CORRELATES OF ACADEMIC ATTRITION

by

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INTRODUCTION

It has become increasingly evident that the problem of academic mortality among college students merits research attention. Wolfle, et al (32) demonstrated that there is currently a severe shortage of college trained people, and it appears likely that this deficiency will continue for at least another decade. On the other hand, Berdie (2) found that only about half of the high school graduates who appeared to be good college prospects actually attended college. Clearly, one reason for the circumstance which Wolfle describes is to be found in Berdie's report.

Obviously, the need for more college graduates could be met if ways could be found to increase the number of qualified high school graduates attending college. This solution would involve a marked increase in the already over-taxed capacities of universities and colleges to provide higher education.

An alternative approach would be to graduate a higher percentage of college students than is current practice. This could be done by lowering academic standards - an academically unpopular and probably self-defeating measure - or by "salvaging" a greater percentage of qualified students who do not graduate.

If the "salvaging" process is going to be successful there will need to be a better understanding of the conditions and correlates of unsuccessful college work by academically qualified students. There are a multitude of personal and situational factors which may be associated with premature termination of college studies.

It is conceivable that a number of qualified students may withdraw because of certain conditions at the institution which could realistically

be changed. For example, better housing facilities, restricted electives, etc. On the other hand, some may withdraw because they have personal characteristics such as poor study habits or mild behavior disorders, which tend to inhibit academic progress. Once identified, such characteristics may be modified; others may be practically unmodifiable. In the former case, colleges may institute remedial programs. In the latter, they may conceivably set new admission standards.

Apart from the considerations of societal need and the college's training capacities, academic mortality has serious implications for the individual student. It is often with a great deal of lost pride and decrease in self-confidence that many students return to their families and friends (Iffert, 13). The psychological consequences of failure in an academic institution have not received systematic attention from research workers but casual observation and limited research would suggest that they are considerable in many cases (Quarles, 24).

Clearly, it would be advantageous to students, college administrators, and to society in general if the academic mortality rate could be reduced. Granted that a large proportion of attrition cases represent low ability students who were unable to compete intellectually, it seems likely that a significant number of ability-qualified students also fall by the wayside (Stagner, 25). It is to this general problem that this study is addressed.

REVIEW OF LITERATURE

A number of studies have been done on factors related to student mortality. Nearly all of them have concluded that the causes of student mortality are numerous and complex. Several of these studies have employed

a questionnaire as a follow-up technique for getting information concerning the dropout students (4, 6, 13, 17, 18). In none of these studies has the percent of questionnaire returns been large enough to validly infer that the results were representative of the entire attrition population.

Nevertheless, several studies have consistantly reported six reasons for withdrawal (18, 19, 20, 24). In order of importance these were: (1) failure in college work, (2) lack of finances, (3) lack of interest, (4) illness, (5) disciplinary dismissal, and (6) needed at home.

It is not surprising that failure in college work ranks first among reasons for withdrawal (6, 14, 16, 18, 19, 20, 21, 31). Several studies (3, 16, 26) have suggested that one of the most likely reasons for failure is limited academic ability.

However, in almost all the studies some low ability students were successful and some high ability students failed in college work or dropped out for some other reason.

Most of the studies that investigated the factors related to academic attrition did not control the ability factor. Findings from such studies may not be reliable because the differences in ability were confounded with other differences. Arnholter (1), for instance, studied the difference between persisting and attrition high school students on two personality tests (The California Mental Health Analysis and The Rotter Incomplete Sentence Blank). She concluded that the dropouts were less well adjusted than the persisters. Stewart and Roberts (27) studied differences between attrition and persisting students on the Kuder Preference Record at George Peabody College for Teachers. They found the latter scoring higher on outdoor and mechanical interests, whereas the former scored higher on persuasive and clerical interests. Herriott (12) studied attitudinal

differences between persisters and dropouts using five custom-made attitude scales. He found that those students who persisted tended to score higher than did the withdrawees on evaluative and persevering attitudes, and lower on the attitude of self-confidence.

The United States Office of Education reported an extensive study in this area (18). They found that withdrawees and persisters differed on a number of factors. A higher percentage of older students (20 years vs. 17 years) withdrew from college. Moreover, a larger percentage of the students whose homes were farther away from school, and who did not live in Greek houses, withdrew.

Several studies have been made on the differences between attrition and persisting students in regard to background factors (1, 5, 8, 15, 17 22, 28, 30). In general, these studies have pointed out that withdrawees tended to come from below average size families in which the parents had high school educations. In addition, in a substantial number of cases the family was of rather low economic status.

In none of the above studies was the factor of scholastic aptitude held constant. This appears to be a serious error insofar as one might logically expect a relationship between scholastic ability and many of the factors reported to be associated with academic attrition. For example, it has been shown that sons of professional men score higher on scholastic aptitude tests than do sons of laboring men (29).

Only two studies were found in which an attempt was made to equate the attrition and persisting students on the factor of scholastic aptitude. Griffiths (10) studied the personality differences between freshman men who persisted at Ohio State University and those who were on scholastic probation. In order to study these differences he equated the persisters

and those students on scholastic probation on their <u>Ohio State Psychological Examination</u> scores. Then, by comparing the scores which the students in these two groups received on the <u>Bell Adjustment Inventory</u> he found that there were no significant personality differences, according to this measure, between those students who were academically successful and those who were not.

Another study in which the persisting and attrition students were equated on ability scores was done by Fullmer (9). The measure of ability which he used was the <u>American Council on Education Psychological Examination</u>. He found that there was no significant difference between the two groups in regard to grade point averages. There was, however, a tendency for the students in the persisting group to have changed majors more frequently than dropouts.

From this review of literature, it is clear that the general conclusion regarding the number and complexity of factors related to student mortality is justified. In addition to the factor of academic ability, the literature review does suggest that the students in the attrition and persisting groups could differ on a number of other factors. Six studies (1, 3, 14, 20, 24, 25) have suggested possible personality differences. Another (27) suggested differences in vocational interests. A number (5, 15, 17, 20, 22, 28, 30) indicated certain background differences which were related to attrition; another (12) suggested attitudinal differences. As has been pointed out, these studies have been found lacking in terms of experimental sophistication.

Therefore, the suggestions gleaned from this review of literature must be considered to be highly tentative.

Problem

Even though the suggestions found in the review of literature must be considered to be highly tentative, they were accepted as a starting point for the present study. Formally, the problem under investigation was the identification of psychological and sociological characteristics related to academic attrition among ability-qualified freshman men at Kansas State College.

PROCEDURE

Sample

The sample used for the study was drawn from a group of 219 Kansas State College male freshmen who had withdrawn from college at or before the end of their first semester. This study was concerned with personal characteristics other than low ability associated with student withdrawal. Therefore, only those students in the schools of Agriculture and Arts and Science who had a raw score of 95 or higher on the American Council on Education Psychological Examination were used. For the school of Engineering and Architecture, only those students who made a raw score of 33 or above on the Pre-Engineering Aptitude Test were selected for study. These cut-off points were chosen because students who made such scores would be "expected" (statistically) to earn grade point averages of 1.0 or higher. (The overall grade point average required for graduation is only 0.7.) A total of 54 students (24.7 percent) of the original group were found to have scores at or above the cut-off points.

