Low-, middle-, and highincome students were defined as students whose parental income was: (1) \$36,000 or less, (2) \$36,000 to \$60,000, and (3)

\$60,000 or more. Sample sizes were too small for meaningful analysis by ethnicity. This research also focuses on recent high school graduates; therefore, segmentation by age is not evaluated in the study.

There was no difference in the average ACT score when comparing respondents and non-respondents, and there were only small differences between the groups in the average age of students, sex, and high school GPA. Therefore, it is believed that the random samples are generally representative of students with uvsc in their college choice set.

The results are presented first using descriptive statistics to illustrate student ratings of college choice factors. Important findings using demographic segmentation are presented in the analysis using anova and t-tests. Individual t-tests were not run unless the anova was significant (Keppel 1991). If the Levene's Test for Equality of Variances showed significance, equal variances were not assumed for the t-tests and the results of the non-parametric tests are reported. This research is exploratory reporting both significance levels: $p \le 0.05$ and $p \le 0.01$.

To avoid excessive presentation of tables, results on all choice factors are presented only by geographic origin. The major differences for other groups are then highlighted without presentation of tables. A choice factor is highlighted if the following criteria are met: (1) There is at least a half point difference in the averages among the groups, (2) The factor places in the top ten ranking for at least one of the groups, and (3) The difference between means test is significant at the .05 or .01 level.

Choice Factors Important to Matriculants

UVSC students rate the cost of tuition and ability to work while attending school as two of the most important factors in their choice to attend uvsc (Table 2). Receiving a scholarship is another financial consideration rated among the top ten. Despite rising tuition, the cost of tuition at UVSC is lower than other four-year options in the state, which appears to be an important characteristic of the college in attracting students. The availability of a student's major or program also rates in the top ten. A good quality program at a competitive price is a fitting description of what students are looking for at uvsc. The variety of course offering times (night, weekend, Internet, etc.), small class sizes, and safety of the campus also rate in the top ten, regardless of where the student originated in the state.

There were generally small differences in factors considered important between students living in Utah County as compared to students from outside the county. One expected difference is that students from outside the county value the ability to commute home on weekends (t = 7.552, $p \le 0.01$); yet, the students prefer living away from home (t = 8.889). Thus, the availability of housing becomes more important for out-of-county students (t = 8.023, p ≥ 0.01). Students living in the local area generally place greater importance on their ability to live at home while attending college (t = 10.371, p ≤ 0.01). Prior high school concurrent enrollment credit is more of a factor for students from Utah County (t = 4.059, p \leq 0.01).

Significant differences also existed among other market segments. The safety of the campus is substantially more important to females (1.98, N = 169) than males (2.82, t = 5.657, p \leq 0.01, N = 106). Campus safety fails to make the top ten for males attending the college. Highability students are less concerned with the variety of course offering times (2.70, N = 56) as compared to low-ability (2.10, t = 2.966, p ≤ 0.01, N = 124) and average-ability students (1.99, t = 3.389, p ≤ 0.01, N = 96). Gifted students also rate the cost of tuition as less important (2.38) as contrasted with low-ability (1.72, t = 3.452, p ≤ 0.01) and average-ability students (1.67, t = 3.474, p ≤ 0.01). Receiving a scholarship is ranked as the most important college choice factor for highability students attending uvsc (1.80), but it fails to make the top ten for low-ability students (2.43, t = 2.700). Scholarship offers are less important to high-income students (2.63, N = 92) as compared to middle-income (2.03, t = 3.025, p ≤ 0.01, N = 100) and low-income students (2.01, t = 2.735, $p \le 0.01$, N = 72). The ease in obtaining financial aid/ loans is more important to lowincome students (2.33, t = 3.198, p≤0.01) and middle-income students (2.60, t = 2.104, $p \le 0.05$) as compared with high-income students (3.03). There are no substantial differences in college choice factors when separating students by degree aspirations and whether they came from a small town (population less than 10,000).

Results for Competing Institutions

The ACT data file included a total of 6,718 high school graduates in 2001 who had uvsc in their choice set, with 1,491 (22 percent) ultimately attending the college. Students attended primary competing institutions as seen in Figure 1.

