ABSTRACT
Assuming that the holding power of a junior college is one of the significant indices of its effectiveness, this paper reviews descriptive and inferential data on student attrition. Included are dropout statistics, reported reasons for leaving college, and personality characteristics of dropouts versus persisters. Comparisons between numbers of dropouts at junior and 4-year, public and private, large and small, and co-ed and single sex colleges were made. The conclusion is that small enrollment schools (250-750), whether 2- or 4-year, enjoy higher retention rates. The personality profiles of dropouts reported in the literature surveyed here are not consistent, although it is generally believed that high dropout rates in junior colleges are primarily attributable to the lower level of motivation and poorer academic preparation of students. The value of special programs for potential dropouts and types of college environments which seem to foster higher dropout rates are also discussed. (LP)
Two-Year College Dropouts ---
Why do they leave?
Who are they?
How many?

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Office of Research
IRR 72-11

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"The sensitivity of students to the value system of a society that condemns dropping out is hinted at even if half-facetiously, in the remark of one student: "If you quit school after your bachelor's degree, you're a dropout."

(Cohen, Brawer; 1970, p. 13)

Student attrition rates are not sterile statistics. They reflect the extinguished hopes of young people deprived of the opportunities and advantages of a higher education. And so we ask, with a deep sense of concern -- "why do they leave?"

In an effort to provide a reasonably meaningful answer to this perplexing question, an effort has been made in this literature research-exercise to summarize both descriptive and inferential data on the subject of attrition. No claim is made that this document is a comprehensive, exhaustive literature-search. It is rather a selective sampling from among these resources in an effort to draw together some significant observations regarding this highly complex social process. Highlights of the findings reported in this document will be found beginning on page

The science of probability, (i.e., statistically relevant information) gives mathematical expression to our ignorance, not to our wisdom. If everything -- literally everything were known about a given phenomenon, (such as college dropouts), statistical estimates about it would be unnecessary. But until the "everything" era is reached -- if ever, statistical inference is the next best thing in sight. Where there is sufficient objective evidence of validity, and when it is used in a judicious, conscientious attempt to improve procedures, prediction becomes a worthwhile tool for use in trying to determine: (1) how many, (2) the reasons, and (3) the personality characteristics of those who leave rather than persist through graduation.

In an institutional research report, Blai (1969) notes..."For a college, its 'retention rate' (defined as the percentage of entering freshmen who graduate on schedule with their respective classes) is more than a simple statistic. Loss of students is a costly phenomenon to the institution even though some of those 'lost' to the college do transfer to other institutions and complete degree programs.

"Considering the amount of time, energy and money spent in the recruitment-admissions process, the problem of attrition in each class prior to graduation cannot be ignored. And, since a 'low' retention rate may have implications for institutional actions -- in such areas as curriculum evaluation, admissions -- and student-faculty relations -- this type of 'statistic' reflects a state of affairs which is important on academic as well as 'economic' grounds ....
"Considering the 'cost' of attrition to the college, a careful examination of the scope, nature and general efficacy of counseling and advisory services (academic and personal), in connection with the withdrawal phenomenon, appears pragmatically worthwhile. ... The problem faced by students in meeting the academic-social-cultural pressures which are characteristic of college life in a selective, residential context, and the extent to which students succeed in responding to these pressures unquestionably affects their adjustment and may consequently result in their becoming a dropout statistic. ......

"In a study conducted by the College Research Center (CRC) in the late 1960's, (a cooperative, educational-research agency of 4-year liberal arts colleges for women) among five of its member institutions; Hollins, Mount Holyoke, Sweet Briar, Vassar and Wheaton, the following were the reasons cited for withdrawal from college. In addition, the tabulation also summarizes for 1967 and 1969 the reasons given for second year non-return among Harcum Junior College (a two-year, private, independent junior college for women) first year students who had been invited to return for a second year of study but declined the invitation.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>CRC 1969</th>
<th>CRC 1967</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Marriage</td>
<td>31%</td>
<td>6%</td>
</tr>
<tr>
<td>2 - Desired subjects not in curriculum</td>
<td>28%</td>
<td>3%</td>
</tr>
<tr>
<td>3 - Academic difficulties</td>
<td>24%</td>
<td>1%</td>
</tr>
<tr>
<td>4 - Difficulty in adjustmnt to coll. life</td>
<td>21%</td>
<td>9%</td>
</tr>
<tr>
<td>5 - Lack of goals or interests</td>
<td>20%</td>
<td>9%</td>
</tr>
<tr>
<td>6 - School calibre not as high as expected</td>
<td>18%</td>
<td>4%</td>
</tr>
<tr>
<td>7 - Discovery of spec. talent or interest</td>
<td>16%</td>
<td>3%</td>
</tr>
<tr>
<td>8 - Finances</td>
<td>16%</td>
<td>9%</td>
</tr>
<tr>
<td>9 - Insuff.high school preparation</td>
<td>11%</td>
<td>1%</td>
</tr>
<tr>
<td>10 - Medical reasons (personal)</td>
<td>11%</td>
<td>4%</td>
</tr>
<tr>
<td>11 - College didn't make much sense</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>12 - Pushed into college by parents</td>
<td>10%</td>
<td>1%</td>
</tr>
<tr>
<td>13 - Drop out to work for awhile</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>14 - No real desire to attend college</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>15 - Medical reasons (family)</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>16 - Full-time employment</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>17 - No reply to follow-up inquiry</td>
<td>60%</td>
<td>55%</td>
</tr>
<tr>
<td>18 - Transfer to 4-year college</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>19 - Girls snobbish</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>20 - Did not like location</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Excluding the 'no replies', the most frequently offered reason among the Harcum respondents was "Transfer to 4-year college." This 'springboard' to further education as a 'feeder' two-year college is a vital educational function which Harcum and other two-year colleges afford to many students who might otherwise never enjoy the opportunity for continuing their collegiate education to the baccalaureate degree level.
Among the CRC respondents, excluding marriage, the frequency with which the next three listed reasons for withdrawal are mentioned (73%) may be roughly equated to the 60% and 55% of Harcum non-replies which presumably suggest a dissatisfaction or disinterest in Harcum sufficiently great for them not to even make the effort to reply to the brief mail questionnaire.

