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## An Attempt to Differentiate Underachievers from Normals by Means of Responses to a College Environment Scale

James Clarence Young  
*Loyola University Chicago*

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AN ATTEMPT TO DIFFERENTIATE UNDERACHIEVERS FROM NORMALS  
BY MEANS OF RESPONSES TO A COLLEGE ENVIRONMENT SCALE

by

James C. Young

A Thesis Submitted to the Faculty of the Graduate School  
of Loyola University in Partial Fulfillment of  
the Requirements for the Degree of  
Master of Arts

February

1968

## LIFE

James Clarence Young was born in Chicago, Illinois on January 26, 1943.

He graduated from Quigley Preparatory Seminary, Chicago, in June, 1961. In June, 1963, he graduated from St. Mary of the Lake Junior College in Niles, Illinois. Majoring in psychology, he received the degree of Bachelor of Science from Loyola University, Chicago, in June, 1965.

He was awarded an A. J. Schmitt Fellowship and began full-time graduate study in the Department of Psychology at Loyola University in September, 1965. He took his clerkship at Hines Veterans Administration Hospital and is currently engaged in his internship at the same institution.

## ACKNOWLEDGMENTS

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## CHAPTER I

### INTRODUCTION

More than 30 years of research seems to have left little doubt that intelligence tests, aptitude tests, and measures of previous achievement are by far the best predictors of success in college (Fishman & Pasanella, 1960; Garrett, 1949; Goodstein, Crites, & Hellbrun, 1963). Such tests typically account for no more than 35% of the variance, and it has been generally assumed that personality factors, either alone or in combination, will account for the remaining influences. Goodstein et al (1963), for example, have summarized the results of previous research efforts by breaking down the variance commonly associated with college achievement into the following components: intellectual factors 35%, personality factors 15%, and error variance 10%. The authors note, however, that such a conceptualization would leave 40% of the variance due to unknowns. They reason rather convincingly that it is unlikely that the to-date enumeration of factors has been so inaccurate. Much of the same reasoning is applicable to the suggestion that better measures of the intellectual component might contain the answer, since the old intelligence tests yield nearly the same results as those of more modern origin. They conclude that the non-intellectual factors must be considerably more important than has yet been demonstrated and suggest that the failure to uncover the

suspected relationships has been due to the stereotyped methods of most current research designs.

This criticism may well be valid. In a review of over 250 studies in this area between 1955 and 1960, Fishman and Pasanella (1960) noted that the usual research design was almost exclusively one of correlation and regression with measures taken before admission correlated with measures taken afterward. In most of these studies, both intellectual and non-intellectual measures were generally employed, though the personality tests seldom added more than .05-.08 to the correlation coefficient based on intelligence tests alone. One reason for the failure to find more significant personality variables may be, as Gough (1949) has suggested, that the majority of studies have consistently insisted on using instruments devised for other purposes, chiefly clinical, which have no intended relation to academic achievement. Though the manner in which such tests are used has undergone several changes, Gough's criticism, after 18 years, still appears generally valid.

Some research, representative of the most commonly used psychological tests should be given. Studies using the MMPI have generally employed one of three main approaches. The first of these attempts to differentiate between overachievers (OA), normal achievers (NA), and underachievers (UA) by means of a simple count of the average number of T-scores greater



than 70. This would seem a rather gross measure to assess something as complex as college success, and as early as 1949 Gough had pointed to the general lack of effectiveness of such designs. Though some studies of this nature still persist (Anderson & Spencer, 1963), it seems generally agreed that they should probably be abandoned.

A second technique has been that of deriving a special scale for UA from the MMPI. The method of choice employed in these studies has generally been similar to that used in the development of the original scales; that is, the MMPI is given to a group of NA or OA and to the UA group. Those items which significantly differentiate the two groups are then designated as achievement scales.

One such scale was developed by Altus (1948) who used as a criterion an intergroup difference of five or more "yes" responses to an item (there were only 25 Ss in each group). On the basis of this criterion, 60 items were selected for the final scale, though these were later reduced to 26 items. In general, the author felt that the significant items were characteristic of the restless, overactive, socially extroverted, try-too-many-things student who was also likely to be the poor student. The final 26 items were found to correlate .39 with grade point average (GPA), .40 with introductory psychology course grades, and .21 with a standard intelligence test.

Gough later criticized Altus' endeavor noting that only 21 of the original 60 items significantly differentiated UA's from OA's at the .05 level. Further, sexual disparity in the criterion groups (OA consisted of 22 males, 3 females. UA of 9 males and 16 females) may well have been largely responsible for the personality differences between the two groups.

Correcting for these biases, Gough (1949; 1953) developed his Hr and Ac (now Ai) achievement scales which are still in frequent use. Correlations of these measures with GPA have generally been reported in the vicinity of .35-.40. As for personality correlates, Gough reported his OA to be characterized by moderate depression, femininity of interests for both sexes, social introversion, and insecurity. Other investigators using the scale approach have tended to substantiate these results. Owens and Johnson (1949), for example, noted that on all significant items UA gave better adjusted and more extroverted answers than did OA or NA. In fact, UA showed good adjustment in all areas except family relations. These Es further cite a study by Heston (1947) in which overachievement was related to social introversion, lack of confidence, good family adjustment, and emotional instability -- traits directly opposite those possessed by the UAs in their own study and similar to those noted by Gough. They concluded that the slight tendencies to worry and depression found in UAs were consequences of their poor

adjustment and not causes of it.