A comparison group of 54 persisting male freshmen was selected at random after two conditions had been met. First, the persisting student

had to have been enrolled in the same school as his attrition mate. Second, the two students (one dropout, one persister) had to have identical scholastic aptitude test scores.

Characteristics Studied

It was convenient to group the data on which persisting and attrition students were compared into four categories. These categories were personality, background, vocational interests, and attitudes and values. The measures used were not designed especially for this study, but rather were those available from the freshman orientation testing program. Thus, only limited aspects of each of the four areas could be investigated.

The test which was used to measure personality was the Edwards Personal Preference Schedule (P.P.S.). Definitions of the fifteen needs which it purports to measure are included in Appendix A. This is a test which was devised for the purpose of measuring the relative strengths of psychological needs. There also is a consistency score which is an indicator of how consistent the student was in his answers to the test questions.

The motivational orientation of this test, together with its careful development (particularly in the matter of overcoming the tendency of subjects to over-choose socially desirable responses), make it a particularly appealing device for an investigation of this kind.

The background factors were measured by the Biographical Information Inventory (BII) - a locally devised questionnaire containing questions about personal history, attitudes, and values. A copy of this instrument is included in Appendix A.

Vocational interests were measured by the Strong Vocational Interest Blank for Men. This test is composed of questions about interests which

are generally possessed by men in particular occupations. Two types of
scores are provided - occupational and non-occupational. The former include
scores on 45 specific occupations. These occupations are grouped into
seven major occupational groupings, and four single-occupation groups. Each
of the seven groups had previously been judged by Counseling Center
counselors as to whether it was a primary, secondary, tertiary, reject, or
no pattern. It was these judgments, rather than specific occupational
scores, which were employed in this study.

Exact scores were used for the three non-occupational keys -- Interest
Maturity (IM), Occupational Level (OL), and Masculinity - Femininity (MF).
The first represents the degree to which one's interests correspond to
15 year old boys as opposed to 25 year old men; the second describes the
degree of similarity to business and professional men as opposed to
unskilled laborers; and the third provides a rating on the degree to which
the individual's likes and dislikes correspond to those of men as opposed
to women.

Vocational values were measured by the Choosing An Occupation
Questionnaire -- a locally devised instrument which requires the ranking
of 12 vocational values (Advancement, Security, Prestige, etc.). A copy
of this instrument is also included in Appendix A.

Statistical Analysis

Where there was a reason to expect possible school differences, the
data were analyzed separately by school before being pooled to test for
over-all differences between persisting and attrition groups. The groups
were compared statistically by using the $\underline{t}$ test or, where appropriate (i.e.,
where the data were discrete or non-normal) by the Chi-square technique.

It was decided to call differences statistically significant at the 5 per cent level of probability "significant" differences, and differences which were statistically significant at the 10 per cent level "trends".

The number of students in the equated groups differed in the various phases of this study because not all of them took every test. When the results on a given measure were unavailable for a given student, that student and his control were both eliminated from that aspect of the study.

RESULTS AND DISCUSSION

As noted earlier, it was convenient to group the findings of the study into four broad categories -- those relating to differences in personality characteristics, in background, in interests, and in attitudes and values. Results under each of these categories are presented and discussed below.

Personality

Scores on the PPS for 48 pairs of attrition and persisting groups were available. Table 1 presents the major findings of this analysis.

Table 1. Comparison of attrition and persisting groups on the Edwards Personal Preference Schedule

Need	:	Attrition Group N = 48		:	Persisting Group N = 48		:	t
		Mean	s.d.		Mean	s.d.		
Achievement		14.9	4.3		15.2	4.4		.421
Deference		12.9	3.7		13.3	3.7		.445
Order		10.9	3.6		10.5	4.4		.527
Exhibition		13.8	3.9		14.0	5.5		.191
Autonomy		14.1	4.3		12.6	5.0		1.657*
Affiliation		16.3	4.4		15.3	4.1		1.158

Table 1. (Cont'd)

Need	Attrition Group N = 48		Persisting Group N = 48		t
	Mean	s.d.	Mean	s.d.	
Intraception	13.7	4.8	15.3	4.3	1.725*
Succorance	9.9	4.9	11.1	4.6	1.256
Dominance	14.4	4.9	15.2	5.0	.842
Abasement	15.0	4.1	16.9	4.2	2.224**
Nurturance	15.6	4.8	15.0	3.8	.613
Change	15.3	4.6	13.3	4.8	2.142**
Endurance	15.2	6.1	15.2	5.5	.000
Heterosexuality	15.7	7.5	14.6	6.4	.774
Aggression	11.9	4.3	11.6	3.6	.335
Consistency	10.8	2.1	10.8	2.5	.089

*$p < .10$
**$p < .05$

Two significant differences were found ($p < .05$). Persisters averaged significantly higher on the need for abasement, while the attrition group scored higher on the need for change. In addition, trends ($p < .10$) were found on needs for autonomy and intraception, with the attrition group scoring higher on the former and lower on the latter.

The fact that students who persisted in college scored higher on the need for abasement may be interpreted as indicating that they were better able to accept criticism and blame than were the students who withdrew. Higher autonomy scores by the attrition group may indicate stronger desires for independence from college and its rules and regulations. One might hypothesize that, as a group, the attrition students were somewhat more rebellious and given to projection, while the persisting students were more mature.

The notion might be advanced, in regard to the withdrawees scoring

higher on the need for change, that perhaps they found school too humdrum, routine, and lacking in variety. If this characteristic can be interpreted as indicating some restlessness on the part of the dropouts, one might infer tendencies toward impulsivity on their part. Higher intraception scores on the part of the persisters may support this interpretation, insofar as intraception is associated with an analytical thoughtfulness.

At best, these are speculations. Even for these four variables, mean differences were small and standard deviations were relatively large. Thus, while some statement about group differences is possible, and suggestive interpretations can be made, nothing about the personality of the individual withdrawee or persister can be said. A pattern analysis, in which various combinations of needs were studied, might prove illuminating.

Background

A number of background factors to which the students had responded on the Biographical Information Inventory were studied in an attempt to find out if there were any differences between the attrition and persisting groups.

The factors studied were:

1. Age

2. Veteran status

3. Population of home town

4. Influence of high school background on college achievement

5. Number of seniors in high school graduating class

6. Father's education

7. Mother's education

No significant differences or trends were indicated by the data. (Tables 7, 8, 9, 10, 11, 12, and 13 in Appendix B). The median age for the students in both the persisting and attrition groups was 18. (Table 7 in Appendix B). Some interesting tendencies (not statistically significant) were noted. There was a slight tendency for the withdrawees to be from either towns of less than 1,000 or cities over 10,000, whereas the persisters tended to be from towns of intermediate size (Table 8 in Appendix B). Moreover, there was a tendency for the students who persisted to believe more things in their high school background influenced their college achievement positively (Table 9 in Appendix B). There was a slight tendency for more dropouts to have come from high schools where the number of seniors was less than 50 (26 attrition students versus 19 persisters) (Table 10 in Appendix B). The adjustment from high school to college may have been more difficult for these students (24). The differences in parental education and in veteran status were extremely small. (Appendix B, Tables 11, 12, and 13).