These results generally parallel the findings of a national survey of retention-withdrawal patterns by Iffert (1958) which revealed, in descending order of ranked importance:

1st = "I was generally dissatisfied"
Co-equal 2nd = Change in curricular interest, &
Lack of interest in studies
Co-equal 3rd = Desire to be nearer home, &
Desire to attend a less expensive institution

Among women who "discontinued" their schooling, Iffert (1958) reported the most frequently offered reason to be "marriage" the other leading items being: taking a full-time job; financial difficulties, and lack of interest in studies. Slightly more than a fifth (23%) of the women cited "low grades" in contrast to 40% of the men.

Several action-oriented lines of inquiry into the attrition problem are worthy of careful consideration, including the following which have been suggested by Knoell (1960): "Efforts to identify likely dropouts by securing periodic self-reports of intentions and motivations; noting behavior which may be symptomatic of attrition, such as excessive cutting of classes, infractions of rules, and repeated visits to the health center; flagging records of entering students with particular syndromes of characteristics associated with attrition.

"Analysis of the process of decision-making about attrition -- where it is clearly the choice of the student:

(1) Are there peak times during the semester (year) when students think seriously about dropping out?
(2) With whom do they talk about it?
(3) Who appears to influence their thinking about attrition?
(4) When does the final decision tend to be made?
(5) What kinds of incidents trigger the final decision?
(6) What is the time-lag between the preliminary thinking and the decision, and the decision and the action?
(7) What point in time seems best for taking preventive action?"

As Blai (1971, Sept.) notes .... "The holding power of a junior college is one of the significant indices of its effectiveness." As revealed by an action-oriented inquiry into student attrition at Harcum Junior College in the Spring of 1970, reported by Blai (1970); through an analysis of 4 types of indicative records, it was ascertained that some 83% of those students who withdrew during the academic year were "flagged" by being among one of the following four groups"
A program of preventive dropout counseling was instituted, beginning in academic 1970-71. This focused upon potential dropouts by systematic counseling of: (1) those students who were potential out-transfers as revealed by their requests for transcripts, (2) to avoid, wherever possible, later academic dismissal of students in potential jeopardy, as revealed by their mid-term, progress report grades, (3) to avoid possible dropout of students with Incomplete mid-term grades, (4) to minimize dropout propensity of previously-accepted academically-weak students.

As is noted by Blai (1971, Sept.), the student withdrawal rate during academic 1970-71 was 6% (expressed as a percentage of the total student body at the beginning of the year), as compared with 11% during academic 1969-70. It is also a fact that during Sept.-January of academic 1971-72, the rate remained a low 3.4%, as well as the like period during academic 1970-71 when the rate was also a low 3.2%. This substantial and sustained improvement in student attrition is associated with the introduction of an expanded counseling-interviewing program designed to pinpoint and 'salvage' potential dropouts.

