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A study of freshmen recruitment practices and their effectiveness in selected small private colleges in Iowa

James Allen Lockard
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A study of freshmen recruitment practices and their effectiveness
in selected small private colleges in Iowa

by

James Allen Lockard

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of
The Requirements for the Degree of
DOCTOR OF PHILOSOPHY

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INTRODUCTION

American higher education was born of the desire of early colonists to continue the higher learning of Europe in the rough New World. Although the training of orthodox clergy for the major denominations was probably the primary motivating force behind the establishment of the colonial colleges, Brubacher and Rudy (16) point out that the education of orthodox laymen--professionals and public officials--was also of great importance.

Beginning with Harvard in 1636, a pattern of privately founded and controlled institutions of higher learning was established. Financial support was, however, another matter, for the colonial colleges were partially dependent upon public subsidies from the beginning, whether in the form of cash grants, tax exemptions, or the right to lottery profits. Nonetheless, institutional governance rested in private hands.

A public-private controversy and struggle were virtually built into colonial higher education, as English law required consent of the Crown for the establishment of any corporation. Harvard and Yale both struggled over royal charters, wishing to avoid the attendant potential for interference with their operations. Others, such as William and Mary and the College of New Jersey, reached agreement with the public authorities.

The conflict over private versus public control was destined to linger on into the early years of the new republic. Benjamin Franklin guided the creation of the College of Philadelphia in the 1750s, which, although private, was not under denominational control. Thomas Jefferson

worked diligently to assert greater public control over William and Mary. His failure led him to found the University of Virginia solely under public control.

The most famous struggle over control was the case of Dartmouth College. The furor grew out of a seemingly local dispute between the president, John Wheelock, and the college trustees. The state legislature sought to aid the president by amending the college charter. This action provoked a lawsuit which turned on the question of Dartmouth's nature. Was Dartmouth a public or a private corporation?

The New Hampshire courts ruled that Dartmouth was a public corporation and hence open to legislative intervention. Daniel Webster then carried the case to the United States Supreme Court, which ruled that Dartmouth was private. Thus in 1819 the right of colleges to exist as private corporations was firmly established.

This outcome may have been somewhat of a Pyrrhic victory for private colleges, for many legislatures retaliated by reducing subsidies to the colleges and by passing new restrictive laws. Nonetheless, private institutions would remain the dominant form of higher education for many decades.

State institutions of higher learning developed in the second half of the eighteenth century. Elements of public and private control and support were mixed to nearly the same extent as among the so-called private institutions, because the public was not yet ready to accept full responsibility for providing education at any level in most parts of the nation. Such interest as there was developed first in the South,

and until after the Civil War only the West (now the Midwest) followed suit to any extent, according to Brubacher and Rudy (16, p. 153). In all regions the dividing line between public and private was more imaginary than real.

Major impetus to develop publicly supported, state-controlled colleges and universities came in the form of federal grants of land for the so-called land-grant colleges. Annual appropriations followed later. The Morrill Acts of 1862 and 1890 deserve much credit for the ultimate development of public higher education. Yet the same time period saw an enormous effort on the part of the denominations to found new colleges throughout the rapidly developing West. Upwards of 80 percent of these would not survive.

Despite rapid and considerable increases in total enrollments in higher education and in the number of institutions, the percentage of students in private colleges could only decrease from the initial 100 percent as public institutions were founded. Berdahl (6) notes that in the early twentieth century nearly two-thirds of all students were enrolled in private colleges and universities. Doermann (32) reports that by 1950 the public and private sectors each enrolled 50 percent, but by 1965 private enrollments had declined to just over one-third of the total. In 1968 private college enrollments actually decreased from the previous year for the first time except during war (33). Ryan (91) noted that the one-to-one ratio of 1950 changed to a three-to-one ratio in favor of public institutions in 1972. The private sector has lost approximately one percent annually in recent years (92).

In 1950, 25 percent of all persons eighteen to twenty-four years of age were enrolled in higher education; in 1972 the figure was 60 percent (91). This percentage increase combined with substantial population growth to enable private colleges and universities to double enrollments from 1950 to 1972. At the same time, public enrollments increased five-fold, resulting in a substantial percentage decline for private institutions. Ryan (91) reports projections that in 1985 as many as 85 percent of the eighteen to twenty-four year olds will be in higher education. However, the birth rate has declined steadily since 1961. Thus he concludes that the total number of students could increase through the seventies, but should decline thereafter.

Table 1 shows the United States Office of Education enrollment figures from fall 1960 through fall 1970 and projections from fall 1971 through fall 1980 for all of higher education. Corresponding figures for four-year institutions appear in Table 2. These data conform closely to those previously mentioned. Federal projections are based on the trends established between 1960 and 1970. Figure 1 depicts growth rates for 1960-65.

Some observers have predicted an even more difficult future for private higher education. While Mendelsohn (71) expects private higher education's share of students to be only 19 percent in 1980, Mayhew (69) believes the proportion may stabilize at between 15 and 20 percent by the end of the decade. However, in 1969 he wrote of anticipating a time when a maximum of 10 percent of all students would be enrolled in private colleges and universities (68).

Table 1. Total degree-credit enrollment in all institutions of higher education, by institutional control: United States, fall 1960 to 1980 (92)

	Total	Public institutions	Private institutions	Percentage Public--Private	
1960	3,582,726	2,115,893	1,466,833	59	41
1961	3,860,643	2,328,912	1,531,731	60	40
1962	4,174,936	2,573,720	1,601,216	62	38
1963	4,494,626	2,848,454	1,646,172	63	37
1964	5,526,325	3,624,442	1,901,883	64	36
1965	5,526,325	3,624,442	1,901,883	66	34
1966	5,928,000	3,940,000	1,988,000	66	34
1967	6,406,000	4,360,000	2,046,000	68	32
1968	6,928,115	4,891,743	2,036,372	71	29
1969	7,484,073	5,414,934	2,069,139	72	28
1970	7,920,149	5,800,089	2,120,060	73	27
PROJECTED					
1971	8,475,000	6,291,000	2,183,000	74	26
1972	8,980,000	6,753,000	2,228,000	75	25
1973	9,456,000	7,196,000	2,260,000	76	24
1974	9,955,000	7,660,000	2,295,000	77	23
1975	10,463,000	8,135,000	2,329,000	78	22
1976	10,906,000	8,560,000	2,346,000	78	22
1977	11,305,000	8,952,000	2,353,000	79	21
1978	11,628,000	9,283,000	2,345,000	80	20
1979	11,867,000	9,546,000	2,321,000	80	20
1980	12,050,000	9,762,000	2,288,000	81	19

Table 2. Total degree-credit enrollment in 4-year institutions of higher education, by institutional control: United States, fall 1960 to 1980 (92)

	Total	Public institutions	Private institutions	Percentage Public--Private	
1960	3,131,393	1,723,583	1,407,810	55	45
1961	3,342,718	1,872,531	1,470,187	56	44
1962	3,585,407	2,054,463	1,530,944	57	43
1963	3,869,837	2,297,146	1,572,691	59	41
1964	4,239,305	2,558,668	1,680,637	60	40
1965	4,684,888	2,886,552	1,798,336	62	38
1966	4,984,000	3,100,000	1,883,000	62	38
1967	5,325,000	3,393,000	1,932,000	64	36
1968	5,638,616	3,722,602	1,916,014	66	34
1969	5,955,644	4,002,324	1,953,320	67	33
1970	6,290,167	4,280,327	2,009,840	68	32
PROJECTED					
1971	6,684,000	4,615,000	2,070,000	69	31
1972	7,036,000	4,925,000	2,111,000	70	30
1973	7,361,000	5,220,000	2,141,000	71	29
1974	7,702,000	5,529,000	2,173,000	72	28
1975	8,048,000	5,844,000	2,204,000	73	27
1976	8,343,000	6,124,000	2,220,000	73	27
1977	8,603,000	6,378,000	2,225,000	74	26
1978	8,808,000	6,591,000	2,217,000	75	25
1979	8,948,000	6,756,000	2,193,000	75	25
1980	9,049,000	6,888,000	2,161,000	76	24

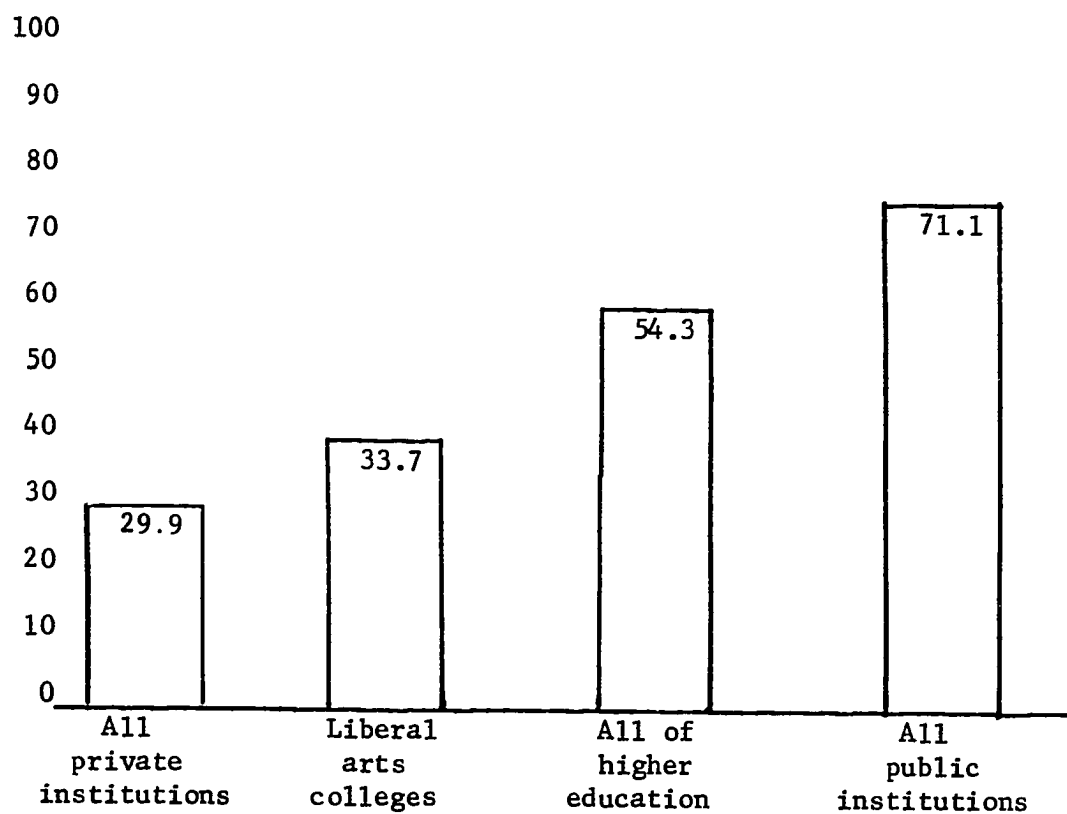


Figure 1. Enrollment increases in higher education in the United States, 1960-1965, in percents (93)

In 1970 there were more than 2550 institutions of higher education in the United States (93). Over 1450 were private institutions, of which 1165 were private four-year colleges. The great variety of types of institutions found in the United States has been cited by Brubacher and Rudy (16), among others, as a major distinction and strength of American higher education. The Digest of Educational Statistics (93) terms diversity a salient characteristic of the American system. Yet many observers find diversity on the decline, as institutions across the country seek to emulate the large, prestigious universities. Borrowing Clark Kerr's terminology, Hodgkinson (46) writes that we are approaching a monolithic system comprised of miniversities, universities, and multiversities.

Many who recognize this trend also decry it. Bowen (11) believes private higher education exists to provide diversity and leadership. Diversity comes of offering varying styles of education to suit differing clienteles. Leadership is a by-product of private control, since privacy affords the flexibility and the independence to be a model of what a college ought to be. If private institutions do not live up to their raison d'etre, Bowen feels they will fail and higher education will lose much vitality.

The Carnegie Commission is on record as strongly supporting the preservation and strengthening of private institutions, because it is there that "innovative and imaginative approaches to higher education are most likely to be found" (25, p. xii). Doermann (32) echoes these sentiments, believing some private colleges and universities are of such

high quality as to be models for the remainder of higher education. He also notes the vanguard role of a few private colleges in the resistance to McCarthyism in the 1950s. The list of defenders of private higher education, as well as their justifications, goes on ad infinitum.

Defenses and justifications are seldom necessary when times are good, but few educators would classify the early 1970s as good times, particularly from the financial standpoint. Horn (50) writes of the increasing seriousness of the "financial crisis" in private colleges. Lynch writes (63, p. 56), "Alarming numbers of small private liberal arts colleges and universities across the United States are closing their doors simply because they cannot pay their bills." Ban (3) notes increased speculation about the number of colleges which will be forced to close for lack of money in the near future. Unless changes occur, he fears that predictions of the death within twenty years of private education as we know it may come true. A study by Wish, Cooke, and Maltby (102) concluded that more private colleges will surely cease to exist. Hughes (51), Kinnison (59), and Geiger (43) among numerous others express similar beliefs.

The true magnitude of the financial problems of private higher education is most clearly revealed in the studies of Jellema (53 and 54) and Cheit (25). In "The red and the black" Jellema writes (53, p. 5):

Looking at net surplus or deficit for the current operating fund, in 1968 the "average" institution, a gross statistical amalgam derived by dividing the total net surplus or deficit figure for all institutions in our study by the number of institutions, finished its fiscal year with a surplus By June 1970 membership in the deficit club was complete; the average institution in every region was firmly in the red.

His follow-up study in 1971, titled "Redder and much redder" (54), found the situation had further deteriorated. He concluded that at the current rate and pattern 223 accredited four-year colleges will have exhausted all liquid assets within ten years and face either further debt or oblivion.

Earl Cheit's The new depression in higher education (25) is based on a study of forty-one institutions across the United States. From them figures are projected for all of higher education. Institutions are classified as being in financial difficulty, headed for financial trouble, or not in financial difficulty. The study found 30 percent of all universities and 28 percent of liberal arts colleges (of which 96 percent are private!) currently in financial difficulty. Grave financial problems began, in most cases, between 1966 and 1968, reaching such proportions that Cheit concludes the situation must improve or higher education in toto will not be able to meet its responsibilities in the 1970s.

The high incidence of financial trouble among private institutions suggests the survival of many is questionable. Private institutions were 56 percent of Cheit's sample, but 82 percent of the institutions in trouble. An estimated one-fourth of all private colleges and universities were using endowment to meet current operating expenses, a dangerous institutional posture.

Special attention is focused on the Midwest by Cheit's findings. Midwestern institutions of all types constituted only 34 percent of the sample, but fully 83 percent of the institutions were already in

financial trouble or headed for it. The financial position of Midwestern colleges and universities, both public and private, seems particularly weak.

The relevant portions of Cheit's projections are presented in Table 3. Although 39 percent of all institutions of higher learning are not in financial trouble, they enroll only 22 percent of the students. Overall, 78 percent of all students are enrolled at institutions either headed for or already in financial trouble. Among private institutions, only 28 percent are not in trouble, and their enrollments total to a meager 12 percent of the students. Eliminating the private universities, which have extraordinary problems, the picture for liberal arts colleges is better, but far from reassuring. Only 29 percent are not in trouble, and they enroll just 22 percent of the students. Fully 25 percent of liberal arts college students are enrolled at institutions already in financial trouble.

It would be easy at this point to adopt an attitude of fatalism and sit back to await the seemingly inevitable. However, there are some observers who see rays of hope. Dennis Binning (7), former editor of College and University Business and now a consultant to colleges and universities, is confident that private colleges can hold and even increase their share of the market, although this defies the past. Howard Bowen (11) maintains faith in private higher education, believing it will survive this trial just as it did the trauma of the Depression, World War II, and the loss of the GI's in the 1950s.

Finally, perhaps there is mild hope that current trends will,

Table 3. Financial situation of American colleges and universities:
1971 (25)

Institutions	All institutions	Not in financial trouble	Headed for financial trouble	In financial difficulty
All nonspecialized institutions	2,340	905	1,000	435
In percent	100	39	42	19
Total enrollment (in 1000s)	7,265	1,570	3,940	1,755
In percent	100	22	54	24
Private institutions	1,170	325	500	345
In percent	100	28	42	30
Private enrollment (in 1000s)	1,935	240	790	905
In percent	100	12	41	47
Liberal arts colleges	730	210	310	210
In percent	100	29	43	28
Liberal arts college enrollment (in 1000s)	770	170	400	200
In percent	100	22	53	25

indeed, change and current predictions will prove wrong. Consider the prophecy of Archibald MacLeish (65, p. 4) in 1941:

Like other private institutions, Harvard must face the fact that gifts to the university in the foreseeable future will not equal in bulk the gifts of the late twenties. Like other private institutions, it must admit that the peak of enrollment has probably been reached. And like other private institutions it must therefore accept the fact that this period of its history will be a period of organization within existing frontiers.

Past predictions and projections have been wrong, and today this "science" remains imperfect. However, to ignore the warnings would be irresponsible, and even the most optimistic observer bases his hope on changes yet to come. The context within which this study was undertaken is one of grave difficulties facing private higher education in general, but particularly in the Midwest.

Admissions in Higher Education

In the early American colleges, the president performed most of the services offered by the college. With the faculty he examined prospective students to determine admissibility, as well as being counselor, advisor, teacher, keeper of the academic records, disciplinarian, chaplain, fund raiser, and secretary to the board of control (16). Institutional growth would eventually necessitate a division of labors.

Donovan (35) reports that the first registrar was apparently appointed at Brown University in 1828. Others followed slowly. Thresher (99) remarks that inspection of admissions credentials was quite routine and thus typically delegated to the registrar as "master of routines." In 1920 the American Association of College Registrars (AACR) was

founded (14).

Continued growth resulted in still further division of labors. Brubacher and Rudy (16) place the appointment of the first admissions officers at the time of World War I. The work was quite routine. Admissions standards were supposedly fixed, but many independent colleges stretched some requirements, waived others, or offered remedial work. Many applied the standards only after reaching a prespecified number of enrollees, according to Thresher (99).

The office of admissions came into its own in the post-World War II era. Enrollments were skyrocketing and administrative structures changed. The foremost need was simply to be able to handle the flood of students. In 1949 AACR became the American Association of College Registrars and Admissions Officers (AACRAO) (14).

When colleges reached capacity, selective admissions came about. For the first time colleges were able to apply true standards for admission, adding work for admissions officers. However, as recently as 1955, Donovan (35, p. 6) placed responsibility with the registrar for "recruiting, selection, admission, and registration of students, and the keeping of their academic records." Especially in small institutions, a complete separation of function had not been effected in 1955.

Through the 1940s the high school traditionally bore the responsibility for disseminating college information. Since 1950, however, colleges have assumed an ever increasing role in what Birnbaum (9, p. 786) terms "pre-application information dissemination and student counseling." This normally takes the form of mass media techniques such as books,

bulletins, films, and brochures plus personal contacts. Thus we arrive at the present-day admissions office, typically staffed by several "counselors" or "recruiters" plus clerical support personnel. It is this admissions staff which bears primary responsibility for bringing new freshmen and transfer students to the campus each year. The enrollment of a private college is heavily dependent upon the success of the admissions program.

The significance of admissions work should not be underestimated. Richard Klotz (1, p. 303), Director of Admissions at Eisenhower College, states that "enrollment is integrally related to solvency, if not the survival of many colleges." Geiger relates the matter directly to the admissions office as he remarks (43, p. 502), "All one needs to do to find out how dependent any private college is upon filling its available student capacity is to observe the gloom that prevails on a campus when admissions applications drop, or the general rejoicing when they rise."

According to Hughes (51, p. 242):

The question of survival is, of course, linked to money. In their search for funds, many private schools may see growth in student enrollment as the panacea for all ills as more money will accrue from increased enrollments.

Cheit (25) also notes that growth is one option for some schools in financial difficulty, but he cautions that net income will rise only if costs are held down by increasing class sizes. Many resist this due to its presumed impact on quality. A low student-to-faculty ratio is essential to quality in the eyes of many.

Binning is more emphatic than most concerning the potential of

admissions. Writing in 1971, he states (7, p. 174):

What few private college officials have seen or admitted is that the greatest economic leverage occurs in the area of admissions, not necessarily in normal fund-raising activities. Obviously, private colleges should do a better job of fund-raising; but, dollar for dollar, the greatest and most secure arena for revenue production is offered by a better, more aggressive admissions program.

Jellema, however, offers a very important reminder concerning growth (52, p. 40):

Every institution of higher learning takes students very seriously. They are the name of the game An institution that builds plant and program for a student body that never reaches the expected size, or that rises and then falls, is apt to be in fiscal trouble

The validity of Jellema's warning is shown in the case of Parsons College. Rapid growth, with its accompanying demands for more buildings, faculty, etc., was the ultimate undoing of Parsons, according to Koerner (60). When enrollment finally plummeted to around 20 percent of the peak for which the physical plant was built, the burden of debt overwhelmed the institution. For details of Parsons' failure and closing, references 17, 18, 20, and 21 are offered.

The dependence of private colleges and universities upon enrollment has varied in recent years. Cheit (25) reports that prior to World War II, student fees accounted for only about 25 percent of income for all colleges and universities, public and private. This fell to only 17 percent by 1949-1950, but the separate figures were 32 percent at private institutions and only 11 percent at public institutions. Even this was a decline for private institutions, since, according to Parker (79), the typical private institution depended on tuition for 50 percent

of its income in the World War II era.

Now tuition is the primary source of operating funds for most private institutions. A New York State Education Department study (76) found that private institutions in that state received about 70 percent of their income from tuition in the late 1960s. Johnson (55) makes the point that endowment contributes little income to most private colleges. He places the typical proportion of income derived from tuition and fees at 60 to 90 percent.

The danger inherent in such dependence upon tuition is obvious. Notre Dame College of Staten Island depended on tuition for 90 percent of its income. It closed in June of 1971 (8). Perhaps the most extreme example was Parsons College, which received 95 percent of its income from tuition during the Roberts era (60). The situation at the time of its closing in May of 1973 is not known, but it cannot have been much different. Unfortunately, if Geiger's predictions (43) are accurate, the dependence on tuition will continue to increase, due to poor economic conditions, general disillusionment with higher education, and increasing interest in such national problems as pollution.

Thus the message seems clear--extraordinary attention must be paid to the admissions effort of private institutions if they are to survive. In many cases, stabilized enrollment rather than gradual, continual decline, would be sufficient to secure the college's position, although this alone means ever increasing effort. For others, growth is absolutely essential--probably not back to the peak, which most reached between 1966 and 1969, but at least to a size sufficient to operate the

existing physical plant with some efficiency.

Attracting Students to Private Colleges

Having established the overwhelming need for students, the next problem is obtaining them. Jellema (52) writes of the need for aggressive admissions programs. Johnson (55) and Lynch (63) agree that most private institutions have failed to place high enough priority on admissions efforts. Doermann (33) quotes Sidney Tickton at a 1963 seminar as stating that private colleges will have to appeal to "willing students rather than reluctant donors." The employment of "marketing-sales management techniques" is imperative, according to Klotz (1).

Such activities are commonly referred to as the active "recruitment" of new students. Thresher (99), Koerner (60), and the National Association of College and University Business Officers (75) all treat the necessity of recruitment, although the term carries a negative, commercial connotation for some institutions. Regardless of the terminology, in 1955 Garrett (42, pp. 20-21) aptly observed that private institutions must think of recruiting "on the basis that we cannot afford to operate an institution without students, and that students will not come to us if we do nothing to attract them"

Student recruitment is not a new concept. Thresher (99) reports that many admissions offices were first established during the depression years, prompted largely by the need to recruit students during those difficult times. The post-World War II years brought a boom and recruiting subsided, only to spring back to life when the flow of new

students slowed.

In the 1950s nonprestigious small private colleges were obliged to actively search for students. At the same time, prestigious colleges were becoming increasingly selective, turning away all but the most highly qualified applicants, according to Thresher (99). Many public institutions were forced to turn away from a virtual open-door policy by tightening admissions standards and, in effect, become selective, due to applications far exceeding available spaces. Thus a tripartite situation developed with public institutions filling their spaces with the best applicants and rejecting many, prestigious colleges and universities becoming more and more selective by actually searching for exceptional students, and the bulk of private institutions recruiting virtually anyone they could get.

Today the situation has again changed. Interest in college education has declined due to many factors, including the end of the Draft and the relatively poorer market for graduates. Jellema anticipated the situation now existing at many public institutions (52, p. 40):

If neither the percentage of college age students actually attending college nor the length of time they stay enrolled increases, while the college age cohort . . . declines to a rate of increase near zero, tax-supported institutions will be scrabbling for students along with privately supported ones in order to justify their expanded plants and programs. This will not make the admissions task of privately supported institutions any easier.

This prophecy is aptly fulfilled by the current recruitment efforts of Iowa's state universities (19). The situation is doubtless comparable in many other states.

The position of selective colleges has also changed. Most had

seemingly assumed the existence of an unlimited supply of top-quality students who could also afford their exceptionally high fees. This assumption was exploded by Humphrey Doermann in Crosscurrents in college admissions (32). Doermann conclusively demonstrated that the actual pool upon which these institutions have drawn is far smaller than they believed. He concluded that the new potential students would likely be largely of middle aptitude, probably with less willingness and less ability to pay high college fees. The result is that selective institutions today are working harder to enroll somewhat less able students than was the case five or ten years ago.

For the traditionally less selective colleges, the effort has become even more difficult. As Keefe notes (57, p. 5), "the increasingly costly and sophisticated public relations efforts which we in private college admissions are more and more forced to employ are vital to our survival and are actually producing, in general, fewer students than we enrolled in years past, when such expenditures were unheard of."

The admissions directors of the seven colleges cooperating in this study, of which only one is generally considered selective or prestigious, tended in interviews to support Keefe's conclusion. Naturally, some are having a more difficult time than others, but none is in the position where he would like to be, nor has he been in recent years. All agreed that the work was becoming more difficult each year.

The potential of recruitment was clearly demonstrated by the "Parsons Experiment," which Koerner (60) treats thoroughly and gently. Most private colleges would reject the example out of hand as being irrelevant

to them, due largely to the clientele Parsons deliberately chose to court. Yet Koerner maintains that the only significant difference between Parsons and most other small colleges was the completely open and frank approach taken by Parsons. Few if any others aim specifically at those who were dropped by other colleges, but the actual academic standards in operation probably differ little.

There is a lesson for all in Parsons' example. A good sales promotion can work miracles. There is indeed hope that small colleges can attract enough students to operate efficiently in the black. From Parsons they must also learn that to exceed existing physical capacity can be disastrous. Furthermore, they must direct their efforts toward the proper arena, namely to attracting students who were not already planning to attend private institutions. The overall situation will not improve with stiffer competition among private institutions alone. The only true gains will be students attracted from those who either did not plan to attend college at all or had planned to attend a public institution.

Research in Admissions

A common theme in many books, articles, and research reports on aspects of admissions is how little is truly known about this vital work. Referring to the movement of high school graduates into the over 2500 institutions of higher learning, Thresher writes (99, p. 3), "This 'great sorting' is a social process of great complexity, not fully understood by the students themselves, by their parents and advisors, or by the

educators, including admissions officers, who participate in it."

Douvan and Kaye are concerned about how students select their college. "If we know little about the decision to go to college, we know even less about how adolescents choose the particular schools they enter" (36, p. 216). In the same article they continue (36, p. 223):

The dropout and exchange rates in American colleges suggest that something goes seriously awry in this choice process. Even discounting the large number of transfers that occur because of the move from junior college, the rates seem to reveal a widespread choice based on inappropriate or transitory needs One thing is certain; we are badly in need of more accurate information on all of this fateful process of deciding.

Ehling (39) has also cited the dropout and transfer problem as proof that research is badly needed concerning how students select a college.

Doermann (33) and Binning (7) both see the private college as attempting to sell itself without first having done the basic market research, a "luxury" no business could afford. Jellema (52) believes private college enrollment will improve only with better recruiting and more attention to attrition. To achieve this, colleges need better studies of where their students come from, why they come, and why they leave. Johnson also calls for more research, stating (55, p. 50), "One must begin by critically analyzing his institution, and the first and best sources of ideas for this are the presently enrolled students."

Specifically aiming at student recruitment, Birnbaum discusses various approaches commonly used, but states flatly (9, p. 786), "The effectiveness of these techniques in influencing students' post-secondary school plans remains largely unknown." In the same vein, Grosz (44)

describes how many small private colleges have enlarged and expanded the admissions effort to recruit more students. He goes on to claim that the results of spending large sums have been negligible, but offers no evidence to support this opinion.

Statement of the Problem

Small private colleges, the most abundant type of higher education institution in the United States, are working harder than ever to enroll a steadily decreasing percentage of all students in higher education. The competition for students has been further intensified by the entry of public institutions into more active student recruitment. Unfortunately, the financial solvency, and hence continued existence of private colleges is much more closely linked to enrollment than is true of public institutions.

The growth of public community colleges is certainly a partial explanation of changing enrollment patterns, although their greatest strength tends to lie in the vocational-technical areas, with many actually losing students in their college parallel programs. Cost is certainly a factor in not attending a private college, although tuition grant programs in states like Iowa and Illinois help to offset the difference.

Whatever the causes, the responsibility for changing the current direction falls largely to the admissions staff. One aspect of the problem of this study is to determine what practices or techniques are currently being used by private colleges in Iowa to attract freshman

students to their campuses.

Across the nation in the fall of 1971 an estimated 450,000 new freshmen enrolled in nearly 1200 private institutions (93). In Iowa 8451 new freshmen chose private institutions that same fall, which was 34.9 percent of all new freshmen in all Iowa institutions (29). A second aspect of this study is to determine the relative degree of influence on college selection which is attributed to recruitment practices by first-semester freshmen and the college personnel responsible for the recruitment effort. These data may help to determine how effectively each college's program is reaching students and how well the admissions staff understands the effects of its efforts.

Finally, an attempt will be made to suggest ways to improve the efficiency and effectiveness of each institution's efforts.

The following specific questions served to guide this research:

1. What practices are currently employed by Iowa's private colleges to recruit freshmen?
2. How much influence do these practices exert on the student's decision to attend his college?
3. Do the admissions personnel perceive their practices to be influential to the same degree as students?
4. Are certain practices uniformly effective across all institutions studied?
5. Is there a relationship between the perceived influence of the practices and certain student characteristics?
6. Which practices deserve particular emphasis and which are of

questionable value in general, at each institution, and for differing types of students?

As Birnbaum (9) stated, little effort has been directed previously to the study of the effectiveness of recruitment techniques. It is certainly not impossible that Grosz's unsupported claim of negligible value is true. To determine if he is correct, and no admissions officer would agree with him, the actual effectiveness of recruitment practices must be examined. Discovery of facts in this matter is the central aim of this study. If, indeed, recruitment efforts are found to be effective, it is hoped that suggestions for further improvement can also be made.

Purposes of the Study

While the literature abounds with opinion articles concerning college admissions, including some references to recruitment, more objective information is scarce. It is remarkable how little has been published concerning recruitment, despite the fact that virtually every private college operates such a program. The first purpose of this study is to learn as much as possible about the recruitment efforts of representative private colleges in Iowa by collecting information now available only on individual campuses, and known there by only a few persons.