The addition of four-year degrees at the BYU Idaho campus could have a substantial impact on uvsc college enrollment in the future.

Table 2: Important Choice Factors for UVSC Matriculants						
Choice Factors	Within County	Outside County	Difference			
Ability to live at home or commute daily	1.63	3.29	1.66*			
Ability to work while attending school	1.74	2.12	0.38			
Availability of your major/program of study	1.90	2.18	0.28			
Cost of tuition	1.91	1.77	-0.13			
Prior credits taken awarded at the school	1.96	2.59	0.63*			
Variety of course offering times (night, weekend, internet, etc.)	1.97	2.37	0.40			
Quality of program in your intended major	2.21	2.29	0.08			
Receiving a scholarship	2.22	2.20	-0.01			
Safety	2.33	2.28	-0.05			
Small class sizes	2.34	2.30	-0.04			
Quality of faculty/faculty commitment to teaching	2.45	2.16	-0.29			
Type of institution (private, public, 4-year, 2-year, etc.)	2.45	2.54	0.09			
Ease in obtaining financial aid/loans	2.47	2.86	0.39			
Admissions policy	2.52	2.55	0.03			
Availability of graduate programs	2.65	2.66	0.01			
Knew more about it than other schools	2.69	3.01	0.32			
Overall reputation of the school	2.86	2.64	-0.22			
Availability of special programs for academically talented students	2.89	2.97	80.0			
Religious considerations	2.98	3.04	0.06			
Friends attending school there	3.02	3.09	80.0			
Attending a small school (<4,000 students)	3.11	3.19	80.0			
Work study or part-time employment opportunities at the school	3.15	3.35	0.21			
School traditions, activities, or social scene	3.22	3.12	-0.10			
Impressions from a campus visit or other personal contacts	3.28	3.12	-0.16			
Athletic programs offered	3.36	3.47	0.12			
Parent (s) felt it was the best choice	3.39	3.41	0.02			
Other relatives attended school there	3.40	3.37	-0.03			
Ability to commute home on weekends	3.54	2.23	-1.32*			
Teacher or counselor recommended it	3.57	3.90	0.33			
Availability of housing	3.64	2.44	-1.21*			
Availability of sororities/fraternities, other clubs and organizations	3.74	3.91	0.17			
Living away from home	3.88	2.45	-1.43*			
Parents attended school there	4.20	4.68	0.48			
Sample Size	129	148	_			

#Significant p ≤ 0.01, Scale: 1 = Very Important to 5 = Not Important

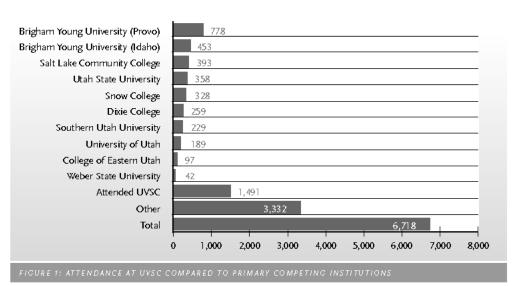


Table 3: Choice Factors—Students Attending Other Four-year Institutions

Chair France	Average
Choice Factors	Rating*
Availability of your major/program of study	1.72
Quality of program in your intended major	1.84
Type of institution (private, public, 4-year, 2-year, etc.)	1.88
Overall reputation of the school	2.01
Quality of faculty/faculty commitment to teaching	2.20
Receiving a scholarship	2.22
Safety	2.30
Cost of tuition	2.31
Ability to work while attending school	2.37
Religious considerations	2.46
Variety of course offering times (night, weekend, internet, etc.)	2.54
Knew more about it than other schools	2.58
Availability of housing	2.61
Ease in obtaining financial aid/loans	2.62
Impressions from a campus visit or other personal contacts	2.66
Prior credits taken awarded at the school	2.78
Availability of special programs for academically talented students	2.80
Living away from home	2.81
Admissions policy	2.82
Availability of graduate programs	2.82
Ability to commute home on weekends	2.88
Work study or part-time employment opportunities at the school	2.97
School traditions, activities, or social scene	2.99
Ability to live at home or commute daily	3.01
Small class sizes	3.15
Friends attending school there	3.28
Other relatives attended school there	3.32
Parent (s) felt it was the best choice	3.35
Teacher or counselor recommended it	3.61
Athletic programs offered	3.68
Attending a small school (< 4,000 students)	3.94
Parents attended school there	3.95
Availability of sororities/fraternities or other clubs and organizations	4.14
Sample Size	147
# Scale: 1 – Very Important to 5 – Not Important	