"The matter of dropping out of college, with its widespread ramifications in the educational and social realms, transcends the merely personal psychology of the individual. It is a phenomenon that highlights the ancient struggle between the environment and the individual striving to modify the other in ways as complex as life itself, until a better balance is achieved, ... If examination of ... (the) interaction (between the environment and the individual) discloses elements of ignorance or extremism on both sides, more rooted in emotionalism than in calm objectivity, perhaps the dropout may be less widely included among the failures, delinquents, and other undesirables." (Pervin, Reik, Dalrymple, 1966. p.3)

"Concerns with the phenomenon of dropout have nationwide implications. While the differential between entrants and graduates is highest in California public institutions, even in selective colleges throughout the nation, there is always a small group of intellectually well-equipped students who select themselves out after having been selected in, who drop out for a time, only to return and graduate later. This raises a question of the desirability of selective admissions because whether such people resent a college more if they flunk out than if they are refused admission we do not know." (Cohen & Brawer, 1970. p. 14)
Numerous references to student attrition are to be found, both in educational and psychological literature. In fact, Knoell (1966) has observed that attrition has stimulated so many investigations that they may "soon rival college prediction studies in sheer numbers." Representative ones have dealt with dropouts in terms of personal and social situations - Iffert (1951, 1952), Strang (1937), Suddarth (1957), Summerskill and Darling (1955): academic achievement - Dressel (1943), Feder (1940), Weigand (1951): specific schools, Blai (1971, July), Eckland (1964), Pervin, Reik and Dalrymple (1966): adjustment - Freedman (1956), Munroe (1945), Pervin, Reik and Dalrymple (1966); illness and injury Iffert (1957), Lerner & Martin (1955): finances - Cooper (1928), Gable (1957), Thompson (1953), and "motivation" -- Farnsworth et al (1955), Rust & Ryan (1955).

Trent and Medsker (1968. p. 176) indicate that autonomy most differentiated the college persister group from the withdrawals and, especially, from the non-college attenders, for they note, ... "a strong relationship between entrance to and length of stay in college and growth of open-minded, flexible and autonomous dispositions as measured by ... scales designed to assess these traits. The fact that the carefully classified college withdrawals were more like the nonattenders than the persisters in their amount of manifest change, indicates that the type of personality development measured continues to be associated with persistence in college beyond the early years. This held, regardless of level of ability or socioeconomic status."

As reported by Cohen & Brawer (1970, pp. 16, 17), "Other findings suggested that family climates of the persisters were different from those of withdrawals and nonattenders. Nearly 70 percent of the high school seniors who later became college persisters reported, while they were still in high school, that their parents definitely wanted them to attend college. This may be compared with the less than 50 percent withdrawals and less than 10 percent nonattenders who stated similar family interest. ..."

"Despite considerable research on the college dropout, few investigations especially concerned junior college populations. In fact, much of the work on junior college students remains in the files of the particular institutions that initiated the investigations."

The purposes of the student attrition study reported by Cohen and Brawer, (1970, pp. 29, 30) .. "were to provide data for (1) enhancing the accuracy of predictions for student attrition; (2) adjusting counseling procedures; (3) encouraging junior college instructors to define their objectives more precisely for their students, and (4) developing hypotheses for identifying potential dropouts."

"The hypothesis tested was that there are significant personality, ability and/or demographic differences among individuals who persist in college and individuals who withdraw before completing their school programs.... the null hypothesis of no difference between persisters and dropouts was tested for each relevant item by Chi-square. Significant differences were as follows:
Dropouts showed a tendency to be enrolled for fewer than 12 units whereas persisters tended to be enrolled for 22 units or more. ($X^2 = 10.56, p = .01$)

Dropouts tended to be employed more time outside school than persisters. ($X^2 = 20.05, p = .01$)

Dropouts tended to have attended more schools prior to the 10th grade than did persisters. ($X^2 = 12.65, p = .05$)

The mothers of dropouts tended to have less education than those of the persisters; specifically, more mothers of dropouts did not complete high school. ($X^2 = 12.93, p = .05$)

"Twelve semester units is generally considered to be a minimal load for a full-time student in the junior college. Since dropouts tended to be enrolled for fewer than 12 units, it is suggested that they are less committed to full-time school work, and, hence are more inclined to leave school when conditions within the college become unpleasant or impinge on other activities, e.g., their jobs. It also suggests - as does much of the literature -- that withdrawal from the junior college is related to financial pressures. Dropouts reported more time spent in outside employment than persisters. Such employment may well reflect financial need, but since this variable was not definitely established for this sample, its influence is uncertain...."

"Dropouts may be less committed than persisters, but they may be more realistic. Seven instructors taught sections of English I. For purposes of this study, individual student grades were computed by section and the instructors ranked according to average marks given in their English I sections.

A correlation of $+.71$ ($p = .05$) was found to result when the statement, "The higher the grades given by an instructor, the lower the number of students who drop his classes," was tested. An implication of this finding is that many students drop out of classes -- and indeed, drop out of school -- when they realize they are in a precarious position regarding grades."