Despite substantial costs incurred in recruiting students, little research has attempted to evaluate the effectiveness of such programs. A second purpose of this study is to determine the nature of the influence upon their selection of a college which first-semester freshmen attribute to recruitment practices and to compare this with the perceptions of the

admissions staff. From this may emerge a clearer picture of which practices are effective for various types of colleges and students, as well as the accuracy of the staff's comprehension of the value of its methods.

Private colleges are assumed by many to be vital to the overall health of American higher education and worthy of continued existence. The historical diversity found among American colleges and universities is a major strength of the entire system. A third purpose of this study is to provide suggestions toward the improvement of recruitment efforts at private colleges, in the belief that nothing will better help to secure their future than an adequate number of students.

Delimitations

1. In order to make possible personal visits to the selected campuses, a method of data gathering much preferred to mailed questionnaires, this study was limited to institutions within the state of Iowa.
2. Despite the limiting effect upon generalizability, a representative, rather than random, sample of colleges was selected in order to secure a cross section of types of colleges. It is assumed that the colleges so selected are representative not only of Iowa's private institutions, but also the great majority of small private colleges in America.
3. Only four-year, coeducational private colleges which grant the baccalaureate degree only were included in the population. Private colleges not serving multiple functions were excluded, e.g. Bible colleges and seminaries, business colleges, osteopathic and chiropractic

colleges, etc. The remaining institutions are those which are commonly called liberal arts colleges.

4. Only first-semester freshmen were surveyed to control for factors related to retention of the student by the college, factors such as satisfaction, social and intellectual climate, and success in the course of study.
5. No attempt was made to determine the effect of the recruitment effort on either parents or high school counselors. While the role of these persons in the selection of a college by adolescents is undeniably large, reliable data could be obtained only from the parents and counselors themselves. This would have more than doubled the scope of the study, while necessitating mailed questionnaires, a procedure deemed undesirable.

Limitations of the Study

The following limitations were recognized and accepted as reasonable at the start of this research.

1. The selection of a representative rather than random sample of colleges for inclusion in the study necessarily restricts the scope of the conclusions. No generalizations may properly be made beyond the institutions actually studied. This is not considered to be unduly serious or detrimental to the purposes of this study, as the sample is assumed to reflect with considerable accuracy the larger population from which it was drawn. By extension the sample may also reflect institutions in other states which meet the same criteria

and might have been selected but for the geographic delimitation. Furthermore, the study must be considered developmental in nature, with the hope that it will stimulate similar studies on a regular basis by colleges of the types represented.

2. Whenever research is based on the recollections or feelings of human subjects, the ultimate accuracy of the observations is open to question. Accuracy of memory or perception, as well as intervening events are largely beyond control. The methods employed in this study were attempts to control these variables to the fullest extent possible within the scope of such a study and will be treated fully elsewhere.

REVIEW OF RELATED LITERATURE

In the preceding chapter the history and development of the admissions function in higher education were discussed, with the point being made that this is a comparatively new area of endeavor. With the office of admissions typically little more than twenty years old, it follows that significant research in the area will be at least equally recent in origin.

Interest in the broad area of admissions has been considerable, yielding a substantial corpus of written material. Much attention has focused on the initial decision to attend college. This topic was felt to be too tangential to the heart of this study to be reviewed here; it is treated by Grosz (44) and Spears (96) among many others.

This chapter will deal first with literature related to the total range of influences operating upon the student as he selects a specific college, with emphasis on materials directly related to recruiting activities. A second area of review will be the limited number of writings which deal exclusively with the recruitment of students. Where research reports were detailed enough to permit evaluation, critiques of the studies will be given.

The special area of recruiting disadvantaged students will not be reviewed. Due to the inordinate financial ramifications for small private institutions of attracting large numbers of students needing virtually total support, this can only be an area of very minor interest.

This chapter is partially based on a complete manual search of

Dissertation Abstracts International on the topic of student recruitment. The decision was made not to utilize the DATRIX automated search system of University Microfilms due to its low level of reliability, according to Iowa State University reference librarians. In addition a computerized search for relevant materials in the ERIC system was employed, as well as manual searches of such standard reference guides as Education Index and the Reader's Guide to Periodical Literature.

Influences in the Selection of a College

For a large number of teenagers today, there was never a conscious decision to attend college. Rather they have "always" planned on a college education or it has "always" been expected of them. Others must indeed weigh the elements and perhaps overcome a negative home attitude toward college education. Once the decision has been made or the inevitability of college has been accepted, the prospective college student is faced with a major decision. Which college should he attend?

Holland (47, p. 26) has observed that this selection of a college is "the outcome of a complex set of forces including student goals, abilities, and personality, which interact with parental values, education, socio-economic status, and parental images of the 'best' and ideal college." Identifying the nature of this "complex set of forces" has been the objective of numerous studies. Unfortunately there is at least as much contradiction as agreement among the studies.

Henry S. Dyer (37), writing for the college and university admissions section of the Encyclopedia of Educational Research, comments that

choosing a specific college is much more difficult than deciding to attend college. He identifies the following factors influencing the choice of an institution: parental educational background, the quality and amount of reading in the home, the family's socio-economic status, their religion, the presence or absence of various types of colleges in the home community, the level of the student's academic achievement in high school, the size of his high school, the distance from home, the cost of attending the college, and scholarship opportunities at the institution. Dyer considers athletic recruitment, social opportunities, and the college attended by the parents to be subtleties in the choice process.

Relative specifically to recruitment Dyer states (37, p. 32), "The stream of college literature, films, and recruiters moving through the high schools is probably also not without some effect on some students." In sum, then, Dyer places most of the influences upon college selection on "internal" factors, that is, things within and surrounding the prospect and his family. "External" factors such as athletics, social life, and recruitment are attributed much less influence.

Douvan and Kaye (36) suggest there are at least three kinds of psychological variables which are crucial to understanding the choice made: 1) the criteria used to judge institutions and their relevance to the issue; 2) the individuals or agencies which influence the choice; and 3) the nature of parental involvement.

Relative to the college itself, their research identified several major choice criteria (36, pp. 219-221): geographic location, which

probably determines the initial pool to be considered; academic quality; status or prestige of attending this college; cost, which limits the range of choice, but probably is not the final determiner between A and B; religious affiliation for some groups. Of lesser importance were whether the institution is publicly or privately supported, whether it is coeducational, its size, and the physical facilities.

The primary sources of influence, in no specific order, were found to be parents, teachers, counselors, unrelated adult acquaintances, peers, close friends, and older siblings and their contemporaries. Douvan and Kaye leave ample room in their findings for a significant role for recruitment, although they did not investigate it directly.

Some of the earliest research in the area of college choice was done by Holland (48) in the late 1950s. Studying 7500 National Merit Scholarship finalists, he found that they chose a college largely because they believed it to be the best college or outstanding in their area of interest. However, he noted that these opinions were based on ideas obtained from other students and various significant adults, rather than any more factual data. Among other choice criteria, being close to home was highly desirable, but little emphasis fell on the institution's research reputation, cost, physical facilities, or coeducational status. When one adjusts for the highly select sample Holland studied, and the fact that cost would be a relatively minor factor to scholarship winners, Holland's findings tend to support those previously mentioned.

In another study of 1957 National Merit Scholars and Certificate of Merit winners, Holland (47) found that choosing a private college was

associated with such items as small size, liberal arts orientation, religious affiliation, and belief that this was the best college, either in general or for the particular student's development. Those choosing a public institution emphasized low cost, closeness to home, desirable location, and coeducational status. For males, choosing a private college correlated with being satisfied with the choice. For all students, the choice of a private institution was correlated with higher cultural and economic background factors. There is little that is surprising in these findings.

Possibly influenced by Holland's finding that a student's view of or opinion about a college influences his choice, Morey (72) studied the role of the institutional image. To avoid obviously different types of institutions, she elected to study three campuses of the University of California (Berkeley, Davis, and Santa Cruz), which are all within the attracting range of San Francisco. Morey administered a questionnaire to a random sample of 914 university sophomores and high school students due to enter the university in the fall. Subjects were asked to rate the relative importance of twenty-nine possible reasons for choosing their campus.

From only these ratings, Morey was able to correctly identify 85 percent of the Berkeley and Davis freshmen and 92 percent of the Santa Cruz group. Thus she concluded that the image of the campus which the students held could well be the link between the two. This would tend to support the view of several other researchers, including Holland (47) and Astin (2), that institutions appeal to or attract a specific type

of student. If this is accepted, the identification of this specific pool of potential students, as well as thorough and honest promotion of the institutional image, should be high priority work of the admissions staff.

Stahlmann and his colleagues (97) surveyed high school seniors and their parents, asking for a ranking of what factors had led to the choice of a college and what people and sources of information had been most influential. Sixty usable student-parent pairs of questionnaires were obtained. According to parents, the most influential factor was the advice of parents or other family members, followed by cost and location. Students agreed on the three factors, but reversed the importance of cost and location.

Parents saw themselves as the most influential persons, followed by brothers and sisters, high school counselor, high school friends, friends already in college, high school teachers, other relatives, and college recruiters in that order. The students agreed on parents and siblings, but rated the high school counselor below high school and college friends. Other relatives ranked above high school teachers and recruiters were again at the bottom. In either case, college recruiters were ranked lowest in influence, an unhappy finding for admissions directors.

To parents the most influential source of information was talking with college students, followed by a campus visit, college catalogs, handbooks and guides about colleges, and other college recruitment literature. The students reversed only the first two, finding the campus

visit most influential. Here the hopes of the recruiter are raised considerably, since only the handbooks and guides do not fall under his control as a recruiting device. While the recruiter may not be personally influential, apparently some of his "tools" are. In general, this study strongly supports others which place major influence in the hands of parents. This suggests a strong need to contact parents personally as an integral part of student recruitment.

Napp (74) took a 10 percent random sample of each class at East Carolina College in 1960-61 to determine why the students chose that college. He found that the most influential items were: nonalumni parents, high school administrators, former students of the college, friends who attend the college, a college student, a campus visit, the college catalog, General College programs, low tuition, low cost of living, pride in a degree from the college, specialized courses, financial aid, coeducational status, size of the college (circa 5000), location, proximity to home, and the friendly atmosphere of the college.

Several points are of special interest. Napp separated parents into alumni and nonalumni groups, and surprisingly, found that only non-alumni parents were influential. It is also quite unusual to find high school administrators among the most influential. Recruiters should be pleased that campus visits and the college catalog ranked high, but the importance of low costs is ominous for private colleges.

Napp also reported many items which students rated as least influential. They are: alumni parents; nonalumni relatives; college faculty; a high school talk by a college representative; letter from a college

administrator; conference with a college representative; all forms of mass media; the college alumni paper, yearbook, picture bulletin, and placement service; a film about the college; class size; the availability of public transportation between home and the college; the belief that the student could succeed at the college better than elsewhere; and a high school talk by a college student.

No explanation was offered for the poor showing of alumni parents, nor why class size made little difference. Beyond this, the recruiter will find many of his devices listed among the least influential. At least relative to East Carolina College, the recruiting effort would appear to have only limited influence.

In a massive survey for the American Council on Education, Creager (31) obtained data from 243,156 students who entered 358 institutions. When asked to rate thirteen items as being a major influence, a minor influence, or not relevant, 48.1 percent rated parents or relatives as a major influence. The academic reputation of the college was rated a major influence by 43.2 percent, followed by low cost (24.6 percent), a high school teacher or counselor (22.6 percent), friends going there (15.2 percent), a chance to get away from home (14.6 percent), and a graduate or college representative (12.2 percent). All other items received less than 10 percent major influence ratings.

When broken down, parents and relatives were a major influence to a slightly higher percentage of private college students than of the total sample. The academic reputation of the college was of major importance to far more private college students, while low cost was of

considerably less importance.

Creager's findings again emphasize the importance of parents in choosing a college, as well as the cost factor. The importance of high school teachers and counselors seems to contradict Stahlmann's findings, although less than one-fourth of the sample considered them a major influence. That only 12.2 percent felt a college graduate or other representative was a major influence again speaks poorly of the recruiting effort, but this study attempted only a very superficial look at recruitment. At the same time, the enormous scope of the sample lends weight to the findings.

The role of the counselor is not clear from the studies already discussed. Two researchers have examined that aspect of the influences on college selection. Kerr (58) sampled 1350 seniors in 33 Iowa school systems. When asked who provided the most valuable assistance in deciding which college to attend, 67.3 percent said parents. Only 3.6 percent said college representatives, the lowest percentage of any category. A total of 36.7 percent said their high school counselor had no influence on their decision, the highest percentage response to that item. As for who gave the most accurate information about the college, 32.1 percent said their counselor, 31.2 percent said college representatives, and only 10.9 percent said parents.

The first result tends to support Napp and Stahlmann on the role of parents and college representatives. The poor showing of high school counselors may contradict Creager's findings. Of greater interest is the finding that, despite their enormous influence, parents are not

viewed as the best source of accurate information. That college representatives should rank behind high school counselors as a source of accurate information is unfortunate. Perhaps some representatives were not properly trained for their work, or perhaps they "oversold" their institution. Whatever the explanation, it is clear that recruiters particularly need to get more accurate information into the hands of parents.

Interest in the role of counselors also sparked a study by Roemmich and Schmidt (90), who surveyed all high school seniors in the San Diego city schools plus two county high schools. In response to the question who assisted you in selecting a college, a large 41 percent said parents and family, while an astounding 37 percent said "no one." Eleven percent cited friends, 5 percent a counselor, 4 percent a teacher, and 2 percent "others."

These results pose several interesting questions. No other study posed the identical question, so direct comparisons are not valid. However, one must wonder whether 37 percent of those students actually made the decision alone. It is conceivable that other researchers have omitted this possibility and just assumed someone always helps. It seems equally plausible that some answered "no one" out of a desire to appear independent, rather than as a fact.

The 9 percent total finding for counselors and teachers clearly contradicts Creager's finding that the counselor was a major influence for 22.6 percent of his sample. However, it must be remembered that Creager's group spanned the nation, while Roemmich and Schmidt worked

only around San Diego.

Finally, this study either includes college representatives under "others" with a feeble 2 percent showing, or omits them entirely. In either case, the study was not set up to differentiate finely enough to allow comments about recruiting efforts.

The subject of influences on college choice has also inspired several dissertation studies, mostly at Southern universities. McNeese (66) sought to identify the significant factors which influenced freshmen to select the University of Mississippi. From a random sample of 300 incoming freshmen, she received 197 usable replies or about 66 percent. Each subject was asked to rate fifty items as being of great influence, some influence, or no influence in choosing Ole Miss. Any item receiving at least 50 percent "great influence" responses was considered a major factor.

In rank order by percentages, the nine major factors were: the good reputation of the university, desired courses were offered, a friendly campus atmosphere, the high academic standing of the university, school spirit, the academic strength of the faculty, the prestige of a degree from the university, an outstanding program in the major field, and a favorable campus visit.

Only item nine, the campus visit, relates to recruiting. Its importance was greater to female students than to males and was also related to age. The younger the students, the greater the percentage who found a campus visit of great importance. Furthermore, the lower the ACT score, the higher the percentage who were influenced by the campus visit.

These findings may have implications for recruiting via campus visits. Perhaps girls, younger applicants, and students with lower ACT scores should be especially encouraged to visit the campus.

An additional seven items were rated of little or no importance by at least 50 percent of the students and were termed unimportant items. They were: interest in the university aroused by a faculty member, by the campus newspaper, by a high school teacher, by the year book, or by a high school counselor; the university's recruitment program; and the family tradition to attend Ole Miss.

Again the role of high school teachers and counselors is called into question. In this study a full 80 percent said a high school teacher had little or no influence and only 6 percent said such a teacher had great influence. For counselors the respective figures were 62 percent and 11 percent. Differences in sampling and questionnaires may explain these findings with respect to, say, Creager's. However, this contributes little toward a final conclusion.

Relative to the response to recruitment, 75 percent said it was of little or no importance; only 4 percent rated it of great importance. Unfortunately, the concept was not defined for the students, nor was it explained in the dissertation. The campus newspaper and yearbook, a campus visit, and appearances by faculty members are normally elements of a recruiting program, yet they were treated separately in this study. Since McNeese did not profess to be studying recruitment, it would be improper to draw conclusions about it from her work. In fact, it would seem she did not have a clear understanding of recruitment herself.

Another University of Mississippi dissertation by Spears (96) had as its purpose the identification and validation of factors given by a sample of high school seniors as affecting their choice of a college. This study was limited to Mississippi, but not to the university. Spears was impressed by the lack of consistency among other studies of influential factors, as well as the lack of validation in the sense of stability of the perceptions over time.

A fifty-seven-item questionnaire was developed, with each item to be rated as essential (to selecting the specific college), considered, or not considered. The items were grouped into social, financial, transportation, friends, tradition, academic quality, curriculum, high school faculty, and recruitment factors. The questionnaire was first administered in April of the senior year in high school and again in October for validation. Six high schools were selected at random from within "blocks" based on the number of seniors in the school and the size of the community. The final sample was 118 students, stratified by low, medium, or high ACT scores.

Ten of the fifty-seven items received at least 50 percent "essential" ratings and were considered most important. In rank order, they were: friendly atmosphere, offered desired courses, excellent facilities and equipment, cost within family budget, outstanding major program, prestige of the college's degree, academically strong faculty, strong prospect for success at this college, coeducational, and individual faculty and staff attention.

Five items received at least 50 percent "not considered" ratings and

were judged to be of no importance. In rank order from the least important, they were: family members went there, recommended by elementary or high school teachers, recommended by high school counselor or principal, alumni contacts, and personal contact from a faculty member.

Next all items were grouped into the nine factors, the percentage of responses to each factor calculated, and the factors rank ordered. From the most important, the order was: financial, academic quality, curriculum, social factors, recruitment, transportation, tradition, friends, and high school faculty.

It is worth noting that although no individual recruitment items were rated most important, and two (alumni and faculty contacts) were rated not important, the recruitment factor ranked fifth of nine overall. Much as McNeese found, the recruiting items were more important to females than males and to lower ACT scores than to higher. Age was not considered by Spears.

Regarding the validation, Spears found moderate instability between the two administrations. From April to October eight items decreased in importance, including five of the original ten most important items. Three of the initially not important items became even less important, including two recruiting items (alumni and faculty contacts). These two also showed the largest decrease among all items. Only one item--cost--increased in importance. All others were unchanged.

In summation, relative to recruiting, Spears identified nine individual items, of which seven were rated as being of some importance and two of no importance. The nine items broadly cover some aspects of

student recruitment, but are in no way adequate to truly evaluate the efforts. Spears makes no broad generalizations concerning recruitment, as the study was focused on broader influences. Spears' study has added to the small body of knowledge in this area another rank ordering of items which supports some findings of other researchers and contradicts others.

At the University of Texas, Mason (67) attempted to determine the relative importance of various factors in the choice of college by Texas Baptist students. He mailed questionnaires to 1864 students on twenty-nine Texas college and university campuses. His final usable return was 1128 or about 60.5 percent. His instrument contained forty-two items to be evaluated on a five-point scale of degrees of influence.

For students attending Baptist colleges, the most influential persons were, in order: parents, no one, friends, brother or sister, pastor, college representatives tied with others, and teacher or counselor tied with alumni. At non-Baptist institutions, "no one" ranked first, followed by parents. College representatives also declined in importance. The finding that a relatively large number of students felt no one person had been influential in their decision tends to support the findings of Roemmich and Schmidt in San Diego, only from a much broader base. The relatively poor showing of college representatives is similar to other studies.

Eleven of the original items had a mean rating of 2.25 or greater across all institutions on Mason's five-point scale. They were: offered desired courses, outstanding major program, high academic standards,

friendly atmosphere, coeducational, excellent facilities, prestige of the degree, low cost, impressive campus visit, neither too small nor too large, and small classes. Again the findings overall are not startlingly different from other studies, but the rank order continues to vary considerably, suggesting, perhaps, a level of individuality within any sample which will always exist. Possibly only the major factors as a group are identifiable.

As a further analysis Mason grouped related items and reanalyzed the data. The following rank order resulted: curriculum, proximity, location of college, transfer intentions, informational media, type of college, financial, religious, entrance requirements, persons, social life, and athletics.

This technique must be questioned, as it tends to distort the results. For instance, neither the second factor (proximity) nor third (location) contains even one of the top eleven items. This occurs because a group or factor which contains only items of individually moderate rank may, as a whole, have a better rating than a factor containing both very high and very low ranking items which tend to offset each other. Thus informational media ranked fifth, but was a factor containing only one average-rated item. This type of analysis tends to obscure, rather than elucidate.

Other weaknesses in Mason's study are also apparent. His use of a five-point rating scale did not force as clear a choice as would a three-point scale. Furthermore, Spears (96) has since demonstrated that student perceptions will vary considerably just from April to October. Mason did

not obtain his data until the spring of the freshman year. From Spears' findings it is reasonable to assume that the responses Mason received were not the same as would have been obtained in, say, November, which would themselves have differed from those obtainable just prior to the start of freshman classes. Thus Mason's results may not accurately reflect the influences which were operative at the time the actual choice of a college was made and subsequently carried through to matriculation. Nonetheless, Mason's results are probably comparable to many other studies which are reported in insufficient detail to allow detection of such weaknesses.

In addition to the general research and dissertation studies already cited, several researchers have sought to discover the underlying influences behind college choice and then reduce a rather large number of influences to a small number of easily interpreted "factors" which reasonably represent the original items. Such studies employ the statistical technique of factor analysis.

The earliest such study discovered was conducted by Richards and Holland (89) in 1964-65. They utilized a sample of 8292 high school students taken from the November 1964 ACT testing period. Twenty-seven commonly listed explanations for college choice were to be rated as being of no importance, a minor consideration, or a major consideration.

Among individual influences, good faculty was rated highest by males, with high scholastic standards second. Girls reversed that order. Boys rated advice of high school or college counselor third, followed

by advice of parents, campus visit or tour, talking with a college admissions counselor, and alumni contacts. Financial aid ranked a surprisingly low eighth. For the girls, advice of parents ranked third, then a campus visit, advice of a high school or college counselor, talking with a college admissions counselor, alumni contacts, and financial aid.

Even before the factor analysis, many differences from other studies are apparent. The eight items mentioned above had a mean rating of 1.66 on a scale of one to three, which leaves the remaining items with rather low ratings. Yet this latter group includes such items as size, location, desired courses, low cost, close to home, and friends going there--all items which have ranked high in other studies. Furthermore, this study produced high ratings for items like alumni contacts and talking with an admissions counselor, which were low in most other studies. As was the case with Creager's research (31), the size and diverse nature of the sample tends to lend weight to this study, yet it is as contradictory of other findings as any existing study.

To complete the project, correlation matrices were computed for each sex and then factor analyzed. Results showed considerable consistency between the sexes. Four factors emerged which were designated intellectual emphasis, practicality, advice of others, and social emphasis. These four represent the original twenty-seven items.

Relative to recruitment, the advice of others factor loaded high on advice of alumni contacts, advice of high school or college counselor, and talking with an admissions counselor. These items loaded higher

than a campus visit, which fell into the social emphasis factor. Here, at last, is a study which found considerable value in aspects of the formal admissions effort.

Morrison (73), noting the lack of agreement among studies such as those previously cited, also attempted to isolate factors influential in college selection. He began with a 148-item instrument which was administered to a random sample of liberal arts high school seniors with finalized college plans. Only communities with the highest average incomes and educational attainment levels, based on the 1960 census, were involved. Unfortunately, his report provided little detail concerning the procedures.

The top factor to emerge was labeled student freedom. A number of items within this major factor are relevant to recruiting. Positive loadings were found for admissions publications, catalogs, and correspondence. Negative loadings were found for admissions conferences, college nights in the high school, recommendations of college students, and correspondence from a faculty member. Morrison interpreted these as negative influences because the student is suspicious of them.

The remaining four factors were social mobility, dependency, personal observation (which includes campus appearance, size and facilities, as well as film or slide presentations on the college) and practicality. While there may be a resemblance between these factors and the four of Richards and Holland, it seems rather shallow. Instead of enlightenment, this study brought further confusion to the topic.

Bowers and Pugh (12) included parental views in their factor

analysis of influences behind college choice. They used a twenty-two-item instrument with a three-point scale for ratings. The sample consisted of all freshmen attending the first University Division freshman counseling meeting at Indiana University in the Fall 1970 term. Usable instruments were obtained from 4215 respondents. Questionnaires were also mailed to 6365 families of students accepted as freshmen.

The initial factor analysis showed such remarkable similarity between students and parents that the two were pooled and reanalyzed. Six factors emerged with academic items ranking highest, followed by financial considerations, then social and cultural items. Geographic location, formal advice of others, and informal advice of others were least important. These findings are more harmonious with other studies, placing the intellectual and practical considerations highest and downgrading the common recruiting devices (here in the formal advice factor). However, the relative unimportance of geographic location differs from some other studies.

The factors which influenced second-semester freshmen to initially enroll at three selected Protestant liberal arts colleges were examined by Grosz (44). He also investigated possible relationships between positive influences on college choice and certain academic, demographic, and leadership characteristics of the students.

Although Grosz tried to make a sound case for selecting second-semester freshmen, Spears' (96) finding that expressed reasons for selecting a college do change over time speaks against Grosz's decision. It would seem that only those reasons expressed prior to or very soon

after enrollment could be considered valid, since intervening experiences will alter the perception of influences and hence their expression. Advice to admissions officers would be much more meaningful, if based on what the student perceived at the time of matriculation, not several months later.

All second-semester freshmen at the three colleges rated forty-one possible influences on their choice of a college on a scale from -50 (strong negative influence) to +50 (strong positive influence). This scale may be considered a weakness of the study as it does not force clear-cut choices. However, Grosz is to be commended for including the possibility of negative influences, something rarely seen in such studies.

Combining all colleges and students, the ten most positive influences, in order, were: small college, coeducational, faculty interaction, parents or relatives, job preparation, scholarship aid, course offerings, value of a degree from the college, excellent college, and a campus visit. In general, these items are not radically different from other studies, except for the top item--small size.

Only three of the forty-one items received negative mean ratings: being able to live at home, low academic reputation of the college, and costs.

It should be noted that, with the exception of the top three items, the standard deviation for each positive influence exceeded the mean. This indicates a rather wide range of responses was obtained, probably including many negative responses. With such a range of responses, one might question the appropriateness of the mean as a basis for rank

ordering, and for all conclusions. The mean may well have obscured important individual deviations.

Grosz went on to compute correlations between the seven most positive items, which were common to all three colleges, and selected personal characteristics of the students. Only scholarship aid yielded a significant correlation. The higher a male ranked in his graduating class and the higher his composite leadership score, the more he was influenced by scholarship offers. As the family income and distance from home increased, the influence of a scholarship offer decreased. For females, the higher the ACT/SAT score, high school rank in class, and leadership score, the more influential a scholarship offer was. As parental income rose, the influence of scholarships declined. Grosz was careful to note that, although these correlations reached statistical significance, they were of low magnitude and had little practical significance for the colleges.

Finally, Grosz sought to reduce his forty-one items to a manageable set of factors by factor analysis. Ten factors emerged, of which only four reached the necessary reliability level. Grosz termed them academic, size and environment, music and drama, and religion. The academic factor ranked first, which agrees with other studies, but the other factors differ considerably. They are presumably a result of the attributes of the specific institutions under study.

In general, then, Grosz found that many common sources of influence--academic prestige and quality, cost, location, and curriculum--were not major influences within his sample. Nor did he find any major differences

among the institutions. Each attracted students for very similar reasons. The failure to uncover significant relationships between high influence ratings and student characteristics, except relative to scholarship aid, precludes offering advice to college admissions personnel. This could be due to the nature of Grosz's instrument and/or sample.

It is particularly interesting to note a lack of relationship between the student's academic characteristics and those of the college. Furthermore proximity to the college was not related to geographic location and parental income was not related to financial considerations except scholarship aid. These findings within three Protestant liberal arts colleges differ considerably from those of the broader-based studies.

Relative to recruitment specifically, Grosz confirms a similar pattern to most studies. The campus visit ranked as one of the top ten influences. Other recruiting devices ranked lower. However, no recruitment practice received a negative mean rating. It is interesting that a "former student" ranked as the thirteenth highest influence, perhaps suggesting a greater role for alumni than is normally accorded them.

Of the other items, the admissions staff ranked twenty-third and college publications twenty-fourth. The influence of another friend planning to attend the college ranked thirty-second out of forty-one, perhaps because Grosz's colleges drew heavily from outside the immediate location so that fewer groups of friends may attend.

As in all other studies cited, Grosz was not attempting to evaluate recruitment per se and hence covered only aspects of it, and coarsely at that. To draw broad conclusions about recruitment from this study

would be improper.

One other study involving general factors of influence on college choice deserves mention. It has been noted that the factor analysis studies produced varying factors, largely due to different starting points. Stordahl (98) began with the four factors found by Richards and Holland (89) and constructed an eighteen-item instrument based on their high load items. The questionnaire was administered to all new freshmen at Northern Michigan University in the fall of 1966.

Stordahl wished to study the relationship of socio-economic status, proximity to home, academic ability, and college achievement to the factors of intellectual emphasis, practicality, advice of others, and social emphasis. He found that intellectual emphasis was most important to all students, which is not surprising. Practicality meant more to those from nearer the university, while social emphasis meant more to those from farther away. Simple logic supports those findings. Unlike several other studies, the advice of others factor was of little importance by any possible analysis. However, this study dealt with a large public university, rather than a private college, and Stordahl makes no broad generalizations from his findings, properly limiting them to the institution studied.

Recruitment of Students

Most of the studies cited in the preceding section included some recruiting devices among items influencing college selection, but none attempted to examine this vital area in depth. In fact, the subject of

recruitment has received very little research attention. Conversations with admissions officials revealed a total lack of reference materials on the subject. There is no publication devoted to the area, although numerous opinion articles appear in the literature.

The recruitment of disadvantaged students has attracted some attention. However, among other things, disadvantaged usually implies a need for much financial support. The financially precarious position of many small private colleges can only discourage the active recruitment of students who will require massive support from college resources. Therefore, this topic is not treated in this review.

Bowling (13) asked high school principals or headmasters to evaluate college and university publications which are used in recruitment. Brief general information brochures, such as financial aid opportunities, received high ratings, as did informative pamphlets about departments and special programs. The general catalog or bulletin was frequently downgraded as too complex or difficult to understand. Scholarship brochures outranked posters on the same subject. Yearbooks were considered to be interesting, but noninfluential. This rather unsophisticated survey was the earliest report located which specifically treated an area of recruitment.

At Iowa State Teachers College (now the University of Northern Iowa), Baumgart (5) asked matriculated freshmen who had been to a college day or college night program to evaluate the experience. Although 93 percent felt the experience had been worthwhile, only 75 percent attributed any influence to it. Nonetheless, recruitment has never aimed

at total influence or reaching all prospects by any one technique. Baumgart concluded that such programs were worthwhile and should be continued and improved.

A longitudinal study involving 10,000 young persons from thirty-seven high schools in sixteen communities from California to Pennsylvania was begun in 1959. Trent (100) reports that most chose their college firstly for proximity, secondly for peer popularity, and thirdly for some vague idea of institutional prestige. He concludes that these findings must give guidance to the recruitment program, which can best reach prospects by emphasizing these primary influences.