It should be noted that the results of studies attempting to derive achievement scales from the MMPI have been anything but consistent. In what seems to be a typical trend, one author will devise such a scale, cross-validate it (usually at the same school) with positive results, yet the scale fails miserably when applied by another investigator in a different setting. Typical are the results of a comparison made by this writer between two such cross-validated scales, each of about 60 items, which had been derived for the same purpose by their respective authors from the 566 item form of the MMPI. Somewhat remarkably, these two scales had only three items in common, and two of these were scored in opposite directions!

The third approach has been that of pattern analysis of scales having deviant T-scores. Though still relatively crude this approach has yielded some recurrent positive results. McKenzie (1964), for example, was able to differentiate the UA from the NA by means of a pattern which showed UA's to obtain peaks on Pd and Pt accompanied by low T-scores on the L and K scales. The OA differed from the normals by displaying peak scores on D, Mf, and Pt with a depression on Ma. It was noted that the mean scores of the UAs and OAs did not differ significantly, and McKenzie suggested that much may be lost by comparing these two groups with one another.

More typically, however, these two groups have been found

to differ. Most important would seem to be the elevation of Pd, Ma, and Sc in the profiles of UAs, a pattern which has occurred with some consistency (Bolander, 1947; Drake, 1956; 1962; Drake & Oetting, 1957; Frick, 1955; Frick & Keener, 1955; Goodstein, 1963). Likewise, the peaks on D and, more often, Mf in the profiles of OA would seem a reliable sign (Hewitt, 1963; McKenzie, 1964).

A refinement of these measures was attempted in the studies of Drake (1956; 1962). Of greatest importance was the finding that Mf, in addition to predicting overachievement, could be used as a suppressor variable in the profiles of UAs to contraindicate the usual implications of a high Pd, Ma, or Sc. The implication here is that a broad cultural range of interests somehow offsets the negative factors working for underachievement. It should be noted that Drake used the Mf suppressor only with male Ss, and that it is far from clear what it signifies in the profiles of females. Further, though the peaks on Pd, Ma, and Sc are useful predictors when present, many UAs have elevations on none of these scales.

As with the MMPI, results of studies employing the California Psychological Inventory (CPI) have been largely equivocal with the possible exception of the moderate success had in using scores on the Ai (Achievement vs. Independence) and, less frequently, the Ie (Intellectual Efficiency) scales as a differential index (Bernette, 1961; Holland, 1959;

Rosenberg & McHenry, 1962). Holland (1959) at one time claimed that several other scales of the CPI might yield validity coefficients two or three times as great as those obtained using aptitude measures alone. The usefulness of the aptitude measures was lessened, however, due to the highly restricted range of intelligence among Holland's Ss who were National Merit Scholars. That the differentiating power of personality variables should be enhanced in such a group is not surprising. More positively, there is some indication that the derived scale approach, once popular with the MMPI, may hold more promise than the attempt to seek group differences among the original scales (Fink, 1962a; 1962b; 1963). Whether or not such scales will meet the same fate as that of their MMPI counterparts remains to be seen.

It might be noted that the nature of the success which accrues from use of the Ai, Ie, and other CPI scales is far from clear. Jackson and Pacine (1961), for example, point out that the content of these scales may be practically irrelevant to the question of academic success. In support of this position, they cite a study by Hardy (1956) who showed that Ai, Ie, as well as four other CPI scales often related to achievement all were characterized by a heavy preponderance of items keyed "false." This would imply that response style, not scale content, was the differentiating factor; and in fact, a moderate correlation was obtained between GPA and the

tendency to reject undesirable items while acquiescing to "socially approved" ones. At any rate, the response style approach in predicting UA's would seem deserving of more research effort than it has so far received.

In the case of the TAT, the major trend has been to predict achievers and non-achievers on the basis of achievement imagery. In particular, the AI index of Hurley and McClelland's criteria of n-Ach have been the favorite devices, though other approaches have been tried (eg. Arnold, 1962). Generally, the results of these studies have been difficult to interpret, being almost equally divided between positive (Atkinson, 1950; McClelland, Atkinson, Clark, & Lowell, 1953; Morgan, 1952; Weiss, Wertheimer & Groesbeck, 1959) and negative results (Bernette, 1961; Lowell, 1952; Parrish, 1954; Vogel, Raymond, & Lazarus, 1959). As might be expected, the studies of Hurley, McClelland, and their associates have generally been more favorable to the predictive value of achievement imagery, often reporting correlations of .40 to .50 in magnitude. Other investigators, however, have not fared nearly so well, n-Ach being frequently unable to significantly differentiate even the most gross levels of academic success. Recently, Murstein (1963) has proposed a more promising and refined technique which attempts to consider the stimulus value of each card (in regard to a particular type of imagery) as well as S's response to it. To date, this method has not

been sufficiently tested in the area of academic achievement to permit of evaluation.