In a study (among 683 first-year students), designed to test the utility of a theoretical model in explaining the undergraduate dropout process, Spady (1971) concludes that .... "the decision to leave a particular social system is the result of a complex social process that includes, (1) family, (2) previous educational background, (3) academic potential, (4) normative congruence (this represents the most complex and problematic set of factors in the entire model. This concept symbolizes not only the entire set of personality dispositions, values, attitudes, aspirations, and expectations with which the student first enters a new social system, but also the influences, expectations, values and attitudes that he encounters in that system), (5) friendship support, (6) intellectual development, (7) grade performance, (8) social integration, (9) satisfaction, and (10) institutional commitment. .... Although social integration, satisfaction and institutional commitment can be explained primarily on the basis of intrinsic rewards associated with interpersonal relationships, and intellectual development, the short-run dropout decision is largely influenced by extrinsic performance criteria among the men but less so for the women. Over a four-year period, however, formal academic performance is clearly the dominant factor in accounting for attrition among both sexes." (underlining supplied)
In another study among pre-collegians, (1800 high ability Pennsylvania high school dropouts), French and Cardon (1969) concluded: "Although students gave many answers when asked why they dropped out, four were given frequently: (1) school, they felt, was not preparing them for the real world; (2) they were given too little say in planning their curriculum; (3) their teachers did not understand them; and (4) they felt incompatible with the 'system'. ...To encourage high ability dropouts to remain in the classroom, the investigators recommend:

(1) A more comprehensive system of vocational guidance.

(2) Earlier attention to language skills (in which these students were frequently deficient.) Mandatory courses in English, history, or foreign languages should be more relevant to students' needs.

(3) Part-time jobs provide training for a guided, gradual entry to the world of the wage earner.

(4) Special classes outside the traditional secondary school system for those who have already dropped out.

(5) There may be more need, the investigators conclude, to change the educational "system" rather than to try and change the attitudes of the dropouts.

Panos and Astin (1967) examined the ability to complete four years of college within four years after matriculation, in a longitudinal study of 36,405 college students entering 246 colleges and universities as freshmen in 1961.

It was found that students who do not complete four years of college come from lower socioeconomic backgrounds, have lower grades in high school, and have a lower level of initial educational aspiration than do students who complete four years of college. An analysis of the effects of 36 college characteristics on student persistence in college was performed. After controlling statistically for differential student input to the various college environments, 21 significant college effects were observed. It was suggested that students are more likely to complete four years if they attend colleges where student peer relationships are characterized by friendliness, cooperativeness, and independence, where there is a high level of personal involvement with the concern for the individual student, and where the administrative policies concerning student aggression are relatively permissive.

A very recently released study, Astin (1972), indicates that by the most severe measures of persistence -- completing a baccalaureate degree within four years -- 53% of all students entering four-year colleges and universities can be classified as dropouts (based on data obtained from 217 two-year and four-year colleges and universities over a four year period beginning in 1966. At two-year colleges, approximately 62% did not receive a degree, Astin concluding the higher dropout rates at junior colleges are "primarily attributable to the lower level of motivation and poorer academic preparation of students entering these colleges."
Astin reports among the predictors of lack of persistence or dropout propensity, (in descending order of importance): (1) plans to marry while in college, (2) holding a job during the academic year, (3) smoking cigarettes, (4) being a female, (5) turning in a paper or theme late, and (6) having no religious preference.

In a study conducted by the author, Blai (1971), replies from some 60 two-year colleges revealed statistically significant differences, (at the .05 level of confidence) in the first-to-second year student retention rates, favoring:

(1) Private, independent as compared with Private, church-related schools (76% vs 71%).
(2) All-female schools had a greater average rate of return than did co-ed schools (81% vs 72%).
(3) In terms of enrollment size, those in the "up to 250" range were significantly greater (statistically) than those in the 250/500 and 500/750 ranges (84% vs 68%, and 84% vs 74%); and those in the 500/750 range were significantly greater than those in the 750/1000 and 1000 and over ranges. (78% vs 48%; 78% vs 70%)

In descending order, the average rates of retention were found to be:

(1) enrollments up to 250=84%
(2) all-female, church-related = 84%
(3) all-female schools, combined = 81%
(4) enrollments 500 to 750 = 78%
(5) all-female, private independ. = 78%
(6) Harcum Junior College = 76%
(7) co-ed, private, indep. = 77%
(8) co-ed public, community = 75%
(9) average, all respondents = 72%
(10) co-ed schools, combined = 71%
(11) enrollments over 1000 = 70%
(12) enrollments 250 to 500 = 69%
(13) co-ed, private, church related = 60%
(14) enrollments 750 to 1000 = 59%

In descriptive terms, and stated as dropout rates, the above tabulation reveals the range of average dropout rates to be a low of 16% for all-female, private, church-related schools to a high rate of 41% for co-ed, private, church-related schools -- more than a doubling in attrition rates between these two types of student bodies in church-related schools.