Background factors investigated in this study seemed to be relatively independent of group classification (attrition or persisting). But to say background is unimportant would be unrealistic for two reasons. First, only a limited amount of background data was examined. Second, as in the case of personality characteristics, only group trends were tested; it seems likely that a more thorough research into individual background patterns would produce more positive results.

Interests

Scores on the Strong Vocational Interest Blank were available for 47 pairs of subjects. Comparisons were made on both occupational and

non-occupational interests.

Occupational Interests. The frequency of occurrence of primary, secondary, tertiary, reject or no patterns on each of the seven major interest groups was tabulated. Since one would logically expect students enrolled in different schools to have different interests, attrition and persisting subjects enrolled in the same school were compared. The Chi-square test of statistical significance was employed.

No differences were found between dropouts and persisters in terms of their occupational interests. The data from which this conclusion was drawn are summarized in Table 14 in Appendix B.

The number of cases within each school was so small that the negative finding should be regarded as tentative. It would appear safe to conclude that the occupational groups of the SVIB had very little, if any, power to discriminate between persisters and dropouts as defined in this study.

Table 2. Scores on the Occupational Level Scale for groups of persisting and attrition students.

| | | | Group | | | | | |
| | | | Attrition | : | Persisting | : | t |
School	:	N	:	Mean	s.d.	Mean	s.d.	
Agriculture		11		43.8	5.7	48.4	3.4	2.2**
Arts and Science		21		48.3	4.5	48.7	5.8	0.3
Engineering		15		46.7	5.6	47.8	3.9	0.6
Total		47		46.7	5.4	48.4	4.6	1.5

**$p < .05$

Non-Occupational Interests. Table 2 presents the results obtained on the Occupational Level Scale. While persisters averaged higher than

dropouts in all three schools, the difference was significant only in the school of Agriculture. The magnitude of the difference was so slight in the schools of Arts and Science and Engineering that, despite this consistency, combining the groups led to acceptance of the null hypothesis.

The tendency for the persisters to score higher on the O.L. key is in agreement with the findings of several other studies (11, 16, 23).

Table 3. Scores on the Masculinity-Femininity Scale for groups of persisting and attrition students

School	:	N	:	Attrition		:	Persisting		:	t
				Mean	s.d.		Mean	s.d.		
Agriculture		11		56.6	5.2		52.4	6.0		1.7*
Arts and Science		21		52.1	7.6		47.6	8.7		1.8*
Engineering		15		55.8	6.0		55.6	7.1		0.1
Total		47		54.3	6.8		51.3	8.3		1.9**

*p $\leq$ .10
**P $\leq$ .05

Table 3 presents the results obtained on the Masculinity-Femininity Scale. No significant difference (p $<$ .05) was found when the students in the attrition and persisting groups were compared by school. However, a significant difference was found when the schools were pooled. Those students who withdrew scored higher than those who persisted. Two trends were found when comparison was made by schools. Those students in the attrition group scored higher on the M-F scale than did those who persisted in the schools of Agriculture and Arts and Science.

When the students in the attrition and persisting groups were compared on the Interest Maturity Scale, a slight but not statistically significant

tendency was found for the students in the persisting group to score higher than the withdrawees. Refer to Table 15 in Appendix B.

Results on the non-occupational scales of the SVIB are often discussed under the topic of "personality" rather than "interests" (cf. Darley and Hagenah (7)). While the differences reported here were not large, they do suggest tendencies on the part of the persisting group to identify somewhat more closely with professional (as opposed to laboring) men and to be somewhat more feminine (cultured? broad?) in their likes and dislikes. Further study of these characteristics would probably be rewarding.

Attitudes and Values

As noted earlier, there were two sources of information regarding the attitudes and values of the subjects. One was the Choosing an Occupation questionnaire, in which the students placed in rank order 12 different "vocational values". (Advancement, security, salary, prestige, etc.) Since this questionnaire was distributed 9 weeks after classes started, results from it were available for only 32 pairs of subjects. The other source of information was the Biographical Information Inventory (BII) results of which were available for 47 pairs on 4 of the measures and 45 on the remaining 3 measures.

For the most part, persisting and attrition students were homogeneous with regard to their vocational values. Refer to Table 16 in Appendix B. Only one trend was found -- on the vocational value of "Prestige". Table 4 describes this finding.

Table 4. Importance of "Prestige" in the vocational planning of persisting and attrition students

Group :	Ranking 1, 2, or 3 :	4 - 9 :	10, 11, or 12 :	
Persisting	2	15	15	N = 32
Attrition	0	23	9	N = 32

$p < .10$

From Table 4, it is apparent that persisters tended to rate prestige as less important than did the attrition group. However, two persisters placed this value in one of the first three ranks, whereas none of the attrition group rated it that highly. Such an inconsistency may mean that strong feelings regarding this value, regardless of their direction, are associated with persistence. Alternatively, it may simply be reflecting chance fluctuations in the ratings. Further study of this variable is needed to clarify the interpretation of this finding.

A variety of attitudes and values were studied from the BII. (a) 22 fairly general attitudes toward school and life in general (see pp. 4 and 5 of the BII included in Appendix A); (b) educational goals in college; (c) perceived attitude of parents toward vocational goal; (d) perceived chances of graduating from college; (e) matters the student had changed his feelings toward; (f) matters he was still deciding about; and (g) number of things liked about previous school experiences.

Again, for the most part, the two groups were homogeneous with respect to these attitudes. Refer to Tables 17, 18, 19, 20, 21, and 22 in Appendix B. Only two trends were found. (a) On the statement "At least half of a student's college courses should be electives (not required courses)", the persisting group tended to be uncertain, whereas

the dropout group both agreed and disagreed more frequently. This finding is presented in Table 5.

Table 5. Responses of the students in the attrition and persisting groups to the statement "At least half of a student's courses should be electives (not required) courses".

Group		Disagree		Uncertain		Agree		Total	
	:	No.	%	No.	%	No.	%	No.	%
Attrition		26	55	9	19	12	26	47	100
Persisting		18	38	19	40	10	21	47	100

The other trend was found in regard to the number of matters the students were still deciding about. The students in the attrition group tended to still be deciding about more things. These results are shown in Table 6.

Table 6. Responses of the students in the attrition and persisting groups in regard to the number of matters about which they were still deciding

		Number of Matters Still Deciding									
		0		1		2,3		4 to 9		Total	
Group	:	No.	%	No.	%	No.	%	No.	%	No.	%
Persisting		14	30	12	26	18	38	3	6	47	100
Attrition		18	38	10	21	9	19	10	21	47	100

From Tables 5 and 6, it is clear that these trends did not represent clear-cut findings. For the present, it seems safest to assume that these differences represent chance fluctuations, but more extensive study at a later date may establish these trends with more certainty.

In summary, it appears that, in terms of the attitudes and values assessed in this study, the two groups were very similar. All differences found were statistically non-significant, and thus, highly tenatative.