Two dissertations were discovered which deal with student recruiting. LaBouve (62) studied undergraduate student recruiting programs in Southern Baptist colleges and universities, seeking to describe them in terms of their objectives, policies, administrative organization, practices, costs, evaluation, and chief recruitment officers. Of the fifty-five Southern Baptist institutions, forty-seven agreed to participate, with six being representatively selected for on-campus study. LaBouve states (62, p. 100) that his essentially descriptive study was needed due to the "dearth of systematic, comprehensive research treating the student recruiting technique." Only a solid descriptive base is adequate as a starting point for future planning.

Forty-five percent of the cooperating institutions indicated they were dissatisfied with their success in attracting students. This percentage could well be higher today, as competition has grown even stiffer in the four years since LaBouve's study.

The section on recruiting practices is most germane to this review. LaBouve prepared a list of twenty-nine items based on his review of literature and the 1967 Baptist Education Study Task report. Many of these techniques are strictly Southern Baptist oriented and of no broader interest. At no point did LaBouve treat such common items as letters and phone calls. Even publications received very little attention.

Effectiveness was determined by asking each recruiting officer to rate selected items as highly effective, effective, or not effective. Over 50 percent rated as highly effective high school visits, High School Day programs on campus, campus visits, and visits to the home of prospects. Least effective "honors" went to commercial clearinghouses, college day/night programs, and displays at fairs, meetings, etc.

It is interesting to note that, while over 50 percent saw little value in college day or night programs, 20 percent rated them as the best of all techniques, while another 16 percent rated them second best. Obviously, a great diversity of opinion exists relative to this practice.

The faith institutions place in their recruiting efforts was amply demonstrated by the fact that twenty-nine of the forty-seven institutions were increasing their recruiting budgets from 1968-69 to 1969-70. In three instances the increase was 90 percent or more. An additional increase of over 20 percent was planned for 1970-71 by 41 percent of the institutions.

Another finding was a general absence of any systematic evaluation of the effectiveness of recruiting efforts. The most common evaluation

was simply the raw number of enrolled students, followed by the number of applications received and the quality of new students. In no case was any attempt made to evaluate the techniques being used to recruit students. Evaluation of the effectiveness of the recruiting programs is one of LaBouve's major recommendations.

LaBouve has provided an interesting overview of student recruitment within a small segment of American private higher education. As a descriptive study, and as a pioneering effort in the area, it can hardly be faulted.

Only one study even remotely relates to the premises behind this investigation. Campbell (22) surveyed the recruitment practices of private liberal arts colleges and universities in a thirteen-state area of the Southeast. The purposes of his study were: 1) to determine the types of recruitment practices in current use; 2) to compare practices in similar institutions; 3) to determine the relative effectiveness of these practices to attract students; and 4) to provide a model of the most effective practices. His delimitations left seventy-eight institutions to be studied.

Campbell's questionnaire was based on the sixteen most common recruiting devices found in the review of literature. The instrument was first mailed to twenty-five college admissions directors outside the Southeast for their reactions. When no one added anything of importance, the instrument was declared valid. It was sent to the seventy-eight institutions, along with a request for the names and addresses of ten randomly selected incoming freshmen. Forty-two institutions (54

percent) cooperated. No follow-up to gain a higher response rate was possible, because no institution was identified on the responses.

Admissions directors were asked to check off those items among the sixteen which they utilized to recruit students. The same items were listed individually on cards which they were to sort by the Q-Sort technique into a quasi-normal distribution according to the influence they attributed to each item. The 420 students, whose names had been provided by the colleges, received the same Q-Sort materials and directions. Of the 420 students, 222 (53 percent) replied, with no follow-up possible.

From the Q-Sort analysis, rank order correlations were calculated for student responses by type of institution (over or under 1000 enrollment, church-related or independent, coeducational or not) and for students versus admissions officers. Campbell found no significant differences in the rankings by institutional type. The correlation coefficients all exceeded 0.90, indicating a high level of agreement in the rank ordering. When admissions officer rankings were compared to student rankings by institutional types, all correlation coefficients reached significance. Comparing all students to all admissions officers also yielded a significant result. From this Campbell concluded that the ranking of his sixteen recruitment items was essentially the same for all groups of respondents.

Combining all institutions and respondents, the sixteen items were ranked in influence as follows:

1. campus tour
2. general information brochures
3. on-campus interview

4. high school visit by a college admissions representative
- 5.5 personal letter to the applicant
- 5.5 high school visit by a college student
7. specific department brochures
8. college catalogs or bulletins
9. high school visit by a college faculty representative
10. personal phone call to the applicant
11. college day or night program
12. group meetings for interested students
13. personal contact by local alumni
14. interview in the local community
15. social gathering for interested students
16. admissions clearinghouses

Campbell concluded that all recruiting programs should include the eight highest-ranking practices. Alumni efforts, college day or night programs, group meetings, and phone calls were termed ineffective and should perhaps be abandoned.

Campbell's study is a pioneering effort in a virtually untouched field. However, several weaknesses in the study must be considered. Sending the initial list of sixteen practices to nonparticipating admissions officers as a means of "validation" seems questionable. His goal was to not overlook any items, but his validators added none. He went on to ask each admissions officer to add other practices which were discussed as "innovations." These were items actually used by the colleges surveyed, but no one had the opportunity to evaluate them. Each person could react only to Campbell's list of sixteen items.

The sixteen-item list also led to another problem. Although only seven of the sixteen items were used by even 90 percent of the institutions, and four were used by less than 50 percent, each admissions officer and student had to assume that all sixteen were indeed used by his college and sort the cards accordingly. One would expect items not used by

a particular college or experienced by its students to be ranked lowest, which may not be a true measure of their value.

Another flaw is apparent in the questionnaire. The list on which the admissions officers checked the items which they used contained only fifteen items, while the Q-Sort has sixteen. Hopefully this was a typographical error in the dissertation.

The use of the Q-Sort technique may also be considered a weakness. This is a rather time-consuming procedure, if done properly, which may account for the basically poor response rate. The Q-Sort forces a quasi-normal distribution, which means some item has to be rated highest and some lowest. This does not assure, however, that the rater actually perceived much difference between the top and bottom items. If a person felt all items were virtually identical in value, whether high or low, he could not indicate this. Thus to conclude that the lower ranking items are of little value, as Campbell did, could be false.

Finally, the instructions to admissions directors for randomly selecting the ten student names were adequate, but required considerable effort on the part of the directors. This, combined with the time-consuming Q-Sort, justifies concern as to whether the names Campbell received were, in fact, randomly selected, as he requested.

All in all, Campbell's study is an interesting effort, but contains enough weaknesses to call into question its findings.

Summary

This chapter has presented a review of literature related to the topic of this study. Very little research has focused directly on student recruitment, although many studies have sought to determine what overall influences operate on a student as he selects a particular college or university. Both areas were reviewed.

Douvan and Kaye (36) found that geographic location, academic quality of the institution, institutional status or prestige, cost, and, for some groups of students, religious affiliation were the major criteria in choosing a college or university.

Among National Merit Scholars and Certificate of Merit winners, Holland (47) found small size, liberal arts orientation, religious affiliation and quality of the institution were most important to those choosing private institutions, while those entering public institutions emphasized low cost, proximity to home, desirable location and coeducation.

Morey (72) determined that the image of an institution, however based, linked students to three University of California campuses well enough to predict with considerable accuracy which campus a student would choose.

Stahlmann and colleagues (97) found that the advice of parents, location, and cost were top factors to both students and their parents, with parents also being the most influential persons. Parents and students alike attributed little influence to college recruiters.

Napp's study (74) placed nonalumni parents high on the list of influences, along with a campus visit and the college catalog. He alone found high school personnel other than counselors to have influence. However, alumni parents and several recruiting tactics were viewed as having little influence.

A nation-wide study by Creager (31) found parents to be very influential, along with the academic reputation of the institution and cost. He also found that nearly one-eighth of his sample considered college representatives as of major influence. High school teachers and counselors were also more important than in many other studies.

Parents were also found to be most influential by Kerr (58). Counselors and college representatives were rated low in influence, but credited with providing more accurate information about colleges than parents. Roemmich and Schmidt (90) found nearly as many San Diego area students claiming no one helped them choose a college as there were students calling parents a major influence.

University of Mississippi freshmen were attracted most by the university's reputation, availability of courses, friendly atmosphere, high academic standing, school spirit, academically strong faculty, prestigious degree, outstanding major programs, and a campus visit, according to McNeese (66).

In Spears' study (96) a friendly atmosphere, availability of courses, facilities, costs, outstanding programs, degree prestige, strong faculty, prospects for success in the college, coeducational status, and provision for individual attention ranked high as influences on college selection.

Family tradition, public school figures, alumni contacts, and college faculty all were rated low. In grouped factors, financial, academic quality, and curriculum considerations were rated highest. Spears also found that the answers given by students changed somewhat from April to October, indicating that intervening events cause shifts in the perception of influences. Recruitment was found to be of some importance.

Mason (67) found parents most influential, followed by "no one," friends, and siblings, according to Texas Baptist students in Baptist institutions. Items not involving persons were headed by course offerings, outstanding programs, high standards, friendly atmosphere, coeducation, facilities, degree prestige, cost, a campus visit, and size.

Several researchers have sought to identify factors underlying the individual influences mentioned above. Richards and Holland (89) found four factors which they designated intellectual emphasis, practicality, advice of others, and social emphasis. Morrison (73) labeled his top factor student freedom, followed by social mobility, dependency, personal observation, and practicality. Seven factors emerged from a study by Bowers and Pugh (12)--academic, financial, social, cultural, geographic, formal advice, and informal advice. Grosz (44) isolated ten factors, but only four met reliability standards. He labeled them academic, size and environment, music and drama, and religion.

Throughout these studies many elements recur time and again, items related to academic quality, prestige, location, cost, parental guidance, and so forth. Many differences and contradictions are also apparent, especially relative to the role of recruiting techniques and school

counselors. The differences may be partially explained by the fact that no study cited is a replication of any other. Each had its own particular goals and methods. Yet even where identical or very similar items occur, the attributed influence is frequently different. One must conclude that no definitive answer yet exists as to why students select a given college. Indeed one might suspect that there is no such answer apart from each individual institution.

The generally low influence level attributed to recruiting devices should not be interpreted as indicating that recruitment is a waste of time and money. While recruitment may not rank with parents as an influence, it must surely make the difference for some students. To a private college, struggling to maintain enrollment, a recruitment program which makes the decisive difference for 25 percent of its students, or even 10 percent, may well be the difference between life and death for the college.

Until recruitment fails to produce any new students, it seems likely to continue to exist. Yet few studies have examined recruitment practices and programs. Bowling (13) found that small, easy to read brochures were better received than complex catalogs. For 93 percent of students surveyed by Baumgart (5), college day or night programs were worthwhile.

LaBouve (62) found nearly half of Southern Baptist recruiters were dissatisfied with the success of their efforts. His study included only twenty-nine possible recruiting practices, many of which are inapplicable outside Southern Baptist institutions. He found that recruiters

considered high school visits, High School Day programs on campus, other campus visits, and visits to prospects' homes to be most effective, while commercial clearinghouses, college day or night programs, and displays about the college were termed least effective. Unfortunately, these ratings were strictly opinion based, with no concrete evidence to support them.

Campbell (22) surveyed recruiting practices in the Southeast. To his initial list of sixteen devices, the forty-two responding admissions officers added eleven others as "innovations." Campbell's analyses found no significant differences in the ranking of the sixteen items by students at different types of institutions or between students and admissions directors. Campus visits were rated highest, followed by general information brochures, on-campus interviews, visits to high schools by recruiters, letters to applicants, and visits to high schools by college students. Admissions clearinghouses ranked last.

It is apparent that even within so few studies, major differences exist. The value of college day or night programs is a good example. It is apparent that too little is known about student recruitment, an activity which involves thousands of individuals and millions of dollars across the nation. Recruiting students will continue; in fact, it will probably grow in importance. The question is, can it be made better and more effective than it now is?

RESEARCH METHODS AND PROCEDURES

The problem for this research was to first determine how selected small, private colleges in Iowa overtly recruit new freshman students, and then to measure the relative influence upon college selection which incoming freshmen attribute to recruitment practices. It was believed these data would provide some understanding of the relative effectiveness of recruitment tactics. Further, it was felt that a meaningful measure of the admissions staffs' comprehension of the relative value of various recruitment methods could be obtained by comparing the influence levels attributed to recruitment by staff members and by students.

A further aspect of this study was to determine if certain recruitment practices were effective at all colleges studied. These would constitute a nucleus of recruitment methods of general utility. Relationships between attributed influence levels and certain student personal characteristics were also investigated, in the hope that suggestions for more efficient employment of recruitment techniques might be offered. From these separate analyses it was hoped that summary suggestions for more effective freshman recruitment could be made.

This chapter describes the methodology of the study. It is organized into the following sections:

1. Selection of the sample colleges
2. Selection of the sample students
3. The data collection instruments
4. Collection of the data

5. Data analysis

Selection of the Sample Colleges

Private, four-year colleges constitute nearly 40 percent of all institutions of higher education in the United States (93, p. 61). The vast majority of these are located in the East and Midwest, a result of American settlement and expansion patterns. It has been assumed for the purposes of this study that if these private colleges were classified into broad categories, those within each category would be essentially similar, regardless of geographic location.

Based on the assumption that the data required for this study could be most accurately and efficiently collected during personal visits to each campus, the decision was made to restrict the study to colleges in Iowa. This delimitation was further supported by the rather brief time span within which the data could be collected and by the lack of selection criteria data for colleges outside Iowa.

Nineteen institutions in Iowa met all criteria established in the delimitations for this study. To begin selection of a representative sample, the colleges were first divided into two groups by the existence or nonexistence of an identifiable cultural group to which the college primarily appeals. The group with strong cultural identity consists of ten Catholic, Dutch, Lutheran, and Mormon colleges. The remaining nine denominational and independent colleges lack such strong identification with one group.

Within the initial categories institutions were classified as

"highly selective" or "other" similarly to the Carnegie Commission scheme (25, pp. 26-30). This division yielded the following groupings:

1. Cultural identity, highly selective--no college
2. Cultural identity, other--ten colleges
3. No cultural identity, highly selective--three colleges
4. No cultural identity, other--six colleges

The net result was three categories of diverse size.

Examination of the specific colleges within each category revealed a unique situation relative to the Catholic colleges. Each had been co-educational less than ten years. It was assumed that this fact made the Catholic institutions unrepresentative of their category as a whole. The decision was made not to include any Catholic college in the study unless a fourth category was created for them. Since two institutions were needed in each category, and since six colleges were felt to be the maximum which could be scheduled for visits within the time frame essential to the study, the Catholic colleges were, in effect, excluded at this point.

The basis for selecting two representative colleges from each category was fall enrollment data for 1962-1972. These data were obtained from annual reports prepared at the University of Iowa for the Iowa College Presidents' Association, the only consistent source of such data (references 27-30 and 82-88).

Fall 1972 enrollments were of primary interest, being the most recent available. Average (mean) fall freshman enrollments were calculated for each of the nineteen colleges for the period of 1962-1967

(generally good years for private colleges), for the period of 1967-1972 (generally more difficult years), and for the entire period of 1962-1972. The 1972 figure was then compared to each average. Within each of the three categories, two institutions were desired--one whose 1972 fall enrollment exceeded each of the three averages, as indicative of a relatively stronger institution in enrollment, and one whose 1972 enrollment fell below each average, as a relatively weaker institution. It should be noted that the labels "stronger" and "weaker" are for the purposes of selecting colleges with contrasting enrollment patterns. They should not be taken as value judgments of the institutions in general.

The actual enrollment data frustrated the application of these selection criteria as uniformly as desired. However, each institution selected as showing enrollment strength was above at least two of the three averages in 1972. Each college selected as weaker was below all three averages in 1972. The final selection results were:

Category 1. Cultural identity, not highly selective--Northwestern College, Orange City, Iowa (stronger) and Wartburg College, Waverly, Iowa (weaker).

Category 2. No cultural identity, not highly selective--Buena Vista College, Storm Lake, Iowa (stronger) and Westmar College, LeMars, Iowa (weaker).

Category 3. No cultural identity, highly selective--Grinnell College, Grinnell, Iowa (stronger) and Cornell College, Mount Vernon, Iowa (weaker).

The enrollment data which led to the selection of these colleges are

presented in Table 4. An alternate was available for each selected institution with the exception of Grinnell College. No other institution in its category showed enrollment strength by the established criteria.

Table 4. Freshman enrollment data for the sample colleges (computed from data in references 27-30 and 82-88)

College	1972 freshman enrollment	1962-67 average	1967-72 average	1962-72 average
Northwestern	221	198.17	225.83	211.10
Wartburg	369	409.33	414.50	409.45
Buena Vista	221	242.83	192.67	219
Westmar	223	274	284.50	279.90
Grinnell ^a	389	333	369.33	353.45
Cornell	272	301	306.83	303.40
Mount Mercy ^b	171	166.17	159.67	160.70
Briar Cliff ^b	290	257.33	344	300.30

^aWithdrew.

^bAdded after loss of Grinnell.

Following the selection of the desired colleges, each admissions director was contacted and informed of the nature of the study. The efforts required of each participating college were explained, and each was invited to participate. Each director expressed interest in the study and agreed to cooperate. Then, quite unexpectedly, Grinnell College

withdrew. All efforts to obtain an explanation were futile. Since no alternate existed, the situation had to be reevaluated.

Cornell College had to be the sole representative of its category. With the number of participants reduced to five, the decision was made to create the new category for the Catholic colleges, as had been strongly suggested by the data from the start.

The selection criteria were applied to the four Catholic institutions resulting in the selection of Mount Mercy College, Cedar Rapids, Iowa, as the "stronger" and Briar Cliff College, Sioux City, Iowa, as the "weaker" college. Thus the final sample consisted of seven colleges representing four types of small, private colleges.

Selection of the Sample Students

According to the admissions directors, the anticipated freshman classes would range from about 150 to nearly 400 students. It was decided that a random sample of 70 students on each campus would be appropriate, yielding a potential total of nearly 500.

A table of random numbers was used to select seventy students from the freshman rosters of five colleges. In three cases the selected students were contacted by mail and asked to come to a special questionnaire administration. In two cases the list of selected students was read at a meeting of all freshmen. Those named were asked to remain after the meeting for the administration.

At Briar Cliff College, officials felt the random number procedure would take too much time at their freshman meeting. The Dean of Student

Affairs wished to randomly select rows of subjects from all new students assembled in the auditorium. While this process was less desirable, it was essential to the cooperation of the college. The researcher was present at the selection and could find no cause to suspect bias.

A unique situation existed at Wartburg College. The college was already engaged in research concerning its freshmen and had made plans to randomly select 107 for testing. Officials offered the use of this computer-selected group for this study and the offer was accepted.

The Data Collection Instruments

As no existing data collection instrument was suitable for this study, new instruments were created. The data needed were obtained from three sources: 1) an initial information form for admissions officers; 2) an interview with each admissions director or delegated representative; and 3) a two-part questionnaire for the students, which was modified slightly for administration to the admissions staff members.

The initial information form for admissions officers listed those recruitment practices suggested by the review of literature, modified as necessary to fit this study, and augmented by items with which the researcher was personally familiar. Space was provided for the addition of techniques used by the colleges which were not incorporated into the form.

The first section of the student questionnaire was constructed to obtain basic descriptive information about each student, including sex, high school grade point average, ACT Composite or SAT Mathematics and

SAT Verbal test scores, rank in graduating class, size of graduating class, and so forth. Provision was made for each student to approve extraction of grade point and entrance scores from records, if he could not provide them.

Fifty different recruitment practices were compiled from the initial information forms and the interviews. The second section of the questionnaire consisted of response sheets on which the students were asked to indicate the degree of influence they felt each of the fifty recruitment practices had had on their decision to attend the college in question. The practices were not printed on the questionnaires for reasons discussed under Collection of the Data. Appropriate directions and a printed list of the recruitment techniques were added to the response sheets to create the questionnaire for admissions staff members.

Six responses to each practice were possible: strongly negative influence, negative influence, no influence, positive influence, strongly positive influence, and no contact with the practice. Inclusion of the last choice allowed the same format to be used at all seven colleges, although no one college used all fifty techniques. It further avoided asking the students to express an opinion about something with which they were unfamiliar, a common weakness in similar studies. Many studies dealing with the selection of a college also failed to recognize that influences might be negative as well as positive.

All data collection instruments were submitted to Dr. John Menne of the Iowa State University Student Testing and Counseling Service for evaluation. Dr. Menne made several valuable suggestions which were

incorporated into the instruments. The questionnaire was also discussed with Dr. Rex Thomas of the Computer Science Department to be certain that the information would be gathered in a form suited to computer analysis with a minimum of difficulty.

Collection of the Data

There were three distinct phases to the collection of the data for this study. The seven colleges had been selected and had agreed to participate by early July 1973. On-campus interviews with admissions officers were scheduled during the third and fourth weeks of July. Each officer received the initial information form by mail a few days prior to the interview.

The interview was intended to enhance rapport and to afford the researcher a fuller understanding of the total admissions effort at each institution. It also afforded a cross-check on the items marked on the information form as constituting each college's recruitment repertory. Several items were thus uncovered which had been initially overlooked by the admissions officer. In most instances, arrangements for the student questionnaire administration were also made during this visit to the campus.

The timing of the student questionnaire administration was especially critical. First-semester freshmen were selected because of the basic purpose of student recruitment--to bring students to the campus. Retention of the student concerns the entire college community. It was believed that the period of time when the student responses were gathered

would bear on the outcome of the study. Spears (96) found that the degree of influence upon college choice attributed to various factors was unstable over the relatively short time from April of the senior year in high school to October of the freshman year in college. This suggests that the ideal time to measure the influence of recruitment upon the student's selection of a college is the earliest time when one is absolutely certain the student will indeed matriculate. That time is just prior to the start of fall classes, during what is commonly called freshman orientation and registration. It was during this time that the data had to be gathered from the students.

The dates for these activities fell between August 28 and September 10, 1973. Unfortunately, both Briar Cliff College and Wartburg College could offer time only on the morning of September 10. When the conflict was explained, the Dean of Student Affairs at Wartburg kindly offered to administer the questionnaire on his campus. He received all necessary materials and detailed instructions well in advance of the scheduled administration.

One possible source of response contamination was identified in planning the study. Personal data items presented no particular difficulty. However, among the fifty recruitment practices were several sets of similar items, e.g. phone calls from faculty members, administrators, admissions staff members, etc. It was feared that students might tend to attribute similar or identical degrees of influence to similar items, rather than to evaluate each independently. Forcing a quick response, which could not be reevaluated later, seemed to be a means of controlling

this.

The actual method employed was to individually present each recruitment practice orally and visually by means of overhead projection transparencies. The students had only one item at a time before them and could not recheck answers later. The time allotted for each response was kept very brief and the questionnaires were collected immediately after the final item was presented. After the administration, grade points and test scores were obtained from college records when needed.

The administration of the instrument occurred at a time and place arranged by the college. In some cases, it was after a mass meeting of all freshmen. In others, students were asked to report to a designated place at a separate time.

Admissions staff members were also asked to respond to the fifty recruitment techniques as they believed their students would. This was an attempt to determine the true level of influence they believed each practice had rather than a level they might ideally hope each would have. Since the potential for contamination of student answers was considered inoperative among staff members, instructions and a list of the fifty items accompanied the staff response sheets. Each staff member completed his form individually. In all cases but one, the questionnaires were completed by the time of the student administration. Westmar College returned the forms by mail a few days later.

It had been predetermined that responses from fifty students at each college would be the minimum acceptable response rate. This was not achieved on the first try at Buena Vista, Westmar, Mount Mercy, or

Cornell. A follow-up was needed to obtain more responses.

No other gathering of the missing students could be arranged. Instead, those students who had been selected, but had failed to complete a questionnaire, were sent directions, the list of practices, and response sheets by mail, much as the admissions staff members had received. Instructions were to complete the questionnaire at once and return it the same day to the respective admissions office. Missing grade points and test scores were supplied by college personnel, and the materials were returned to the researcher. In no case were there fewer than fifty questionnaires after the follow-up. Additional analyses were planned to evaluate the compatibility of the two groups of students in each case.

Data Analysis

Information obtained from the admissions officers by means of the initial information form and the interview were examined immediately after gathering. It became the basis for the questionnaire, providing an up-to-date listing of recruitment practices in use.

After all other data had been collected from students and staff members, the data were prepared for computer analysis. Two items required mathematical manipulation before keypunching. In a few cases, the high school grade point average was given as a percentage rather than a number on the usual four-point scale. Such percentages were multiplied by 4.00 to convert them to their equivalent on the customary scale. Students were also asked to report their entrance scores as a further measure of academic ability. As expected, a few had submitted

only SAT scores, rather than the more customary ACT scores. Conversion to a common base was necessary for analysis.

The ACT office in Iowa City was contacted and informed on the nature of the research and the specific need to convert ACT and SAT scores to a common scale. An official of ACT suggested the purposes of this research would be served by averaging the two SAT scores and converting the result by means of z-transformation from the SAT scale with a mean of 500 and standard deviation of 100 to a scale with a mean of 20 and standard deviation of 5. This scale describes the distribution of ACT Composite scores for the type of students in this study. This strategy was employed, rounding to the nearest whole number. The score was then labeled ACT equivalent for all students, although less than 20 of 459 were not true ACT scores.

The difficulties encountered in obtaining an adequate response rate at four colleges necessitated analyses preliminary to those originally planned. A decision had to be made as to whether the two sets of data obtained in each case could be combined for analysis, or if they had to be treated separately. The T-Test for the difference between two sample means was utilized for grade point averages and ACT equivalent scores. These data are on an interval scale, for which parametric statistics are suitable. Remaining personal data responses of the two groups were compared using the chi-square statistic, since these are ordinal data and best treated with a nonparametric technique. It was felt that if the two groups of students on each campus did not differ significantly on personal items, they could properly be combined for further analysis.

The preliminary analyses supported a decision to combine all student data obtained on each campus. The remaining analyses proceeded as planned. Frequency counts were made for each institution by student and staff groupings for each possible response to each of the fifty recruitment practices. Response percentages were also computed. Rank order correlations to compare student and staff responses were calculated by institution. Raw mean scores for each of the fifty items were the basis for rank ordering. Means were calculated only from specific influence level responses, that is, strongly negative through strongly positive influence. "No contact" responses were excluded because their numerical value did not constitute a part of the scale on which the influence levels were measured. A second rank ordering of the fifty items was made using student response means which were weighted by the percentage of total responses which contributed to the mean value. This rank ordering thus considered the number of students who had experienced each technique, as well as their ratings of it.

Finally, all student responses were combined. Chi-square coefficients were calculated on the distribution of responses to various items for each level of selected personal characteristics of the students, seeking relationships between responses and student characteristics. Only the sixteen practices (one-third of the total) which were familiar to the greatest number of students were analyzed to avoid low cell frequencies in the contingency tables.

Personal characteristics used individually were sex of the respondent, highest degree expected in lifetime, and distance from home to

college. In addition, related items were combined to yield composite factors. Population of the home area and size of the high school graduating class were considered to be adequately related to justify creation of a composite size factor. Academic ability was created by combining high school grade point average, ACT equivalent score, and rank in graduating class. Parental educational attainment, family income, and three financial aid items closely related to income (Iowa Tuition Grants, federal loans, and work-study employment) were combined into a so-called socio-economic status factor.

All items to be combined were first transformed into z-scores, placing them on a common scale. The z-scores were then added to obtain the new composite factor with each component contributing equally. The resulting scores were recoded into lower, middle, and upper thirds according to a normal distribution.

Contingency tables were generated and evaluated for low cell frequencies. In some instances, categories were combined; in others they were omitted to achieve tables with no cell frequency below five. From these new tables the chi-square coefficients were computed.

FINDINGS

The first question to be answered by this research was, what recruitment practices are currently employed by private colleges in Iowa? The admissions director of each of seven selected colleges, or a designated substitute, received an initial information form on which to indicate all recruitment practices of the college. Each was also interviewed to gain further information. A composite list of fifty recruitment practices and materials resulted.

Arrangements were also made at each college to administer a questionnaire which would provide the data needed to answer the remaining questions posed in chapter one. These included determining the degree of influence attributed to recruitment by entering freshmen, comparing the relative influence of recruitment practices as perceived by students and admissions staff members, determining whether certain practices were uniformly effective among the seven colleges, and investigating possible relationships between the level of influence attributed to a practice and certain characteristics of the respondents.

A total of 527 entering freshmen received the questionnaire, as well as all veteran staff members. Responses were obtained from 459 students, or 87.1 percent. The return by colleges is shown in Table 5. Separate tabulations for initial and follow-up response rates are provided for the four colleges where the initial return was less than fifty questionnaires.

In the case of admissions personnel, responses were obtained from

Table 5. Number and percentage of student responses to questionnaires

College	Number	Response			Percentage
		Initial	Follow-up	Total	
Northwestern	70	60	--	60	85.7
Wartburg	107	106	--	106	99.1
Buena Vista	70	41	24	65	92.9
Westmar	70	37	25	62	88.6
Mount Mercy	70	32	18	50	71.4
Briar Cliff	70	65	--	65	92.9
Cornell	70	33	18	51	72.3
Total	527	373	85	459	87.1

every veteran staff member. In most cases this was not the total staff. Several persons had resigned in late summer and had not been replaced. New staff members did not receive the questionnaire, as they lacked the necessary background for giving appropriate responses. Within the existing context, the staff response rate is considered to be 100 percent.

At four colleges, two sets of student questionnaires were obtained due to inadequate initial response rates. Preliminary analyses were needed to determine whether the two groups of students in each case differed significantly on personal characteristics. For maximum certainty that true differences existed, the .01 level was selected for rejection of the null hypothesis that no significant differences existed between

the two groups on each campus. The T-test and chi-square techniques were employed as appropriate.

No item of personal data yielded a significant result at either Buena Vista or Westmar. One T-test at Cornell reached significance, with the follow-up group showing a significantly higher mean high school grade point average than the initial group. At Mount Mercy, significant chi-square values led to the rejection of the null hypothesis for two items-- the distance from home to the college and receiving or not receiving an academic scholarship. The initial group came from greater distances and received most of the academic scholarships.

There was no question but that the two groups at Buena Vista and Westmar should be combined, as they showed no significant differences. For Cornell and Mount Mercy, the few differences were not considered to be adequate evidence to reject the general hypothesis that there was no significant difference between the two groups. Therefore, the data for each college were treated as if all students had been present at the initial questionnaire administration.

Description of the Student Sample

Before turning to the questions which guided this research, descriptive information about the students surveyed is provided as a background. From raw high school grade point averages and ACT equivalent scores, means and standard deviations were computed. All other items were analyzed by frequency counts across responses by college. Response percentages were also computed. No comparisons among colleges or with

national norms were planned as a part of this study.

Table 6 provides the breakdown of respondents by sex for the seven colleges. The extreme distributions were found at Buena Vista and Mount Mercy. The Buena Vista sample was approximately two-thirds male and one-third female, whereas Mount Mercy's sample was 94 percent female and only 6 percent male. The preponderance of females at Mount Mercy is partially explained by the college's lack of residential facilities for male students.