The results of using other personality measures apparently parallel the findings already discussed. Interest inventories (Carmichael, 1964; Nugent, 1961), the Rorschach (McArthur & King, 1954; Vorhaus, 1952), Harrower-Rorschach (Osborne, 1950), Taylor Manifest Anxiety Scale and Edwards Personal Preference Schedule (Bendig, 1958; Klugh & Bendig, 1955), as well as many others have all been employed with small -- and unreliable -- degrees of success. That these are not isolated incidents has been shown rather convincingly by Fishman (1960). In a general review of the literature, Fishman noted that in 263 studies between 1955 and 1959, high school rank (HSR) alone correlated .50 with freshman GPA's and aptitude measures .47. In 216 multiple correlation studies for the same period, in which only intellectual predictors were employed, the median  $r$  with freshman grades was .62 with a range of .37 to .83. When an aptitude test and HSR were combined as the two predictors, the median  $r$  was equal to .64. If preselection restrictions were not too great, these same two measures could correlate as high as .78. At most colleges, however, such preadmission criteria were far too restrictive so that multiple correlations seldom reached this magnitude.

For the same period, Fishman reports the correlations of

various personality measures with GPA as follows:

- a) correlations with personality tests (Rorschach, TAT, MMPI, CPI, etc.) range from .01 to .62; median  $r$  equal to .22 for 26 studies;
- b) correlations with study habit inventories (Brown-Holtzman) range from .26 to .66; median  $r$  equal to .47 for 25 studies;
- c) correlation with interest inventories (Kuder, Strong) range from .05 to .26 for 7 studies;
- d) correlations with interview predictions (unspecified) range from .26 to .77 for 9 studies.

It should be noted that though these correlations seem moderately effective when taken by themselves, their ability to increase predictiv validity based on aptitude tests is discouragingly small. In the case of the interview and study habit techniques, what seems likely is that the correlations reported above have probably been inflated by the influence of many of the same factors which are already assessed by the intellectual tests. This same consideration is probably also valid when evaluating the results based on interviews, for the interviewer almost certainly obtained at one time or another information as to the GPA and HSR of the interviewee. Further, many of the factors influencing the judgment of the successful interviewer remain uncommunicable to others desirous of using this method. As for the efficacy of the personality measures, such indices as the AI scale of the CPI (which many claim raises multiple correlations .05 to .10) are typically used with either HSR or aptitude measures. Yet in practice, most schools use both measures as standard procedure. When these same personality measures are



incorporated into regression formulas using both these intellectual predictors, their ability to improve prediction is further diminished.

It would thus appear that the attempt to improve prediction of academic success by means of personality variables has so far proved quite discouraging. Within recent years, however, there have been those who have begun to suspect that many of the contradictory results may be due to the fact that researchers have been typically involved in searching for personality variables to describe the UA, when in fact there is no such clear cut entity. More specifically, it has been suggested that the personality characteristics leading to achievement in one school may have directly opposite effects at another institution. Goodstein et al (1963), for example, though originally failing to find regional differences among college students (Goodstein, 1954), found through the use of more sophisticated techniques that personality factors in the MMPI, while indeed related to academic success, tended to be idiosyncratic to the particular institutions. Similar observations have been made by other investigators (Holland, 1959; 1960; McArthur & King, 1954).

This notion of many distinct types of UA's has many implications. If true, it might, for example, explain why MMPI or CPI scales for achievement which were developed at one school and successfully cross-validated failed to have

predictive value when applied to other college settings. Further, if the hypothesis were true, it would alter the entire conception of research findings in this area with the result that generalization from one study to another would be minimal at best. Analogously, one could not predict college success for a high school senior without knowing the university he will attend any better than one could predict marital bliss for an individual without knowing the type of personality he will marry. The three variables -- intellectual factors, personality variables, and college environment variables -- would all have to be considered and weighed in any individual case.

Recent reviews of educational research (Michael & Boyer, 1965; Pace & McFee, 1960) have pointed to the increasing trend to assess more than the effect of a particular class size or teaching method and to the necessity of realizing that a college is a complex social system which affects students in many different ways. One approach to the measurement of the psychological characteristics of the college environment was devised by Pace and Stern (1958) and resulted in the College Characteristics Index. This index, composed of 300 items (based on Murray's press concepts), was presented in true-false form to students of different colleges. In general, it was found that three-fourths of the items could be answered in substantial agreement by students and faculty and that the

various colleges did indeed show significant differences in the makeup of their environments.

Astin (1962a), the acknowledged authority in the area of college environmental research, has defined six principal dimensions along which institutions might be described as varying. The six were respectively: affluence (wealth), size, private versus public control, masculinity versus femininity, homogeneity of environment, and realistic (technical-pragmatic) emphasis. Of these, the factor of affluence easily accounted for the largest proportion of the variance with the quality of students and faculty being considerably higher at the better endowed institutions. In a similar factor analytic study of student characteristics (Astin, 1964c), the same author identified six factors similar to those describing the institutional environments. In addition, it was noted that the aspirations of the entering freshmen were on the whole harmonious with the characteristics of the colleges they selected (Astin, 1964a). Of interest to the present study would be the question of whether the expectations of UA's were just as harmonious.