As in the case of personality, interest, and background factors, the study

of group differences in attitudes and values was relatively unproductive

and may have covered up some of the individual differences.

IMPLICATIONS

It is abundantly clear that the attrition and persisting groups were

not separated effectively on the basis of the variables considered in

this study. Why might this be so?

One reason would be that the groups really didn't differ, that is,

that persistence in or withdrawal from college are "chance" determined

behaviors. This explanation is hardly sensible; what is "chance" other

than the sum of our ignorances? Three alternative types of explanations

occur--a faulty sample, limited measurement, and/or an ineffective method.

Regarding the first, a faulty sample, it will be recalled that the

groups were defined on the basis of whether or not the students registered

for second semester classes. If so, the student was called a persister;

if not, he was labeled an attrition student. It seems likely that many

errors of classification occurred in the process. Some "attrition"

students may have temporarily interrupted their training because of ill-

ness or finances; others may have enrolled in other colleges. Similarly,

it is likely that a number of "persisters" will become "attrition" cases

before four years have passed. Productive study of the sociological-

psychological characteristics which differentiate dropouts from persisters

requires a more careful definition of these groups than that provided in

this study.

It is seldom that data collected for one purpose can serve well other

purposes. The various measures utilized in this study were collected for

two main purposes: (a) to assist counselors and advisors in working with
individual students; (b) to describe the general characteristics of the
freshman class at Kansas State. These purposes overlap, but are not
identical with the purpose of the present study. Questionnaires and
inventories especially devised to investigate the problem of attrition
among ability-qualified students would be helpful.

Finally, the complexity of the problem raises questions as to how it
might most profitably be investigated. The search for mean differences,
required by the design herein employed, implies hypotheses concerning
the "type" who withdraw as opposed to the "type" who persist. Common
sense and psychological experimentation argue against this "type"
concept, and statisticians have agreed by pointing out how the mean
often conceals more than it reveals. Conceivably, a more fruitful
approach at this time might be a relatively intensive clincal study
of individual dropouts and persisters. Such a study might well suggest
patterns of characteristics predictive of future academic behavior.
At the very least, it could provide a framework for developing the
measurement devices discussed previously, and for developing hypotheses
concerning the dynamics of persistence and withdrawal.

SUMMARY AND CONCLUSIONS

The major goal of this study was to examine the relationship of a
number of personal and situational factors to college withdrawal among
ability-qualified freshman men at Kansas State College.

A sample of 54 male students was taken from a group of 219 freshmen
who had withdrawn from college at or before the end of their first
semester. Since this study was concerned with dropouts who appeared to

be qualified for college work on the basis of scholastic aptitude, only those students whose test scores predicted first year grades of 1.0 or higher were included.

A comparison group of 54 persisting male freshmen was selected at random after two conditions had been met. First, the persisting student had to have enrolled in the same school as his attrition mate. Second, the two students (one dropout, one persister) had to have identical aptitude test scores.

The data on which the persisting and attrition students were compared was grouped into four categories. These were personality, background, vocational interests, and attitudes and values.

Assessment devices included the Edwards PPS, Strong VIB, and two locally devised questionnaires designed to collect information on students' background, attitudes, and values.

The following conclusions appear warrented when they are considered within the limits of the sample used:

1. The persisters averaged significantly higher on the personality need for abasement, while the students in the attrition group scored higher on the need for change.

2. Trends were found on needs for autonomy and intraception, with the students in the attrition group scoring higher than the persisters on the former and lower on the latter.

3. Background factors investigated seemed to be relatively independent of group classification (attrition and persisting).

4. No differences of any consequence were found when the persisting and attrition groups were compared on vocational interests. However, the persisters scored higher on the Occupational Level key and lower on the

Masculinity-Femininity measure than did the withdrawees.

5. Measures of attitudes and values failed, in general, to separate the two groups. Three isolated and inconsistent trends were found.

6. Several suggestions for further research were discussed.

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APPENDICES

APPENDIX A
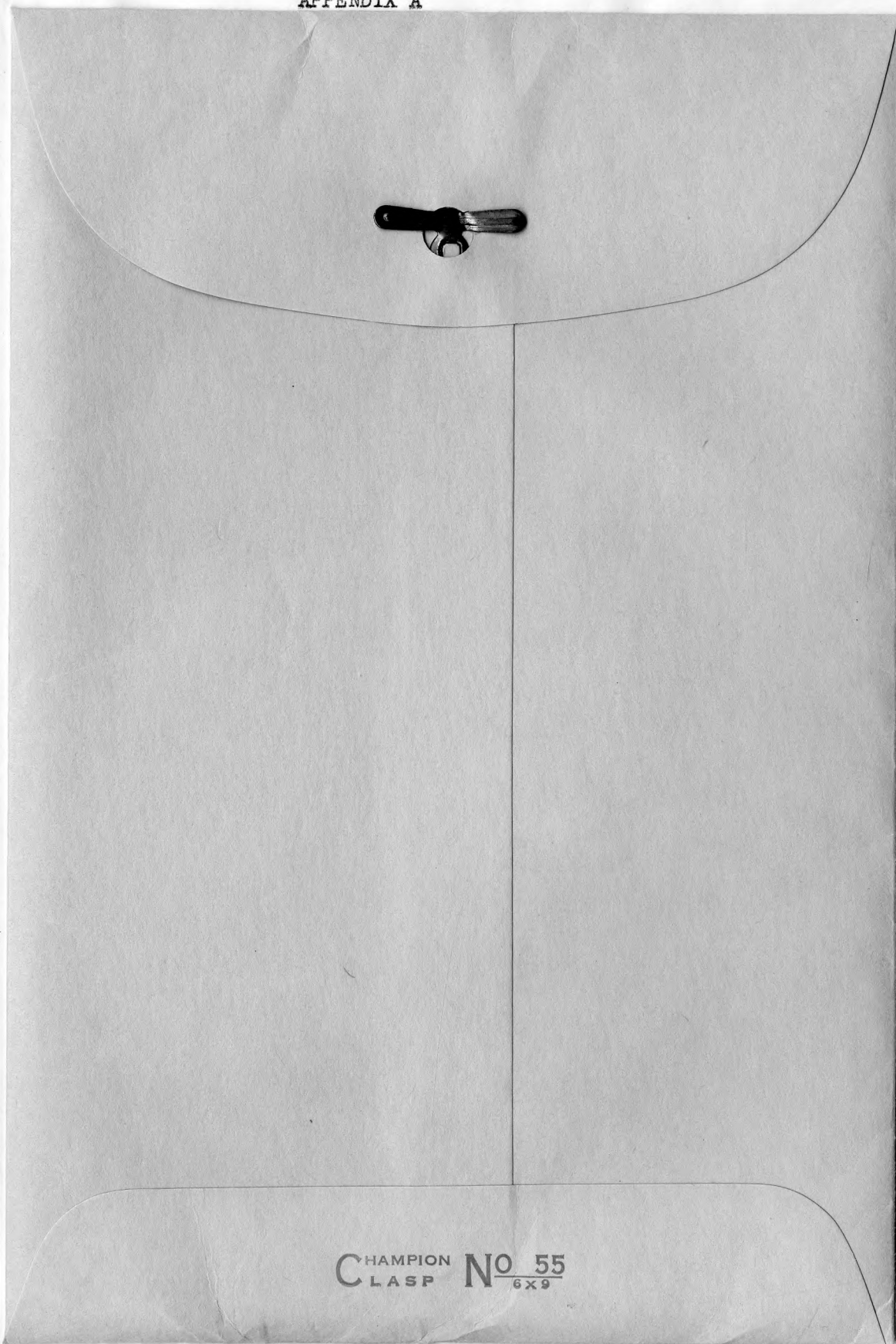
CHAMPION
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Need Definition List

Ach (Achievement): To be known as an authority on something, to accomplish something of significance, to be able to do things better than others.