Table 6. Sex of student respondents

College	Female		Male		No response	
	Fre- quency	Per- centage	Fre- quency	Per- centage	Fre- quency	Per- centage
Northwestern	35	58.3	25	41.7	--	--
Wartburg	65	61.3	41	38.7	--	--
Buena Vista	22	33.8	43	66.2	--	--
Westmar	25	40.3	36	58.1	1	1.6
Mount Mercy	47	94.0	3	6.0	--	--
Briar Cliff	36	55.4	29	44.6	--	--
Cornell	21	41.2	30	58.8	--	--

It is interesting to note that one dimension of the initial college categorization is reflected in the distribution of the sexes at the seven colleges. Buena Vista, Westmar, and Cornell were classified as lacking

a strong cultural subgroup appeal. In each case, males outnumbered females by approximately three to two or more. The remaining four colleges were classified as being strongly identified with a cultural subgroup. At each, females constituted over half of the sample. Within this framework, the distribution varies considerably among the colleges.

The presence or absence of strong cultural subgroup appeal is also reflected in responses concerning the students' church affiliations. At Wartburg College, a Lutheran institution, 65.1 percent of the sample were Lutherans. The next most frequent response was Reformed Church in America (10.4 percent). Less than 10 percent were affiliated with any one other church. Northwestern College, Wartburg's paired institution, is affiliated with the Reformed Church in America. Of the responding students, 66.7 percent were members of the sponsoring church. Less than 10 percent reported affiliation with any one other church.

At the two Catholic colleges, the religious ties were also strong. The Briar Cliff sample revealed that 86.2 percent were Catholics, with no other denominations reaching 5 percent. At Mount Mercy, Catholics accounted for 62 percent of the sample, with less than 10 percent sharing any other affiliation.

Buena Vista College is Presbyterian-affiliated, but its greatest percentage of students (33.8 percent) was Lutheran, followed by Methodists (18.5 percent), Catholics (13.8 percent), and finally Presbyterians (10.8 percent). Other affiliations fell below 10 percent. Westmar College, Buena Vista's paired institution, is a United Methodist college. Methodists accounted for 49.2 percent of the sample, with the next most

frequent response being Lutheran (14.8 percent).

Cornell College is nominally affiliated with the United Methodist Church. The largest percentage of respondents were members of that church (23.5 percent), closely followed by Catholics at nearly 20 percent. Less than 10 percent of the sample indicated affiliation with any one other denomination.

In sum, no less than 62 percent of the respondents at Northwestern, Wartburg, Briar Cliff, and Mount Mercy were members of the church with which the college is affiliated. These four colleges, which were classified as having strong cultural subgroup ties, are heavily dependent upon their primary constituency for students. At Buena Vista, Westmar, and Cornell, less than 50 percent of the sample were members of the parent church, with the exact percentage falling below 25 percent except at Westmar. The tie between church and college is clearly weaker in these cases. This evidence tends to support the validity of the classification of the colleges.

To obtain indications of academic ability, each respondent was asked to report his high school grade point average and his ACT Composite or SAT Mathematics and SAT Verbal scores. As there were very few SAT scores, they were converted to the ACT scale, as described in chapter three, and the item was relabeled ACT equivalent score.

These items presented some difficulty, as generally about one-third of each group of students was unable to provide the figures. All such students gave permission for extracting the data from college records, but even this was not always possible. Many sets of records did not

contain the desired information. In Table 7, means and standard deviations for these items are presented by college. The percentage of students for whom data were available is also given.

It is apparent from Table 7 that differences in mean high school grade point averages between paired institutions are quite small, less than 0.20 in each pair. The difference between the highest and lowest mean is less than 0.50. The maximum difference between mean ACT equivalent scores of paired institutions is less than 2.00 and the difference between the highest and lowest mean is less than 3.50. No one college stands out from the others as having a freshman class which is either academically superior or deficient, according to these measures.

Another indicator of academic ability is a student's rank in his high school graduating class. Each respondent was asked to indicate in which portion of his class he graduated. The responses are summarized in Table 8. This was another item which many students could not answer and which was not found in their files. The percentage of missing responses must be considered when evaluating these findings.

The percentage of students who indicated that they graduated in the upper 25 percent of their classes ranged from 49.2 percent at Briar Cliff to 75.4 percent at Wartburg. Only at Briar Cliff and Buena Vista did more than 10 percent of the respondents indicate graduating in the bottom half of their classes. Much as was the case with high school grade point averages and ACT equivalent scores, relative homogeneity is the rule among the seven colleges when viewed broadly. However, the missing data in several cases could alter the picture considerably. Therefore,

Table 7. Means and standard deviations on high school grade point average and ACT equivalent scores, by college

College	High school grade point average			ACT equivalent score		
	Mean	Standard deviation	Percentage responding	Mean	Standard deviation	Percentage responding
Northwestern	3.128	.542	96.7	23.148	4.736	90.0
Wartburg	3.306	.504	98.1	25.117	4.105	97.2
Buena Vista	2.997	.584	96.9	23.017	4.065	92.2
Westmar	2.865	.655	96.7	21.772	4.762	93.4
Mount Mercy	3.126	.514	96.9	22.458	4.227	85.4
Briar Cliff	3.005	.538	98.0	21.726	4.812	96.0
Cornell	3.285	.524	72.5	23.524	5.218	82.4

Table 8. Rank in high school graduating class

College	Top ten percent	Remainder of first quartile	Second quartile	Third quartile	Fourth quartile	No response
Northwestern						
Frequency	14	16	19	3	1	7
Percentage	23.3	26.7	31.7	5.0	1.7	11.7
Wartburg						
Frequency	54	26	19	4	--	3
Percentage	50.9	24.5	17.9	3.8	--	2.8
Buena Vista						
Frequency	19	16	11	9	2	8
Percentage	29.2	24.6	16.9	13.8	3.1	12.3
Westmar						
Frequency	15	20	18	4	1	4
Percentage	24.2	32.3	29.0	6.5	1.6	6.5
Mount Mercy						
Frequency	14	16	13	5	--	2
Percentage	28.0	32.0	26.0	10.0	--	4.0
Briar Cliff						
Frequency	16	16	13	6	2	12
Percentage	24.6	24.6	20.0	9.2	3.1	18.5
Cornell						
Frequency	20	13	8	4	1	5
Percentage	39.2	25.5	15.7	7.8	2.0	9.8

this item will be further utilized only in conjunction with high school grade point average and ACT equivalent score to yield a composite measure of academic ability.

The seven cooperating colleges are located in a variety of settings, ranging from small towns of under 10,000 population to some of the largest cities in Iowa. This variation in location might reasonably be expected to affect several items. Graduating class size might tend to be larger for students at urban colleges, if the students tend to come from the immediate area or other cities. Distance from home to college might be less for city college students, as there are more potential commuters. Population of the home area could also reflect the location of the college.

Table 9 shows that over 50 percent of the samples at the two large-city colleges (Briar Cliff and Mount Mercy) graduated in a class of over 100 students. However, over 60 percent of the Wartburg and Cornell groups also graduated in a class of over 100. Both colleges are located in small towns, but within 15 miles of a major city. Less than 39 percent of the samples at Northwestern, Westmar, and Buena Vista graduated in a class of over 100, yet only Buena Vista is more than 30 miles from a large city. At the other extreme, at least 26 percent of the freshmen at the latter three colleges graduated in a class of 50 or fewer. The maximum among the other four colleges is 15.4 percent at Briar Cliff. Expectations are neither completely confirmed nor denied by these findings.

Findings with respect to the distance from the students' homes to

Table 9. Size of high school graduating class

College	25 or less	26-50	51-100	101-300	Over 300	No re- sponse
Northwestern						
Frequency	3	13	28	8	8	--
Percentage	5.0	21.7	46.7	13.3	13.3	--
Wartburg						
Frequency	3	12	23	48	20	--
Percentage	2.8	11.3	21.7	45.3	18.9	--
Buena Vista						
Frequency	7	21	11	15	10	1
Percentage	10.8	32.3	16.9	23.1	15.4	1.5
Westmar						
Frequency	2	15	22	13	9	1
Percentage	3.2	24.2	35.5	21.0	14.5	1.6
Mount Mercy						
Frequency	1	4	18	16	10	1
Percentage	2.0	8.0	36.0	32.0	20.0	2.0
Briar Cliff						
Frequency	2	8	6	34	15	--
Percentage	3.1	12.3	9.2	52.3	23.1	--
Cornell						
Frequency	--	4	7	16	24	--
Percentage	--	7.8	13.7	31.4	47.1	--

college also show a varying picture (Table 10). Briar Cliff and Mount Mercy both drew heavily on the immediate area, with 53.8 percent and 30.0 percent of the students respectively coming from within ten miles. Cornell attracted students from a somewhat broader area than any other college, with 45.1 percent coming 101-500 miles and another 33.3 percent traveling over 500 miles. The largest share of Wartburg's freshmen came from 51-500 miles, while Northwestern attracted a large number from both the 11-50 mile range and from over 100 miles. Westmar enrolled a greater percentage of students from a greater distance than did Buena Vista. These findings offer some support for speculation that small town colleges would attract students from greater distances than would colleges located in large cities.

A clearer picture of the source of each college's students emerges from the data in Table 11 on the population of the students' home areas. Briar Cliff and Mount Mercy attracted a large number of students from the immediate area, and, accordingly, show a high percentage of students from areas of at least 50,000 population. Although Cornell is in a small town, it reached out greater distances for its students and found 46 percent in areas of at least 50,000 population. Another 33 percent came from towns of 10,000 to 49,999. The remaining four colleges, all located in small towns, drew heavily on areas of less than 10,000 population. The exact figure ranged from 68 percent at Wartburg to 82.2 percent at Westmar. These data support expectations.

Each student was asked to indicate the highest academic degree he anticipated earning in his lifetime, as a measure of his academic

Table 10. Distance from students' homes to college

College	5 miles or less	6-10 miles	11-50 miles	51-100 miles	101-500 miles	Over 500 miles	No re- sponse
Northwestern							
Frequency	6	2	24	5	13	10	--
Percentage	10.0	3.3	40.0	8.3	21.7	16.7	--
Wartburg							
Frequency	3	2	19	35	44	3	--
Percentage	2.8	1.9	17.9	33.0	41.5	2.8	--
Buena Vista							
Frequency	8	2	10	23	19	3	--
Percentage	12.3	3.1	15.4	35.4	29.2	4.6	--
Westmar							
Frequency	6	2	12	4	32	6	--
Percentage	9.7	3.2	19.4	6.5	51.6	9.7	--
Mount Mercy							
Frequency	13	2	14	8	13	--	--
Percentage	26.0	4.0	28.0	16.0	26.0	--	--
Briar Cliff							
Frequency	27	8	7	6	13	4	--
Percentage	41.5	12.3	10.8	9.2	20.0	6.2	--
Cornell							
Frequency	2	1	3	5	23	17	--
Percentage	3.9	2.0	5.9	9.8	45.1	33.3	--

Table 11. Population of students' home areas

College	Rural	Under 2000	2000- 9999	10,000- 49,999	50,000- 100,000	Over 100,000	No re- sponse
Northwestern							
Frequency	27	9	11	7	2	3	1
Percentage	45.0	15.0	18.3	11.7	3.3	5.0	1.7
Wartburg							
Frequency	23	22	27	16	13	5	--
Percentage	21.7	20.8	25.5	15.1	12.3	4.7	--
Buena Vista							
Frequency	28	10	12	4	3	7	1
Percentage	43.1	15.4	18.5	6.2	4.6	10.8	1.5
Westmar							
Frequency	24	11	16	3	3	5	--
Percentage	38.7	17.7	25.8	4.8	4.8	8.1	--
Mount Mercy							
Frequency	13	9	7	4	1	16	--
Percentage	26.0	18.0	14.0	8.0	2.0	32.0	--
Briar Cliff							
Frequency	9	5	7	7	30	6	1
Percentage	13.8	7.7	10.8	10.8	46.2	9.2	1.5
Cornell							
Frequency	8	2	6	11	10	13	1
Percentage	15.7	3.9	11.8	21.6	19.6	25.5	2.0

aspirations. The responses are given in Table 12. Within the pairs of colleges, the percentage of students making each response tends to be quite similar. The major exception is a large percentage of students at Northwestern who indicated a goal of less than a bachelor's degree. With the exception of Cornell, a minimum of 49 percent of the respondents anticipated no degree beyond the bachelor's. In striking contrast, less than 20 percent of Cornell's students planned to stop at that level. Fully 48 percent expected to earn either a doctorate or professional degree, more than double the next highest percentage in those categories (Buena Vista, 21.5 percent). Cornell clearly stands alone on this item.

Tables 13 and 14 present data concerning the educational attainment of the parents of the students surveyed. Cornell again deviates the most from the general pattern. While 19.6 percent of fathers of Cornell freshmen had no formal education beyond high school, the minimum among the other six colleges was 52 percent. Conversely, 37.3 percent of Cornell fathers had formal education beyond the bachelor's degree. The maximum at any other institution was 12.9 percent.

Two other findings merit comment. Of the fifty student respondents at Mount Mercy, only one reported a father with education beyond the bachelor's degree level. Percentagewise, this is about one-fourth of what is typical. At Northwestern, 40 percent of the fathers had less than a high school diploma, which is about double the average of the other six colleges. In sum, there are widely differing levels of formal education among fathers of the freshmen at these seven colleges.

Across all institutions, mothers of students were grouped at the

Table 12. Highest degree expected in lifetime

College	Less than bachelor's	Bachelor's	Master's	Doctorate	Profes- sional	No re- sponse
Northwestern						
Frequency	8	24	15	5	5	--
Percentage	13.3	40.0	25.0	8.3	8.3	--
Wartburg						
Frequency	2	50	35	6	13	--
Percentage	1.9	47.2	33.0	5.7	12.3	--
Buena Vista						
Frequency	1	35	15	6	8	--
Percentage	1.5	53.8	23.1	9.2	12.3	--
Westmar						
Frequency	2	30	18	8	4	--
Percentage	3.2	48.4	29.0	12.9	6.5	--
Mount Mercy						
Frequency	2	37	9	1	1	--
Percentage	4.0	74.0	18.0	2.0	2.0	--
Briar Cliff						
Frequency	2	38	14	3	6	2
Percentage	3.1	58.5	21.5	4.6	9.2	3.1
Cornell						
Frequency	--	10	16	8	16	1
Percentage	--	19.6	31.4	15.7	31.4	2.0

Table 13. Educational attainment of students' fathers

College	Less than H. S. diploma	H. S. diploma	Some college work	Bache- lor's degree	Some graduate work	Graduate degree	No re- sponse
Northwestern							
Frequency	24	17	8	5	2	4	--
Percentage	40.0	28.3	13.3	8.3	3.3	6.7	--
Wartburg							
Frequency	18	38	20	18	3	7	2
Percentage	17.0	35.8	18.9	17.0	2.8	6.6	1.9
Buena Vista							
Frequency	12	32	11	4	2	3	1
Percentage	18.5	49.2	16.9	6.2	3.1	4.6	1.5
Westmar							
Frequency	15	26	11	2	1	7	--
Percentage	24.2	41.9	17.7	3.2	1.6	11.3	--
Mount Mercy							
Frequency	9	17	15	7	--	1	1
Percentage	18.0	34.0	30.0	14.0	--	2.0	2.0
Briar Cliff							
Frequency	19	26	11	4	4	1	--
Percentage	29.2	40.0	16.9	6.2	6.2	1.5	--
Cornell							
Frequency	3	7	9	13	3	16	--
Percentage	5.9	13.7	17.6	25.5	5.9	31.4	--

Table 14. Educational attainment of students' mothers

College	Less than H. S. diploma	H. S. diploma	Some college work	Bache- lor's degree	Some graduate work	Graduate degree	No re- sponse
Northwestern							
Frequency	17	24	11	6	1	1	--
Percentage	28.3	40.0	18.3	10.0	1.7	1.7	--
Wartburg							
Frequency	9	52	28	12	3	2	--
Percentage	8.5	49.1	26.4	11.3	2.8	1.9	--
Buena Vista							
Frequency	8	34	19	2	2	--	--
Percentage	12.3	52.3	29.2	3.1	3.1	--	--
Westmar							
Frequency	6	29	19	4	2	2	--
Percentage	9.7	46.8	30.6	6.5	3.2	3.2	--
Mount Mercy							
Frequency	6	24	20	--	--	--	--
Percentage	12.0	48.0	40.0	--	--	--	--
Briar Cliff							
Frequency	12	34	15	3	1	--	--
Percentage	18.5	52.3	23.1	4.6	1.5	--	--
Cornell							
Frequency	2	15	13	12	4	4	1
Percentage	3.9	29.4	25.5	23.5	7.8	7.8	2.0

middle educational levels. Fewer mothers than fathers had less than a high school diploma at all seven colleges, but there were also fewer who had gone beyond a bachelor's degree. As among fathers, Cornell had the lowest percentage of mothers with less than a high school education and Northwestern had the highest. At Mount Mercy no mother was reported to have a college degree, although 40 percent had had some college work. Cornell dominated the upper end of the scale, with 16 percent of the mothers having surpassed the bachelor's level. The findings are as varied as was the case among the fathers.

In order to round out the descriptive background of the students, each was asked to estimate his parents' annual income. This proved to be a sensitive area. Although response rates varied, in general a large number of students either did not know the answer or declined to give it. In many cases the questionnaires were marked "Declined" or "Refused" or "None of your business." No attempt was made to obtain this information from confidential files.

It had been anticipated that a relatively high proportion of private college students would report parental incomes in the upper brackets, in view of the high cost of attending these colleges. As Table 15 shows, this was not necessarily the case. At five colleges, the greatest numbers of students marked \$10,000-\$14,999, a range including the national average income. At Northwestern the most common answer was \$5000-\$9999. The modal response at Cornell, the most costly college, was \$15,000-\$24,999. In addition, the percentage of Cornell students reporting family incomes over \$25,000 was about three times the average of the other

Table 15. Estimated parental annual income

College	Under \$5000	\$5000- \$9999	\$10,000- \$14,999	\$15,000- \$24,999	\$25,000 or more	No response
Northwestern						
Frequency	2	19	15	7	3	14
Percentage	3.3	31.7	25.0	11.7	5.0	23.3
Wartburg						
Frequency	5	20	45	15	5	16
Percentage	4.7	18.9	42.5	14.2	4.7	15.1
Buena Vista						
Frequency	3	20	21	9	5	7
Percentage	4.6	30.8	32.3	13.8	7.7	10.8
Westmar						
Frequency	6	13	29	8	4	2
Percentage	9.7	21.0	46.8	12.9	6.5	3.2
Mount Mercy						
Frequency	5	8	18	8	6	5
Percentage	10.0	16.0	36.0	16.0	12.0	10.0
Briar Cliff						
Frequency	5	14	14	13	--	19
Percentage	7.7	21.5	21.5	20.0	--	29.2
Cornell						
Frequency	5	5	12	13	10	6
Percentage	9.8	9.8	23.5	25.5	19.6	11.8

colleges. At the same time, Cornell, Westmar, and Mount Mercy virtually tied for the highest percentage of responses in the under \$5000 range. It must be noted, however, that enough data were missing in most cases to substantially alter the findings unless the distribution of missing values closely approximated that of the existing distribution.

Two items conclude the descriptive information about the students of the seven cooperating colleges. A few years ago, the high school senior generally faced considerable uncertainty about which college he would attend. Competition for available spaces was keen, as colleges received applications from many more qualified individuals than they could accept. It was common for prospective students to apply to several colleges to be certain of acceptance somewhere.

The last few years have brought a reversal of this situation. Even the more prestigious colleges now experience some difficulty in filling available spaces. The situation is apparently well known to today's high school students. On all campuses, admissions officers indicated that late summer was now a busy time for processing applications, whereas in past years the work had often been completed in the spring.

To gain current information, students were asked to indicate how many applications they had filed and how many colleges had accepted them. Tables 16 and 17 summarize the responses. With the exception of Cornell, over 50 percent of the freshmen at each college applied only to that college. Inclusion of those who applied to only one other college accounts for 74 to 91 percent of these students. The situation differs at Cornell, however. Only 25.5 percent applied to no other college, and

Table 16. Number of colleges applied to

College	Only this college	One other	Two others	Three others	More than three others	No re- sponse
Northwestern						
Frequency	40	15	3	1	1	--
Percentage	66.7	25.0	5.0	1.7	1.7	--
Wartburg						
Frequency	69	17	12	6	2	--
Percentage	65.1	16.0	11.3	5.7	1.9	--
Buena Vista						
Frequency	41	13	9	2	--	--
Percentage	63.1	20.0	13.8	3.1	--	--
Westmar						
Frequency	38	12	8	2	2	--
Percentage	61.3	19.4	12.9	3.2	3.2	--
Mount Mercy						
Frequency	28	9	9	3	1	--
Percentage	56.0	18.0	18.0	6.0	2.0	--
Briar Cliff						
Frequency	35	16	7	4	3	--
Percentage	53.8	24.6	10.8	6.2	4.6	--
Cornell						
Frequency	13	18	9	5	6	--
Percentage	25.5	35.3	17.6	9.8	11.8	--

Table 17. Number of colleges where accepted

College	Only this college	One other	Two others	Three others	More than three others	No re- sponse
Northwestern						
Frequency	40	14	2	1	1	2
Percentage	66.7	23.3	3.3	1.7	1.7	3.3
Wartburg						
Frequency	69	14	14	4	2	3
Percentage	65.1	13.2	13.2	3.8	1.9	2.8
Buena Vista						
Frequency	42	14	8	--	--	1
Percentage	64.6	21.5	12.3	--	--	1.5
Westmar						
Frequency	35	11	8	2	1	5
Percentage	56.5	17.7	12.9	3.2	1.6	8.1
Mount Mercy						
Frequency	33	11	5	1	--	--
Percentage	66.0	22.0	10.0	2.0	--	--
Briar Cliff						
Frequency	41	14	7	3	--	--
Percentage	63.1	21.5	10.8	4.6	--	--
Cornell						
Frequency	15	19	10	3	4	--
Percentage	29.4	37.3	19.6	5.9	7.8	--

21.6 percent filed at least three applications. This is more than double the next highest percentage.

In general, with the exception of Cornell, students seemed confident that they would be accepted by the college of their first choice. A comparison of figures in Tables 16 and 17 supports this confidence. In most instances, students were offered admission by the institutions to which they applied. Unfortunately, these data are not completely reliable, due to the fact that several students reported that they were accepted by more colleges than they had applied to. Such impossible answers were classified as "no response," which accounts for slight discrepancies between the two tables.

The remainder of this chapter is organized according to the questions posed in chapter one. A summary will conclude the chapter.

Current Recruitment Practices

The first goal of this research was to determine what recruitment practices are currently being used by private colleges in Iowa to attract new freshmen. This information was compiled from forms completed by each admissions director, or designated substitute, as well as an on-campus interview with the same person. In contrast to the relatively few recruiting devices treated by other researchers, fifty different practices were reported by the seven colleges in this study.

Of the fifty total recruitment practices, the number actually used by any one college ranged from a low of thirty-two for Mount Mercy to a high of forty-six for both Westmar and Briar Cliff. Buena Vista listed

forty, Northwestern forty-one, Cornell forty-two, and Wartburg forty-five. It is noteworthy that the three colleges which use the fewest of the fifty techniques are also the three which were selected for showing enrollment strength. The remaining four colleges employ more of the practices, and each was selected for having a poorer enrollment pattern.

Some twenty-one recruitment practices are common to all seven colleges. They are numbered as on the original questionnaires.

7. Magazine advertisements
8. Campus visits or tours for individual prospects
10. A phone call from an alumnus or alumna
11. College day or night programs
12. Dean's lists and similar items about the college in the newspaper
14. Group meetings in the home area
18. A phone call from a current student
20. A phone call from an admissions representative
21. General information brochures
22. A visit to the prospect's home by a college representative
24. Newspaper advertisements
26. An interview in the prospect's home community or area
28. The alumni paper or bulletin
32. The college catalog or bulletin
34. Materials sent to prospects prior to any request for materials
35. On-campus interviews
40. Campus visits/tours for groups of prospects
41. A letter from an admissions officer
42. Displays at fairs, youth conferences, etc.
43. Visits to high schools by admissions counselors
47. Old programs from concerts, plays, special events on campus

An additional eighteen practices were acknowledged by six of the seven colleges.

1. A film or slide presentation about the college
2. A social gathering in the home area
3. Summer orientation/registration
5. A phone call from a college administrator
15. A letter from a current student
16. College speakers at high school graduations, etc.
17. ACT's Educational Opportunities Service

19. Individual department/program brochures
23. A letter from a college faculty member
25. Visits to high schools by college faculty
27. The student newspaper
29. A letter from a college administrator
36. The college yearbook
37. A phone call from a college faculty member
39. A letter from an alumnus or alumna
45. Visits to churches by college representatives
46. Posters
48. Performances in high schools by the college band, choir, drama groups, etc.

The remaining practices are employed by fewer than six of the colleges.

4. The Advanced Acceptance Program (through Driscoll High School, Chicago)
6. Publicity materials like match books, ash trays, carrying bags, etc.
9. Sharing a common application form with other colleges
13. Spot ads in theaters before the feature film
30. Visits to high schools by current students
31. Admissions counselors at Lutheran encounter schools
33. Admissions clearing houses
38. Admissions counselors at Boys State
44. Billboards
49. The student literary-type publication
50. Radio or television advertising

Relative Influence of Recruitment Devices

A random sample of entering freshmen on each campus responded to a questionnaire. Each was asked to assess the degree of influence each of the fifty recruitment practices had exerted upon his choice of a college. Five influence levels were differentiated: strongly negative influence, negative influence, no influence, positive influence, and strongly positive influence. However, no one college used all fifty techniques, and not all techniques were employed with every prospective student.

Therefore, a response of no personal contact with an item was also included. Each student was thus asked to attribute influence only to those practices which he had personally experienced.

The students' responses provide an answer to the second question posed by this study, namely, how much influence do recruitment techniques exert on students as they choose a college? Of the fifty items, only eleven were experienced by at least 50 percent of the students at four or more colleges. They are considered to be the primary recruitment devices, having reached the greatest numbers of prospects. Findings relative to each are presented.

Until fairly recently, freshman orientation and registration normally occurred just prior to the start of fall classes. Today many colleges and universities bring new freshmen to the campus in small groups at various times throughout the summer. Among the seven cooperating colleges, only Cornell retains the traditional fall program. Student responses to summer orientation and registration are given in Table 18.

The responses of Cornell students are puzzling and must be discounted. Although the college has no summer orientation program, 25.5 percent of the sample attributed influence to the item. Some sort of communications breakdown apparently occurred. Similar occurrences will be noted for other items as well. They are a disturbing element of the findings.

Turning to the six colleges which have summer orientation and registration, anywhere from 56.6 percent (Northwestern) to 83 percent (Wartburg) of the sampled students had experienced this item. Buena Vista and

Table 18. Responses of freshmen to summer orientation/registration

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	2	3	6	21	2	25	1	--
Percentage	3.3	5.0	10.0	35.0	3.3	41.7	1.7	--
Wartburg								
Frequency	--	--	30	40	18	18	--	--
Percentage	--	--	28.3	37.7	17.0	17.0	--	--
Buena Vista								
Frequency	1	--	11	23	16	14	--	--
Percentage	1.5	--	16.9	35.4	24.6	21.5	--	--
Westmar								
Frequency	2	4	22	9	8	17	--	--
Percentage	3.2	6.5	35.5	14.5	12.9	27.4	--	--
Mount Mercy								
Frequency	--	--	3	22	11	13	1	--
Percentage	--	--	6.0	44.0	22.0	26.0	2.0	--
Briar Cliff								
Frequency	--	1	24	17	6	17	--	--
Percentage	--	1.5	36.9	26.2	9.2	26.2	--	--
Cornell ^a								
Frequency	1	--	5	6	1	38	--	--
Percentage	2.0	--	9.8	11.8	2.0	74.5	--	--

^aNot employed by this college, despite student responses.

Mount Mercy students gave the most total positive and strongly positive responses, 60 percent and 66 percent respectively, with Wartburg close behind at 54.7 percent. The other three institutions each had less than 50 percent positive and strongly positive responses. Negative responses totaled less than 10 percent at any college. Comparatively large percentages of students at Wartburg, Westmar, and Briar Cliff attributed no influence to this practice.

Considering only those who had experienced such a program, more than 65 percent marked one of the positive responses at each college except Westmar and Briar Cliff. In general, students tended to find summer orientation and registration a positive influence upon their choice of a college, although many were neutral toward it.

The second device which a large group of students had experienced was publicity materials such as ash trays, match books, carrying bags, and so forth. Although these materials serve to put the name of the college before many people, they may be questioned as a recruiting device, since they are often beyond the control of the admissions staff. Neither Mount Mercy nor Cornell considered this to be a recruitment practice. However, as Table 19 shows, many students are coming into contact with these materials, so that a potential for influence exists.

Fewer than 5 percent of the respondents at any college assessed their contact with these publicity materials as a negative influence. Only at Buena Vista were any strongly negative responses recorded. The combined percentages of positive and strongly positive responses were less than the percentage of no influence responses at each college

Table 19. Responses of freshmen to publicity materials (ashtrays, matchbooks, etc.)

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	21	22	1	15	--	1
Percentage	--	--	35.0	36.7	1.7	25.0	--	1.7
Wartburg								
Frequency	--	2	27	5	--	72	--	--
Percentage	--	1.9	25.5	4.7	--	67.9	--	--
Buena Vista								
Frequency	2	1	31	10	--	21	--	--
Percentage	3.1	1.5	47.7	15.4	--	32.3	--	--
Westmar								
Frequency	--	1	28	7	2	24	--	--
Percentage	--	1.6	45.2	11.3	3.2	38.7	--	--
Mount Mercy								
Frequency	--	1	11	3	1	34	--	--
Percentage	--	1.5	26.2	30.8	4.6	36.9	--	--
Briar Cliff								
Frequency	--	1	17	20	3	24	--	--
Percentage	--	1.5	26.2	30.8	4.6	36.9	--	--
Cornell								
Frequency	--	2	5	4	--	39	--	1
Percentage	--	3.9	9.8	7.8	--	76.5	--	2.0

except Northwestern and Briar Cliff. Overall, students tend to find neither positive nor negative influence in these publicity materials.

The positive value of a campus visit was suggested by several studies reviewed in chapter two. Data in Table 20 confirm this value. No less than 55 percent of the students at any college had made an individual visit to the campus. Negative responses were very few in number. Responses of no influence totaled less than 5 percent for each college except Briar Cliff, which reached 9.2 percent.

Considering only those who made such a visit, the vast majority rated it on the positive side of the scale. In fact, anywhere from 57 percent at Briar Cliff to nearly 78 percent at Cornell attributed strongly positive influence to a campus visit. No other recruitment practice reached these percentages of strongly positive responses. Students at all seven colleges agreed that an individual visit to the campus was a highly influential experience.

Another very common recruiting device is the brochure concerning individual departments and/or programs of study. Only Buena Vista College does not currently have such publications. Despite this fact, 80 percent of the Buena Vista sample attributed influence to such brochures, another serious communications gap. Table 21 presents all responses to this item.