Through underachievement per se has not been the object of environmental studies, a somewhat opposite concept, that of "productivity" variously defined, has been given considerable attention. In a classic statement of the hypothesis, McConnell and Heist (1962) postulated that "the efficacy of

a college is the product of the fortunate conjunction of student characteristics and expectations, and the demands, sanctions, and opportunities of the college environment and its subcultures"(p. 250). In agreement with this hypothesis have been a group of sociopsychological theorists (Brown, 1962; Fishman, 1962; Stern, 1962; 1963) who have concluded that different types of students will profit optimally from different kinds of university settings. In regard to the problems of selection policies, these same authors have urged that efforts be directed toward promoting achievement either by matching the student to the type of university wherein he will best be able to realize his potential or by manipulating the school environment to meet the needs of different subgroups of students.

An example of this differential effect was evident in a series of studies by Thistlewaite (1959a; 1959b; 1963). In these reports, the College Characteristics Index of Pace and Stern was employed by the author in order to assess environmental influences on one form of achievement, the attainment of the Ph.D. A novel aspect of this study was the use of the Talent Supply Index, a device designed to take into consideration the relative intellectual capacity of students at different colleges. Using this index with the College Characteristics Index, Thistlewaite found that various environmental settings did indeed have a differential effect on stimulating those pursuing a doctoral degree. Of greatest importance was the

finding that the climate of undergraduate colleges that is associated with the subsequent production of Ph.D's in the natural sciences differs substantially from that of undergraduate colleges noted for their preparation of scholars in the social sciences and humanities. More closely related to the present study were the findings of Gottlieb and Hodgkins (1963), who not only identified four distinct student subcultures (academic, collegiate, vocational, and deviant), but were able to relate differences in the level of scholastic attainment to membership in one of these subcultures. Still other environmental characteristics have been related to productivity in the studies of Astin (1961; 1962c; 1963a; 1963b; 1964b) and Nichols (1964).

It was these studies that prompted the present investigation. The present study, however, differed from those mentioned in several ways. First, whereas the college environment scales used in these studies (e.g. Pace & Stern, 1958; Thistlewaite, 1959a; 1959b; 1963) were for the most part a priori constructions admitting only of a true-false answer, the scale of this study was composed of statements submitted and rated by the students themselves. Further, a refinement in the rating was introduced in that each statement could be rated as to the degree of truth or falsity by means of a six point scale. Secondly, whereas the previous studies correlated agreed upon college environmental factors with various student

subgroups or measures of productivity, this study focused directly on underachieving students in exploring the possibility that UA would differ from a randomly selected group of students in their perception of what is in fact characteristic of their school and to what degree. Some evidence that the perceptions of high and low GPA students do differ has been suggested in a study by Davis (1963).

Though the present study was mainly of an exploratory nature, several hypotheses were offered as being most likely on the basis of prior research findings. It was hypothesized that given the opportunity to rate statements about college life as to their degree of applicability in regard to their school, UA's would tend to emphasize the negatively toned (unfavorable) aspects of their school to a greater degree than a randomly selected group of students. It was felt that this difference would be both: a) quantitative, that is, the UA's would select more negatively toned statements as characteristic; and b) qualitative, that is, the UA's would respond more extremely to negative aspects than the random group even if the positively toned characteristic statements failed to show differences in extreme response sets. Both of these hypotheses were stated at the .05 level of significance. A final related hypothesis was that there would be an increasing trend to respond in the predicted manner as one passed from sophomore to senior UA's.

## CHAPTER II

### METHOD

#### Phase I

#### Subjects

The Ss were 26 students enrolled in an abnormal psychology class at Loyola University, Chicago, who responded to a request to submit ten statements pertaining to college life in general.

#### Procedure

The 26 Ss received the following instructions:

You are being asked to submit ten statements which will pertain to any one of a number of different aspects of university life in general. Such statements may range from the more frequently thought of aspects (such as faculty characteristics, difficulty of the courses, or social events) to those less frequently considered (such as registration policies, the cafeteria, or even campus landscaping). A few examples of such statements might be:

- 1) The library here has excellent facilities for doing good scientific research.
- 2) Classrooms are poorly ventilated and more conducive to sleep than attentive listening.
- 3) Many professors here encourage informal out-of-class gatherings where discussions may take place.

In constructing the statements, it is not necessary that you think only, or even at all, of campus life here at Loyola. Nor should your statements be so general that it might apply to any college imaginable. A statement applicable to a conceived subgroup of colleges is more desirable.

The statements obtained by this procedure were then examined by this writer in order to eliminate duplicates or

near duplicates. This common sense type analysis resulted in 80 statements deemed sufficiently different for inclusion in the final scale. For each of these statements, a paired statement was constructed by E designed to express a trend in the opposite direction. For example, if the original statement was "Parking facilities are grossly inadequate," a second statement "Parking facilities are readily available to meet the needs of all students" was constructed to serve as the second member of the pair.

## Phase II

### Subjects

The Ss consisted of two groups of students. The first was a group of randomly selected students or random achievers (RA's) chosen from the junior and senior classes at Loyola University. The second consisted of a group of UA's from the sophomore, junior, and senior classes at the same school. For purposes of this study, an UA was defined as a student who scored over the 90th percentile on the college entrance tests demanded by the university and who was currently maintaining a cumulative GPA of 2.80 or lower. This criterion was selected since it had been used in previous research at this university and would thus facilitate comparison of the results of different studies. It should be noted that for approximately 70 per cent of the UA the college entrance test was the SCAT. Two factors prompted the inclusion of Ss having



entrance scores on other tests; first, the relative difficulty in obtaining a sufficiently large enough sample of UA's who met the criterion; and secondly, because in practice the University bases its selection policy on measures other than the SCAT.