Def (Deference): To get suggestions from others, to follow the leadership of others, to do what is expected of you.

Ord (Order): To like order, to aim for perfection in detail, to have things planned and organized.

Exh (Exhibition): To be the center of attention, to make an impression, to have an audience.

Aut (Autonomy): To be free to do what you want, to defy convention, to be critical of authority.

Aff (Affiliation): To make many friends, to form strong personal attachments, to do things with friends rather than alone.

Int (Intraception): To analyze oneself or other people, to understand why people behave as they do, to predict how others will act.

Suc (Succorance): To want encouragement, have others interested in your problems, receive affection from others.

Dom (Dominance): To dominate others, to be a leader, to influence others, to make decisions.

Aba (Abasement): To accept blame when things go wrong, to feel guilty when one does something wrong, to avoid personal conflicts.

Nur (Nurturance): To be helpful to others, to encourage others, to be affectionate toward others, to sympathize with others.

Chg (Change): To do new and different things, to try a number of different jobs, to participate in new fads, to travel.

End (Endurance): To persist, to keep at a task until it is completed, to put in long hours of uninterrupted work.

Het (Heterosexuality): To date, to be interested in the opposite sex, to engage in social activities with the opposite sex.

Agg (Aggression): To be critical of others, to attack contrary points of view, to "get even" with others, to tell others what one thinks of them.

BIOGRAPHICAL INFORMATION INVENTORY

Student Counseling Center

Kansas State College

<u>PLEASE</u> <u>PRINT</u>   Date_____

Name_____Sex_____Marital Status_____
       Last   First   Middle Initial

Curriculum_____ Age_____Veteran_____
                                    Years   Months   Yes or no   Branch of
                                                                             service

Home Address_____ Population of Home Town_____
                                             Number of seniors in your
Manhattan Address_____ high school graduating class_____

Father's Name_____Father's Age_____Father's Occupation_____

Mother's Name _____ Mother's Age_____ _____

Mother's present occupation_____ Mother's Occupation before Marriage_____

                                             _____

Parents' Marital Status:

_____ Living Together   _____ Father Deceased
_____ Divorced   _____ Mother Deceased
_____ Separated
                    (Grade School)   (High School)   (College)
Father's Education 1 2 3 4 5 6 7 8 9 10 11 12 Fr. So. Jr. Sr.
                    (Circle last school grade completed)
Mother's Education 1 2 3 4 5 6 7 8 9 10 11 12 Fr. So. Jr. Sr.

Other members in family:
        Brothers & Sisters   Age   Years in School   Present Occupation

_____   _____   _____   _____

_____   _____   _____   _____

_____   _____   _____   _____

_____   _____   _____   _____

Curriculum Choice_____
        How certain are you of this choice? 1 2 3 4 5 6 7 8 9 10
                                             (very uncertain   (very certain)
                                                                  (Circle one)

Vocational goal_____
        How certain are you of this?   1 2 3 4 5 6 7 8 9 10
                                             (very uncertain)   (very certain)

What is your parents' attitude toward your vocational goal? (check appropriate statement.)

_____ They suggested it.
_____ They want it more than I do.
_____ They helped me plan it.
_____ They left it pretty much up to me.
_____ They had other preferences but came around to my way of thinking.
_____ They want me to go to college but would rather I chose another curriculum.
_____ They are rather opposed to my going to college.

List what you consider to be three major job duties in the vocation you have chosen:
(Example: Supervising others, writing reports, performing technical analyses.)

1._____

2._____

3._____

List the major influences which sold you on this goal.
(Example: 1. My father does this kind of work, and from what I've seen him do, it seems like something I want. 2. I worked part-time for a man engaged in this work, and it seemed interesting. 3. I've heard there were many opportunities in that field, etc.)

_____

_____

_____

_____

_____

_____

_____

_____

What will you do if you are unsuccessful in finishing college?

_____

_____

_____

What do you think your chances of graduating from college are? (check one)

_____ Less than 1 chance out of 10
_____ 1 out of 10   _____ 6 out of 10
_____ 2 out of 10   _____ 7 out of 10
_____ 3 out of 10   _____ 8 out of 10
_____ 4 out of 10   _____ 9 out of 10
_____ 5 out of 10   _____ 10 out of 10

Who do you know that has a job similar to the one you are preparing for?

_____ Relative   _____ No one
_____ Friend   _____ Have no definite type of position
                                                in mind.

How do you plan to finance your college program? (check appropriate statements)

_____ My own savings   _____ G. I. Bill
_____ Parents   _____ Earn_____per cent of expenses by
_____ Summer work   part-time work while in school.
                                              _____ Scholarship

High School background often influences college achievement.
    From the following list, place a "plus" (+) before those parts of your high school background which you feel will help you in college and a "minus" (−) before those which will hinder you. If you don't know, or if you feel it will have no effect, write a zero (0) in the blank.

_____ English   _____ Number of subjects offered by school
_____ Mathematics   _____ Orientation to college
_____ Study Habits   _____ Information about jobs
_____ Reading   _____ Philosophy of life
_____ Concentration   _____ Teacher methods
_____ Extra-curricular activities   _____ Athletics
_____ Interest in learning   _____ Size of school

Listed below are various reasons people give for choosing the job that they have. Indicate your reaction to each reason by placing an X in the appropriate column. After you have marked each item, then draw a circle around the most important reason. (Imp. = Important, Not Imp.= Not important, H.C. = Haven't considered.)

Imp.	Not Imp.	H.C.	
____	____	____	Salary is high.
____	____	____	Good security - not likely to be laid off.
____	____	____	Work is challenging.
____	____	____	Work is important to my philosophy of life.
____	____	____	Job commands respect from others.
____	____	____	Work is interesting.
____	____	____	Work is helpful to others.
____	____	____	Work demands some special talent of mine.
____	____	____	Opportunities for advancement are good.
____	____	____	Shortage of qualified workers in this job.
____	____	____	There is much variety in activity.
____	____	____	Most positions are around industrial areas.
____	____	____	Most positions are in midwest or rural areas.
____	____	____	I can be my own boss (or relatively independent).

People change from time to time in the way they feel and think about different things. Listed below are a number of things one might, at one time or another, change his mind about. Place a check (√) before those things you feel differently about now than you have at some time in the past. Double check (√√) those things you are still trying to decide about. If your opinion hasn't changed, leave the space blank.