Across the six institutions which have such brochures, the percentage of students reached by them ranged from 65 percent at Northwestern to 95.3 percent at Wartburg. The modal response at every college was positive influence, with virtually no negative responses. There were

Table 20. Responses of freshmen to an individual campus visit or tour

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	2	10	21	26	1	--
Percentage	--	--	3.3	16.7	35.0	43.3	1.7	--
Wartburg								
Frequency	--	--	5	31	51	19	--	--
Percentage	--	--	4.7	29.2	48.1	17.9	--	--
Buena Vista								
Frequency	--	1	1	12	36	14	--	1
Percentage	--	1.5	1.5	18.5	55.4	21.5	--	1.5
Westmar								
Frequency	--	3	3	13	29	14	--	--
Percentage	--	4.8	4.8	21.0	46.8	22.6	--	--
Mount Mercy								
Frequency	--	--	2	10	34	4	--	--
Percentage	--	--	4.0	20.0	68.0	8.0	--	--
Briar Cliff								
Frequency	--	1	6	13	27	17	1	--
Percentage	--	1.5	9.2	20.0	41.5	26.2	1.5	--
Cornell								
Frequency	--	--	1	7	28	15	--	--
Percentage	--	--	2.0	13.7	54.9	29.4	--	--

Table 21. Responses of freshmen to individual department and/or program brochures

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	1	2	25	11	21	--	--
Percentage	--	1.7	3.3	41.7	18.3	35.0	--	--
Wartburg								
Frequency	--	1	7	53	40	5	--	--
Percentage	--	0.9	6.6	50.0	37.7	4.7	--	--
Buena Vista ^a								
Frequency	1	--	8	32	11	13	--	--
Percentage	1.5	--	12.3	49.2	16.9	20.0	--	--
Westmar								
Frequency	--	--	7	29	15	11	--	--
Percentage	--	--	11.3	46.8	24.2	17.7	--	--
Mount Mercy								
Frequency	--	--	--	24	23	2	1	--
Percentage	--	--	--	48.0	46.0	4.0	2.0	--
Briar Cliff								
Frequency	--	--	9	27	18	10	1	--
Percentage	--	--	13.8	41.5	27.7	15.4	1.5	--
Cornell								
Frequency	--	--	7	18	15	11	--	--
Percentage	--	--	13.7	35.3	29.4	21.6	--	--

^aNot employed by this college, despite student responses.

also comparatively few responses of no influence. Considering only those who were familiar with the brochures, the percentage of strongly positive responses ranged from 29.2 percent at Northwestern to 48.9 percent at Mount Mercy. There was substantial agreement among the students of the six colleges that department or program brochures are a positive, or even strongly positive, influence in choosing a college.

The use of phone calls for quick, direct, personal contact with prospective students has undoubtedly increased with the availability of Wide Area Telecommunications Service (WATS), to which several of the sample colleges subscribe. The data in Table 22 show considerable variation among the seven colleges in the use of phone calls from admissions personnel. At the extremes, less than 30 percent of the students at Northwestern had received a call from someone on the admissions staff, compared to more than 70 percent at Buena Vista.

Of the students who indicated that they had been called, no less than 75 percent rated the calls as either a positive or strongly positive influence. Negative responses were negligible. The percentage of no influence responses was very low at Briar Cliff and Mount Mercy, but ranged upward to nearly 15 percent at Westmar. Overall, there was substantial agreement among respondents that they had been positively influenced toward attending their college by a phone call from an admissions officer.

Table 23 presents the responses to general information brochures, those publications treating such matters as financial aid, residence hall life, automobile regulations, etc. All seven colleges have such brochures,

Table 22. Responses of freshmen to a phone call from an admissions representative

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	1	3	9	4	43	--	--
Percentage	--	1.7	5.0	15.0	6.7	71.7	--	--
Wartburg								
Frequency	--	--	12	39	13	41	1	--
Percentage	--	--	11.3	36.8	12.3	38.7	0.9	--
Buena Vista								
Frequency	--	--	6	27	14	17	--	1
Percentage	--	--	9.2	41.5	21.5	26.2	--	1.5
Westmar								
Frequency	--	1	9	20	11	21	--	--
Percentage	--	1.6	14.5	32.3	17.7	33.9	--	--
Mount Mercy								
Frequency	--	--	1	11	11	27	--	--
Percentage	--	--	2.0	22.0	22.0	54.0	--	--
Briar Cliff								
Frequency	1	1	1	18	6	38	--	--
Percentage	1.5	1.5	1.5	27.7	9.2	58.5	--	--
Cornell								
Frequency	--	--	6	10	17	17	--	1
Percentage	--	--	11.8	19.6	33.3	33.3	--	2.0

Table 23. Responses of freshmen to general information brochures

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	10	32	14	4	--	--
Percentage	--	--	16.7	53.3	23.3	6.7	--	--
Wartburg								
Frequency	--	--	18	55	30	3	--	--
Percentage	--	--	17.0	51.9	28.3	2.8	--	--
Buena Vista								
Frequency	--	--	8	32	21	4	--	--
Percentage	--	--	12.3	49.2	32.3	6.2	--	--
Westmar								
Frequency	--	1	10	32	15	4	--	--
Percentage	--	1.6	16.1	51.6	24.2	6.5	--	--
Mount Marcy								
Frequency	--	--	6	23	18	3	--	--
Percentage	--	--	12.0	46.0	36.0	6.0	--	--
Briar Cliff								
Frequency	--	--	11	23	25	5	--	1
Percentage	--	--	16.9	35.4	38.5	7.7	--	1.5
Cornell								
Frequency	--	--	5	21	19	4	2	--
Percentage	--	--	9.8	41.2	37.3	7.8	3.9	--

and over 90 percent of the respondents on each campus were acquainted with them.

There was only one negative response across all institutions. No influence responses were under 20 percent of the total in each case. At every college no fewer than 70 percent of all respondents attributed positive or strongly positive influence to these brochures. The strongly positive responses slightly outnumbered the positive responses at Briar Cliff, while positive influence was the modal response in each other case. Once again there was strong agreement among students at each college that this item exerted positive influence upon their decision to attend.

Letters to prospective students from various persons associated with the college are another common practice. Only letters from a college administrator (Table 24) and from the admissions staff (Table 25) were familiar to enough students to warrant mention in this chapter. Responses of Cornell students to a letter from a college administrator must be discounted, as the admissions staff indicated that such letters are not sent.

As one might anticipate, a comparison of data in the two tables shows that more students had received a letter from an admissions officer than from an administrator, except at Northwestern. After eliminating the Cornell responses, over 50 percent of each group of students had received a letter from an administrator. Across all colleges, over 60 percent of the students acknowledged receiving a letter from an admissions officer. There was only one negative response to either item. The percentages of no influence responses were moderate, although somewhat

Table 24. Responses of freshmen to a letter from a college administrator

College:	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	10	22	7	21	--	--
Percentage	--	--	16.7	36.7	11.7	35.0	--	--
Wartburg								
Frequency	--	--	14	36	6	50	--	--
Percentage	--	--	13.2	34.0	5.7	47.2	--	--
Buena Vista								
Frequency	--	--	7	17	10	31	--	--
Percentage	--	--	10.8	26.2	15.4	47.7	--	--
Westmar								
Frequency	--	--	16	22	9	15	--	--
Percentage	--	--	25.8	35.5	14.5	24.2	--	--
Mount Mercy								
Frequency	--	--	4	16	8	22	--	--
Percentage	--	--	8.0	32.0	16.0	44.0	--	--
Briar Cliff								
Frequency	--	--	12	24	9	20	--	--
Percentage	--	--	18.5	36.9	13.8	30.8	--	--
Cornell ^a								
Frequency	--	--	7	13	3	28	--	--
Percentage	--	--	13.7	25.5	5.9	54.9	--	--

^aNot employed by this college, despite student responses.

Table 25. Responses of freshmen to a letter from an admissions officer

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	7	25	5	22	--	1
Percentage	--	--	11.7	41.7	8.3	36.7	--	1.7
Wartburg								
Frequency	--	--	19	53	12	22	--	--
Percentage	--	--	17.9	50.0	11.3	20.8	--	--
Buena Vista								
Frequency	--	--	8	28	17	12	--	--
Percentage	--	--	12.3	43.1	26.2	18.5	--	--
Westmar								
Frequency	--	--	22	22	9	9	--	--
Percentage	--	--	35.5	35.5	14.5	14.5	--	--
Mount Mercy								
Frequency	--	--	4	19	12	15	--	--
Percentage	--	--	8.0	38.0	24.0	30.0	--	--
Briar Cliff								
Frequency	--	--	11	29	13	11	1	--
Percentage	--	--	16.9	44.6	20.0	16.9	1.5	--
Cornell								
Frequency	--	1	5	23	13	9	--	--
Percentage	--	2.0	9.8	45.1	25.5	17.6	--	--

higher for Westmar than for the others.

Considering only the responses of those who received such letters, a majority in every instance attributed at least positive influence to them. The pattern of no influence, positive influence, and strongly positive influence responses is relatively consistent within institutions on these items.

The college catalog or bulletin might be considered the most universal recruiting device, as probably every college publishes one. Furthermore, one might expect study of the catalog to contribute to the final selection of any college. Yet among students surveyed at three of the colleges (Northwestern, Mount Mercy, and Briar Cliff), at least 10 percent claimed no contact with the college catalog, as shown in Table 26.

The pattern of responses from students familiar with the catalog is similar to most others already mentioned: a few negative responses, a modest grouping of no influence responses, and a sizable majority of responses in the positive or strongly positive columns. Generally, the modal response was positive influence, but at Westmar and Mount Mercy the largest numbers of responses were strongly positive influence.

The final number of new students enrolled by a college may be, to an extent, a function of the number of prospects contacted. All seven colleges utilize mailing lists obtained from their constituent churches, high schools, counselors, alumni, and other sources of likely prospects. The students in this study were asked to indicate the influence they attributed to any materials they had received prior to communicating with the college themselves. It was believed that this item would

Table 26. Responses of freshmen to the college catalog or general bulletin

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	4	4	23	17	10	1	1
Percentage	--	6.7	6.7	38.3	28.3	16.7	1.7	1.7
Wartburg								
Frequency	1	2	18	57	25	3	--	--
Percentage	0.9	1.9	17.0	53.8	23.6	2.8	--	--
Buena Vista								
Frequency	1	1	9	34	16	4	--	--
Percentage	1.5	1.5	13.8	52.3	24.6	6.2	--	--
Westmar								
Frequency	--	--	10	24	26	1	--	1
Percentage	--	--	16.1	38.7	41.9	1.6	--	1.6
Mount Mercy								
Frequency	--	--	2	19	24	5	--	--
Percentage	--	--	4.0	38.0	48.0	10.0	--	--
Briar Cliff								
Frequency	--	--	7	36	15	7	--	--
Percentage	--	--	10.8	55.4	23.1	10.8	--	--
Cornell								
Frequency	--	2	6	23	18	2	--	--
Percentage	--	3.9	11.8	45.1	35.3	3.9	--	--

measure some results of using mailing lists. The responses are given in Table 27.

The percentage of students who had received such materials varied from a low of 38.5 percent at Briar Cliff to a high of 75.5 percent at Wartburg. A few negative responses were scattered among the institutions. No influence responses generally ranged from about 10 percent to 17 percent of the total. Disregarding the no contact responses, the most common response in every instance was positive influence. Mount Mercy and Cornell recorded the highest percentages of strongly positive responses. Differences among the institutions are not striking.

Ranking alongside the college catalog as a nearly universal recruitment practice is the traditional high school visitation by college admissions representatives. Responses to such visits are summarized in Table 28. Only 47.1 percent of Cornell's sample had had contact with an admissions counselor in their high schools, compared to 76.4 percent of Wartburg's group. The typical range is 60 to 70 percent.

As in all other cases, there were few negative responses. No influence responses did not exceed 10 percent of the total at any college. For Westmar, Mount Mercy, and Cornell, strongly positive responses were given by over 50 percent of the students who had had contact with the item. This is an unusual concentration of strongly positive responses, compared to the other items. At Buena Vista, the number of strongly positive responses also exceeded the number of positive responses, but did not reach 50 percent. At Northwestern, Wartburg, and Briar Cliff, the modal response was positive influence. Omitting the no contact

Table 27. Responses of freshmen to any materials received from the college prior to any request for such materials

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	2	10	23	6	19	--	--
Percentage	--	3.3	16.7	38.3	10.0	31.7	--	--
Wartburg								
Frequency	--	1	17	51	11	26	--	--
Percentage	--	0.9	16.0	48.1	10.4	24.5	--	--
Buena Vista								
Frequency	1	--	9	27	6	21	--	1
Percentage	1.5	--	13.8	41.5	9.2	32.3	--	1.5
Westmar								
Frequency	--	1	8	27	6	20	--	--
Percentage	--	1.6	12.9	43.5	9.7	32.3	--	--
Mount Mercy								
Frequency	--	1	4	14	8	23	--	--
Percentage	--	2.0	8.0	28.0	16.0	46.0	--	--
Briar Cliff								
Frequency	--	--	7	14	4	40	--	--
Percentage	--	--	10.8	21.5	6.2	61.5	--	--
Cornell								
Frequency	--	--	3	11	6	31	--	--
Percentage	--	--	5.9	21.6	11.8	60.8	--	--

Table 28. Responses of freshmen to visits to their high schools by college admissions representatives

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	1	6	17	15	20	--	1
Percentage	--	1.7	10.0	28.3	25.0	33.3	--	1.7
Wartburg								
Frequency	2	--	4	45	30	25	--	--
Percentage	1.9	--	3.8	42.5	28.3	23.6	--	--
Buena Vista								
Frequency	--	--	6	16	19	24	--	--
Percentage	--	--	9.2	24.6	29.2	36.9	--	--
Westmar								
Frequency	--	1	2	13	20	25	--	1
Percentage	--	1.6	3.2	21.0	32.3	40.3	--	1.6
Mount Mercy								
Frequency	--	--	2	10	21	17	--	--
Percentage	--	--	4.0	10.0	42.0	34.0	--	--
Briar Cliff								
Frequency	--	--	6	20	14	24	--	1
Percentage	--	--	9.2	30.8	21.5	36.9	--	1.5
Cornell								
Frequency	--	1	3	5	15	27	--	--
Percentage	--	2.0	5.9	9.8	29.4	52.9	--	--

responses, in no instance did positive and strongly positive influences total less than 80 percent of the responses. Only the individual campus visit produced higher percentages of strongly positive responses.

In sum, of the eleven primary recruitment practices, nine were rated as positive or strongly positive influences by a sizable majority of the students who experienced them. Minimal numbers of other responses were recorded, except for no contact. Summer orientation and registration yielded a more substantial percentage of no influence responses than most of the others. It also resulted in the largest number of negative responses of any item discussed. Publicity materials in the form of ash trays, match books, etc. also yielded a larger than usual percentage of no influence responses at each college, but only the customary numbers of negative responses.

The remaining thirty-nine items from the questionnaire were not included at this point because they were familiar to fewer students and were thus considered to be of less general importance in recruiting. The responses to these items are given in tables in Appendix B for the interested reader and are assumed to be self-explanatory.

Comparison of the Influence of Recruitment Practices as Perceived by Students and Admissions Staff Members

The third question posed by this research was whether admissions staff members perceived their recruitment practices to be influential to the same degree as the students on their campuses. Mean values were calculated separately for all student and staff responses of some level of

influence, strongly negative through strongly positive. Those practices actually employed by each college were then rank ordered on the basis of the mean response to each item. From the two rank orderings of the practices, Spearman rank order correlation coefficients were calculated. These coefficients indicate relative agreement or disagreement on the rankings, thereby comparing the perceptions of the two groups. The calculated coefficients appear in Table 29.

Table 29. Spearman rank-order correlation coefficients of influence attributed to recruitment practices by students and staff members

College	Calculated correlation coefficient	Value needed for significance at .01 ^a	Degrees of freedom
Northwestern	.593	.398	39
Wartburg	.6398	.380	43
Buena Vista	.543	.403	38
Westmar	.380	.376	44
Mount Mercy	.461	.449	30
Briar Cliff	.444	.376	44
Cornell	.682	.393	40

^aSource: (94, p. 557).

For each of the seven colleges, the rank order correlation yielded a coefficient which was significant at the .01 level. This shows a relatively strong agreement between students and staff at each college. However, the strength of that agreement varies considerably among the institutions, as shown by the magnitude of the coefficients. In the case of Westmar College, the calculated coefficient was just barely large enough to reach significance, while the largest coefficients resulted at Wartburg and Cornell.

These findings of statistical significance should not be interpreted as meaning that staff and students agreed closely on the ranking of every item. There were sizable disagreements in each case. Examination of the distribution of differences between student and staff rankings revealed that a substantial majority were of ten points or less, with another block of differences greater than fifteen points. Thus it was felt that any item for which the difference exceeded fifteen showed considerable misjudgment on the part of the admissions staff and warranted mention.

For Northwestern College, six of forty-one pairs of ranks differed by more than fifteen. Table 30 presents these items. In five of the six cases, the staff ranking was higher than the student ranking, indicating the staff believed these items were more influential than the students said they were. The largest difference was found for the item "phone call from a current student." The staff ranked this item tenth, while the students ranked it thirty-second. In the case of college day or night programs, the staff considered them to be of relatively little influence, while students found considerable benefit and influence in them.

Table 30. Items on which student and staff rankings differed by more than fifteen, Northwestern College

Item	Student rank	Staff rank
1. Film or slide presentation about the college	39	20
5. Phone call from a college administrator	26	6
11. College day or night programs	8	32
15. Letter from a college student	23	6
18. Phone call from a current student	32	10
46. Posters	38	20

Students and staff at Wartburg disagreed by over fifteen points on seven items, as shown in Table 31. Here the staff underrated four items

Table 31. Items on which student and staff rankings differed by more than fifteen, Wartburg College

Item	Student rank	Staff rank
1. Film or slide presentation about the college	33	6
16. College speakers at high school graduation, etc.	29	44.5
19. Department and/or program brochures	3	26.5
21. General information brochures	11	26.5
30. Visits to high schools by college students	12	39
38. Admissions counselors at Boys State	28	8.5
46. College posters	42	22

and overrated three, compared to the students. Various brochures about the college seem much more important to the students than the staff realizes. Students are also considerably more enthusiastic than the staff about having college students visit their high schools. However, students found substantially less influence than the staff expected in the college's slide presentation, the presence of admissions counselors at Boys State, and college posters.

Five pairs of ranks differed by more than fifteen points at Buena Vista College. Table 32 presents these data. In three of the five cases, students ranked the items higher. Both the size of the difference in rankings and the high ranking itself given by students to high school visits by college faculty are worth noting. The low rank given by students to a college representative visiting their homes is surprising, as is the low rank given by staff to "open house" opportunities for groups of prospects to visit the campus.

Table 32. Items on which student and staff rankings differed by more than fifteen, Buena Vista College

Item	Student rank	Staff rank
16. College speakers at high school graduations, etc.	11	32.5
22. Visit to the prospect's home by a college representative	29	12
25. Visits to high schools by college faculty	2	25
40. "Open house" (weekend) for groups of prospects	4	32.5
42. College display at a fair, youth conference, etc.	32	7.5

At Westmar, student and staff rankings differed by more than fifteen on fifteen of the forty-six items ranked, nearly one-third of the total. It is somewhat surprising that the correlation coefficient reached significance with so many large disagreements. The fifteen items and respective rankings appear in Table 33. The split between the groups is about even, with students ranking seven items higher and eight lower than the staff. Four items ranked in the top ten according to the students, yet none was even in the top twenty by staff rankings. Conversely, the staff ranked five items in the top ten which did not make the top half according to students. These are indeed substantial disagreements.

Table 33. Items on which student and staff rankings differed by more than fifteen, Westmar College

Item	Student rank	Staff rank
2. Social gathering in the home area	32	9.5
10. Phone call from an alumnus or alumna	10.5	33.5
11. College day or night programs	13	37.5
15. Letter from a current student	24	7
17. ACT's Educational Opportunities Service	41	24.5
32. College catalog or bulletin	6	24.5
34. Materials received before the student requested any	20	37.5
37. Phone call from a college faculty member	25	4
38. Admissions counselors at Boys State	40	9.5
39. Letter from an alumnus or alumna	4	41.5
40. "Open house" (weekend) for groups of prospects	8	24.5
43. Visits to high schools by admissions counselors	1	24.5
44. Billboards	45	24.5
48. High school performances by college choir, etc.	35	4
50. Radio or TV advertising	46	12.5

The fewest major disagreements were found at Mount Mercy College, where only four items were ranked more than fifteen points differently by staff and students. These items are listed in Table 34. While students were more enthusiastic about a phone call from an alumnus than the staff believed, they saw less value than the staff in the alumni bulletin. Billboards and posters also found less favor with students. The significance of this small number of major disagreements must be tempered by the fact that only thirty-two items were included in the ranking, the fewest for any institution.

Table 34. Items on which student and staff rankings differed by more than fifteen, Mount Mercy College

Item	Student rank	Staff rank
10. Phone call from an alumnus or alumna	4.5	22.5
28. Alumni bulletin	31	13.5
44. Billboards	28	5.5
46. Posters	29	13.5

Briar Cliff College's data showed the second largest number of substantial disagreements in ranking, as shown in Table 35. Once again, the split between the over- and underratings was about as even as possible. Four items were ranked in the top ten by students, but no higher than thirty-third by staff. Alumni contacts fair better with students than the staff believes. The on-campus interview, normally a strong

Table 35. Items on which student and staff rankings differed by more than fifteen, Briar Cliff College

Item	Student rank	Staff rank
1. Film or slide presentation about the college	36	18.5
7. Magazine ads	35	18.5
10. Phone call from an alumnus or alumna	4	43
14. Group meetings in the home area	10	33
18. Phone call from a current student	9	33
24. Newspaper ads	40	5.5
30. Visits to high schools by college students	31	11.5
35. On-campus interview	21.5	2
39. Letter from an alumnus or alumna	21.5	45
42. College display at a fair, youth conference, etc.	6	33
48. High school performance by college choir, etc.	27	11.5

technique, was rated accordingly by the staff, but barely made the top half with students.

Cornell students and staff differed by more than fifteen in their rankings of seven of forty-two items, as listed in Table 36. In only two

Table 36. Items on which student and staff rankings differed by more than fifteen, Cornell College

Item	Student rank	Staff rank
1. Film or slide presentation about the college	19	2.5
7. Magazine ads	16.5	40
17. ACT's Educational Opportunities Service	30	12
30. Visits to high schools by college students	31	12
42. College display at a fair, youth conference, etc.	4	25
45. Visits to churches by any college representative	41.5	25
48. High school performance by college choir, etc.	41.5	25

instances were staff rankings below student rankings, showing that the staff tends to overvalue some of its practices. The student ranking of a college display at a fair, conference, etc. seems quite high for this item. The staff feels their film or slide presentation about the college is considerably more influential than the students. No other item was ranked in the top ten by either group.

The Most Uniformly Effective Practices

The fourth question to be answered by this research was whether certain of the fifty recruitment practices studied were uniformly effective across all seven institutions. There are many ways of analyzing data to suggest answers to this question, the final choice resulting primarily from subjective definitions of effectiveness.

One approach would be to examine the top ten ranking practices for each college, based on raw mean scores for each item, to see which items are common to all colleges. This might be termed the inherent effectiveness of the practices. However, this approach fails to consider how many responses contributed to the mean value. The highest rated, and hence ranked, item could conceivably have been so rated by only a few persons, whereas the entire group rated another item only slightly lower.

To overcome the problem, one might utilize weighted means as a basis for rank ordering. In this approach, each raw mean would be multiplied by a weighting factor such as the number of responses from which the mean was calculated. The new value reflects both the raw score for the item and the number of respondents who rated it. In order to rank

highly, an item would have to be rated well by many respondents. This might be termed the relative effectiveness of the practice, or a measure of its effective utilization. However, an item which was rated highly by the few persons who experienced it would rank low, quite possibly below a technique which was widely used, but was given only mediocre ratings. Thus something of potential value may go unnoticed in this approach.

Because each possible analysis has strong and weak points, results of both are presented, as well as a synthesis. The arbitrary decision was made to utilize the top fifteen ranking items from each college, based on both raw and weighted means.

Examination of the top items as ranked by raw means revealed that the following practices were included on the lists for all seven colleges. They are numbered as on the questionnaire.

- 8. An individual campus visit or tour
- 40. "Open house" (weekend) for groups of prospects
- 43. Visits to high schools by college admissions counselors

The following practices were on all lists except as indicated:

- 19. Individual department/program brochures (all except Buena Vista, which has no such brochures, and Cornell)
- 21. General information brochures (all except Wartburg)
- 22. Visits to the homes of prospects by college representatives (all except Buena Vista)
- 35. On-campus interviews (all except Briar Cliff)

These seven practices may be considered uniformly effective on the basis of raw mean rankings.

Employing means which were weighted by the percentage of students who had experienced the item, listings of the top fifteen ranking items were again compiled for each college. The following items are common to

all seven colleges:

- 8. An individual campus visit or tour
- 21. General information brochures
- 32. The college catalog or bulletin
- 41. A letter from an admissions officer
- 43. Visits to high schools by college admissions counselors

The following are common to all colleges except the one given in parentheses:

- 3. June, July, or early August registration/orientation (Cornell)
- 19. Individual department/program brochures (Buena Vista)
- 20. A phone call from an admissions representative (Northwestern)
- 29. A letter from a college administrator (Wartburg)
- 34. Materials received by the prospect prior to any request for information (Briar Cliff)

These ten practices have proved effective for at least six of the seven colleges on the basis of both the inherent influence attributed to them by students and the number of students who experienced them. They may be considered the most effectively utilized techniques. It should also be noted that items three and nineteen above do not appear on their respective college's list because neither is used by that college. Thus, in effect, they belong in the first grouping, as they are among the top fifteen practices for every college which uses them.

In terms of both inherent effectiveness and effective utilization, those items appearing on both lists may be considered the top practices.

They are:

- 8. An individual campus visit or tour
- 19. Individual department or program brochures
- 21. General information brochures
- 43. Visits to high schools by college admissions counselors

By either approach to the question of effectiveness, these four items can be considered the most effective recruitment practices.

Relationship of Perceived Influence Levels
to Selected Student Characteristics

It is of obvious value to college recruiters to know that certain practices positively influenced new students toward attending the institution. However, one might justifiably speculate that not all students were equally influenced by the same items. The fifth question to be answered by this study was whether there is a relationship between the level of influence attributed to various recruitment practices by students and certain personal characteristics of the students.

Data on numerous personal characteristics were gathered in the course of the study. Sex of the respondent, highest degree expected in the respondent's lifetime, and the distance from home to the college were analyzed individually. Other items were closely related, suggesting combination factors. Academic ability was created from high school grade point average, ACT equivalent score, and high school rank. The educational attainment of both parents, family income, and three items concerning financial aid were combined to yield a type of socio-economic status measure. Population of the home area and size of the high school graduating class resulted in a composite size factor.

The chi-square technique was chosen to analyze the distribution of responses to various recruitment practices by levels of the six individual and combination student characteristics. The items to be analyzed were the sixteen practices which were familiar to the greatest numbers of students. The .05 level was selected for determining significance. In each case, this question was posed: Are the responses to this item

independent of the student characteristic? A significant chi-square would indicate lack of independence, meaning that a relationship exists between the characteristic and the responses to the item.

Contingency tables were generated and chi-square values were computed for the ninety-six possible combinations of the sixteen practices and the six characteristics. Twenty-two significant departures from independence were found. The tables for the significant chi-squares are found in Appendix C. Because of missing data, the total number of responses varies among the tables.

The hypothesis of independence between sex and responses to the following recruitment practices was rejected: 1) college day or night programs, 2) individual department or program brochures, 3) general information brochures, 4) the student newspaper, 5) the college catalog, and 6) visits to high schools by college admissions counselors. The distributions are shown in Tables 76 through 81 in Appendix C.

The significant relationship between sex of the respondent and response to college day or night programs is largely attributable to disproportionately high percentages of females and low percentages of males attributing positive influence to these programs.

For department or program brochures, considerably fewer females than expected indicated that they were not influenced by the brochures or had had no contact with them. Among males, the number was higher than expected in each instance. Furthermore, more females than expected attributed a strongly positive influence to the brochures, while fewer males marked that response.

The pattern was similar for general information brochures. A higher percentage of males and fewer females than expected attributed no influence to these brochures. The deviations were reversed for responses of strongly positive influence.

Responses to the student newspaper were ambiguous. No influence and positive influence were both marked by a higher percentage of females than expected, whereas males were underrepresented on both answers. Fewer females and more males than expected indicated no contact with the newspaper.

Relative to the college catalog, fewer females than expected indicated no contact with it or attributed no influence to it. Males were overrepresented on both responses. An unexpectedly low percentage of males and high percentage of females attributed strongly positive influence to the catalog.

The same pattern of responses existed for visits of admissions counselors to the high schools. Females were underrepresented in the no contact and no influence categories and overrepresented in the strongly positive category. The opposite held for males.

Overall, for the six significant results, females were more likely to attribute positive or strongly positive influence to the practices than one would expect from their proportion in the sample. Males were less likely to give those answers. Females were less likely to be unfamiliar with the practices or to attribute no influence to them than expected, while males were overrepresented on each response.

Each student was asked to reveal his educational ambitions by

indicating the highest degree which he expected to earn in his lifetime. For this analysis, responses were grouped as bachelor's degree or less, master's degree, and doctorate or professional degree. Four of the sixteen recruitment practices yielded significant chi-squares. Tables 82 through 85 in Appendix C show the distributions.

Responses to summer orientation and registration were found to be related to degree expectations. No influence was attributed to the practice by more of those in the bachelor's or less group than expected, while fewer in the other two groups gave that response. The same was true for the positive influence response--more than expected in the bachelor's or less category and fewer in the others. Fewer students than expected in the doctorate or professional degree group found strongly positive influence in this item, while, again, more in the bachelor's or less group gave that response. The bachelor's or less group was underrepresented in no contact responses, while both other groups were overrepresented.

Concerning a phone call from an admissions staff member, the bachelor's or less group was underrepresented on responses of both no influence and strongly positive influence. Those expecting to earn doctorates or professional degrees were overrepresented on both responses, but underrepresented in the no contact category. A lower than expected percentage of those in the master's degree group attributed positive influence to such a phone call, while a larger percentage indicated no contact.

Visits by college faculty to the students' high schools were either a positive or strongly positive influence to more than the expected

number of students in the bachelor's or less group. They were underrepresented on no contact answers. The master's level group was underrepresented on positive influence responses, but gave more no contact responses than expected. Fewer than expected in the doctorate or professional group attributed strongly positive influence to this practice.

The final practice to yield a significant chi-square when analyzed by degree expectations was the on-campus interview. In the bachelor's or less group, more than expected indicated positive influence, while fewer marked strongly positive influence. Fewer than expected in the master's group indicated the interview was a positive influence. Those anticipating a doctorate or professional degree were overrepresented on strongly positive responses and underrepresented in the no contact category.

Student responses to the distance they had traveled from home to attend their college were grouped into three categories: 0-10 miles, 11-100 miles, and over 100 miles. The distance factor yielded a significant chi-square on eight of the sixteen recruiting practices (Tables 86 through 93 in Appendix C).