For both groups, letters were sent out requesting them to partake in an experiment sponsored by the Office of the Academic Dean and the Department of Psychology. Eighty RA's responded to the letter (out of 221 notified), as did 36 UA's (out of 82 notified).

### Instruments

The questionnaire used in this study was the 80 item, paired statement, College Environment Rating Scale whose development was described above.

### Procedure

The College Environment Rating Scale was given with the following instructions to those members of each group who responded to the letter:

Below are 80 sets of statements describing various possible aspects of university life. Each numbered set is divided into two separate statements marked 'A' and 'B'. In each case one member of the pair describes a situation that is generally the opposite of the situation described by the other member of the pair. In some cases, the A and B statements will be contradictory or mutually exclusive. More frequently, they will not be absolutely contradictory but will simply express trends in the opposite direction.

First, read carefully the A and B statements of a given set. Next, select the one statement (either A or B) which you feel is generally most characteristic of university life here at Loyola. In some instances you may feel that both statements could be true depending on the situation, or, conversely, that neither is too appropriate. In either case, select only the one statement which you would choose if you were forced to make the selection.

You will notice that after each of the A and B statements are the numbers 3, 2, and 1. After you have selected one of the statements as described above, rate your choice by using the three numbers in terms of just how characteristic you feel the statement is when applied to Loyola.

The numbers indicate: 3 - very characteristic  
2 - moderately characteristic  
1 - only slightly characteristic.

Do not rate the statement you did not originally select.

Since many of the statements involved criticism of the faculty or the administration, the Ss were further told they need not sign their names to the questionnaire in order to eliminate any feelings of possible reprisal.

Responses obtained from the two groups were then compared with one another for differences in response style, A - B item choices, and the tendency to endorse favorable or unfavorable responses as characteristic of the University. For this last procedure, three judges were asked to designate for each question which member of the statement pair expressed a quality which might be found at the "ideal" university and which expressed a negatively toned aspect.

Statements on which these judges could not agree were eliminated from this part of the analysis.

## CHAPTER III

### RESULTS

The 80 paired statements of the College Environment Rating Scale were first submitted to three Judges currently enrolled in the graduate school of Loyola University. These Judges were two males and one female, each of whom had taken his or her undergraduate degree at a different university. One judge took his degree in a social science program, one in natural science, and one in humanities. Each Judge was asked to determine which member of the statement pair represented a quality which might be found at the "ideal" university and which member reflected a negatively toned aspect. These two types of statements were designated as "favorable" and "unfavorable" item choices respectively. In nearly all instances this distinction was quite obvious, as can be shown by the fact that on 77 of the 80 items the judges were in 100 per cent agreement. Those three statements on which the judges failed to reach agreement (statements numbered 30, 33, and 46) were excluded from the data in sections calling for group comparisons of favorable and unfavorable item choices.

The first question was whether or not the RA's themselves were able to significantly agree as to which member of the statement pair was in fact characteristic. Table I shows the  $p$  values which result from a critical ratio test when the proportion of RA's responding to either the A or B half of a

TABLE I

SCALE ITEMS WHEREIN THE PROPORTION OF FAVORABLE  
TO UNFAVORABLE RESPONSES FOR RA DIFFERED  
SIGNIFICANTLY FROM A 50-50 SPLIT

Statement Number <sup>a</sup>	Total Items	Level of Significance
6, 17, 29, 49, 54, 55, 73	7	$p < .05$
2, 5, 7, 10, 15, 32, 48, 51, 56, 62, 68, 71, 76	13	$p < .01$
3, 31, 42, 69	4	$p < .001$
1, 8, 9, 13, 16, 18, 20, 21, 22, 23, 24, 25, 26, 27, 30, 34, 35, 36, 37, 38, 39, 41, 43, 45, 46, 57, 59, 67, 72, 75, 77, 78, 80	33	$p < .0001$
4, 11, 12, 14, 19, 28, 33, 40, 44, 47, 50, 52, 53, 58, 60, 61, 63, 64, 65, 66, 70, 74, 79	23	$p > .05$

<sup>a</sup>See Appendix for complete listing of statements.

particular item is tested as being significantly different from a 50-50 split. As is evident from the table, RA's were able to agree on nearly 75 per cent of all items at the  $p < .05$  level of significance or better. Over 46 per cent of all items were significant at less than the .001 level.

Table 2 shows the results of comparing the A-B proportions for RA's on a given statement with the corresponding proportions for the underachieving group. The  $p$  values shown in the table are the result of applying the usual test for significance between two independent proportions. Because of the exploratory nature of this study, a significance level of  $p < .20$  was accepted since the risk of accepting as real a chance difference was felt to be more than offset by the possibility of finding fertile areas for future research. In spite of this, however, only 25 of the 80 items differentiated the two groups at the  $p < .20$  level with only 10 of these items being significant at  $p < .05$ .