In relation to the average rate of retention for all respondents, these 60 two-year colleges distributed themselves as follows:

<table>
<thead>
<tr>
<th>Types</th>
<th>Enrollment sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-female, church-related = 84%</td>
<td>Up to 250 = 84%</td>
</tr>
<tr>
<td>All-female, schools, combined = 81%</td>
<td>500-750 = 78%</td>
</tr>
<tr>
<td>All-female, private, independent = 78%</td>
<td>Over 1000 = 70%</td>
</tr>
<tr>
<td>Co-ed, private, independent = 77%</td>
<td>250-500 = 68%</td>
</tr>
<tr>
<td>Co-ed, public, community = 75%</td>
<td>750-1000 = 59%</td>
</tr>
<tr>
<td>Co-ed schools, combined = 71%</td>
<td></td>
</tr>
<tr>
<td>Co-ed, private, church-related = 60%</td>
<td></td>
</tr>
</tbody>
</table>
As the above tabulation clearly reveals, the smaller enrollment schools (up to 250 enrollment, and 500/750) enjoyed higher retention rates than the average for all respondents. The larger enrollment schools, (as well as those in the intermediate 250-500 range), were among those with the lowest retention rates. Similarly, all-female schools, either church-related alone, or all combined, enjoyed well-above the average rate for all respondents, followed closely by co-ed schools, both private, independent and public, community. The co-ed private, church-related schools reported the lowest retention rates, averaging 60% for the 18 institutions that responded.

Macmillan (1969) seeking to establish a predictive model for early recognition of potential community college student attrition used data from a longitudinal study of student attendance patterns in higher education. He compared the responses of community college students who discontinued their enrollments during the initial semester with those of community college students who persisted for two years. The two major hypotheses studied were: (1) that no pattern of scores on standard instruments and supplemental biographical questionnaires discriminates between students persisting and withdrawing in a national sample of community college students, and (2) that discriminant scores contrasting a national sample of community college students who persisted for less than one semester with students who persisted for two years cannot be applied with acceptable empirical validity to an independent sample of students in two metropolitan community colleges. To test the hypotheses, discriminant scores were developed and an empirical validity was found for each hypothesis. An empirical validity of .65 is reported for a predictive model developed for identifying potential dropouts. This report of the Northern California Cooperative Research Project on Student Withdrawals at 23 colleges generated data on factors influencing withdrawals which included, in the academic sphere: (1) scholastic ability, (2) high school record, (3) first-year college grades. Among the environmental factors were, (4) peer pressures, (5) social interests and (6) college cultural climate. Social-personal factors included: (7) age, (8) time of entry to college, (9) sex, (10) socioeconomic status, (11) degree of family support, (12) family values as shown by occupation and education, (13) marriage plans, (14) motivation, (15) personality traits, (16) conflict of goals, and (17) family attitudes.

Turner (1970), in what he terms a limited survey of attrition in community colleges, concludes from his survey of literature that several student-related and college-related factors appear to influence discontinuance at junior colleges. He indicates that recent research reports on student attrition have questioned academic aptitude as a predictor of perseverance at college, and thus other factors are sought to explain who drops out and why. He indicates that student-related factors involve: (1) an interplay of actual and perceived ability, (2) family and school background, and (3) motivation. The college-related factors begin with: (1) the student’s introduction to the school, and (2) depends on his adjustment to faculty, curriculum and school mores. He concludes that a closer link between community colleges and secondary schools would be an initial step in decreasing college dropout rates, and that student personnel programs and institutional preparation are other areas that need improvement.
Snyder and Blocker (1970) report in a profile of non-persisting students at Harrisburg Area Community College (Penna.) that approximately 30% of the students indicated positive reasons for discontinuing their attendance without having earned an associate degree or certificate (their objective had been completed; about 25% indicated negative reasons (there were barriers to continuance); and about 50% indicated neutral areas. The four most frequently specified reasons were: (1) to attend another college; (2) to enter the armed services; (3) to become employed, and (4) objectives completed.

Davis (1970) reports a study of student-perceived community college experience, as viewed by 143 withdrawees who enrolled in the fall of 1967 as full-time, first-time freshmen in three Florida junior colleges. Results of interviews revealed that they were: (1) pragmatic, (2) materialistic, (3) able to recognize higher education as one of the major prerequisites for upward mobility. They had chosen junior colleges for reasons of economics and convenience, and because they presented less of a threat than 4-year colleges. They criticized counseling and lack of faculty interest and evaluation. Negro withdrawees, entering college with a higher level of confidence than the white withdrawees, left with less positive perceptions. The reasons for withdrawal given were: (1) finances, (2) irrelevancy of college education, (3) discouragement with meeting academic standards, (4) marriage, (5) health, and (6) family problems. As a group, these withdrawees seemed more disappointed with themselves than with their college for their unsuccessful efforts to further their education. Only 18% of the withdrawees sought assistance to stay in college.