The 0-10 miles group provided more no influence and fewer strongly positive responses to summer orientation and registration than expected by their proportion in the total sample. Those traveling 11-100 miles were overrepresented on both positive and strongly positive responses, but underrepresented on no contact. Fewer than expected positive responses and more than expected no contact responses came from the over 100 miles group.

Relative to publicity materials like match books, ash trays, etc., fewer students than expected from the 0-10 miles group and more than expected from the over 100 miles group indicated no contact with these materials. Positive and strongly positive responses were combined for this item to avoid low cell frequencies. The 0-10 miles group was overrepresented and both other groups were underrepresented in the combined category. Those from over 100 miles were also low on no influence responses, while the 11-100 miles group gave more no influence responses than expected.

Responses to a phone call from the admissions staff were also related to distance. The 0-10 miles and 11-100 miles groups were both overrepresented on no contact responses, while the over 100 miles group was underrepresented. Fewer than expected from the 0-10 miles group marked either positive or strongly positive responses. A lower than expected percentage from the 11-100 miles group attributed no influence to such a phone call. More than the expected number from over 100 miles indicated no influence, positive influence, and strongly positive influence. The total response pattern is ambiguous.

A letter from a college faculty member elicited more no influence responses than expected and fewer positive and strongly positive responses from the 0-10 miles group. Precisely the reverse was true for the 11-100 miles category. Those from over 100 miles provided more no influence and more strongly positive influence responses than expected, but fewer responses of positive influence.

Responding to visits of admissions counselors to high schools, a

larger than expected percentage of those in the 0-10 miles group indicated no influence or no contact with the counselors, while fewer than expected found a strongly positive influence in the practice. The 11-100 miles group was overrepresented on both no influence and strongly positive influence responses, but low on no contact responses. Fewer than expected in the over 100 miles group attributed no influence to such a visit, while more than expected indicated no contact.

The no influence category had to be omitted for the item individual campus visit or tour, due to low cell frequencies. Of the 0-10 miles group, a smaller than expected percentage marked strongly positive influence, while a larger than expected percentage indicated no contact. The 11-100 miles group was high on positive influence responses and low on no contact. Fewer than expected from over 100 miles responded that the visit had been a positive influence.

A college day or night program was a positive influence to more students than expected in both the 0-10 and 11-100 miles ranges. The over 100 miles group was underrepresented on this response, but overrepresented on no contact. A smaller than expected percentage of those from the 11-100 miles group indicated no contact with such a program. The no influence category was eliminated from the table due to low frequencies.

No influence responses were also eliminated for the item visits to high schools by college faculty. More than expected in the 0-10 miles range found this a positive influence, while fewer from over 100 miles marked that response. An unexpectedly large percentage of those from the 11-100 miles group responded with strongly positive influence, while the

over 100 miles group was again underrepresented. Finally, the over 100 miles group gave more no contact responses than expected, while the 0-10 miles group gave fewer.

Turning to the combined characteristics (Tables 94 through 97 in Appendix C), the raw scores resulting from the addition of the individual items had to be grouped into categories to allow analysis. It was decided to divide the raw scores into lower, middle, and upper thirds according to a normal distribution. Based on these groupings, the responses to summer orientation and registration were found to relate to the composite size factor. Students in the lower third on this factor provided more strongly positive responses and fewer no contact responses to summer orientation than expected. Fewer than expected in the middle one-third responded no influence or strongly positive influence, while more than expected indicated the item was a positive influence. The upper one-third group was overrepresented on both no influence and no contact responses, but underrepresented on both positive and strongly positive responses.

The composite size factor was also related to the responses to a letter from a college faculty member. Fewer than expected in the lower third found no influence in this item, while more than expected rated it a positive influence. The middle group was overrepresented on both positive and strongly positive responses, but underrepresented on no contact. The percentages of no influence and no contact responses were both higher than expected for the upper group, while the percentages for both levels of positive influence were lower.

The academic ability characteristic yielded a significant result only for the publicity materials item. Positive and strongly positive responses were combined to avoid low cell frequencies. Those in the lower one-third on academic ability provided a disproportionately high percentage of the positive influence responses, but were low on no influence. The middle group was also high on positive responses, but underrepresented on no contact. The number of positive influence responses was far below expectations for the high academic ability group, while the number of both no influence and no contact responses exceeded expectations.

Finally, the hypothesis of independence between socio-economic status level and responses to an individual campus visit or tour was not supported. The no influence responses were too few in number to be included. Positive influence responses were given less frequently than expected by students in the lower one-third on socio-economic status and more frequently than expected by those in the middle range. The pattern was reversed on strongly positive responses, with the lower one-third overrepresented and the middle one-third underrepresented. Fewer no contact responses were recorded for the upper socio-economic level than were expected from that group's proportion in the sample.

Summary

The admissions director of each of seven cooperating colleges, or a designated substitute, received an initial information form on which to indicate the recruitment practices employed by the college. Each person was also interviewed on his own campus. From these sources of information

a composite list of fifty current recruitment practices was compiled. Of the fifty, the number used by any one college ranged from thirty-two to forty-six. Twenty-one practices were common to all seven colleges.

A total of 459 new freshmen on the seven campuses responded to a questionnaire designed to determine the degree of influence each attributed to the fifty recruitment practices. Eleven items had been experienced by at least 50 percent of the students on at least four campuses. These are considered to be the primary recruitment devices:

1. Summer orientation and registration
2. Publicity materials like match books, ash trays, etc.
3. An individual campus visit or tour
4. Individual department and/or program brochures
5. A phone call from a college admissions representative
6. General information brochures
7. A letter from a college administrator
8. A letter from a college admissions officer
9. The college catalog
10. Materials received by the student prior to any request for such materials
11. Visits to high schools by admissions representatives

In general, most of the students who had experienced these practices also attributed positive or strongly positive influence to them. There were fewer than 5 percent negative influence responses to any item. A somewhat higher than usual percentage of students found no influence in summer orientation and registration. This practice also resulted in fourteen negative responses, the most for any one item. Publicity materials were also rated as having no influence by an unusually large number of students.

Rank order correlations were calculated to compare the responses of students and staff to the fifty recruitment practices. In each case, the

calculated coefficient reached the .01 level of significance, indicating substantial agreement between students and staff on the rankings. However, students and staff differed by more than fifteen points on the rankings of from four to fifteen of the items, depending on the college. Thus, considerable disagreement was also evidenced.

Those practices in use by each college were rank ordered by raw mean student responses and by means weighted by the percentage of students who had experienced each item. The fifteen highest ranking practices for each college were examined for common items. Four practices were included on the lists by both methods of ranking:

1. An individual campus visit or tour
2. Individual department or program brochures
3. General information brochures
4. Visits to high schools by admissions counselors

These were termed the most uniformly effective and most effectively utilized practices across the seven colleges.

Chi-square contingency tables were generated for six student characteristics and the sixteen recruitment practices which were familiar to the most students. Sex of the respondent was found to be related to responses to college day or night programs, individual department or program brochures, general information brochures, the student newspaper, the college catalog, and visits to high schools by admissions counselors.

Responses to summer orientation and registration, a phone call from an admissions officer, visits to high schools by college faculty, and an on-campus interview were found to be related to the highest degree the respondent expected to earn in his lifetime.

Significant chi-squares were found between the distance the

respondent traveled from home to the college and eight practices: 1) summer orientation and registration, 2) publicity materials, 3) a phone call from an admissions officer, 4) a letter from a college faculty member, 5) visits to high schools by admissions counselors, 6) an individual campus visit or tour, 7) college day or night programs, and 8) visits to high schools by college faculty members.

A composite size factor was created by combining the population of the respondent's home area and the size of his high school graduating class. This factor was found to relate to responses to summer orientation and registration and a letter from a college faculty member.

High school grade point average, rank in graduating class, and ACT equivalent scores were combined to yield a composite measure of academic ability. Only responses to publicity materials were dependent upon this factor.

A measure of socio-economic status resulted from combining parental educational attainment data with four items related to the family's financial position. This factor was related to responses to an individual campus visit or tour.

CONCLUSIONS AND RECOMMENDATIONS

Seven small, private colleges in Iowa participated in this study of freshman recruitment practices and their effectiveness. Veteran admissions staff members and 459 entering freshman students provided most of the data by responding to a questionnaire. On the basis of evidence presented in the preceding chapter, the following conclusions appear justified:

1. There is little innovation in recruitment practices among the seven colleges. Fifty different practices were identified, of which thirty-nine were common to at least six of the colleges. Only four practices were exclusive to as few as two colleges, and they had been experienced by very few respondents. It is conceivable that the manner in which various practices are utilized may vary considerably among the colleges. However, practices generally received similar ratings at all seven colleges. Thus any operational innovations which may exist appear to have had little effect upon those at whom they are directed.
2. With the exception of Cornell College, each cooperating institution was one of a pair of essentially similar institutions which had had differing enrollment patterns. This study produced little evidence that these strong and weak enrollment patterns can be attributed to recruitment. In general, the institutions which had the weaker enrollment history also tended to use more recruitment methods. This observation may be viewed from two

perspectives. First, the use of more techniques could be a response to enrollment problems, an attempt to attract more students. The second possibility is that the stronger institutions may benefit from concentrating their efforts on some of the proven and more promising techniques. The weaker colleges could be at a disadvantage from overextending themselves. Proper interpretation must be left to the staffs of the cooperating colleges. No other relationship between enrollment and recruitment was found.

3. The recruitment practices currently in use are, generally, positive influences upon students as they select a college. Only scattered negative responses were recorded, with no practice generating enough negative responses at any institution to demand immediate action. Some items, such as summer orientation and registration and publicity materials, were of no influence to sizable numbers of respondents. However, this does not indicate that these practices are detrimental to the recruitment effort. Rather, they were neutral to many, while still positively influencing others. Such instances do not negate the general conclusion.
4. The admissions staffs of the seven colleges have a basic understanding of the relative influence of their recruitment practices. All rank-order correlations between staff and student responses reached significance at the .01 level. However, the number of substantial ranking disagreements between students and

staff at each college indicates that considerable improvement is possible. There are still some major areas of misunderstanding which the staffs should seek to eliminate. Accurate judgments of the likely influence of each technique should be the basis for its utilization.

5. There is a nucleus of recruitment practices which are uniformly effective across the institutions studied, even by differing definitions of effectiveness. These outstanding practices are: an individual campus visit or tour, department or program brochures, general information brochures, and visits to high schools by college admissions counselors. These items also appeared among the seven top-ranking items found by Campbell (22), the only other study with a base somewhat comparable to that of this study. LaBouve (62) and Bowling (14) had also suggested the value of some of these items, although they reached their conclusions from vastly different directions. This study confirms the place of these items in recruitment programs.
6. There are identifiable relationships between responses to some recruitment practices and certain characteristics of the entering freshmen. Their existence suggests possible increases in efficiency in recruitment by the selective employment of specific techniques. For example, females were more positively influenced by department or program brochures than males. Extra effort should probably be taken to assure that female applicants receive these publications, although the responses of males do

not suggest refraining from sending them the materials. The potential benefits of discovering such relationships and employing recruiting practices accordingly could be considerable. However, annual studies on each campus utilizing more sophisticated personal characteristics data would be necessary for maximum benefits.

Beyond these conclusions, the final question posed for this research has not been treated, as its answer rests upon interpretations of the findings. The first part of the question was, which recruitment practices deserve particular attention and which are of questionable value in general? On the subjective basis of positive responses by large numbers of students at most of the colleges, and by the relative absence of negative or no influence responses, the following items appear to belong in any sound recruitment program:

1. Individual campus visits or tours
2. Department or program brochures
3. Phone calls to prospects from admissions staff members
4. General information brochures
5. Letters to prospects from college administrators
6. Letters to prospects from admissions staff members
7. The college catalog
8. Materials sent to prospects prior to any request for materials, based on mailing lists
9. Visits of admissions counselors to high schools

In addition, three items were rated highly enough by the students who had experienced them to rank among the top fifteen practices of at least six of the colleges. They are:

1. "Open house" (weekend) for groups of prospects
2. Visits to the homes of prospects by admissions representatives
3. On-campus interviews

It appears justifiable to conclude that these practices also deserve special emphasis in any recruitment program.

For an item to be of questionable value, it should have received considerable numbers of negative or no influence responses. There was no item which was frequently rated as a negative influence. However, the following items were marked as having no influence by approximately one-third or more of all respondents who had experienced them:

1. Magazine advertisements
2. Use of a single application form to apply to several colleges
3. Newspaper publicity, such as a Dean's list
4. The Educational Opportunities Service of ACT
5. Newspaper advertisements
6. The student newspaper
7. The alumni bulletin
8. Admissions clearing houses
9. The college yearbook
10. Billboards
11. Posters about the college
12. Programs from past campus events
13. The student literary publication

Compared to other practices, the value of these thirteen items appears questionable. They seem to have had a limited effect upon the college selection process.

When the same questions are posed for each institution, differing patterns emerge. Regardless of the number of persons who were familiar with an item, if it received no negative responses and at least twice as many positive and strongly positive responses as no influence responses, it would seem to have demonstrated potential for that college.

The following appear to be strong recruitment practices for Northwestern College:

1. Magazine advertisements
2. Phone calls to prospects from alumni

3. College day or night programs
4. Group meetings in the home areas of prospects
5. Letters to prospects from current students
6. Letters to prospects from college faculty members
7. Interviews in the home areas of prospects
8. Visits to high schools by college students
9. Phone calls to prospects from college faculty members
10. Letters to prospects from alumni
11. College displays at fairs, youth conferences, etc.
12. Visits of college representatives to prospects' churches
13. High school performances by the college band, choir, etc.

The following practices appear to warrant special attention by Wartburg College admissions personnel:

1. Phone calls to prospects from college administrators
2. College day or night programs
3. Group meetings in the home areas of prospects
4. Phone calls to prospects from current students
5. Letters to prospects from college faculty members
6. Interviews in the home areas of prospects
7. Visits to high schools by college students
8. Admissions counselors at Lutheran encounter schools
9. Admissions counselors at Boys State
10. Visits of college representatives to prospects' churches

The Buena Vista College staff might reexamine its use of the following methods, which seem effective, but were experienced by comparatively few students:

1. College day or night programs
2. Phone calls to prospects from college students
3. Letters to prospects from college faculty members
4. Phone calls to prospects from college faculty members
5. Letters to prospects from alumni

For Westmar College, the following items appear to deserve more emphasis than currently given:

1. Phone calls to prospects from college administrators
2. Phone calls to prospects from alumni
3. College day or night programs
4. Group meetings in the home areas of prospects
5. On-campus interviews
6. Letters to prospects from alumni

7. Visits of college representatives to prospects' churches

Mount Mercy College might benefit from more active use of these practices:

1. A film or slide presentation about the college
2. Social gatherings in the home areas of prospects
3. Magazine advertisements
4. Phone calls to prospects from alumni
5. Phone calls to prospects from current students
6. Interviews in the home areas of prospects
7. Programs from past campus events

The following practices were favorably received by the limited number of Briar Cliff College students who had experienced them:

1. Phone calls to prospects from alumni
2. College day or night programs
3. Group meetings in the home areas of prospects
4. Letters to prospects from current students
5. Phone calls to prospects from current students
6. Visits to high schools by college faculty members
7. Interviews in the home area
8. The student newspaper
9. The college yearbook
10. Letters to prospects from alumni
11. College displays at fairs, youth conferences, etc.
12. Visits by college representatives to prospects' churches

For Cornell College, the following practices appear to deserve more emphasis than they have been given:

1. A film or slide presentation about the college
2. Social gatherings in the home areas of prospects
3. Phone calls to prospects from college administrators
4. Magazine advertisements
5. Phone calls to prospects from alumni
6. Group meetings in the home areas of prospects
7. Letters to prospects from current students
8. Phone calls to prospects from current students
9. Letters to prospects from college faculty members
10. Visits to high schools by college faculty members
11. Interviews in the home areas of prospects
12. Phone calls to prospects from college faculty members
13. Letters to prospects from alumni
14. College displays at fairs, youth conferences, etc.

These conclusions concerning the programs of individual institutions also suggest several more general conclusions.

1. Previous research is contradictory concerning the value of college day or night programs. Responses of students in this study support the conclusion that prospective students do gain information helpful to them in choosing a college from such programs.
2. Relatively few entering freshmen had received a letter or phone call from a current student of the college, or had had college students visit their high schools. However, those who had had such contacts tended to be positively influenced by them. This suggests that increased use of college students as recruiters could produce favorable results.
3. Responses of students to contacts with alumni and college faculty members, either by letter or phone, were also quite favorable. The conclusion appears warranted that these two groups should be considered for larger roles in freshman recruitment.

Turning to the other half of the question, if a practice produced more negative and no influence responses than positive responses, one might conclude that its value to the institution was questionable. The respective admissions staffs should reexamine the items listed for their institutions to see whether justification exists for their continued use. They appear to be of limited value as recruiting devices for the respective colleges and may not justify associated costs.

For Northwestern College:

1. Newspaper publicity, such as a Dean's list
2. Phone calls to prospects from current students
3. Posters about the college

For Wartburg College:

1. Newspaper publicity, such as a Dean's list
2. The Educational Opportunities Service of ACT
3. Newspaper advertisements
4. The alumni paper or bulletin
5. Admissions clearing houses
6. The college yearbook
7. Posters about the college
8. Old programs from past campus events

For Buena Vista College:

1. Magazine advertisements
2. Newspaper publicity, such as a Dean's list
3. Newspaper advertisements
4. The alumni paper or bulletin
5. Admissions clearing houses
6. Admissions counselors at Boys State
7. College displays at fairs, youth conferences, etc.
8. Visits by college representatives to prospects' churches
9. Old programs from past campus events
10. High school performances by the college choir, band, etc.
11. Radio or television advertising

For Westmar College:

1. Social gatherings in the home areas of prospects
2. Use of a single application form for several colleges
3. Newspaper publicity, such as a Dean's list
4. Faculty or administration speakers at high school graduations, etc.
5. The Educational Opportunities Service of ACT
6. Newspaper advertisements
7. Admissions clearing houses
8. The college yearbook
9. Admissions counselors at Boys State
10. Billboards
11. Old programs from past campus events
12. High school performances by the college choir, band, etc.
13. Radio or television advertising

For Mount Mercy College:

1. Newspaper publicity, such as a Dean's list

For Briar Cliff College:

1. The Advanced Acceptance Program
2. Newspaper publicity, such as a Dean's list
3. Theater spot ads
4. Newspaper advertisements
5. Billboards
6. Posters about the college
7. Old programs from past campus events

For Cornell College:

1. Use of a single application form for several colleges
2. Newspaper publicity, such as a Dean's list
3. Newspaper advertisements
4. The student newspaper
5. The alumni paper or bulletin
6. The college yearbook
7. Posters about the college
8. Old programs from past campus events
9. The student literary publication

The third portion of the final question asked whether certain practices were particularly helpful in recruiting certain types of students, and whether some might be of little use with certain students. The data suggest these conclusions:

1. Females were more likely than males to be positively influenced by college day or night programs, department or program brochures, general information brochures, the student newspaper, the college catalog, and admissions counselors at high schools.
2. Males were more likely than females to find no influence in department or program brochures, general information brochures, the college catalog, and admissions counselors at high schools.
3. Although four recruitment practices were found to relate to a student's lifetime degree expectations, the results were generally

ambiguous and of little practical significance. For instance, those anticipating a bachelor's degree or less tended to find either no influence or strongly positive influence in a phone call from an admissions staff member. This pattern offers no guidance to recruiters. The exception may be responses to an on-campus interview. Such an interview tended to exert the strongest influence on those seeking doctorates or professional degrees, and the least on those anticipating master's degrees.

4. Summer orientation and registration was most favorably received by students whose homes were between 11 and 100 miles from the college. These students were little influenced by publicity materials. They tended to find positive influence in letters from faculty members, college day or night programs, and individual campus visits or tours. Strongly positive influence was attributed to college faculty visiting their high schools.
5. Publicity materials, college day or night programs, and college faculty visits to high schools all produced positive responses among students from the immediate area (0-10 miles from home).
6. Those who traveled over 100 miles to the college responded less favorably to all of the eight practices which were found to relate to distance from home. Apparently the motivation to attend a college varies with the distance from home and was not adequately treated by this study.
7. Students from the lowest population areas and smallest high school classes were positively influenced by summer orientation

and registration and receiving a letter from a college faculty member. Those from the largest areas and classes either did not attend such a summer program or tended to find no influence in it. Reactions to letters from faculty members were similar. Those from medium-size areas and classes were ambivalent toward summer orientation, but found strongly positive influence in a letter from a faculty member.

8. Academic ability was found to relate only to publicity materials. Since such materials are largely uncontrolled by admissions officers, there is no practical significance for recruitment in this relationship.
9. In general, students from lower socio-economic backgrounds tended to find more positive influence in an individual campus visit than those from higher socio-economic levels.
10. Although the conclusions above are supported by the data, their practical value appears to be limited. While one group was more favorably influenced than another by a given practice, there were no instances where a practice was clearly effective with one type of student and ineffective or even detrimental with another. This may be a result of the specific student characteristics employed in this study. It could also be a function of the colleges themselves and their student bodies. Whatever the cause, it would be improper to draw firm conclusions that a given type of student is best approached with certain techniques. However, experiments with the selective employment of some practices

might be justified by the evidence presented.

Discussion

A sizable body of literature exists concerning the college selection process. Both research and opinion articles have all but exclusively focused on the total range of influences which operate on the person choosing a college. The active recruitment of students has generally been overlooked, or superficially treated within a broader context. The near universality of student recruitment in private higher education and the extremely limited amount of research devoted to it provided the basic motivation for this study.

It is hoped that this research may generate interest in the study of recruiting and provide a base for future research. The study may be considered successful from the standpoint of having collected and reported considerable new information about freshman recruitment. The exhaustive, though possibly yet incomplete, compilation of recruitment techniques is, in itself, a significant step forward. The limited geographical scope of the study and the use of a representative sample restrict the applicability of the findings. Future research can broaden the base provided by this study.

When recruitment was included within a broader context of influences on college selection, findings tended to indicate that it was of little significance in the process. The major sources of influence were usually parents, relatives, the characteristics of the institution, etc. While few writers actually said so, many seemed to imply that recruitment was

an all but useless appendage, that there was little which an institution could overtly do to attract students.

Acceptance of this view is tantamount to accusing private institutions of fiscal irresponsibility in maintaining a recruitment program. To explore the situation, this study went directly to students who had just made their final selection of a college. It asked them to indicate whether the recruitment practices which they had encountered had influenced their decision. Taken broadly, the responses were clear that recruitment materials and practices had exerted positive influences upon the students. While in no way denying the role of parents and other persons or factors, the evidence suggests that recruitment is not a waste of time and money as many have hinted.

However, caution is in order at this point. The findings of this study do not indicate that recruitment necessarily made the difference between selecting college X and college Y. The fact that students viewed the many recruitment devices as positive influences does not guarantee that their absence would have resulted in another choice. The most that can unequivocally be stated is that students generally attributed positive influence to recruitment practices. These practices were apparently effective in reaching the students surveyed, but they may still have been inconsequential when compared to other influences. However, the student responses do provide a more secure basis on which to postulate the value of recruiting than has existed up to now.

Furthermore, the findings of this study do not guarantee the final success of recruiting. Student responses only indicate the relative

merits of various techniques, as viewed by students who did select these colleges. What of those, quite possibly equal or greater in number, who experienced the same things, but selected another college? Perhaps they rejected the "hard sell" approach completely. Or perhaps the selection was actually based on a combination of factors which was not measured in this study. To say that a given recruitment technique positively influenced some students does not assure the unconditional success of the technique. Far more still needs to be known about the interaction of recruitment and other influences.

The third purpose of this study was to provide suggestions toward improving the recruiting effort. While a basis has been provided, improvement must necessarily be within the context of individual institutions. A thorough study of the findings by the cooperating colleges may lead to strengthened programs. Each college should carefully examine all responses of its students. The admissions staffs can compare their views of the relative merits of each practice with the expressed reactions of students and seek greater understanding of the recruitment effort. Benefits may accrue from selective application of certain practices in accordance with relationships discovered between responses to items and student characteristics. However, at this point all must remain theoretical. Only application of the findings and examination of future results can determine the ultimate value of this research in helping private colleges in their quest for new students. The major disappointment of the study was its failure to lead to more specific recommendations in this area.

Student recruitment is not, and has not been, a science. This study will not make it a science. However, a "more educated guess" should now underlie institutional decisions relative to student recruitment. Whether the trend away from private colleges can be abated is a moot question, which only time will answer. If the results of this study in any way contribute toward a more stable future for private colleges, its ultimate purpose will have been reached.

Recommendations for Future Study

The following suggestions for further research are offered on the basis of experience gained from this study:

1. An annual survey of entering students on each campus, similar to this study, would provide accurate, up-to-date information to recruiters. There is no guarantee that students are influenced by the same things or to the same extent by certain practices from one year to the next.
2. Replications of this study in other geographical areas could substantiate the findings presented here and provide the missing base for broader generalizations.
3. Future studies of relationships between recruitment and other influences upon college selection might benefit from a longitudinal research design. A case study approach, beginning with subjects in high school and following the entire college selection process, is suggested. This seems the most promising means of determining the actual place of recruitment among influences

in college selection.

4. Based on the premise that the individual student characteristics employed in this research were inadequate, further study is recommended concerning what types of prospects are best influenced by what techniques. The answer could help to eliminate the "shot gun" approach currently employed. The proper context may well be within individual institutions.
5. It is recognized that the "hard sell" approach may evoke negative as well as positive reactions. This was not true for the students surveyed, but what of those who considered one of the cooperating colleges, then enrolled elsewhere? Research into the reactions to recruitment of those who decide against an institution could provide a broader view of the merits of recruiting. Further insight into which type of prospect is best influenced in which manner might also be gained, if adequate personal data were collected and analyzed.
6. Other, broader studies have suggested the influence of parents, high school counselors, relatives, etc. upon students selecting a college. A study of influences which lead these persons to prefer or recommend specific institutions should be of considerable value to private college officials. An aspect of such a study might be the impact of present recruiting practices upon these persons.
7. No study has attempted to analyze recruitment from the standpoint of the individual recruiter. However, various contacts

with admissions personnel were among the more influential practices, according to this study. Perhaps there are specific types of individuals who are the most successful recruiters. A profile of these persons might provide valuable insight into the recruitment process.

8. While it is the job of admissions officers to bring students to the campus, the entire college community is concerned with their retention. A study of possible relationships between elements of recruiting and eventual satisfaction or dissatisfaction with the institution could suggest modifications in recruiting practices or materials.
9. Various college publications, such as catalogs, brochures, etc., were favorably received by the students surveyed. A study of these publications, aimed particularly at those aspects which are most helpful or influential to prospective students, could lead to improved publications and greater recruiting success.
10. A study of the relatively recent entry of public institutions into active student recruitment is also suggested. A thorough knowledge of the competition is one key to successfully meeting the challenge.

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APPENDIX A: DATA COLLECTION INSTRUMENTS

ADMISSIONS OFFICER INFORMATION FORM

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TO COOPERATING ADMISSIONS OFFICERS

JULY 1973

FROM

Sam Rockard

All institutions of higher education utilize a variety of means to influence the ultimate decision of persons who are seeking a college. Some of these are largely informational or publicity devices, others are more directly promotional. Each is presumed to have some influence upon the prospect who comes into contact with it. The following list is based upon items suggested by existing literature on college admissions, supplemented by my personal experience. Please look over this list and place an X before each item which is used by your college. Please add any remarks which you need or care to, and note any questions we should discuss during the interview. Finally, please expand the list as needed to include all items which are a part of your admissions effort. Completeness is vital to this study.

Please retain this form and I will take it at the time of the interview.

Thank you very much for your cooperation. I look forward to meeting with you soon.

- 1. college catalog and/or bulletin
- 2. general information brochures, i.e. financial aid information
- 3. specific department and/or program brochures
- 4. student newspaper
- 5. college yearbook
- 6. mass mailings to some area -- please specify _____
- 7. newspaper advertisements
- 8. magazine advertisements
- 9. TV or radio advertisements

- 10. campus visit/tour
- 11. on-campus interview
- 12. personal letter to prospect from:
 - a. admissions staff member
 - b. administrator (i.e. President, Dean, etc.)
 - c. faculty member, including department head
 - d. alumnus or alumna
 - e. other -- specify _____
- 13. phone call to prospect from:
 - a. admissions staff member
 - b. administrator (i.e. President, Dean, etc.)
 - c. faculty member, including department head
 - d. alumnus or alumna
 - e. other -- specify _____
- 14. visit to high schools by:
 - a. admissions representative(s)
 - b. currently enrolled college student(s)
 - c. faculty member(s)
 - d. others -- specify _____
- 15. college day or college night program
- 16. group meetings in the home area for interested students
- 17. social gathering in the home area for prospects
- 18. interview in the home community or area
- 19. college display at a fair, youth conference, etc.
- 20. film or slide presentation(s) about the college, other than at a fair, etc.
- 21. college admissions clearing house
- 22. other outside assistance, i.e. ACT's Educational Opportunities Service

- 23. summer (June, July, early August) registration/orientation
- 24. single application to several institutions
- 25. publication of students accepted, Dean's List, etc. in hometown papers
- 26. publicity materials (match books, placemats, etc.) off-campus
- 27. faculty or administration speakers at high school graduations, etc.
- 28. hometown dances for local undergraduates during holiday vacations
- 29. "open house" weekends for specific groups of prospects
- 30. other -- specify _____
- 31. other -- specify _____
- 32. other -- specify _____

Name _____
Last First Middle

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College _____

STUDENT QUESTIONNAIRE

Please read the following information and directions carefully!

Many factors entered into your final decision to attend this college. The purpose of this questionnaire is to determine how much influence you believe certain things had upon your decision. You are asked to first provide various items of personal information, which are needed for data analysis purposes. All data will be treated in group form only. No one's individual answers or name will be reported at any time. All information provided by you will be treated with the strictest confidence, protecting your personal privacy. Should you be unable to provide some of the information requested, please sign your name in the space on page 3 to authorize the college to supply this information from records.

Thank you very much for your cooperation. Without it this study could not be done.