_____ Dating	_____ Republicans	_____ Music	_____ Dancing
_____ Religion	_____ Democrats	_____ Art	_____ Petting
_____ Studying	_____ Smoking	_____ Sports	_____ Honesty
_____ Work I'd like	_____ Drinking	_____ Literature	_____ Money

You have had a good deal of experience with going to school. What things have you liked and disliked about it? From the activity list below, place a "plus" (+) before each aspect that you liked and a "minus" (-) before each aspect you disliked. Place a 0 (zero) before each aspect about which you have no particular feeling.

_____ Homework	_____ Association with teachers
_____ Outside reading	_____ Tests
_____ Themes or reports	_____ School activities (sports, newspaper,
_____ Discussions (recitations)	clubs, etc.)
_____ Lectures	_____ Memory work
_____ Studying	_____ Social life

List the extra-curricular activities in which you plan to participate in college.

_____

_____

_____

Listed below are a number of controversial statements. Place a "plus" (+) beside those with which you agree, a "minus" (-) beside those with which you disagree, and a zero (0) beside those upon which you are undecided.

_____ Those who are qualified to do college work owe it to society to go to college.

_____ A person should work as hard at something that is uninteresting as at something that is interesting.

_____ Parents control the lives of college students too much.

_____ A person would get more out of college if he paid all the bills himself.

_____ At least half of a student's college courses should be electives (not required courses).

_____ Communism should be taught in public schools.

_____ Religion should be taught in public schools.

_____ The best college courses are those that teach one how to perform some specific, useful function.

_____ Talking problems over with a counselor is a sign of weakness.

_____ College majors should not be declared until at least one year of study has been completed.

_____ Anyone who tries hard enough can get a college education.

_____ Nowadays a person needs a college education if he wants to be successful.

_____ College graduates are happier than non-college graduates.

_____ The smartest students should get the best grades.

_____ College professors are not generally very practical.

_____ Almost anyone would cheat on a test if he were sure that he wouldn't be caught.

_____ There's a lot more to college than studying and attending classes.

_____ Students with poor high school records should not be allowed to enter college.
_____ A person shouldn't be made to do things that are not interesting to him.
_____ If a student does not attend class regularly, he should be failed.
_____ Athletic scholarships are justified.
_____ If you argue with a college professor, you simply show your ignorance.

The following list includes different things that people sometimes want to get from college. Number them in order of their importance to you. Place a "1" before the thing that is most important, "2" before that which is next important, and so on up to "6".

_____ Skill to earn a living.
_____ Better understanding of myself.
_____ Better understanding of the world in which I live.
_____ New friends.
_____ More social experience.
_____ Business and social contacts.

We are interested in the various places you may have lived. Please list these and the dates; starting from the time you were born.

Place	Date

For each of the following statements, if you <u>agree</u> with the statement of fact (if it is generally true about you), cross out the <u>T</u> in front of the number. If you disagree and feel that it is not generally true about you, cross out the <u>F</u> before the number.

T   F   1. I participated in four or more activities in high school (athletics, plays, school paper, etc.)

T   F   2. The members of my family are frequently too curious about my personal affairs.

T   F   3. I earn most of my own spending money.

T   F   4. I have worked most of every summer for the last four summers.

T   F   5. I can deal with an actual situation better than I can cope with general ideas and theories.

T   F   6. My parents and I live in different worlds, as far as ideas are concerned.

T   F   7. I enjoy an intimate conversation with one person more than a general converstaion with several.

T   F   8. I would rather <u>know</u> than <u>do</u>.

T   F   9. I am interested in a person's behavior more than in his inner life.

T F 10. I have had complete responsibility for a day or two while my employer was away from work.

T F 11. My parents sometimes criticize me unjustly.

T F 12. I am interested in business and financial problems of the day.

T F 13. I usually see things as a whole and am apt to disregard minor details.

T F 14. I have several times had opportunity to make speeches before groups of people.

T F 15. I am a practical person interested in tangible achievement.

T F 16. I have traveled in more than four states.

T F 17. I dislike everything that has to do with money - buying, selling, and bargaining.

T F 18. My parents frequently find fault with my conduct.

T F 19. I have visited at least five cities of more than 50,000 population.

T F 20. I feel I know a great deal about my own motives and feelings.

T F 21. I am rather detached and impersonal in my dealings with other people.

T F 22. I like being in the thick of action.

T F 23. I would rather write a fine book than be an important public figure.

T F 24. I have had considerable experience writing reports.

T F 25. My parents have certain personal habits that frequently irritate me.

T F 26. I feel that a person's life should be the full expression of his innermost self.

T F 27. My anticipations remain with the realm of the probable, i.e., they are based on past experience.

T F 28. I would rather take an active part in contemporary events than read and think about them.

T F 29. I like above all to discuss general questions - scientific or philosophical - with my friends.

T F 30. I have attended at least one state or national meeting of an organization to which I belong.

T F 31. I like to play cards.

T F 32. My father is pretty close to an ideal father.

T F 33. I would rather grow inwardly and achieve balance and fullness of experience than win success in practical affairs.

T F 34. I like to do things with my hands: manual labor, manipulation or construction.

T F 35. I believe that science offers as good a guide to the future as there is.

T F 36. I am apt to see an underlying or symbolic meaning in the stories I read.

T F 37. I like to associate with people who take life emotionally.

T F 38. My relations with other people are simple and uncomplicated.

T F 39. I have participated in school plays.

T F 40. My parents expect too much of me.

T F 41. I have had some experience teaching children.

T F 42. My head is full of ideas clamouring to be expressed.

T F 43. I am quite conventional in my behavior.

T F 44. It is easier for me to deal with concrete facts in one special field than with general ideas about man or nature.

T F 45. I feel things deeply and personally, and am sensitive to the deeper feelings of others.

T F 46. I have been an officer in at least four organizations or classes.

T F 47. My teachers seem to depend upon me.

T F 48. I am familiar with Robert's Rules of Order.

T F 49. I have been a county, district, or state officer in an organization to which I belong.

T F 50. I have had considerable experience in formal social situations.

What magazines do you read regularly?_____

List any other magazines that are in your home which you do not read._____

About how many books were in your high school library?_____
About how many books were in your home?_____

About how many books have you read in your lifetime (other than text books)?_____

What kind of books do you prefer for leisure-time reading? Number the following in the order of your preference.

_____ Mystery	_____ History
_____ Science Fiction	_____ Novels
_____ Biography	_____ Social issues (non-fiction)
_____ Travel	_____ Science

About how often did your parents read to you before you began school?

_____ Almost never	_____ Once or twice a week
_____ Occasionally	_____ Almost every day

What do you consider to be the two major problems in the world today?

1.

2.

At what age did you begin dating?_____
How frequently do you date? (i.e. once a week, once a month, etc.)_____

About how many times have you applied for a job during your lifetime?_____

Check any of the following occupations in which you have <u>relatives</u> or <u>friends</u>.

