In an effort to identify characteristics that relate to student dropout, 259
entering freshmen at a large community college were studied with personality, ability,
and demographic measures, and it was hypothesized that a group of highly efficient
predictor variables would become evident. Instruments used were the Omnibus
Personality Inventory (OPI), the Adaptive-Flexibility Inventory, a 34-item demographic
questionnaire, the Henmon-Nelson Tests of Mental Ability, and the Cooperative English
Test: Reading Comprehension. Although none of the findings was of major significance,
the authors felt that the differences found between dropouts and persisters in the
(1) scores on the Complexity Scale of the OPI, (2) number of units attempted, (3)
number of schools attended prior to the tenth grade, and (4) amount of mother's
education corroborate other research in this area and suggest further investigation.
It was also found that the higher an instructor tended to grade his students, the less
students tended to drop his class, and that present English placement procedures
tend to differentiate between cognitive and practical orientation. They conclude that
measures of goal orientation and personality may be more appropriate instruments
for placement and prediction than an English-usage test that does not yield as much
information. (MC)

SELECTED PERSONALITY CORRELATES OF

JUNIOR COLLEGE DROPOUTS AND PERSISTERS

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Student attrition rates in higher education have concerned educators, psychologists, sociologists, economists and the public at large for a number of years. "Dropout", "student mortality", "academic failure" and similar terms simultaneously generate anxiety-provoked action and resigned, passive acceptance. These concerns have instigated so many investigations that they "may soon rival college prediction studies in sheer numbers" (Knoell, 1966, p. 63). Even with the vast research efforts which have been put into the many attempts to understand and influence the problem, the percent of students who become academic dropouts remains fairly constant. Prevailing approaches to the consequences of attrition --economic and administrative--have not facilitated "the development of better understanding of college dropouts nor [have they] succeeded in substantially reducing high attrition rates" (Summerskill, 1962, p.629).

A segment of higher education that is particularly vulnerable to student dropout is the community junior college. It presents a variety of programs geared to different types of students who enroll for many reasons. Its students --terminal, transfer and returning--represent a broad sampling of society. They enter the junior colleges for vocational training, for cultural and self-development, for preparation to entering other schools and for, often, merely an excuse "to be", existing untouched in a "moratorium" (Erikson, 1963) until that time when they are ready to commit themselves to goals.

While many investigations deal with student attrition in highly selective universities and in state universities, few studies of junior college dropouts have been reported (Knoell and Medsker, 1965). There is a need for studies of students and action programs in the schools,

> particularly...in the junior colleges, where attrition is
> exceedingly high after only one year and where a large proportion
> of the students in transfer programs do not enter four-year insti-
> tutions. One very important aspect of such an evaluative approach
> is an assessment of the long-term effects of failure among college
> students (Knoell, 1966, p. 70).

The purpose of this study is to identify certain student characteristics which might relate to student dropout from a community college. The underlying hypothesis of the study is that there are significant differences between students classified as "Dropout" and those classified as "Persisters" in terms of one or more person-ality, ability or demographic measures. It is further hypothesized that a group of highly efficient predictor variables will become evident.

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Method

Subjects

The subjects of this study were students in a California community junior college of 8500 students, one of several colleges in a large city district. The college offers post-high school curricula including general, vocational and lower division college programs. Of the 259 entering freshmen included in the sample, there were 175 men and 74 women (10 did not designate). Their ages ranged from 17 to 30, with a mean and median of 18 years.

Approximately equal numbers of the total population were enrolled in each of three introductory English courses, one class from each of twenty instructors in the English department. However, because testing occurred over two class periods and because students may not have attended both the first and second class sessions, the total population of 259 did not respond to both instruments.

Instruments

Two personality measures were administered.

1)   The Omnibus Personality Inventory (OPI), Form F-X (Center, 1962) is an attitudinal inventory consisting of 390 statements arranged into fourteen scales. Developed by the Research and Development Center for the Study of Higher Education at the University of California, Berkeley, for college populations, the inventory is now published for more general use (Psych Corp., 1968).