PERSONAL INFORMATION -- please circle the appropriate answer letter, or provide the needed answer in the space provided

1. Sex a. female b. male 2. Church affiliation _____
3. Your high school grade point average (percentage or numerical value) _____
4. Where did you rank in your high school graduating class? a. top 10%
b. top 25%, c. second 25% d. third 25% e. fourth 25%
5. What was the size of your high school graduating class? a. 25 or less
b. 26 - 50 c. 51 - 100 d. 101 - 300 e. over 300
6. What was your score for: (disregard irrelevant items)
a. ACT composite _____ b. SAT verbal _____
c. SAT mathematical _____

7. What is the highest degree you expect to earn in your life?
- a. less than bachelor's
 - b. bachelor's (B.A.; B.S.; etc.)
 - c. master's (M.A.; M.S.; M.Ed.; etc.)
 - d. doctorate (Ph.D.; Ed.D.; etc.)
 - e. professional (M.D.; D.D.S.; D.V.M.; J.D.; B.D.; etc.)
8. Number of colleges you applied to: a. this college only b. one other
- c. two others
 - d. three others
 - e. more than three others
9. Number of colleges where you were accepted: a. this college only
- b. one other
 - c. two others
 - d. three others
 - e. more than three others
10. Father's formal education: a. less than high school diploma
- b. high school graduate
 - c. some college
 - d. bachelor's degree
 - e. some graduate school
 - f. post-graduate degree (specify _____)
11. What is your father's occupation? _____
12. Mother's formal education: a. less than high school diploma
- b. high school graduate
 - c. some college
 - d. bachelor's degree
 - e. some graduate school
 - f. post-graduate degree (specify _____)
13. What is your mother's occupation? _____
14. Estimated parental family income per year: a. under \$5000
- b. \$5000 - 9999
 - c. \$10,000 - 14,999
 - d. \$15,000 - 24,999
 - e. \$25,000 or more
15. Population of the area you come from: a. rural b. town under 2000
- c. town of 2000 - 9999
 - d. small city of 10,000 - 49,999
 - e. city of 50,000 - 100,000
 - f. large city of over 100,000
16. What is the distance from your home to this college? a. 5 miles or less
- b. 6 - 10 miles
 - c. 11 - 50 miles
 - d. 51 - 100 miles
 - e. 101 - 500 miles
 - f. over 500 miles

17. Are you receiving: (please answer for each section)
- a. an athletic, music, or drama scholarship? YES NO
 - b. an academic scholarship? YES NO
 - c. an Iowa Tuition Grant? YES NO
 - d. a loan from:
 - 1. this college? YES NO
 - 2. a bank (privately arranged)? YES NO
 - 3. any government program? YES NO
 - e. a work-study job? YES NO

I do hereby authorize the release from college records of information requested above which I could not provide accurately myself.

Signed _____

The following pages are for your responses to items which may have influenced your decision to attend this college. The items are devices used by colleges to help publicize the institution and to help prospective students reach a decision.

Each item will be presented to you orally and visually for a short time. Please respond quickly to each item by circling the response which most accurately indicates your reaction to that item. Positive responses (+1, +2) indicate the item influenced you toward attending this college. Negative responses (-1, -2) indicate the item tended to make you not want to attend this college. Please note that the last choice on the right is an X . Mark this response if you did not personally come in contact with the item relative to this college. (Do not make any response based on what some other college may have done.) Circle only one response for each item and please do not omit any item.

Thanks again for your cooperation.

RESPONSE SHEET -- 1

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ITEM	strongly negative influence	negative influence	no influence	positive influence	strongly positive influence	<i>I did not come in contact with this</i>
1.	-2	-1	0	+1	+2	X
2.	-2	-1	0	+1	+2	X
3.	-2	-1	0	+1	+2	X
4.	-2	-1	0	+1	+2	X
5.	-2	-1	0	+1	+2	X
6.	-2	-1	0	+1	+2	X
7.	-2	-1	0	+1	+2	X
8.	-2	-1	0	+1	+2	X
9.	-2	-1	0	+1	+2	X
10.	-2	-1	0	+1	+2	X
11.	-2	-1	0	+1	+2	X
12.	-2	-1	0	+1	+2	X

	strongly negative influence	negative influence	no influence	positive influence	strongly positive influence	<i>I did not come in contact with this</i>
13.	-2	-1	0	+1	+2	X
14.	-2	-1	0	+1	+2	X
15.	-2	-1	0	+1	+2	X
16.	-2	-1	0	+1	+2	X
17.	-2	-1	0	+1	+2	X
18.	-2	-1	0	+1	+2	X
19.	-2	-1	0	+1	+2	X
20.	-2	-1	0	+1	+2	X
21.	-2	-1	0	+1	+2	X
22.	-2	-1	0	+1	+2	X
23.	-2	-1	0	+1	+2	X
24.	-2	-1	0	+1	+2	X
25.	-2	-1	0	+1	+2	X

RESPONSE SHEET -- 2
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ITEM	strongly negative influence	negative influence	no influence	positive influence	strongly positive influence	<i>I did not come in contact with this</i>
26.	-2	-1	0	+1	+2	X
27.	-2	-1	0	+1	+2	X
28.	-2	-1	0	+1	+2	X
29.	-2	-1	0	+1	+2	X
30.	-2	-1	0	+1	+2	X
31.	-2	-1	0	+1	+2	X
32.	-2	-1	0	+1	+2	X
33.	-2	-1	0	+1	+2	X
34.	-2	-1	0	+1	+2	X
35.	-2	-1	0	+1	+2	X
36.	-2	-1	0	+1	+2	X
37.	-2	-1	0	+1	+2	X

	strongly negative influence	negative influence	no influence	positive influence	strongly positive influence	<i>I did not come in contact with this</i>
38.	-2	-1	0	+1	+2	X
39.	-2	-1	0	+1	+2	X
40.	-2	-1	0	+1	+2	X
41.	-2	-1	0	+1	+2	X
42.	-2	-1	0	+1	+2	X
43.	-2	-1	0	+1	+2	X
44.	-2	-1	0	+1	+2	X
45.	-2	-1	0	+1	+2	X
46.	-2	-1	0	+1	+2	X
47.	-2	-1	0	+1	+2	X
48.	-2	-1	0	+1	+2	X
49.	-2	-1	0	+1	+2	X
50.	-2	-1	0	+1	+2	X

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IOWA STATE UNIVERSITY
of Science and Technology
AMES, IOWA 50010



Instructional Resources Center
318 Curtiss

August 1973

To cooperating admissions staff members

From *James Lockard*, College of Education

Many factors enter into the choice of a college by new freshmen. As part of a research study, a random sample of your in-coming freshmen will be asked to indicate how much influence they feel certain "tools" of the admissions program exerted on their decision. The items to which the students will respond are listed for you on the next two pages. You are asked to mark the accompanying response sheets as you believe the students will respond to each item. In other words, how do you as an admissions staff member think students are responding to these things? Your responses will be compared in group form only to those of the students. The only information you need add to the forms is the name of your college and the title of your position on the staff. All responses will be held in the strictest confidence. These forms will be collected at the time of administering the student questionnaire on your campus. Results of the study will be made available to the college as soon as possible. You are welcome to write any comments or observations you may care to offer.

Thank you very much for your cooperation in this effort.

Please circle the response on the response forms which is your best estimate of how the freshmen¹⁸⁴ of your college will respond to each item below. Note the choice on the right for items with which the student did not come in contact relative to your college. This allows for the fact that no college in the sample uses all the items listed here. You should circle the X only for those items not used by your college. Please indicate a degree of influence for all items which are used in your admissions program, regardless of how extensively they are utilized.

1. a film or slide presentation about the college
2. a social gathering in the home area
3. June, July, or early August registration/orientation
4. Advanced Acceptance Program (through Driscoll High School, Chicago)
5. phone call from a college administrator (President, Dean, etc.)
6. publicity materials like matchbooks, ash trays, carrying bags, etc.
7. magazine ads
8. an individual campus visit/tour (not part of a group)
9. being able to file a single application for several colleges
10. phone call from an alumnus or alumna
11. college day or college night program
12. seeing a Dean's List or similar items from the college in the news
13. spot ads in theaters before the feature film
14. group meetings in the home area
15. personal letter from a current student
16. faculty or administration speakers at high school graduation, etc.
17. ACT's Educational Opportunities Service
18. phone call from a current student
19. individual department and/or program brochures
20. phone call from an admissions representative
21. general information brochures, including financial aid, etc.
22. visit to the student's home by any college representative
23. personal letter from a faculty member
24. newspaper ads
25. high school visit by college faculty

26. interview in the home community or area
27. student newspaper
28. alumni bulletin or paper
29. personal letter from an administrator
30. high school visit by a college student
31. admissions counselors at Lutheran encounter schools
32. college catalog or general bulletin
33. college admissions clearing house assistance
34. any materials received before the student himself wrote to the college
35. on-campus interview
36. college yearbook
37. phone call from a faculty member
38. admissions counselors at Boys State
39. personal letter from an alumnus or alumna
40. "open house"(weekend) for groups of student prospects
41. personal letter from admissions officer
42. college display at a fair, youth conference, etc.
43. high school visit by admissions counselors
44. billboard ad
45. visit to church by any college representative
46. posters about the college
47. receiving old programs from concerts, plays, special events on campus
48. high school performance by college choir, band, drama group, etc.
49. student literary-type publication
50. radio or TV spot ads

Dear College Student,

You are one of a limited number of students on your campus who were randomly selected to respond to a questionnaire concerning aspects of the college's admissions program. Due to a combination of circumstances, you were not present at a meeting a few days ago at which the questionnaire was administered. Because it is absolutely essential to have the response of each of the selected students, you are receiving the questionnaire now. It consists of two parts -- the actual questionnaire (five pages) and two "item sheets." Read the information and directions on both parts, then proceed, following the directions carefully. You should need 20 minutes or less. Please complete the questionnaire right away and return it to the college admissions office YET TODAY, if at all possible. Only the five page questionnaire must be returned. On it underneath your name and college, please write in whether you live in the dorm or off-campus (i.e. at home).

I regret the short time allowance for completing the questionnaire, but time is an important factor in the completion of the study. Thank you very much for your cooperation.

Sincerely yours,

James Lockard
Researcher -- Ph.D. candidate
Iowa State University

STUDENT QUESTIONNAIRE ITEM SHEETS

The following fifty items are devices which are used by private colleges to help publicize the institution and to help prospective students reach a decision about which college to attend. Begin by completing the personal information section of the questionnaire. Then respond to each item listed below on the response sheets of the questionnaire. You will notice several items concerning phone calls and letters from various persons. Please keep these separate in your mind as you answer. The admissions staff is treated separately from college administrators.

Please respond quickly and honestly to each item below by circling the response which most accurately indicates your reaction to that item. Positive responses (+1, +2) indicate the item influenced you toward attending this college. Negation responses (-1, -2) indicate the item tended to make you not want to attend this college. Please note that the last choice on the right is an X. Circle this response only if you did not personally come in contact with the item relative to this college. (Do not make any response on the basis of what some other college to which you applied may have done.) Circle only one response for each item and do not omit any item.

Only the five page questionnaire must be returned to the admissions office. Thank you for your cooperation.

1. a film or slide presentation about this college
2. a social gathering in your home area
3. June, July, or early August registration/orientation
4. Advanced Acceptance Program (through Driscoll High School, Chicago)
5. phone call from a college administrator (President, Dean, etc.)
6. publicity materials like matchbooks, ash trays, carrying bags, etc.
7. magazine ads about this college
8. an individual campus visit/tour (not part of a group)
9. being able to file a single application for several colleges
10. phone call from an alumnus or alumna
11. college day or college night program
12. seeing a Dean's list or similar items in the newspaper
13. spot ads in theaters before the feature film
14. a group meeting in your home area
15. personal letter from a current student
16. faculty or administration speakers at high school graduation, etc.
17. ACT's Educational Opportunities Service
18. phone call from a current student
19. individual department and/or program brochures
20. phone call from an admissions representative
21. general information brochures, including financial aid, etc.
22. visit to your home by any college representative
23. personal letter from a faculty member
24. newspaper ads about this college
25. high school visit by college faculty

STUDENT QUESTIONNAIRE ITEM SHEETS -- 2

26. interview in your home community or area
27. student newspaper
28. alumni bulletin or paper
29. personal letter from a college administrator
30. high school visit by a college student
31. admissions counselors at Lutheran encounter schools
32. college catalog or general bulletin
33. college admissions clearinghouse assistance
34. any materials received before you yourself wrote to the college
35. on-campus interview
36. college yearbook
37. phone call from a faculty member
38. admissions counselors at Boys State
39. personal letter from an alumnus or alumna
40. "open house (weekend)" or other group campus visit
41. personal letter from an admissions officer
42. college display at a fair, youth conference, etc.
43. high school visit by admissions counselors
44. billboard ad
45. visit to your church by any college representative
46. posters about the college
47. receiving old programs from concerts, plays, special events on campus
48. high school performance by college choir, band, drama group, etc.
49. student literary-type publication
50. radio or TV spot ads

APPENDIX B: TABLES LISTING STUDENT RESPONSES TO THIRTY-NINE
RECRUITMENT PRACTICES

Table 37. Responses of freshmen to a film or slide presentation about the college

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	1	--	1	3	--	55	--	--
Percentage	1.7	--	1.7	5.0	--	91.7	--	--
Wartburg								
Frequency	--	1	19	28	1	56	1	--
Percentage	--	0.9	17.9	26.4	0.9	52.8	0.9	--
Buena Vista								
Frequency	1	--	18	21	1	24	--	--
Percentage	1.5	--	27.7	32.3	1.5	36.9	--	--
Westmar ^a								
Frequency	--	--	11	11	2	37	--	1
Percentage	--	--	17.7	17.7	3.2	59.7	--	1.6
Mount Mercy								
Frequency	--	--	2	9	4	35	--	--
Percentage	--	--	4.0	18.0	8.0	70.0	--	--
Briar Cliff								
Frequency	--	2	3	7	2	50	--	1
Percentage	--	3.1	4.6	10.8	3.1	76.9	--	1.5
Cornell								
Frequency	--	--	4	8	8	31	--	--
Percentage	--	--	7.8	15.7	15.7	60.8	--	--

^aNot employed by this college, despite student responses.

Table 38. Responses of freshmen to social gatherings in their home areas

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	1	--	4	11	2	41	--	1
Percentage	1.7	--	6.7	18.3	3.3	68.3	--	1.7
Wartburg								
Frequency	1	--	11	38	5	50	--	1
Percentage	0.9	--	10.4	35.8	4.7	47.2	--	0.9
Buena Vista								
Frequency	--	3	5	5	5	47	--	--
Percentage	--	4.6	7.7	7.7	7.7	72.3	--	--
Westmar								
Frequency	--	1	10	6	3	41	--	1
Percentage	--	1.6	16.1	9.7	4.8	66.1	--	1.6
Mount Mercy								
Frequency	--	--	2	14	4	29	--	1
Percentage	--	--	4.0	28.0	8.0	58.0	--	2.0
Briar Cliff ^a								
Frequency	--	1	8	5	3	48	--	--
Percentage	--	1.5	12.3	7.7	4.6	73.8	--	--
Cornell								
Frequency	--	--	2	1	4	43	--	1
Percentage	--	--	3.9	2.0	7.8	84.3	--	2.0

^aNot employed by this college, despite student responses.

Table 39. Responses of freshmen to the Advanced Acceptance Program (through Driscoll High School, Chicago)

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern ^a								
Frequency	--	--	--	--	--	60	--	--
Percentage	--	--	--	--	--	100	--	--
Wartburg ^a								
Frequency	1	--	5	2	2	96	--	--
Percentage	0.9	--	4.7	1.9	1.9	90.6	--	--
Buena Vista ^a								
Frequency	--	--	3	--	--	61	1	--
Percentage	--	--	4.6	--	--	93.8	1.5	--
Westmar ^a								
Frequency	--	1	5	1	1	54	--	--
Percentage	--	1.6	8.1	1.6	1.6	87.1	--	--
Mount Mercy ^a								
Frequency	--	--	--	2	--	48	--	--
Percentage	--	--	--	4.0	--	96.0	--	--
Briar Cliff								
Frequency	--	1	3	1	1	59	--	--
Percentage	--	1.5	4.6	1.5	1.5	90.8	--	--
Cornell ^a								
Frequency	--	--	4	1	1	45	--	--
Percentage	--	--	7.8	2.0	2.0	88.2	--	--

^aNot employed by this college, despite student responses.

Table 40. Responses of freshmen to a phone call from a college administrator

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	5	6	3	46	--	--
Percentage	--	--	8.3	10.0	5.0	76.7	--	--
Wartburg								
Frequency	--	--	12	37	16	41	--	--
Percentage	--	--	11.3	34.9	15.1	38.7	--	--
Buena Vista								
Frequency	--	1	7	8	4	44	--	1
Percentage	--	1.5	10.8	12.3	6.2	67.7	--	1.5
Westmar								
Frequency	--	--	5	15	3	39	--	--
Percentage	--	--	8.1	24.2	4.8	72.9	--	--
Mount Mercy ^a								
Frequency	--	--	--	2	5	43	--	--
Percentage	--	--	--	4.0	10.0	86.0	--	--
Briar Cliff								
Frequency	2	--	1	3	2	56	1	--
Percentage	3.1	--	1.5	4.6	3.1	86.2	1.5	--
Cornell								
Frequency	--	--	2	5	2	41	--	1
Percentage	--	--	3.9	9.8	3.9	80.4	--	2.0

^aNot employed by this college, despite student responses.

Table 41. Responses of freshmen to magazine ads about the college

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	6	9	3	41	1	--
Percentage	--	--	10.0	15.0	5.0	68.3	1.7	--
Wartburg								
Frequency	--	1	12	14	1	78	--	--
Percentage	--	0.9	11.3	13.2	0.9	73.6	--	--
Buena Vista								
Frequency	2	1	13	4	1	44	--	--
Percentage	3.1	1.5	20.0	6.2	1.5	67.7	--	--
Westmar								
Frequency	--	2	4	11	2	43	--	--
Percentage	--	3.2	6.5	17.7	3.2	69.4	--	--
Mount Mercy								
Frequency	--	--	6	13	2	28	--	1
Percentage	--	--	12.0	26.0	4.0	56.0	--	2.0
Briar Cliff								
Frequency	--	--	12	17	3	33	--	--
Percentage	--	--	18.5	26.2	4.6	50.8	--	--
Cornell								
Frequency	--	--	2	6	5	37	--	1
Percentage	--	--	3.9	11.8	9.8	72.5	--	2.0

Table 42. Responses of freshmen to being able to apply to several colleges by filing a single application form

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern ^a								
Frequency	--	1	10	4	2	42	1	--
Percentage	--	1.7	16.7	6.7	3.3	70.0	1.7	--
Wartburg ^a								
Frequency	--	1	32	6	1	66	--	--
Percentage	--	0.9	30.2	5.7	0.9	62.3	--	--
Buena Vista ^a								
Frequency	--	--	7	3	2	52	--	1
Percentage	--	--	10.8	4.6	3.1	80.0	--	1.5
Westmar								
Frequency	--	--	10	4	4	43	--	1
Percentage	--	--	16.1	6.5	6.5	69.4	--	1.6
Mount Mercy ^a								
Frequency	--	2	4	1	6	37	--	--
Percentage	--	4.0	8.0	1.0	12.0	74.0	--	--
Briar Cliff ^a								
Frequency	--	--	3	5	3	54	--	--
Percentage	--	--	4.6	7.7	4.6	83.1	--	--
Cornell								
Frequency	--	--	20	8	4	19	--	--
Percentage	--	--	39.2	15.7	7.8	37.3	--	--

^aNot employed by this college, despite student responses.

Table 4.3. Responses of freshmen to a phone call from a college alumnus or alumna

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	--	--	6	4	50	--	--
Percentage	--	--	--	10.0	6.7	83.3	--	--
Wartburg								
Frequency	--	1	7	12	6	80	--	--
Percentage	--	0.9	6.6	11.3	5.7	75.5	--	--
Buena Vista								
Frequency	--	--	5	4	2	54	--	--
Percentage	--	--	7.7	6.2	3.1	83.1	--	--
Westmar								
Frequency	--	--	5	10	7	40	--	--
Percentage	--	--	8.1	16.1	11.3	64.5	--	--
Mount Mercy								
Frequency	--	--	--	5	5	40	--	--
Percentage	--	--	--	10.0	10.0	80.0	--	--
Briar Cliff								
Frequency	--	--	2	7	7	49	--	--
Percentage	--	--	3.1	10.8	10.8	75.4	--	--
Cornell								
Frequency	--	--	3	8	6	34	--	--
Percentage	--	--	5.9	15.7	11.8	66.7	--	--

Table 44. Responses of freshmen to college day or night programs

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	3	15	8	33	--	1
Percentage	--	--	5.0	25.0	13.3	55.0	--	1.7
Wartburg								
Frequency	--	--	14	20	15	57	--	--
Percentage	--	--	13.2	18.9	14.2	53.8	--	--
Buena Vista								
Frequency	--	--	6	12	4	43	--	--
Percentage	--	--	9.2	18.5	6.2	66.2	--	--
Westmar								
Frequency	--	--	7	10	8	37	--	--
Percentage	--	--	11.3	16.1	12.9	59.7	--	--
Mount Mercy								
Frequency	--	1	2	18	10	19	--	--
Percentage	--	2.0	4.0	36.0	20.0	38.0	--	--
Briar Cliff								
Frequency	--	--	4	14	7	40	--	--
Percentage	--	--	6.2	21.5	10.8	61.5	--	--
Cornell								
Frequency	--	--	3	2	2	43	1	--
Percentage	--	--	5.9	3.9	3.9	84.3	2.0	--

Table 45. Responses of freshmen to seeing a Dean's list or similar items about the college in the newspaper

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	2	23	3	--	32	--	--
Percentage	--	3.3	38.3	5.0	--	53.5	--	--
Wartburg								
Frequency	--	--	37	13	3	53	--	--
Percentage	--	--	34.9	12.3	2.8	50.0	--	--
Buena Vista								
Frequency	1	--	16	3	2	43	--	--
Percentage	1.5	--	24.6	4.6	3.1	66.2	--	--
Westmar								
Frequency	--	--	18	7	--	36	--	1
Percentage	--	--	29.0	11.3	--	58.1	--	1.6
Mount Mercy								
Frequency	1	2	13	11	3	20	--	--
Percentage	2.0	4.0	26.0	22.0	6.0	40.0	--	--
Briar Cliff								
Frequency	--	--	14	10	3	38	--	--
Percentage	--	--	21.5	15.4	4.6	58.5	--	--
Cornell								
Frequency	--	--	6	--	--	45	--	--
Percentage	--	--	11.8	--	--	88.2	--	--

Table 4.6. Responses of freshmen to spot ads in theaters before the feature film

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern ^a								
Frequency	--	--	2	--	--	58	--	--
Percentage	--	--	3.3	--	--	96.7	--	--
Wartburg ^a								
Frequency	--	--	4	1	--	101	--	--
Percentage	--	--	3.8	0.9	--	95.3	--	--
Buena Vista ^a								
Frequency	--	--	5	1	--	59	--	--
Percentage	--	--	7.7	1.5	--	90.8	--	--
Westmar ^a								
Frequency	--	--	3	2	--	57	--	--
Percentage	--	--	4.8	3.2	--	91.9	--	--
Mount Mercy ^a								
Frequency	--	1	--	--	--	49	--	--
Percentage	--	2.0	--	--	--	98.0	--	--
Briar Cliff								
Frequency	--	--	3	--	--	62	--	--
Percentage	--	--	4.6	--	--	95.4	--	--
Cornell ^a								
Frequency	--	--	--	--	--	51	--	--
Percentage	--	--	--	--	--	100	--	--

^aNot employed by this college, despite student responses.

Table 47. Responses of freshmen to group meetings in their home areas

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	--	1	17	8	34	--	--
Percentage	--	--	1.7	28.3	13.3	56.7	--	--
Wartburg								
Frequency	--	--	4	31	5	66	--	--
Percentage	--	--	3.8	29.2	4.7	62.3	--	--
Buena Vista								
Frequency	1	--	4	9	9	42	--	--
Percentage	1.5	--	6.2	13.8	13.8	64.6	--	--
Westmar								
Frequency	--	--	3	7	1	51	--	--
Percentage	--	--	4.8	11.3	1.6	82.3	--	--
Mount Mercy								
Frequency	--	1	--	9	4	36	--	--
Percentage	--	2.0	--	18.0	8.0	72.0	--	--
Briar Cliff								
Frequency	--	--	1	13	5	45	1	--
Percentage	--	--	1.5	20.0	7.7	69.2	1.5	--
Cornell								
Frequency	--	--	2	6	13	30	--	--
Percentage	--	--	3.9	11.8	25.5	58.8	--	--

Table 48. Responses of freshmen to a letter from a college student

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	7	9	5	39	--	--
Percentage	--	--	11.7	15.0	8.3	65.0	--	--
Wartburg								
Frequency	--	--	16	22	9	58	--	1
Percentage	--	--	15.1	20.8	8.5	54.7	--	0.9
Buena Vista								
Frequency	1	--	1	5	3	55	--	--
Percentage	1.5	--	1.5	7.7	4.6	84.6	--	--
Westmar								
Frequency	--	2	6	7	6	41	--	--
Percentage	--	3.2	9.7	11.3	9.7	66.1	--	--
Mount Mercy ^a								
Frequency	--	--	2	8	4	36	--	--
Percentage	--	--	4.0	16.0	8.0	72.0	--	--
Briar Cliff								
Frequency	--	--	3.0	7	5	50	--	--
Percentage	--	--	4.6	10.8	7.7	76.9	--	--
Cornell								
Frequency	--	--	1	6	2	42	--	--
Percentage	--	--	2.0	11.8	3.9	82.4	--	--

^aNot employed by this college, despite student responses.

Table 49. Responses of freshmen to faculty or administration speakers at high school graduations, etc.

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	1	5	8	2	43	1	--
Percentage	--	1.7	8.3	13.3	3.3	71.7	1.7	--
Wartburg								
Frequency	--	1	2	6	2	94	1	--
Percentage	--	0.9	1.9	5.7	1.9	88.7	0.9	--
Buena Vista								
Frequency	--	--	4	2	5	53	--	1
Percentage	--	--	6.2	3.1	7.7	81.5	--	1.5
Westmar								
Frequency	--	--	5	2	2	53	--	--
Percentage	--	--	8.1	3.2	3.2	85.5	--	--
Mount Mercy ^a								
Frequency	--	--	2	5	2	41	--	--
Percentage	--	--	4.0	10.0	4.0	82.0	--	--
Briar Cliff								
Frequency	--	1	4	10	2	48	--	--
Percentage	--	1.5	6.2	15.4	3.1	73.8	--	--
Cornell								
Frequency	--	1	--	1	3	46	--	--
Percentage	--	2.0	--	2.0	5.9	90.2	--	--

^aNot employed by this college, despite student responses.

Table 50. Responses of freshmen to the Educational Opportunities Service of the American College Testing Program

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern ^a								
Frequency	--	--	5	2	--	53	--	--
Percentage	--	--	8.3	3.3	--	88.3	--	--
Wartburg								
Frequency	2	--	23	9	--	71	--	1
Percentage	1.9	--	21.7	8.5	--	67.0	--	0.9
Buena Vista								
Frequency	--	1	10	8	6	40	--	--
Percentage	--	1.5	15.4	12.3	9.2	61.5	--	--
Westmar								
Frequency	1	--	9	3	2	47	--	--
Percentage	1.6	--	14.5	4.8	3.2	75.8	--	--
Mount Mercy								
Frequency	2	1	7	7	6	27	--	--
Percentage	4.0	2.0	14.0	14.0	12.0	54.0	--	--
Briar Cliff								
Frequency	--	--	7	8	4	46	--	--
Percentage	--	--	10.8	12.3	6.2	70.8	--	--
Cornell								
Frequency	--	--	3	4	1	43	--	--
Percentage	--	--	5.9	7.8	2.0	84.3	--	--

^aNot employed by this college, despite student responses.

Table 51. Responses of freshmen to a phone call from a college student

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	--	5	2	2	51	--	--
Percentage	--	--	8.3	3.3	3.3	85.0	--	--
Wartburg								
Frequency	--	--	2	11	4	89	--	--
Percentage	--	--	1.9	10.4	3.8	84.0	--	--
Buena Vista								
Frequency	--	--	2	2	3	58	--	--
Percentage	--	--	3.1	3.1	4.6	89.2	--	--
Westmar								
Frequency	--	1	4	5	5	47	--	--
Percentage	--	1.6	6.5	8.1	8.1	75.8	--	--
Mount Mercy								
Frequency	--	--	3	3	3	40	1	--
Percentage	--	--	6.0	6.0	6.0	80.0	2.0	--
Briar Cliff								
Frequency	--	--	2	10	6	47	--	--
Percentage	--	--	3.1	15.4	9.2	72.3	--	--
Cornell								
Frequency	--	--	1	7	4	39	--	--
Percentage	--	--	2.0	13.7	7.8	76.5	--	--

Table 52. Responses of freshmen to visits to their homes by any college representative

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	--	2	2	56	--	--
Percentage	--	--	--	3.3	3.3	93.3	--	--
Wartburg								
Frequency	--	2	2	10	12	80	--	--
Percentage	--	1.9	1.9	9.4	11.3	75.5	--	--
Buena Vista								
Frequency	1	--	3	4	1	56	--	--
Percentage	1.5	--	4.6	6.2	1.5	86.2	--	--
Westmar								
Frequency	--	1	1	7	9	44	--	--
Percentage	--	1.6	1.6	11.3	14.5	71.0	--	--
Mount Mercy								
Frequency	--	--	--	--	4	46	--	--
Percentage	--	--	--	--	8.0	92.0	--	--
Briar Cliff								
Frequency	--	--	1	5	2	57	--	--
Percentage	--	--	1.5	7.7	3.1	87.7	--	--
Cornell								
Frequency	--	--	2	3	6	39	1	--
Percentage	--	--	3.9	5.9	11.8	76.5	2.0	--

Table 53. Responses of freshmen to a letter from a college faculty member

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	8	18	9	25	--	--
Percentage	--	--	13.3	30.0	15.0	41.7	--	--
Wartburg								
Frequency	--	--	4	26	24	52	--	--
Percentage	--	--	3.8	24.5	22.6	49.1	--	--
Buena Vista								
Frequency	--	--	4	9	9	43	--	--
Percentage	--	--	6.2	13.8	13.8	66.2	--	--
Westmar								
Frequency	--	1	14	14	16	17	--	--
Percentage	--	1.6	22.6	22.6	25.8	27.4	--	--
Mount Mercy ^a								
Frequency	--	--	--	8	8	34	--	--
Percentage	--	--	--	16.0	16.0	68.0	--	--
Briar Cliff								
Frequency	--	--	14	11	6	34	--	--
Percentage	--	--	21.5	16.9	9.6	52.3	--	--
Cornell								
Frequency	--	--	2	6	5	38	--	--
Percentage	--	--	3.9	11.8	9.8	74.5	--	--

^aNot employed by this college, despite student responses.

Table 54. Responses of freshmen to newspaper ads about the college

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	7	5	2	46	--	--
Percentage	--	--	11.7	8.3	3.3	76.7	--	--
Wartburg								
Frequency	--	--	7	2	--	97	--	--
Percentage	--	--	6.6	1.9	--	91.5	--	--
Buena Vista								
Frequency	1	1	7	3	--	53	--	--
Percentage	1.5	1.5	10.8	4.6	--	81.5	--	--
Westmar								
Frequency	--	1	9	7	1	44	--	--
Percentage	--	1.6	14.5	11.3	1.6	71.0	--	--
Mount Mercy								
Frequency	--	--	8	11	4	27	--	--
Percentage	--	--	16.0	22.0	8.0	54.0	--	--
Briar Cliff								
Frequency	--	1	12	10	2	39	1	--
Percentage	--	1.5	18.5	15.4	3.1	60.0	1.5	--
Cornell								
Frequency	--	1	--	--	--	50	--	--
Percentage	--	2.0	--	--	--	98.0	--	--

Table 55. Responses of freshmen to visits to their high schools by college faculty members

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	1	2	15	8	34	--	--
Percentage	--	1.7	3.3	25.0	13.3	56.7	--	--
Wartburg								
Frequency	2	--	1	31	20	52	--	--
Percentage	1.9	--	0.9	29.2	18.9	49.1	--	--
Buena Vista								
Frequency	1	--	2	8	14	40	--	--
Percentage	1.5	--	3.1	12.3	21.5	61.5	--	--
Westmar								
Frequency	--	1	5	15	5	36	--	--
Percentage	--	1.6	8.1	24.2	8.1	58.1	--	--
Mount Mercy ^a								
Frequency	--	--	3	11	8	28	--	--
Percentage	--	--	6.0	22.0	16.0	56.0	--	--
Briar Cliff								
Frequency	--	--	4	20	13	27	1	--
Percentage	--	--	6.2	30.8	20.0	41.5	1.5	--
Cornell								
Frequency	--	--	1	1	2	46	--	1
Percentage	--	--	2.0	2.0	3.9	90.2	--	2.0

^aNot employed by this college, despite student responses.