Stocking (1969) in a small-sample (N=23) study of non-persisting, and persisting (N=20) transfer program freshmen enrolled in Crowder College (Missouri) during the fall of 1967 found the following similarities and dissimilarities:

<table>
<thead>
<tr>
<th>Similarities</th>
<th>Persist.</th>
<th>non-Persist.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Composite School &amp; College Ability Test (71-80 range)</td>
<td>Similar percentages</td>
<td></td>
</tr>
<tr>
<td>(2) Same (51-70 range)</td>
<td>Greater%</td>
<td>Lesser %</td>
</tr>
<tr>
<td>(3) Survey of Interpersonal Values</td>
<td>(The groups were more alike than different; most scores clustering around &quot;average&quot; category on 5 of 6 values)</td>
<td></td>
</tr>
<tr>
<td>(4) Subsequent 4-year college enrollment</td>
<td>75%</td>
<td>50%</td>
</tr>
<tr>
<td>(5) Mothers completed high school</td>
<td>75%</td>
<td>82%</td>
</tr>
<tr>
<td>(6) Wanted to attend college and were supported in this decision by both parents</td>
<td>80%</td>
<td>56%</td>
</tr>
<tr>
<td>(7) Did not wish to attend, but were encouraged to do so by at least one parent</td>
<td>--</td>
<td>17%</td>
</tr>
</tbody>
</table>

Stocking concludes that the nature of the results suggests that replication of the study on a larger scale would be valuable.

Gold (1970) reports a study of Los Angeles City College attrition, examining characteristics of 397 randomly selected students. More important findings included:

(1) those students scoring in the lowest quintile on School and College Abilities Test showed considerably less persistence after their first semester.

(2) Females recorded higher persistence rates than males.
Ethnically, Blacks and Spanish-surname students persisted at a rate slightly (but not significantly) below rate for all students, while orientals persisted and obtained AA degrees at a significantly higher rate.

A comparison of this study with the NORCAL project, a larger-scale study involving 23 northern California junior colleges, (see Macmillan, 1970), showed similar results.

Berg (1965) in a study designed to evaluate factors bearing on the persistence of low ability in four California junior colleges found a varying persistence rate (40% remaining through the fourth semester at one college; 17% at another). He concludes that such colleges, especially the counselors, must change their approach and attitude if they are to provide a successful experience for low-ability students. The entire concept of educational opportunities for all must include significant and serious efforts on their behalf.

Weigel (1969) studied persisting and non-persisting male students at Anoka-Ramsey State Junior College (Minnesota), in a comparison utilizing non-intellectual measures. Chi-square tests for significance at the .05 level were applied with the following results:

1. No significant response differences were noted on general information items.
2. The persisters differed significantly from non-persisters in selecting the following more often:
   a. "preparation for a better paying job," and
   b. "encouragement by people outside the college," as reasons for attending a junior college.
3. Appraisals of the college's services and environment showed:
   a. Persisters significantly more negative about a required general orientation course.
   b. Persisters more positive (significantly) about:
      1) instructor assistance
      2) campus recreational facilities
      3) emphasis on cultural and intellectual pursuits outside of class.
4. The two reasons most often selected for leaving college were:
   a. "that another school would offer more of what I was interested in,"
   b. "a general feeling of not getting anywhere."

Rice and Scofield (1969) in a project investigating the contrasts between "successful" and "dropout" students at Yakima Valley College (Washington) over the past five years, attempted to determine whether any characteristics of the dropout differed significantly from those who successfully completed their program of study. They report that:

1) sex, 2) high school GPA, 3) declared major, 4) proximity to YVC, and 5) father's occupation. Both father's and mother's education were of borderline significance.

The "Emotional" Dilemma

Of all the freshmen seen by college officials this past Fall at 4-year colleges and universities, many are acutely aware that only about 47% will stay around long enough to collect a sheepskin; while at 2-year colleges, only about 38% will persist to the point of earning their associate degrees. As most of the studies reported in this review indicate, reasons for campus failures these days are far more often of an emotional nature, and thus harder to remedy.
As reported by Dr. Edward A. Levenson of the William Alanson White Institute in New York, in a 1965 study, the "typical dropout was found to be generally above average in intelligence and creativity. He suggests that his mind is bright, but mixed up; and socially, he is likely to be a "loner". Given this psychological "profile," when he collides with the environment "press" of what appears to be an alien campus setting, the potential dropout becomes an actual dropout.

Today, more and more administrators express concern that perhaps dropping out is not entirely the "wrong" move for the reluctant student. Behind the pressure to persist in college is the American success syndrome. For many American parents, "success" is equated with a house in the suburbs after a "successful" college education experience. Consequently, they "pressure" vigorously for these goals and consider anything short of them to be failure. More than one college dean has heard reports of parents who engage in bribery (a ski trip; a trip to the islands; a new car), to "influence" their offspring to go after that all-important sheepskin degree.

Dr. Robert W. Pitcher, co-author of "Why College Students Fail" find that many of today's teenagers do not evidence the strong motivational level of their parents. He believes the adolescent's motivation and persistence are slow to develop because ... "they are frequently over-protected by people who want them to have everything they didn't have -- such children have never really heard 'no'."