Means, mean differences, and  $t$  ratios for II, III, and IV year UA's on the number of favorable and unfavorable statement endorsements are reported in Table 3. Results indicated that the tendency for UA's to see the University in a favorable light was greatest for sophomores, declined somewhat for juniors, and was lowest of all for the senior group. Conversely, of course, the table shows that as one passed from younger to older UA's one found the school being

TABLE 2

SCALE ITEMS WHEREIN THE PROPORTION OF FAVORABLE  
TO UNFAVORABLE RESPONSES DIFFERED  
SIGNIFICANTLY FOR  
UA'S (N=36) AND RA'S (N=80)

Statement Number <sup>a</sup>	Total Items	Level of Significance
4, 5, 15, 17, 28, 30, 33 51, 67, 72, 73, 79	12	$p < .20$
6, 9, 11	3	$p < .10$
12, 41, 56, 63, 75	5	$p < .05$
43, 50, 54, 71, 80	5	$p < .02$
1, 2, 3, 7, 8, 10, 11, 13 14, 16, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 31, 32, 34, 35, 36, 37, 38, 39, 40, 42, 44, 45, 46, 47, 48, 49, 52, 53, 55, 57, 58, 59, 60, 61, 62, 64, 65, 66, 68, 69, 70, 74, 76, 77, 78	55	$p > .20$

<sup>a</sup>See Appendix for complete listing of statements.

TABLE 3  
DIFFERENCES BETWEEN MEAN FAVORABLE AND  
UNFAVORABLE STATEMENT ENDORSEMENTS  
FOR II (N=9), III (N=11),  
AND IV YEAR (N=16) UA's

Variable	M <sub>1</sub>	M <sub>2</sub>	M <sub>1</sub> -M <sub>2</sub>	t-score
<u>Favorable Endorsements</u>				
II vs. III year	39.4	32.2	7.2	1.89 <sup>a</sup>
II vs. IV year	39.4	25.8	13.6	3.77 <sup>c</sup>
III vs. IV year	32.2	25.8	6.4	2.35 <sup>b</sup>
<u>Unfavorable Endorsements</u>				
II vs. III year	37.6	44.8	7.2	1.89 <sup>a</sup>
II vs. IV year	37.6	51.2	13.6	3.77 <sup>c</sup>
III vs. IV year	44.8	51.2	6.4	2.35 <sup>b</sup>

<sup>a</sup>Significant at .10 level

<sup>b</sup>Significant at .05 level

<sup>c</sup>Significant at .01 level



perceived in an increasingly more unfavorable fashion. All interyear differences were shown to be significant at the  $p < .10$  level.

Table 4 shows the mean average deviations (AD's) from the mean RA responses for II, III, and IV year UA's. These figures require some explanation. It was desired to know by how much, on the average, each group of UA's deviated from the mean response scale value of the RA's in answering any given question. The means presented in the table were obtained in the following manner. First, the mean scale value of each of the 80 statements was calculated for the RA group. Using these means, the AD of responses to the favorable part of each item was determined in the usual manner for each of the 80 statements for each year level. Finally, these AD's for each year level were themselves averaged by dividing by the total number of statements. A similar procedure was followed in determining the mean average deviation of responses to the unfavorable member of each statement pair. The results show that in endorsing the favorable part of an item as characteristic, sophomore UA's deviated significantly more from the mean RA response than either juniors or seniors, and juniors more than seniors. These differences are significant at the .10 level or below. No significant differences were found when comparing the different year levels in terms of deviations when unfavorable responses were endorsed.

TABLE 4  
DIFFERENCES BETWEEN MEAN AVERAGE  
DEVIATIONS (AD) FROM THE MEAN RA  
RESPONSE FOR II (N=9),  
III (N=11), AND  
IV YEAR (N=16) UA's

Variable	M <sub>1</sub>	M <sub>2</sub>	M <sub>1</sub> -M <sub>2</sub>	t-score
<u>Mean AD on a</u> <u>Favorable Endorsement</u>				
II vs. III year	1.47	1.26	0.21	2.02 <sup>a</sup>
II vs. IV year	1.47	1.05	0.42	3.98 <sup>c</sup>
III vs. IV year	1.26	1.05	0.21	2.38 <sup>b</sup>
<u>Mean AD on an</u> <u>Unfavorable Endorsement</u>				
II vs. III year	1.06	1.12	0.06	0.50
II vs. IV year	1.06	1.13	0.07	0.58
III vs. IV year	1.12	1.13	0.01	0.05

<sup>a</sup>Significant at .10 level

<sup>b</sup>Significant at .05 level

<sup>c</sup>Significant at .001 level

Mean differences between response style characteristics of RA's and UA's are presented in Table 5. As is clear from the table, the prediction that UA's as a group would respond more extremely and endorse more unfavorable items was not supported by the data. Though there was a tendency for UA's to give more "very characteristic" answers than RA's, the differences were not significant. The only consistent finding was that RA's tend to choose the "moderately characteristic" category significantly more often than underachieving ss ( $p < .02$ ).

Since the RA group consisted solely of juniors and seniors, it was felt that eliminating sophomore UA's from the above analysis, and thereby matching groups in terms of years in college, might reveal differences masked by inclusion of the younger ss. The results of this revised analysis are evident in Table 6. These results showed that the prediction that UA's would respond to more unfavorable items was supported at the  $p < .05$  level. The prediction that the UA's would also respond more extremely was not confirmed for either the favorable, unfavorable, or total item choices. On the unfavorable item choices, there was, however, a clear trend in the hypothesized direction.

