MALE UNIVERSITY ATTRITION:
A DISCRIMINANT ANALYSIS

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Ability and personality test scores of 256 males, categorized by college persistence seven semesters after matriculation, were subjected to stepwise discriminant analysis. A combination of personality and ability variables distinguished between groups (p<.001); personality variables alone did not. The most powerful discriminator was overall ability. Authoritarianism, natural science ability, and nonconformity also entered into the discrimination. Results indicate: (a) the most able, most autonomous group included those who withdrew; (b) the most authoritarian, those who became seniors; (c) the most nonconforming, those who “continued” without becoming seniors, and (d) the highest in ability to think abstractly and scientifically and to solve problems, the academic dismissals who with difficulty succeeded in gaining reinstatement.

College attrition, averaging 50% for half a century (Summerskill, 1962), has meant a loss in time, money, energy, and emotional wear and tear on students, faculties, and society. Evaluating nation-wide findings from attrition studies has been difficult, in part because of differences in criteria and terminology. Early studies defined the dropout as one who failed to receive the bachelor’s degree from the institution of first enrollment in four consecutive years. However, it has become increasingly evident that such a pattern of attendance is atypical, particularly in state universities.

Theorists have moved from relating college persistence solely to academic ability and financial resources, to considering also the function of personality in attrition. Williams (1967) pointed out that although the omission has been glaring, scholastic ability has not generally been included in dropout studies which have
focused on nonintellectual characteristics. On the other hand, Elton and Rose (1967a) subjected American College Test (ACT) and Omnibus Personality Inventory (OPI) factor scores for groups of scholarship winners to discriminant analysis and found the effect of the ability measures so overpowering that the investigators speculated on whether personality variables would have been more discriminating had ACT scores not been included in the analysis.

Elton and Rose (1967b), again using the ACT and the OPI, found personality differences between those who remained in engineering and those who transferred to another college. Hanson and Taylor (1970), using ability and personality measures, concluded that ability separated those who withdrew from those who persisted.

The purpose of this study was to determine how certain cognitive and noncognitive variables, as measured by the ACT and the OPI, relate to university attrition for all males regardless of academic major.

An effort was made to avoid design deficiencies of some earlier studies and also to generate more meaningful results by using multivariate analysis, and by subjecting to analysis a combination of cognitive and noncognitive variables, and also noncognitive variables alone.

Two generalized multivariate hypotheses were proposed:

I. It is not possible to discriminate among groups of males classified by college persistence on the basis of linear combinations of variables which include measures of students' ability and personality configurations.

II. It is not possible to discriminate among groups of males classified by college persistence on the basis of linear combinations of personality variables alone.

METHOD

Sample

The 1,474 males with no prior college credit who enrolled on the Lexington campus of the University of Kentucky in the fall of 1966 comprised the population of this study. A randomly drawn sample yielded 256 males for whom ACT and OPI data were available.

Categorization was derived from student records examined in the seventh semester after matriculation. It had been the intent of the investigator to identify subjects as those who had become seniors, those who had withdrawn in academic difficulty, and those who had been dropped because of scholarship. The latter two groups were to have been subdivided into those who had and those who had not re-enrolled. However, examination of records disclosed that only one male who had withdrawn in academic difficulty had returned, only two who had withdrawn in good standing were enrolled at the time of the study,