[#] Scale: 1 = Very Important to 5 = Not Important

Table 4: Importance of Information Sources (N = 483)

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Sources	Not Used	Percent	Average Rating*
Web site	74	15.38%	2.41
Campus visit	116	24.07%	2.53
College catalogue or schedule	79	16.42%	2.60
Personal contact	162	33.68%	2.66
College guide books	134	27 .8 6%	2.74
Direct mailings	64	13.25%	2.77
Visits to high schools	137	28.36%	2.83
Special event attendance	124	25.67%	2.93
Publications at high schools	1 09	22.57%	2.95
College night	219	45.63%	3.36
Advertisements in journals	227	47.1 0 %	3.46
Radio, TV, newspaper	232	48.33%	3.58

#Scale: 1 = Very Important to 5 = Not Important

The enrollment patterns for several student subgroups at the institutions identified in Figure I (on the previous page) demonstrate that UVSC attracts a good share of students across various income groups, from rural versus urban areas, students of color, and students pursuing a wide variety of majors. However, UVSC is less successful in attracting high-ability students who are most likely to attend BYU. UVSC is also more likely to attract students working more hours while pursuing a college education. Analysis of the ACT data emphasized the possible benefits of using the data to recruit students desiring specific majors, minority students, or high-ability students, particularly among the substantial number of students (1,738, or 26 percent) who failed to attend any college. The ACT Profile also provided data on the four-year majors desired by prospective students that the college could offer in the future.

The choice factors important to non-matriculants at other four-year institutions provide additional insight for student recruitment. Measures of quality fail to make the top five for UVSC matriculants, and only one measure of quality reaches the top ten (Table 2). However, three measures of quality (quality of program in your intended major, overall reputation of the school, and quality of the faculty/faculty's commitment to teaching) place in the top five for non-matriculants (Table 3). Thus, students attending elsewhere place a greater emphasis on quality rather than on location and cost issues.

Non-matriculants were asked what uvsc could do to encourage them to attend or improve. The most common responses are categorized as follows (in rank order): offer more scholarships, increase mailings (shows interest and provides needed information), improve the academic reputation of uvsc, offer a wider variety of majors, visit more high schools, and offer more four-year degrees.

Student Sources of Information

Study results point out that the Web site is one of the most influential sources of information for prospective students, followed by a campus visit (Table 4). The least influential sources of information are advertisements in journals, newspapers, radio, or television.

Conclusion

This research emphasizes the need to consider additional choice factors and improve available standardized instruments. In addition to identifying important choice factors from a review of the literature, the current study finds that flexibility in course offering times or delivery methods (night, weekend, Internet etc.) affects student college choice. The literature review did not result in any other studies considering this factor. Other contributions of this study include the finding that campus safety is an influential consideration, particularly for females. High school concurrent enrollment credit also appears to encourage selection of the institution.

The relevance of academic reputation, quality of faculty and instruction, location, costs, scholarship offers, financial aid, and student employment opportunities confirms findings in several studies cited in the literature. The relative importance of various student sources of information adds to prior research, confirm-

ing the findings of Seymour (2000) that the Web has become an important marketing tool for institutions.

The marketing framework was also found to have utility in analyzing the college choice decisions of prospective students. Major competitors were identified along with the need to improve the academic reputation of the college, add specific majors, and increase scholarship offers to attract more students choosing to attend other institutions. Other institutions can successfully use this framework to understand their student markets.

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