Table 7 presents Pearson correlations with their t ratios for the relationship of UA's GPA with number of "very characteristic" responses, favorable endorsements, and sum of

TABLE 5  
DIFFERENCES BETWEEN MEAN RESPONSE STYLE  
CHARACTERISTICS OF RA's (N=80)  
AND UA's (N=36)

Variable	$M_{UA}$	$M_{RA}$	$M_{UA} - M_{RA}$	<u>z-score</u>
<u>Favorable Items</u>				
Very Characteristic	9.58	8.40	1.18	0.79
Moderately Characteristic	14.62	16.80	2.18	1.47*
Only Slightly Characteristic	10.14	8.98	1.16	0.95
Total Favorable Items	34.34	34.18	0.16	0.07
<u>Unfavorable Items</u>				
Very Characteristic	17.90	17.30	0.60	0.21
Moderately Characteristic	15.11	16.50	1.39	1.09
Only Slightly Characteristic	9.65	9.02	0.63	0.38
Total Unfavorable Items	42.66	42.82	0.16	0.07
<u>Total Items</u>				
Very Characteristic	27.48	25.70	1.78	0.60
Moderately Characteristic	29.73	33.30	3.57	2.39**
Only Slightly Characteristic	19.79	18.00	1.79	0.58

\* Significant at .20 level

\*\* Significant at .02 level

TABLE 6

DIFFERENCES BETWEEN MEAN RESPONSE  
STYLE CHARACTERISTICS OF RA's (N=80)  
AND III AND IV YEAR UA's (N=20)

Variable	$M_{UA}$	$M_{RA}$	$M_{UA} - M_{RA}$	z-score
<u>Favorable Items</u>				
Very Characteristic	6.80	8.40	1.60	1.31 <sup>a</sup>
Moderately Characteristic	13.32	16.80	3.48	2.59 <sup>c</sup>
Only Slightly Characteristic	9.55	8.98	0.57	0.42
Total Favorable Items	29.67	34.18	4.51	1.97 <sup>b</sup>
<u>Unfavorable Items</u>				
Very Characteristic	20.41	17.30	3.11	1.13
Moderately Characteristic	17.66	16.50	1.16	0.64
Only Slightly Characteristic	9.26	9.02	0.24	0.04
Total Unfavorable Items	47.33	42.82	4.51	1.97 <sup>b</sup>
<u>Total Items</u>				
Very Characteristic	27.21	25.70	1.51	0.42
Moderately Characteristic	30.98	33.30	2.32	1.29 <sup>a</sup>
Only Slightly Characteristic	18.81	18.00	0.81	0.27

<sup>a</sup> Significant at .20 level

<sup>b</sup> Significant at .05 level

<sup>c</sup> Significant at .01 level

TABLE 7

CORRELATION OF UA's GPA WITH NUMBER OF VERY  
CHARACTERISTIC RESPONSES ( $\Sigma 3$ 's), FAVORABLE  
ENDORSEMENTS ( $\Sigma F$ 's), AND SUM OF DEVIATIONS  
FROM MEAN RA RESPONSES ( $\Sigma /d/$ )

Variable	PEARSON $r$
<u>Seniors</u> (N = 9)	
GPA with $\Sigma 3$ 's	+ .51 <sup>b</sup>
GPA with $\Sigma F$ 's	+ .06
GPA with $\Sigma /d/$	+ .56 <sup>b</sup>
<u>Juniors</u> (N = 11)	
GPA with $\Sigma 3$ 's	+ .33 <sup>a</sup>
GPA with $\Sigma F$ 's	- .45 <sup>b</sup>
GPA with $\Sigma /d/$	- .34 <sup>a</sup>
<u>Sophomores</u> (N = 16)	
GPA with $\Sigma 3$ 's	+ .08
GPA with $\Sigma F$ 's	- .08
GPA with $\Sigma /d/$	+ .14
<u>All UA's</u> (N = 36)	
GPA with $\Sigma 3$ 's	+ .24 <sup>b</sup>
GPA with $\Sigma F$ 's	- .20 <sup>a</sup>
GPA with $\Sigma /d/$	+ .08
GPA with $\Sigma UF3$ 's <sup>d</sup>	+ .31 <sup>c</sup>

<sup>a</sup>Significant at .32 level

<sup>b</sup>Significant at .16 level

<sup>c</sup>Significant at .06 level

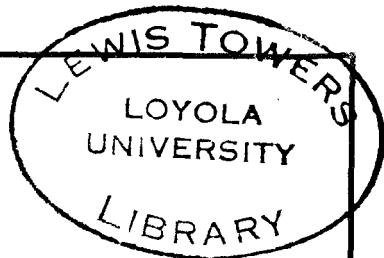
<sup>d</sup>Unfavorable statements answered as "very characteristic."

deviations from the mean RA responses. This last figure was determined in the following manner. First, the mean scale value of each of the 80 statements was calculated for the RA group. A given response for each UA was then expressed as a deviation from the mean scale value of that statement. The 80 deviations for each UA were then summed and are expressed in the table as  $\Sigma/d/$ . For all three year levels, there was a small positive correlation between GPA and the tendency to respond extremely. For the UA's as a group, this correlation was  $+0.24$  ( $p < .15$ ). With the exception of the senior UA's, there was also a tendency for GPA to be correlated negatively with the total number of favorable statements. For all UA's, this figure was  $-0.20$  ( $p < .23$ ). Correlations between GPA and  $\Sigma/d/$  were inconsistent from year to year and generally not significant. Since the tendency was for GPA to be positively related to extreme and unfavorable statements, a final correlation between grades and the number of "very characteristic" unfavorable endorsements was calculated. The Pearson  $r$  in this instance was equal to  $+0.31$  ( $p < .06$ ).