_____ Certified Public Accountant

_____ Lawyer

_____ Dentist

_____ Secretary

_____ Mechanic

_____ Engineer

_____ Home Demonstration Agent

_____ County Agent

_____ Nurse

_____ Chemist

_____ Foreign Missionary

_____ Minister

_____ Federal Government Service

_____ Architect

_____ Pilot

_____ Personnel Officer

_____ Geologist

_____ Journalist

_____ Executive or Administrator

_____ Draftsman

_____ Life Insurance Sales-
      man

_____ Buyer

_____ Librarian

_____ Veterinary

_____ Politician

_____ Farmer

_____ Carpenter

_____ Horticulturist

_____ Medical Technician

_____ Retail Store Manager

****

CHOOSING AN OCCUPATION
Student Counseling Center
Kansas State College

This questionnaire is concerned with the relative importance of various factors in your occupational plans. The directions are quite complicated and will require careful reading. Your full cooperation may well make it possible to improve our counseling service to future students.

Part I.

Suppose two job offers (Job A and Job B) were made to you. Suppose further that you had, or could get, extensive information about both of them regarding all 12 factors listed on the next page.

To which factor would you give the most consideration? Place a "1" in the space opposite that factor.

Assume the two jobs were equal on that factor. Which factor would you consider next? Place a "2" in the space opposite that factor.

Assume the two jobs were also equal on that factor. Which factor would you consider next? Place a "3" in the space opposite that factor.

Continue numbering the factors in this manner until all 12 of them have been ranked. In ranking any factor, always assume that factors you have previously ranked are equal for the two jobs. Be sure to rank each factor; use each of the numbers "1" through "12" once and once only.

Part II.

On this part of the questionnaire, we would like to determine just how many of these factors you would need to consider in order to make a choice between Job A and Job B.

Assume that Job A was clearly superior to Job B on the factor you have numbered "1". Would you accept Job A then or would you consider some of the other factors? If you would accept Job A, draw a circle around number "1".

If you would not accept Job A after considering only the factor you had rated "1", suppose that it was clearly superior to Job B after you had considered both the factor you numbered "1" and the factor you numbered "2". Would you then accept Job A? If so draw a circle around "2".

If you still would not accept Job A, then examine the factor you have numbered "3". Suppose Job A was clearly superior to Job B after you had considered all 3 of these factors (those you numbered "1", "2", and "3"). Would you then accept Job A? If so draw a circle around "3". If not, continue this process, drawing a circle around the last factor you feel you would need to consider. (Assume after each new factor is considered that, all in all, Job A is clearly superior to Job B.)

Many thanks for your cooperation.

ANSWER SHEET

Please Print

Name_____ Age_____ Curr._____
         Last   First   Middle   Yrs.   Months

Class (Fresh., Soph., etc.)_____Married?___Yes___No Veteran?___Yes___No

In what occupational field do you hope to find employment after graduation?
_____

How certain are you that this is the field you want? (Circle a number)

1	2	3	4	5	6	7	8	9
Very Uncertain		Fairly Uncertain				Fairly Certain		Very Certain

Factors

_____ Acceptance (Extent to which the company treats me as an individual rather than as a cog in a machine)

_____ Advancement (Possibility of getting promotions)

_____ Challenge (Amount of ingenuity and thought required)

_____ Demand (Number of openings in relation to number being trained)

_____ Independence (Degree to which I can control my own work activities)

_____ Interest (Degree to which I would enjoy the actual work activities)

_____ Location (Whether job is in large city, east coast, etc.)

_____ Prestige (Degree to which others--wife, parents, friends--respect and admire the job)

_____ Salary (Amount of money I would earn)

_____ Security (Likelihood of being fired or laid off)

_____ Usefulness (Degree to which the job benefits society in general)

_____ Variety (Number of different duties involved)

APPENDIX B

Table 7. Ages of the students in the attrition and persisting
groups

Age	:	Attrition Group N = 46	:	Persisting Group N = 46
Less than 17		0		0
17		14		15
18		22		26
19		2		1
20		1		1
21		6		3

Table 8. Populations of the towns from which the students in the
attrition and persisting groups came

Population of Home Town	:	Attrition Group N = 46	:	Persisting Group N = 46
Less than 1,000		14		13
1,000 - 2,500		7		11
2,500 - 10,000		8		9
10,000 - 50,000		12		8
Over 50,000		5		5

Table 9. Extent to which students in the persisting and attrition
groups believed their high school background would influ-
ence their college achievement

Group	:	-7 to 0	:	1, 2, 3, or 4	:	5 or 6	:	7 or 8	9 or more	:	N
Persisting		4		11		7		7	18		46
Attrition		8		10		10		9	10		46

Table 10. Number of seniors in the high school graduating classes
which students in the persisting and attrition groups
were in.

| Group | Number of Seniors in Class | | | | | |
	Less than 10	10-24	25-49	50-99	Over 100	N
Persisting	4	7	8	9	18	46
Attrition	2	14	10	4	16	46

Table 11. Education of the fathers of the students in the attrition
and persisting groups

Father's Education	Attrition Group N = 45	Persisting Group N = 45
1 - 8 grade	13	9
9 - 11 grade	3	6
12th grade	19	15
Fr.-Jr. in college	6	7
Sr. in college	4	8
Anything beyond	0	0

Table 12. Education of the mothers of the students in the attrition
and persisting groups

Mother's Education	Attrition Group N = 43	Persisting Group N = 43
1 - 8 grade	7	6
9 - 11 grade	1	1
12th grade	21	20
Fr.-Jr. in college	6	10
Sr. in college	7	6
Anything beyond	1	0

Table 13. Veteran status of the students in the attrition and
persisting groups

Veteran Status	Attrition Group N = 46	Persisting Group N = 46
Non-veteran	38	42
Veteran	8	4

Table 14. Scores on occupational interest groups (of the SVIB) for groups of persisting and attrition students (N per group = 47)

	Group	Primary	Secondary or Tertiary	No Pattern or Reject
I Creative Scientific	Persisting	3	17	27
	Attrition	1	20	26
II Physical Science	Persisting	6	16	25
	Attrition-	5	12	30
IV Sub-professional Technical	Persisting	19	17	11
	Attrition	19	19	9
V Social Welfare	Persisting	3	11	33
	Attrition	2	9	36
VIII Business Detail	Persisting	4	28	15
	Attrition	2	26	19
IX Business Contact	Persisting	4	21	22
	Attrition	3	25	19
X Verbal	Persisting	1	16	30
	Attrition	1	15	31

Table 15. Scores on the Interest Maturity Scale for groups of persisting and attrition students

School	N	Group Attrition M	s.d.	Group Persisting M	s.d.	t
Agriculture	11	49.2	7.2	48.0	7.2	.3
Arts and Science	21	50.0	10.5	51.2	6.6	.4
Engineering	15	46.5	7.8	48.5	10.6	.5
Total	47	48.7	9.0	49.6	8.2	.5