The fourteen scales are constructed to assess certain characteristics of human behavior falling within the areas of normal ego functioning and intellectual activity. Scales include Thinking Introversion (TI), Theoretical Orientation (TO), Estheticism (Es), Complexity (Co), Autonomy (Au), Religious Orientation (RO), Social Extroversion (SE), Impulse Expression (IE), Personal Integration (PI), Anxiety Level (AL), Altruism (Am), Practical Orientation (PO), Interest Orientation (IO), and Response Bias (RB). According to the manual, respondents high in TI like abstract, reflective thought and are interested in academic activities. Those who are high in TO tend to be theoretically oriented and enjoy abstract thought while high Es respondents are interested in artistic activities and are highly sensitive to esthetic stimulation. High Co scorers reflect flexible and experimental orientations and appreciate ambiguous, novel situations and ideas. Liberal, non-authoritarian thinking and needs for independence are seen in high Au scorers, while skepticism and frequently, rejection of conventional religious beliefs, characterize those individuals who score high on the RO scale.

High SE scorers prefer to relate to people in a social context; high IE's exhibit a general readiness to seek early gratification for impulses. Individuals high in PI do not admit to feelings of being misunderstood by others nor do they experience barriers between themselves and others. Respondents who score high on the AL scale deny anxiety symptoms, worry and nervousness. People scoring high on Am tend to be affiliative and trusting in their personal relations, demonstrating strong concerns for the welfare of others. A high PO score suggests a person who takes a utilitarian approach to ideas. High scorers on the IO scale tend to deny esthetic interests, emotionality and sensitivity, prefer scientific matters and admit to few adjustment problems. The RB scale measures the test-taking attitudes of respondents; high scorers respond similarly to a group of students who were explicitly asked to answer items in order to make a good impression.

2)   The <u>Adaptive</u> <u>Flexibility</u> <u>Inventory</u>, (A-F) Form B-2 (Brawer, 1967) is a 180-word-association scale, developed as a research instrument to measure the degree of ego strength possessed by the respondent. Ego strength is operationally defined as a concept which refers to the various functions of the ego in its relationships to both outer reality and inner forces. It represents a composite of several dimensions, any or all of which may be present to varying degrees, and it can be demonstrated in the measures of adaptive-flexibility that are exhibited.

Individuals responding to this instrument are evaluated globally according to a 7-point scale: a score of one indicates so low a degree of ego strength that the individual appears to be severely disturbed and functioning only minimally. A score of two suggests a borderline individual who demonstrates low ego-functioning because of either below-average intellectual ability or interfering emotional problems. Threes, fours and fives represent the so-called average population, while sixes and sevens are especially reality-oriented, well-functioning, occasionally creative and usually very intelligent people.

3)   Questionnaire. The 34 questions to which the students responded were designed to elicit demographic information. Questions relating to previous high school work, family, parental information and future plans were included.

Procedure

Selection of students to participate in the study was made on the basis of their presence in English classes on the first or second class day of the spring semester, 1968. English classes were chosen because most entering freshmen enroll in them. One introductory English class was selected from each of the twenty instructors so that students at different levels of competence (as measured by the Cooperative English Test and a writing sample) were included. English 1, a university transfer course, demands scores of 56 or better on the Cooperative English Test; English 21, a course designed to prepare students for English 1, requires test scores between 45 and 55; English 30, a remedial course, is comprised of students who achieve test scores between 27 and 44. The writing sample is used to assign students into a higher or lower class when their scores on the test are close to the borderline between two categories. In all, eight English 1, five English 21 and nine English 30 classes were tested.

The A-F Inventory and the questionnaire were administered during the first hour in which the classes met; the OPI was given during the second hour. Both instruments were administered by the instructors according to written directions. The OPIs were scored as directed in the manual; A-F Inventories were evaluated by the developer of the instrument.

Results

Three groups of data were collected: 1) normative, i.e., age, sex, socio-economic class, number of schools attended, etc., 2) ability test, i.e., stanine levels on the Henmon-Nelson Tests of Mental Ability, and the Cooperative English Test: Reading Comprehension, and 3) data gathered from two personality assessment scales, the Omnibus Personality Inventory and the Adaptive-Flexibility Inventory.