To avoid such emotional immaturity, wise parents will start emotional preparation for college well before high school entrance, seeking to discover and guide, without pressures ("hagging"), their children's ambitions, interests and aspirations. And as these young adolescents achieve a more realistic understanding of the realities of the world of work, their parents will -- if they are wise -- provide realistic help to their child in attaining his/her goals - not their own!

As Eugene S. Wilson, former dean of admissions at Amherst College has said, "Too many boys come to my office still holding on to their father's coattails. The boy, not Dad, should map out a college admissions program, for example. But a lot of fathers can't let go."

Dr. George Hall, head of psychiatric services at New York University, going a step beyond, suggests that compounding paternal pressure with maternal possessiveness will lead to a youngster with a highly developed "separation anxiety." In this state of helpless dependency, he/she is a prime candidate to become a dropout statistic.

Professional counselors recommend that parents allow their children to make some real-life blunders before they are expected to cope with the college experience. A suggested "exercise" is to let the youngster manage his/her own checking account, learning to live with the consequences of their own misjudgments. As Dr. Pitcher strongly advises: "Let him cover his own bounced checks."
In Perspective

Summarizing the findings and conclusions of the various attrition studies and investigations cited in this review, the following facts emerge:

(1) There are various elements of student characteristics and environmental press reported to differentially predict at the .05 or higher level of confidence between the junior college student persister and non-persister. These are noted in the following tabulation; referenced to the cited studies:

<table>
<thead>
<tr>
<th>Student Characteristics</th>
<th>Environmental Press</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Dropouts showed tendency to be enrolled for fewer than 12 units; persisters 12 units or more.</td>
<td>Higher dropouts at:</td>
</tr>
<tr>
<td>2 - Dropouts tended to be employed more times outside school than persisters.</td>
<td>1 - Private, church-related (29%) vs Private, independent (24%)</td>
</tr>
<tr>
<td>3 - Dropouts tended to have attended more schools prior to the 10th grade than did persister.</td>
<td>2 - Co-ed schools (28%) vs all-female schools (19%)</td>
</tr>
<tr>
<td>4 - Mothers of dropouts tended to have less education than mothers of persisters.</td>
<td>3 - Intermediate and larger enrollment schools (about 30%) vs smaller enrollment (about 20%)</td>
</tr>
</tbody>
</table>

(2) Without reference to statistical significance, certain descriptive statistics are noted which focus upon various "dimensions" of the dropout student. These are summarized in the following tabulation; referenced again to the cited studies.

<table>
<thead>
<tr>
<th>2-year Colleges (or Harcum alone*)</th>
<th>4-year Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - No response; presumed dissatisfied = 60%</td>
<td>1 - Desired subjects not in curriculum = 28%</td>
</tr>
<tr>
<td>2 - Transfer to 4-year college = 18%*</td>
<td>2 - Academic difficulties = 24%</td>
</tr>
<tr>
<td>3 - Difficulty in adjusting to college life = 29%*</td>
<td>3 - Difficulty in adjusting to college life = 21%</td>
</tr>
<tr>
<td>4 - Finances = 9%*</td>
<td>4 - Lack of goals or interests = 20%</td>
</tr>
<tr>
<td>5 - Institutional calibre not as high as expected = 25%*</td>
<td>5 - Institutional calibre not as high as expected = 18%</td>
</tr>
</tbody>
</table>
Ifert (1958)

1st - I was generally dissatisfied.
Co-equal 2nd - Change in curricular interest, & lack of interest in studies.
Co-equal 3rd - Desire to be near home, & expensive institution.

Among Women alone
1 - Marriage
2 - Taking a full-time job
3 - Financial difficulties
4 - Lack of interest in studies
5 - Low grades

Trent & Medsker (1968)

1 - Lack of open-minded, flexible and autonomous disposition.

Cohen & Brawer (1970)

1 - 70% of college persisters report parents urged college attendance. Less than 50% among withdrawals and 10% among non-attenders.
2 - Less committed to fulltime school work.
3 - More inclined to leave school when conditions impinge upon job or become otherwise unpleasant.
4 - Related to financial pressures
5 - Academic difficulties

Spady (1971)

1 - family
2 - academic potential
3 - previous educational background
4 - normative congruence
5 - friendship support
6 - intellectual development
7 - grade performance...
   Dominant factor
8 - social integration
9 - satisfaction
10 - institutional commitment
Astin (1972)

1 - 62% drop out

Principal predictors of persistence in 2- & 4-year colleges
1 - grades in high school
2 - scores on tests of academic ability
3 - being a non-smoking male
4 - not being employed during academic year
5 - have high level aspirations upon college entrance
6 - showing a religious preference
7 - financing one’s college education chiefly through parental aid, scholarships or personal savings.