Table 16. The rank in regard to importance which the students in
the attrition and persisting groups gave twelve voca-
tional values (N per group = 32)

| | Group | Ranking | | |
		1, 2 or 3	4 - 9	10, 11 or 12
Acceptance	Persisting	1	23	8
	Attrition	5	16	11
Advancement	Persisting	10	18	4
	Attrition	10	18	4
Challenge	Persisting	5	19	8
	Attrition	4	20	8
Demand	Persisting	2	16	14
	Attrition	5	19	8
Independence	Persisting	7	20	5
	Attrition	5	21	6
Interest	Persisting	24	17	1
	Attrition	24	8	0
Location	Persisting	5	13	14
	Attrition	2	15	15
Prestige*	Persisting	2	15	15
	Attrition	0	23	9
Salary	Persisting	17	13	2
	Attrition	21	8	3
Security	Persisting	13	16	3
	Attrition	15	16	1
Usefulness	Persisting	7	15	10
	Attrition	3	13	16
Variety	Persisting	3	17	12
	Attrition-	2	15	15

*p < .10

Table 17. Responses of the students in the attrition and persisting
groups in regard to the attitudes which they held toward
college (N per group = 47)

Attitude Statement	Group	Disagree	Response Uncertain	Agree
Those who are qualified to do college work owe it to society to go to college	Attrition	19	12	16
	Persisting	14	11	22
A person should work as hard at something that is uninteresting as at something that is interesting	Attrition	17	5	25
	Persisting	13	7	27
Parents control the lives of college students too much	Attrition	30	14	3
	Persisting	30	12	5
A person would get more out of college if he paid all the bills himself	Attrition	11	9	27
	Persisting	8	6	33
At least half of a student's college courses should be electives (not required courses)*	Attrition	26	9	12
	Persisting	18	19	10
Communism should be taught in public schools	Attrition	33	9	5
	Persisting	37	7	3
Religion should be taught in public schools	Attrition	19	15	13
	Persisting	19	15	13
The best college courses are those that teach one how to perform some specific, useful function	Attrition	5	11	31
	Persisting	11	10	26
Talking problems over with a counselor is a sign of weakness	Attrition	40	6	1
	Persisting	40	13	24
College majors should not be declared until at least one year of study has been completed	Attrition	10	12	25
	Persisting	11	16	20
Anyone who tries hard enough can get a college education	Attrition	9	5	33
	Persisting	5	8	34

Table 17. (Cont'd)

Attitude Statement	Group	Response Disagree	Uncertain	Agree
Nowadays a person needs a college education if he wants to be successful	Attrition	20	4	23
	Persisting	12	5	30
College graduates are happier than non-college graduates	Attrition	17	18	13
	Persisting	10	25	12
The smartest students should get the best grades	Attrition	30	7	9
	Persisting	21	12	14
College professors are not generally very practical	Attrition	13	31	3
	Persisting	14	30	3
Almost anyone would cheat on a test if he were sure that he wouldn't be caught	Attrition	27	13	7
	Persisting	26	11	10
There's a lot more to college than studying and attending classes	Attrition	2	4	41
	Persisting	2	4	41
Students with poor high school records should not be allowed to enter college	Attrition	36	9	2
	Persisting	37	7	3
A person shouldn't be made to do things that are not interesting to him	Attrition	21	16	10
	Persisting	24	15	8
If a student does not attend class regularly, he should be failed	Attrition	12	15	20
	Persisting	8	15	24
Athletic scholarships are justified	Attrition	6	19	22
	Persisting	5	19	23
If you argue with a college professor, you simply show your ignorance	Attrition	35	7	5
	Persisting	35	8	4

*$p < .10$

Table 18. The educational goals of those students in the attrition
and persisting groups as they ranked them in regard to
order of importance (N per group = 45)

Educational Goal	Group	Order of Importance					
		1	2	3	4	5	6
Skill to earn a living	Attrition	30	7	5	1	1	1
	Persisting	35	3	5	1	1	0
Better understanding of myself	Attrition	5	5	11	9	7	8
	Persisting	5	8	10	10	6	6
Better understanding of the world in which I live	Attrition	6	18	7	7	4	3
	Persisting	5	20	6	7	3	4
New friends	Attrition	3	5	14	12	7	4
	Persisting	0	8	11	13	11	2
More social experience	Attrition	0	1	5	8	15	16
	Persisting	0	1	10	3	17	14
Business and social contacts	Attrition	1	9	3	8	11	13
	Persisting	0	5	3	11	7	19

Table 19. The parents' attitude toward the vocational goal of the
student as the students in the attrition and persisting
groups perceived them.

Parents' Attitude Towards Vocational Goal	Attrition Group	Persisting Group
They suggested it	1	1
They want it more than I do	1	1
They helped me plan it	9	9
They left it pretty much up to me	33	30
They had other preferences but came around to my way of thinking	1	1
They want me to go to college but would rather I chose another curriculum	0	3
They are rather opposed to my going to college	0	0
Total	45	45

Table 20. The chances of graduating from college as perceived by the students in the persisting and attrition groups

Group	1 out of 10 to 5 out of 10	6 out of 10 to 7 out of 10	8 out of 10	9 out of 10	10 out of 10	N
Persisting	5	8	11	11	10	45
Attrition	12	10	7	8	8	45

Table 21. Responses of the students in the attrition and persisting groups in regard to the number of things they had changed their feelings toward

Group	Number				
	0 - 3	4 or 5	6 or 7	8 or 9	N
Persisting	11	13	8	15	47
Attrition	14	13	9	11	47

Table 22. Responses of the students in the persisting and attrition groups in regard to the number of things they liked about school

Group	Number				
	0	1, 2, or 3	4 - 5	6 - 9	N
Persisting	13	15	11	8	47
Attrition	15	18	11	3	47

CORRELATES OF ACADEMIC ATTRITION

by

DONALD OLIVER NELSON

B. A., Washburn University, 1956

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AN ABSTRACT

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The major goal of this study was to examine the relationship of a number of personal and situational factors to college withdrawal among ability-qualified freshman men at Kansas State College.

A sample of 54 male students was taken from a group of 219 freshmen who had withdrawn from college at or before the end of their first semester. Since this study was concerned with dropouts who appeared to be qualified for college work on the basis of scholastic aptitude, only those students whose test scores predicted first year grades of 1.0 or higher were included.

A comparison group of 54 persisting male freshmen was selected at random after two conditions had been met. First, the persisting student had to have enrolled in the same school as his attrition mate. Second, the two students (one dropout, one persister) had to have identical aptitude test scores.

The data on which the persisting and attrition students were compared was grouped into four categories. These were personality, background, vocational interests, and attitudes and values.

Assessment devices included the Edwards PPS, Strong VIB, and two locally devised questionnaires designed to collect information on students' background, attitudes, and values.

The following conclusions appear warrented when they are considered within the limits of the sample used:

1. The persisters averaged significantly higher on the personality need for abasement, while the students in the attrition group scored higher on the need for change.

2. Trends were found on needs for autonomy and intraception, with the students in the attrition group scoring higher than the persisters

on the former and lower on the latter.

3. Background factors investigated seemed to be relatively independent of group classification (attrition and persisting).

4. No differences of any consequence were found when the persisting and attrition groups were compared on vocational interests. However, the persisters scored higher on the Occupational Level key and lower on the Masculinity-Femininity measure than did the withdrawees.

5. Measures of attitudes and values failed, in general, to separate the two groups. Three isolated and inconsistent trends were found.

6. Several suggestions for further research were discussed.