The classification "Dropout" was assigned to students who did not finish the first semester and students who did not re-enroll or transfer to another school

at the beginning of the second semester. "Persisters" were those who finished the first semester and either re-enrolled or transferred prior to the second semester.

Although all students in the sample (259) were given all instruments, a large number (134) failed to complete the OPI in the allotted time. This factor of non-completion seriously biased the remaining sample in regard to the OPI, but the data from the other instruments were relatively complete. All tests for significant differences were non-directional since no direction of differences was predicted.

In the group of students who completed the OPI, 100 were Persisters and 25 were Dropouts: Of those who failed to complete the OPI, 100 were Persisters and 34 Dropouts. Although this difference was not significant, only completed OPIs were used in the data analysis because items in each scale are distributed throughout the instrument. Differences between the uncorrelated means on each OPI scale of the Persisters and the Dropouts were tested by $\underline{t}$ tests. Of the 14 scales, a significant difference was found only on the Co scale, on which the Dropout group was higher ($\underline{t}=2.36$, $p < .05$).

More complete data were available from the A-F Inventory, with scores from 187 Persisters and 56 Dropouts. Although the Persisters' mean A-F score was slightly higher than that of the Dropouts, the difference was not significant.

Henmon-Nelson (Grades 9-12) stanine scores were collected for 151 Persisters and 43 Dropouts. The differences between the means of the two groups on this measure was small and the derived $\underline{t}$'s were not significant.

The data from the questionnaire were almost entirely nominal and the null hypothesis of no difference between Persisters and Dropouts was tested by Chi-square for each relevant item. Significant differences were found as follows:

1) Dropouts showed a tendency to be enrolled for fewer than 12 units, whereas Persisters tended to be enrolled for 12 or more ($\underline{x}^2 = 10.56$, $p < .01$)

2) Dropouts tended to be employed more time outside school than Persisters ($\underline{x}^2 = 20.05$, $p < .01$)

3) Dropouts tended to have attended more schools prior to the 10th grade than did Persisters ($\underline{x}^2 = 12.65$, $p < .01$)

4) The mothers of Dropouts tended to have less education than did the mothers of the Persisters; specifically, more mothers of Dropouts did not complete high school ($\underline{x}^2 = 12.93$, $p < .05$).

With regard to the hypothesis that the data would yield a set of predictor variables, an initial intercorrelation matrix was formed. Each scale on the OPI, the A-F Inventory, aptitude stanines and all other measured variables were cor-related with each other (product-moment co-efficient) and with the dichotomous criterion variable, Dropout-Persist (point bi-serial). Further analyses were unrewarding because of the high intercorrelation among the proposed predictor variables, the very low correlation of any proposed predictor with the criterion variable, and the biasing of the sample. The students in the sample were

enrolled in three levels of English courses: English I (college parallel), English 21 (preparation for English I) and English 30 (remedial). There was no significant difference among the three groups in the attrition rate; similarly, there was no significant difference among the groups in the proportion of students withdrawing from that course.

In addition to the comparisons of the Dropout group and the Persister group on the variables measured by the instruments administered, comparisons were made of other sub-groups of the total sample. The data concerning personality variables and ability variables were used to compare the sub-groups, "First Semester Dropout: and "Second Semester Dropout." There were no significant differences between the two groups on any of the ability measures nor on the A-F Inventory. However, the First Semester Dropouts' mean on the TI scale of the OPI was significantly higher than was the Second Semester Dropouts' mean ($t = 2.28$, $p < .05$); and higher on the Es scale ($t = 2.41$, $p < .05$). On the IO scale, the Second Semester Dropouts' mean was higher than that of the First Semester Dropouts' ($t = 2.24$, $p < .05$).

The question of whether students grouped by English class level were different with regard to academic ability and personality factors was tested. An analysis of variance indicated significant differences on the OPI scales TI, Es, PO, and IO. Subsequent t tests indicated that the English I class was higher than the English 30 class on the TI scales ($t = 2.29$, $p < .05$) and Es ($t = 2.45$, $p < .05$). The English 30 class was higher than the English I class on the scales PO ($t = 2.95$, $p < .01$) and IO ($t = 3.58$, $p < .01$).