Principal predictors of non-persistence: 2- & 4-year colleges
1 - plans to marry while in college
2 - holding a job during academic year
3 - smoking cigarettes
4 - being female
5 - turning in paper or theme late
6 - having no religious preference

(Panos, Astin (1967)

"Major" reasons for leaving 4-year college:

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>1 - Dissatisfied with college environment</td>
<td>18%</td>
</tr>
<tr>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>2 - Wanted time to reconsider goals/interests</td>
<td>18%</td>
</tr>
<tr>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>3 - Could not afford cost</td>
<td>21%</td>
</tr>
<tr>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>4 - Changed career plans</td>
<td>6%</td>
</tr>
<tr>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>5 - Academic record unsatisfactory</td>
<td>6%</td>
</tr>
<tr>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>6 - Tired of being a student</td>
<td>6%</td>
</tr>
</tbody>
</table>

Students who do not complete four years
1 - come from lower socioeconomic backgrounds
2 - have lower grades in high school
3 - have lower level of initial educational aspirations, than do students who complete four years.

Mai (1971)

Dropouts: - first-to-second year
1 - All-female, church-related = 16%
2 - All female schools, combined = 19%
3 - All-female, private, independent = 22%
4 - Co-ed, private independent = 23%
5 - Co-ed, public, community = 25%

Average - all respondents = 28%
6 - Co-ed schools, combined = 29%
7 - Co-ed, private, church-related = 40%

1 - 53% drop out
1 - An empirical validity of .65 is reported for a predictive model developed for identifying potential dropouts.

Turner (1970)

(Student characteristics) (College-related factors)
1 - Interplay of actual and perceived ability 1 - Student’s introduction to school
2 - Family and school background 2 - Student’s adjustment to faculty, curriculum and school mores.
3 - Motivation

2-year colleges
1 - To attend another college
2 - Enter armed services
3 - To become employed
4 - Objectives completed

Snyder & Blocker (1970)

1 - Finances
2 - Irrelevancy of college education
3 - Discouragement with meeting academic standards
4 - Marriage
5 - Health
6 - Family problems

Davis (1970)

Stocking (1969)

A = Persisters
B = Non-persisters

A
1 - Subsequent 4-year college enrollment 75%
2 - Mothers completed high school 75%
3 - Wanted to attend college and were supported in decision by both parents 80%
4 - Did not wish to attend but were encouraged to do so by at least one parent --

B
50%
82%
56%
17%

Gold (1970)

1 - Lowest quintile SCAT had lower persisters
2 - Males had lower persistence than females
3 - Blacks and Spanish-surnamed persisted slightly less than rate for combined group.

Berg (1965)

1 - Among low-ability students, found varying dropout rates at four junior colleges (60% to 83%)
Weigel (1969)

1 - Two reasons most often selected for leaving:
   (a) "that another school would offer more of what I was interested in."
   (b) "a general feeling of not getting anywhere."

(3) Abstracting from the various studies summarized in (2) above, the following tendencies and characteristics (in no particular order) appear to "profile" the college non-persister, as contrasted with the persister:

1 - Employed more time outside school
2 - More enroll in school as part-timers
3 - Attend more schools prior to 10th grade
4 - More often attend private, church-related and co-ed schools than other types of junior colleges.
5 - Lower high school GPA
6 - Lack of proximity to college
7 - Seek transfers to 4-year colleges
8 - Find institution calibre not as high as expected
9 - Desired subjects not in curriculum
10 - Experience academic difficulty
11 - Lack of goals or college-oriented interests
12 - "General" dissatisfaction
13 - Marriage
14 - Lack of interest in subjects
15 - Lack of open-minded, flexible and autonomous disposition
16 - Fewer parents urge college attendance
17 - Financial pressures
18 - Lower normative congruence
19 - Lower friendship support
20 - Lower social integration
21 - Lesser institutional commitment
22 - Want time to reconsider interests and goals
23 - Changed career plans
24 - Come from lower socioeconomic backgrounds
25 - Have lower initial educational aspirations
26 - Smoke cigarettes
27 - Being a female
28 - Turning in paper or theme late
29 - Having no religious preference
30 - Health problems
31 - Family problems
General Conclusions:

The subject of student attrition has institution-wide ramifications, as well as significant impact upon the well-being of the student as a whole person. The complexity of the problem of attrition is sufficient to challenge the imagination and resourcefulness of all segments of the college community. The advantages which are attendant upon improvement in the holding power of a college would seem to be sufficiently great to warrant the necessary attention, interest and effort required to bring it about. Continuing assessment of institutional experience in this important area is essential to the systematic evaluation of long-range trends and developments.

This sampled review of attrition literature suggests, in part, something of the variety and complexity of factors, both situational and personal, associated with student attrition. It has also focused attention on some of the considerations which might well be taken into account in further inquiry into the socially complex and important educational outcome -- student attrition.

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March 1972
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