Table 56. Responses of freshmen to interviews in their home areas

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	3	11	2	44	--	--
Percentage	--	--	5.0	18.3	3.3	73.3	--	--
Wartburg								
Frequency	--	--	3	12	4	87	--	--
Percentage	--	--	2.8	11.3	3.8	82.1	--	--
Buena Vista								
Frequency	--	2	5	5	5	48	--	--
Percentage	--	3.1	7.7	7.7	7.7	73.8	--	--
Westmar								
Frequency	--	1	8	13	8	32	--	--
Percentage	--	1.6	12.9	21.0	12.9	51.6	--	--
Mount Mercy								
Frequency	--	-	--	4	4	42	--	--
Percentage	--	--	--	8.0	8.0	84.0	--	--
Briar Cliff								
Frequency	--	--	2	4	5	54	--	--
Percentage	--	--	3.1	6.2	7.7	83.1	--	--
Cornell								
Frequency	--	--	4	11	11	24	1	--
Percentage	--	--	7.8	21.6	21.6	47.1	2.0	--

Table 57. Responses of freshmen to the college's student newspaper

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	1	6	13	5	35	--	--
Percentage	--	1.7	10.0	21.7	8.3	58.3	--	--
Wartburg								
Frequency	--	--	34	42	3	27	--	--
Percentage	--	--	32.1	39.6	2.8	25.5	--	--
Buena Vista ^a								
Frequency	1	1	8	4	2	49	--	--
Percentage	1.5	1.5	12.3	6.2	3.1	75.4	--	--
Westmar								
Frequency	--	--	18	28	6	10	--	--
Percentage	--	--	29.0	45.2	9.7	16.1	--	--
Mount Mercy								
Frequency	1	--	13	10	6	20	--	--
Percentage	2.0	--	26.0	20.0	12.0	40.0	--	--
Briar Cliff								
Frequency	--	--	8	12	6	39	--	--
Percentage	--	--	12.3	18.5	9.2	60.0	--	--
Cornell								
Frequency	--	2	8	4	--	37	--	--
Percentage	--	3.9	15.7	7.8	--	72.5	--	--

^aNot employed by this college, despite student responses.

Table 58. Responses of freshmen to the college's alumni paper or bulletin

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	4	4	1	51	--	--
Percentage	--	--	6.7	6.7	1.7	85.0	--	--
Wartburg								
Frequency	--	2	27	11	--	66	--	--
Percentage	--	1.9	25.5	10.4	--	62.3	--	--
Buena Vista								
Frequency	2	1	8	2	1	51	--	--
Percentage	3.1	1.5	12.3	3.1	1.5	78.5	--	--
Westmar								
Frequency	--	1	7	11	1	41	1	--
Percentage	--	1.6	11.3	17.7	1.6	66.1	1.6	--
Mount Mercy								
Frequency	1	1	5	7	1	35	--	--
Percentage	2.0	2.0	10.0	14.0	2.0	70.0	--	--
Briar Cliff								
Frequency	--	--	5	4	2	54	--	--
Percentage	--	--	7.7	6.2	3.1	83.1	--	--
Cornell								
Frequency	--	1	7	5	1	37	--	--
Percentage	--	2.0	13.7	9.8	2.0	72.5	--	--

Table 59. Responses of freshmen to visits to their high schools by college students

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	4	8	5	42	1	--
Percentage	--	--	6.7	13.3	8.3	70.0	1.7	--
Wartburg								
Frequency	--	--	6	12	8	80	--	--
Percentage	--	--	5.7	11.3	7.5	75.5	--	--
Buena Vista ^a								
Frequency	--	1	4	7	3	50	--	--
Percentage	--	1.5	6.2	10.8	4.6	76.9	--	--
Westmar								
Frequency	--	1	3	1	6	51	--	--
Percentage	--	1.6	4.8	1.6	9.7	82.3	--	--
Mount Mercy ^a								
Frequency	--	--	1	4	2	43	--	--
Percentage	--	--	2.0	8.0	4.0	86.0	--	--
Briar Cliff								
Frequency	--	--	9	10	5	40	1	--
Percentage	--	--	13.8	15.4	7.7	61.5	1.5	--
Cornell								
Frequency	--	1	1	3	1	44	--	1
Percentage	--	2.0	2.0	5.9	2.0	86.3	--	2.0

^aNot employed by this college, despite student responses.

Table 50. Responses of freshmen to visits of admissions counselors to Lutheran encounter schools

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern ^a								
Frequency	--	--	2	--	--	57	1	--
Percentage	--	--	3.3	--	--	95.0	1.7	--
Wartburg								
Frequency	--	--	1	4	2	99	--	--
Percentage	--	--	0.9	3.8	1.9	93.4	--	--
Buena Vista ^a								
Frequency	--	--	2	2	1	60	--	--
Percentage	--	--	3.1	3.1	1.5	92.3	--	--
Westmar ^a								
Frequency	--	--	3	1	1	57	--	--
Percentage	--	--	4.8	1.6	1.6	91.9	--	--
Mount Mercy ^a								
Frequency	--	--	1	--	2	47	--	--
Percentage	--	--	2.0	--	4.0	94.0	--	--
Briar Cliff ^a								
Frequency	--	--	--	1	--	64	--	--
Percentage	--	--	--	1.5	--	98.5	--	--
Cornell ^a								
Frequency	--	--	--	1	1	49	--	--
Percentage	--	--	--	2.0	2.0	96.1	--	--

^aNot employed by this college, despite student responses.

Table 61. Responses of freshmen to college admissions clearing houses

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern ^a								
Frequency	--	--	--	1	--	58	1	--
Percentage	--	--	--	1.7	--	96.7	1.7	--
Wartburg								
Frequency	--	--	6	1	--	99	--	--
Percentage	--	--	5.7	0.9	--	93.4	--	--
Buena Vista								
Frequency	--	1	5	3	--	56	--	--
Percentage	--	1.5	7.7	4.6	--	86.2	--	--
Westmar								
Frequency	--	1	3	3	--	55	--	--
Percentage	--	1.6	4.8	4.8	--	88.7	--	--
Mount Mercy ^a								
Frequency	--	--	1	2	1	45	--	1
Percentage	--	--	2.0	4.0	2.0	90.0	--	2.0
Briar Cliff								
Frequency	--	--	--	1	--	63	1	--
Percentage	--	--	--	1.5	--	96.9	1.5	--
Cornell								
Frequency	--	--	2	--	2	46	--	1
Percentage	--	--	3.9	--	3.9	90.2	--	2.0

^aNot employed by this college, despite student responses.

Table 62. Responses of freshmen to on-campus interviews

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	1	7	7	45	--	--
Percentage	--	--	1.7	11.7	11.7	75.0	--	--
Wartburg								
Frequency	--	1	6	29	23	47	--	--
Percentage	--	0.9	5.7	27.4	21.7	44.3	--	--
Buena Vista								
Frequency	--	1	5	19	16	24	--	--
Percentage	--	1.5	7.7	29.2	24.6	36.9	--	--
Westmar								
Frequency	--	--	4	13	12	33	--	--
Percentage	--	--	6.5	21.0	19.4	53.2	--	--
Mount Mercy								
Frequency	--	--	2	10	9	29	--	--
Percentage	--	--	4.0	20.0	18.0	58.0	--	--
Briar Cliff								
Frequency	--	--	6	9	6	44	--	--
Percentage	--	--	9.2	13.8	9.2	67.7	--	--
Cornell								
Frequency	--	--	2	14	15	20	--	--
Percentage	--	--	3.9	27.5	29.4	39.2	--	--

Table 63. Responses of freshmen to the college yearbook

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	2	13	13	3	29	--	--
Percentage	--	3.3	21.7	21.7	5.0	48.3	--	--
Wartburg								
Frequency	--	1	33	7	2	63	--	--
Percentage	--	0.9	31.1	6.6	1.9	59.4	--	--
Buena Vista								
Frequency	--	1	8	7	3	46	--	--
Percentage	--	1.5	12.3	10.8	4.6	70.8	--	--
Westmar								
Frequency	1	2	12	10	3	34	--	--
Percentage	1.6	3.2	19.4	16.1	4.8	54.8	--	--
Mount Mercy ^a								
Frequency	--	--	1	4	--	45	--	--
Percentage	--	--	2.0	8.0	--	90.0	--	--
Briar Cliff								
Frequency	--	--	6	12	9	38	--	--
Percentage	--	--	9.2	18.5	13.8	58.5	--	--
Cornell								
Frequency	1	--	6	4	1	39	--	--
Percentage	2.0	--	11.8	7.8	2.0	76.5	--	--

^aNot employed by this college, despite student responses.

Table 64. Responses of freshmen to a phone call from a college faculty member

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	--	--	4	3	53	--	--
Percentage	--	--	--	6.7	5.0	88.3	--	--
Wartburg								
Frequency	1	1	8	16	16	64	--	--
Percentage	0.9	0.9	7.5	15.1	15.1	60.4	--	--
Buena Vista								
Frequency	--	--	2	2	2	59	--	--
Percentage	--	--	3.1	3.1	3.1	90.8	--	--
Westmar								
Frequency	--	2	5	8	5	42	--	--
Percentage	--	3.2	8.1	12.9	8.1	67.7	--	--
Mount Mercy ^a								
Frequency	--	--	--	2	3	45	--	--
Percentage	--	--	--	4.0	6.0	90.0	--	--
Cornell								
Frequency	--	--	1	1	3	46	--	--
Percentage	--	--	2.0	2.0	5.9	90.2	--	--

^aNot employed by this college, despite student responses.

Table 65. Responses of freshmen to college admissions counselors at Boys State

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	--	--	--	--	60	--	--
Percentage	--	--	--	--	--	100	--	--
Wartburg								
Frequency	--	--	1	5	--	100	--	--
Percentage	--	--	0.9	4.7	--	94.3	--	--
Buena Vista								
Frequency	--	--	2	--	1	61	--	1
Percentage	--	--	3.1	--	1.5	93.8	--	1.5
Westmar								
Frequency	--	1	4	2	1	54	--	--
Percentage	--	1.6	6.5	3.2	1.6	87.1	--	--
Mount Mercy								
Frequency	--	--	1	--	--	48	1	--
Percentage	--	--	2.0	--	--	96.0	2.0	--
Briar Cliff ^a								
Frequency	--	--	--	--	--	65	--	--
Percentage	--	--	--	--	--	100	--	--
Cornell ^a								
Frequency	--	--	--	--	1	50	--	--
Percentage	--	--	--	--	2.0	98.0	--	--

^aNot employed by this college, despite student responses.

Table 56. Responses of freshmen to a letter from a college alumnus or alumna

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	2	5	1	52	--	--
Percentage	--	--	3.3	8.2	1.7	86.7	--	--
Wartburg								
Frequency	--	1	2	9	--	94	--	--
Percentage	--	0.9	1.9	8.5	--	88.7	--	--
Buena Vista								
Frequency	--	--	1	3	--	59	--	2
Percentage	--	--	1.5	4.6	--	90.8	--	3.1
Westmar								
Frequency	--	--	1	5	4	51	1	--
Percentage	--	--	1.6	8.1	6.5	82.3	1.6	--
Mount Mercy ^a								
Frequency	--	--	1	1	1	47	--	--
Percentage	--	--	2.0	2.0	2.0	94.0	--	--
Briar Cliff								
Frequency	--	--	1	2	1	61	--	--
Percentage	--	--	1.5	3.1	1.5	93.8	--	--
Cornell								
Frequency	--	--	--	3	1	47	--	--
Percentage	--	--	--	5.9	2.0	92.2	--	--

^aNot employed by this college, despite student responses.

Table 67. Responses of freshmen to an "open house" (weekend) or other visit to the campus as part of a group

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	1	7	9	40	2	1
Percentage	--	--	1.7	11.7	15.0	66.7	3.3	1.7
Wartburg								
Frequency	--	--	7	26	23	50	--	--
Percentage	--	--	6.6	24.5	21.7	47.2	--	--
Buena Vista								
Frequency	--	1	1	11	9	42	1	--
Percentage	--	1.5	1.5	16.9	13.8	64.6	1.5	--
Westmar								
Frequency	--	--	3	10	6	43	--	--
Percentage	--	--	4.8	16.1	9.7	69.4	--	--
Mount Mercy								
Frequency	--	1	2	6	11	30	--	--
Percentage	--	2.0	4.0	12.0	22.0	60.0	--	--
Briar Cliff								
Frequency	--	--	4	1	11	48	--	1
Percentage	--	--	6.2	1.5	16.9	73.8	--	1.5
Cornell								
Frequency	--	--	1	1	6	43	--	--
Percentage	--	--	2.0	2.0	11.8	84.3	--	--

Table 58. Responses of freshmen to a college display at a fair, youth conference, etc.

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	--	6	--	54	--	--
Percentage	--	--	--	10.0	--	90.0	--	--
Wartburg								
Frequency	--	--	9	9	2	86	--	--
Percentage	--	--	8.5	8.4	1.9	81.1	--	--
Buena Vista								
Frequency	--	1	3	3	--	58	--	--
Percentage	--	1.5	4.6	4.6	--	89.2	--	--
Westmar								
Frequency	--	--	3	2	2	55	--	--
Percentage	--	--	4.8	3.2	3.2	88.7	--	--
Mount Mercy								
Frequency	--	--	--	1	--	49	--	--
Percentage	--	--	--	2.0	--	98.0	--	--
Briar Cliff								
Frequency	--	--	--	3	1	61	--	--
Percentage	--	--	--	4.6	1.5	93.8	--	--
Cornell								
Frequency	--	--	--	1	1	49	--	--
Percentage	--	--	--	2.0	2.0	96.1	--	--

Table 69. Responses of freshmen to billboard ads about the college

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern ^a								
Frequency	--	--	5	1	--	54	--	--
Percentage	--	--	8.3	1.7	--	90.0	--	--
Wartburg ^a								
Frequency	--	--	5	3	--	98	--	--
Percentage	--	--	4.7	2.8	--	92.5	--	--
Buena Vista ^a								
Frequency	1	--	6	2	--	56	--	--
Percentage	1.5	--	9.2	3.1	--	86.2	--	--
Westmar								
Frequency	1	2	14	6	2	36	1	--
Percentage	1.6	3.2	22.6	9.7	3.2	58.1	1.6	--
Mount Mercy								
Frequency	--	--	3	4	--	43	--	--
Percentage	--	--	6.0	8.0	--	86.0	--	--
Briar Cliff								
Frequency	--	--	7	4	1	53	--	--
Percentage	--	--	10.8	6.2	1.5	81.5	--	--
Cornell ^a								
Frequency	--	--	1	--	--	50	--	--
Percentage	--	--	2.0	--	--	98.0	--	--

^aNot employed by this college, despite student responses.

Table 70. Responses of freshmen to visits to their churches by college representatives

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	4	9	5	41	1	--
Percentage	--	--	6.7	15.0	8.3	68.3	1.7	--
Wartburg								
Frequency	--	--	1	5	1	98	1	--
Percentage	--	--	0.9	4.7	0.9	92.5	0.9	--
Buena Vista								
Frequency	--	--	2	1	--	62	--	--
Percentage	--	--	3.1	1.5	--	95.4	--	--
Westmar								
Frequency	--	--	3	5	6	47	--	1
Percentage	--	--	4.8	8.1	9.7	75.8	--	1.6
Mount Mercy ^a								
Frequency	--	--	--	--	--	50	--	--
Percentage	--	--	--	--	--	100	--	--
Briar Cliff								
Frequency	--	--	--	--	3	62	--	--
Percentage	--	--	--	--	4.6	95.4	--	--
Cornell								
Frequency	--	--	--	--	--	51	--	--
Percentage	--	--	--	--	--	100	--	--

^aNot employed by this college, despite student responses.

Table 71. Responses of freshmen to posters about the college

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern								
Frequency	--	--	17	7	2	34	--	--
Percentage	--	--	28.3	11.7	3.3	56.7	--	--
Wartburg								
Frequency	--	1	34	8	--	63	--	--
Percentage	--	0.9	32.1	7.5	--	59.4	--	--
Buena Vista ^a								
Frequency	1	1	5	4	--	83.1	--	--
Percentage	1.5	1.5	7.7	6.2	--	83.1	--	--
Westmar								
Frequency	--	--	15	14	1	31	1	--
Percentage	--	--	24.2	22.6	1.6	50.0	1.6	--
Mount Mercy								
Frequency	--	--	14	14	1	20	1	--
Percentage	--	--	28.0	28.0	2.0	40.0	2.0	--
Briar Cliff								
Frequency	--	--	14	13	--	38	--	--
Percentage	--	--	21.5	20.0	--	58.5	--	--
Cornell								
Frequency	--	--	5	2	--	43	--	1
Percentage	--	--	9.8	3.9	--	84.3	--	2.0

^aNot employed by this college, despite student responses.

Table 72. Responses of freshmen to receiving old programs from concerts, plays, special events on campus, etc.

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	1	4	9	1	45	--	--
Percentage	--	1.7	6.7	15.0	1.7	75.0	--	--
Wartburg								
Frequency	--	1	26	9	1	69	--	--
Percentage	--	0.9	24.5	8.5	0.9	65.1	--	--
Buena Vista								
Frequency	1	1	7	3	1	52	--	--
Percentage	1.5	1.5	10.8	4.6	1.5	80.0	--	--
Westmar								
Frequency	--	1	10	4	2	45	--	--
Percentage	--	1.6	16.1	6.5	3.2	72.6	--	--
Mount Mercy								
Frequency	--	--	4	9	1	36	--	--
Percentage	--	--	8.0	18.0	2.0	72.0	--	--
Briar Cliff								
Frequency	--	--	10	9	--	46	--	--
Percentage	--	--	15.4	13.8	--	70.8	--	--
Cornell								
Frequency	--	2	3	3	1	41	1	--
Percentage	--	3.9	5.9	5.9	2.0	80.4	2.0	--

Table 73. Responses of freshmen to performances at their high schools by the college choir, band, drama groups, etc.

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern								
Frequency	--	--	4	16	9	29	2	--
Percentage	--	--	6.7	26.7	15.0	48.3	3.3	--
Wartburg								
Frequency	1	1	7	14	1	82	--	--
Percentage	0.9	0.9	6.6	13.2	0.9	77.4	--	--
Buena Vista								
Frequency	2	1	6	2	4	50	--	--
Percentage	3.1	1.5	9.2	3.1	6.2	76.9	--	--
Westmar								
Frequency	1	1	6	1	4	49	--	--
Percentage	1.6	1.6	9.7	1.6	6.5	79.0	--	--
Mount Mercy ^a								
Frequency	--	--	1	4	--	45	--	--
Percentage	--	--	2.0	8.0	--	90.0	--	--
Briar Cliff								
Frequency	--	--	10	4	8	43	--	--
Percentage	--	--	15.4	6.2	12.3	66.2	--	--
Cornell								
Frequency	--	--	--	--	--	51	--	--
Percentage	--	--	--	--	--	100	--	--

^aNot employed by this college, despite student responses.

Table 74. Responses of freshmen to the college's student literary publication

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No response	Marked two answers
Northwestern ^a								
Frequency	--	--	1	--	--	59	--	--
Percentage	--	--	1.7	--	--	98.3	--	--
Wartburg								
Frequency	--	--	15	16	--	75	--	--
Percentage	--	--	14.2	15.1	--	70.8	--	--
Buena Vista ^a								
Frequency	2	1	3	--	--	59	--	--
Percentage	3.1	1.5	4.6	--	--	90.8	--	--
Westmar								
Frequency	--	--	6	6	--	50	--	--
Percentage	--	--	9.7	9.7	--	80.6	--	--
Mount Mercy ^a								
Frequency	--	1	2	6	--	41	--	--
Percentage	--	2.0	4.0	12.0	--	82.0	--	--
Briar Cliff								
Frequency	1	--	6	6	7	45	--	--
Percentage	1.5	--	9.2	9.2	10.8	69.2	--	--
Cornell								
Frequency	--	1	2	--	1	47	--	--
Percentage	--	2.0	3.9	--	2.0	92.2	--	--

^aNot employed by this college, despite student responses.

Table 75. Responses of freshmen to radio or television spot ads about the college

College	Strongly negative influence	Negative influence	No influence	Positive influence	Strongly positive influence	No contact	No re- sponse	Marked two answers
Northwestern ^a								
Frequency	--	--	3	--	--	57	--	--
Percentage	--	--	5.0	--	--	95.0	--	--
Wartburg ^a								
Frequency	1	1	1	1	--	102	--	--
Percentage	0.9	0.9	0.9	0.9	--	96.2	--	--
Buena Vista								
Frequency	1	1	3	3	--	57	--	--
Percentage	1.5	1.5	4.6	4.6	--	87.7	--	--
Westmar								
Frequency	2	3	7	--	2	48	--	--
Percentage	3.2	4.8	11.3	--	3.2	77.4	--	--
Mount Mercy								
Frequency	--	1	8	12	12	17	--	--
Percentage	--	2.0	16.0	24.0	24.0	34.0	--	--
Briar Cliff								
Frequency	1	1	9	22	13	19	--	--
Percentage	1.5	1.5	13.8	33.8	20.0	29.2	--	--
Cornell ^a								
Frequency	--	--	1	2	--	48	--	--
Percentage	--	--	2.0	4.0	--	96.0	--	--

^aNot employed by this college, despite student responses.

**APPENDIX C: CHI-SQUARE CONTINGENCY TABLES SHOWING DISTRIBUTION
OF RESPONSES TO RECRUITMENT PRACTICES BY SELECTED
PERSONAL CHARACTERISTICS OF RESPONDENTS**

Table 76. Frequency counts of sex of respondent by college day or night programs, all colleges. N = 455

Sex	No influence	Positive influence	Strongly positive influence	No contact	Total
Female	17	61	32	139	249
Male	22	30	22	132	206
Total	39	91	54	271	455

Chi-square = 9.25303 with 3 degrees of freedom, significant at .05

Table 77. Frequency counts of sex of respondent by individual department and/or program brochures, all colleges. N = 453

Sex	No influence	Positive influence	Strongly positive influence	No contact	Total
Female	10	121	92	25	248
Male	30	87	40	48	205
Total	40	208	132	73	453

Chi-square = 39.56390 with 3 degrees of freedom, significant at .05

Table 78. Frequency counts of sex of respondent by general information brochures, all colleges. N = 454

Sex	No influence	Positive influence	Strongly positive influence	No contact	Total
Female	23	121	91	15	250
Male	45	97	50	12	204
Total	68	218	141	27	454

Chi-square = 17.53438 with 3 degrees of freedom, significant at .05

Table 79. Frequency counts of sex of respondent by the student newspaper, all colleges. N = 452

Sex	No influence	Positive influence	Strongly positive influence	No contact	Total
Female	57	75	16	99	247
Male	38	37	12	118	205
Total	95	112	28	217	452

Chi-square = 15.15607 with 3 degrees of freedom, significant at .05

Table 80. Frequency counts of sex of respondent by the college catalog, all colleges. N = 444

Sex	No influence	Positive influence	Strongly positive influence	No contact	Total
Female	20	123	90	15	248
Male	36	93	50	17	196
Total	56	216	140	32	444

Chi-square = 14.39907 with 3 degrees of freedom, significant at .05

Table 81. Frequency counts of sex of respondent by visits of admissions counselors to high schools, all colleges. N = 450

Sex	No influence	Positive influence	Strongly positive influence	No contact	Total
Female	12	69	89	79	249
Male	17	57	45	82	201
Total	29	126	134	161	450

Chi-square = 11.51965 with 3 degrees of freedom, significant at .05

Table 82. Frequency counts of highest degree expected in lifetime by summer orientation and registration, all colleges. N = 439

Degree	No influence	Positive influence	Strongly positive influence	No contact	Total
Bachelor's or less	58	83	37	53	231
Master's	25	34	17	44	120
Doctorate or professional	17	21	8	42	88
Total	100	138	62	139	439

Chi-square = 20.50212 with 6 degrees of freedom, significant at .05

Table 83. Frequency counts of highest degree expected in lifetime by phone call from an admissions officer, all colleges. N = 447

Degree	No influence	Positive influence	Strongly positive influence	No contact	Total
Bachelor's or less	17	73	36	112	238
Master's	10	29	18	63	120
Doctorate or professional	11	31	22	25	89
Total	38	133	76	200	447

Chi-square = 15.48512 with 6 degrees of freedom, significant at .05

Table 84. Frequency counts of highest degree expected in lifetime by visits to high schools by college faculty, all colleges.
N = 430

Degree	No influence ^a	Positive influence	Strongly positive influence	No contact	Total
Bachelor's or less		66	40	120	226
Master's		15	19	82	116
Doctorate or professional		19	11	58	88
Total		100	70	260	430

Chi-square = 14.37838 with 4 degrees of freedom, significant at .05

^aOmitted due to low cell frequencies.

Table 85. Frequency counts of highest degree expected in lifetime by on-campus interview, all colleges. N = 425

Degree	No influence ^a	Positive influence	Strongly positive influence	No contact	Total
Bachelor's or less		59	36	128	223
Master's		22	22	72	116
Doctorate or professional		19	29	38	86
Total		100	87	238	425

Chi-square = 14.44318 with 4 degrees of freedom, significant at .05

^aOmitted due to low cell frequencies.

Table 86. Frequency counts of distance from home to college by summer orientation and registration, all colleges. N = 443

Distance	No influence	Positive influence	Strongly positive influence	No contact	Total
0 to 10 miles	22	28	5	24	79
11 to 100 miles	38	65	30	39	172
Over 100 miles	41	45	27	79	192
Total	101	138	62	142	443

Chi-square = 22.18427 with 6 degrees of freedom, significant at .05

Table 87. Frequency counts of distance from home to college by publicity materials, all colleges. N = 447

Distance	No influence	Positive influence ^a	Strongly positive influence ^a	No contact	Total
0 to 10 miles	25	23		33	81
11 to 100 miles	61	25		86	172
Over 100 miles	54	30		110	194
Total	140	78		229	447

Chi-square = 11.46201 with 4 degrees of freedom, significant at .05

^aCategories combined to avoid low cell frequencies.

Table 88. Frequency counts of distance from home to college by phone call from an admissions officer, all colleges. N = 452

Distance	No influence	Positive influence	Strongly positive influence	No contact	Total
0 to 10 miles	7	19	8	48	82
11 to 100 miles	13	49	29	84	175
Over 100 miles	18	66	39	72	195
Total	38	134	76	204	452

Chi-square = 12.94606 with 6 degrees of freedom, significant at .05

Table 89. Frequency counts of distance from home to college by letter from a college faculty member, all colleges. N = 458

Distance	No influence	Positive influence	Strongly positive influence	No contact	Total
0 to 10 miles	13	13	5	53	84
11 to 100 miles	10	43	35	87	175
Over 100 miles	23	36	37	103	199
Total	46	92	77	243	458

Chi-square = 18.57693 with 6 degrees of freedom, significant at .05

Table 90. Frequency counts of distance from home to college by visits of admissions counselors to high schools, all colleges.
N = 451

Distance	No influence	Positive influence	Strongly positive influence	No contact	Total
0 to 10 miles	9	21	13	40	83
11 to 100 miles	14	54	63	41	172
Over 100 miles	6	51	58	81	196
Total	29	126	134	162	451

Chi-square = 28.30527 with 6 degrees of freedom, significant at .05

Table 91. Frequency counts of distance from home to college by an individual campus visit or tour, all colleges. N = 431

Distance	No influence ^a	Positive influence	Strongly positive influence	No contact	Total
0 to 10 miles		16	29	28	73
11 to 100 miles		43	92	31	166
Over 100 miles		37	105	50	192
Total		96	226	109	431

Chi-square = 12.32356 with 4 degrees of freedom, significant at .05

^aOmitted due to low cell frequencies.

Table 92. Frequency counts of distance from home to college by college day or night programs, all colleges. N = 417

Distance	No influence ^a	Positive influence	Strongly positive influence	No contact	Total
0 to 10 miles		21	9	49	79
11 to 100 miles		44	19	89	152
Over 100 miles		26	26	134	186
Total		91	54	171	417

Chi-square = 12.41095 with 4 degrees of freedom, significant at .05

^aOmitted due to low cell frequencies.

Table 93. Frequency counts of distance from home to college by visits to high schools by college faculty members, all colleges. N = 434

Distance	No influence ^a	Positive influence	Strongly positive influence	No contact	Total
0 to 10 miles		25	11	36	72
11 to 100 miles		43	33	92	168
Over 100 miles		33	26	135	194
Total		101	70	163	434

Chi-square = 14.79319 with 4 degrees of freedom, significant at .05

^aOmitted due to low cell frequencies.

Table 94. Frequency counts of composite size factor by summer orientation and registration, all colleges. N = 436

Composite size factor	No influence	Positive influence	Strongly positive influence	No contact	Total
Lower one-third	36	55	30	40	161
Middle one-third	21	44	14	42	121
Upper one-third	41	37	18	58	154
Total	98	136	62	140	436

Chi-square = 14.49591 with 6 degrees of freedom, significant at .05

Table 95. Frequency counts of composite size factor by letter from a college faculty member, all colleges. N = 451

Composite size factor	No influence	Positive influence	Strongly positive influence	No contact	Total
Lower one-third	14	39	27	86	166
Middle one-third	14	32	27	55	128
Upper one-third	17	20	22	98	157
Total	45	91	76	239	451

Chi-square = 14.57014 with 6 degrees of freedom, significant at .05

Table 96. Frequency counts of academic ability by publicity materials, all colleges. N = 376

Academic ability	No influence	Positive influence ^a	Strongly positive influence ^a	No contact	Total
Lower one-third	35	30		68	133
Middle one-third	37	22		49	108
Upper one-third	48	12		75	135
Total	120	64		192	376

Chi-square = 11.62320 with 4 degrees of freedom, significant at .05

^aCategories combined to avoid low cell frequencies.

Table 97. Frequency counts of socio-economic status by an individual campus visit or tour, all colleges. N = 337

Socio-economic status	No influence ^a	Positive influence	Strongly positive influence	No contact	Total
Lower one-third		16	74	31	121
Middle one-third		33	41	26	100
Upper one-third		27	65	24	116
Total		76	180	81	337

Chi-square = 14.75651 with 4 degrees of freedom, significant at .05

^aOmitted due to low cell frequencies.