On the A-F Inventory, the English I class mean was significantly higher than the English 30 mean ($t = 2.32$, $p < .05$). The English 21 class mean was significantly higher than the English 30 mean ($t = 2.27$, $p < .05$). The English I class mean was slightly higher than the English 21 class mean.

On the Henmon-Nelson, the English I class mean was significantly higher than English 21 ($t = 2.46$, $p < .05$) and English 30 ($t = 5.61$, $p < .01$). The English 21 mean was higher than the English 30 ($t = 3.96$, $p < .01$). For all three English classes there was little difference in rate of attrition. On self-reported high school GPA, there was no significant difference between the Dropouts and the Persisters ($t = .559$).

Discussion

The study did not yield any findings of major importance regarding the question of the differences between Dropouts and Persisters on selected measures. However, there were certain results that suggest further investigation.

The fact that students who scored high on the Complexity Scale of the OPI were more likely to drop out of school than those who scored low on that scale corroborates findings reported in a study of UCLA freshmen (Hessell). Trent and Medsker also noted that, "On the Complexity scale...the withdrawals [had]...a higher mean score than the persisters, although differences were not statistically significant." (1968, pp. 136, 138). It is conceivable that in some cases the Complexity scale actually reflects a general disregard for tradition rather than an ability to tolerate ambiguity.

Twelve semester units is 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, this may suggest they are less committed to full time school work, hence more inclined to leave when conditions within the college become unpleasant or impinge on their other activities, such as their jobs. It also suggests--as does much of the literature--that withdrawal from the junior college is related to financial demands, especially since Dropouts reported more time spent in outside employment.

Another finding was that Dropouts reported a greater number of schools attended prior to the tenth grade. This may suggest early instability in the family and also that, once a pattern of non-completion is established, it may persist throughout the school years.

Family influence on college attendance has been reported by many investigators. The finding in this study that mothers of Dropouts were less likely than mothers of Persisters to have completed high school corroborates these previous findings.

Dropouts may be less committed than Persisters but they may be realistic. Seven instructors taught sections of English I. For purposes of this study, individual student grades were computed by section and the instructors were 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 class-- and indeed, of school--when they realize they are in a precarious position regarding grades. When OPI measures were related to placement in English classes, the results implied that so-called "tracking" practices may actually be differentiating between the cognitively and the practically-oriented individual. If further study substantiates this finding, it would be reasonable for junior colleges to place students into English classes on the basis of goal orientation (academic or vocational) or on a test of English usage. However, if goal orientation and personality measures point to both placement and propensity to persist (or drop) and a test of English usage only suggests placement, it may be more expedient to use measures that yield the greater amount of information.

Bibliography

Brawer, Florence B. The Concept of Ego Strength and its Measurement Through a Word Association Technique. Doctor's Thesis. Los Angeles: University of California, 1967.

Center for the Study of Higher Education, Omnibus Personality Inventory. Research Manual. Berkeley: University of California, 1962.

Erikson, E. H. Childhood and Society. (2nd edition). New York: Norton, 1963.

Henmon-Nelson Tests of Mental Ability. Revised Edition (Grades 9 - 12). Boston: Houghton-Mifflin Co., 1961.

Hessell, William F. (Personal Communication.)

Knoell, D. M. "A Critical Review of Research on the College Dropout." The College Dropout and the Utilization of Talent. (Edited by L. A. Pervin, L. E. Reik, and W. Dalrymple.) Princeton: Princeton University Press, 1966.

Knoell, D. M., and Medsker, L. L. From Junior to Senior College: A National Study of the Transfer Student. Washington, D. C.: American Council on Education, 1965.

Summerskill, J. "Dropouts from College." The American College. (Edited by N. Sanford.) New York: John Wiley and Sons, Inc., 1962. pp. 627-657.

Trent, James, and Medsker, Leland. Beyond High School. San Francisco: Jossey-Bass, 1968.