Finally, it was felt that whether an UA was trying to improve his GPA or was letting it fall still lower might be a significant variable. As a crude index for assessing this trend, an UA's cumulative GPA was compared with the GPA he obtained in his last semester. If the semester GPA was higher than the cumulative GPA, it was taken as a sign of improvement;

if lower, as a sign of consolidating his underachieving status. Biseria correlations were then determined between the tendency to be raising or lowering one's GPA and the number of extreme responses, favorable responses, and  $\Sigma/d/$ . Results showed that the tendency for GPA to become lower was positively correlated with extreme responses ( $r_b = +.71$ ) and number of favorable endorsements ( $r_b = +.57$ ) though negatively related to  $\Sigma/d/$  ( $r_b = -.39$ ).





## CHAPTER IV

### DISCUSSION

A survey of the literature revealed that: 1) tests of intelligence and general ability are by far the best predictors of success in college; 2) though personality factors are generally considered important, traditional measures of personality functioning have typically added little prognostic significance; 3) that personality factors conducive to achievement at one institution may have opposite effects in another setting; and 4) the school environment is itself an important variable which must somehow be taken into account in the prediction of college success.

The findings of the present study confirm the observation of Pace and Stern (1958) who noted that students are generally able to agree on 75 per cent of all items when given a series of statements which they are asked to describe as being characteristic or non-characteristic of their university. This study further revealed that though group differences in response to item content did occur between UA's and RA's, these differences were slight and would probably be of little usefulness when applied in the individual case. In this regard, it was noted that only 25 of 80 items differentiated the UA from the RA groups even with a level of significance as high as  $p < .20$ . There were, however, some trends among these

25 differentiating statements which might be worthy of future exploration.

Relevant here was the fact that on statements pertaining to the social aspects of the school, the direction of difference was toward the UA's being more negativistic. More specifically, the UA's seemed to stress more the lack of university traditions, the failure of the school to meet the popular conception of college life, and the fact that at a commuter college the students typically tend to go their own ways after they have come for classes. They also tended to emphasize more the feelings that dormitory regulations are somewhat childish and that casual wear is forbidden on campus.

A second area of difference was in what might be called the intellectual aspects of the school environment. Interestingly enough, in this area the UA's generally tended to put the university in a more favorable light than the RA's. In this regard, they saw the school as a place where critical thinking was encouraged, where students were characterized as having many diversified interests, where professors frequently got together with students for out of class discussions, where student "bull sessions" were themselves usually of an intellectual nature, and where homework was consistently heavy. On the negative side, they seemed to feel more that they were being forced into a liberal education, that required courses were too dogmatic, and that too much emphasis was

being placed on the final examinations.

The meaning of these differences must of course remain speculative. On the one hand, the tendency for the UA's to be generally more favorable to the intellectual climate of the university might be taken as a sign of a reaction formation type defense, since it is somewhat hard to accept the fact that one is underachieving at a school where the intellectual standards are poor and the demands upon the student are minimal. There are, however, other interpretations. One such interpretation would be that the rating of a particular situation as to the degree of characteristicness depends in no small measure on the expectations of the student prior to entering the university. If the student expected one hour of homework per evening and the university gives two on the average, then a statement making reference to a heavy homework load will be seen as "very characteristic." From this point of view, it might be said that the UA at Loyola tends to be one who found the social life at the school somewhat restricted and disappointing and the work load more than he had bargained for. Whether in fact this is the case is still open to question since the data of this study which leads to such conjectures is admittedly quite sparse and not of the highest reliability.

The analysis of stylistic features in the present study led to more definite, if not confusing, results.

The hypothesis that UA's would choose as characteristic more negatively toned items was supported ( $p < .05$ ) when the UA and RA groups were matched in terms of year level in college. The hypothesis was rejected when the two groups were compared as they were when originally selected (sophomores present in the UA but not in the RA group). The second hypothesis, that the UA's would also respond by selecting more extreme response categories on the unfavorable items was rejected for both types of group comparisons, though there was a clear trend in the hypothesized direction when year level was controlled. As suggested, group differences in the number of extreme responses to favorable item choices did not closely approach significance. These findings, taken together, would suggest that UA's not only see more unfavorable aspects to their environment than RA's, but that when something is seen as unfavorable, it tends to be seen as more pervasive by the UA than by the RA student.

The final hypothesis, that the number of unfavorable endorsements would increase significantly for UA's from sophomore to senior year, was supported by the data at the  $p < .10$  level for all interyear comparisons. In fact, it was somewhat surprising to find that the differences were as large as they actually were, especially between the sophomore and senior classes (37.6 unfavorable choices for II year ss versus 51.2 such choices for IV year ss). Though the findings

were themselves quite significant, the reason for these differences was somewhat less clear. Unanswered, for example, is the question as to whether unfavorable choices increase as a function of years in school or as a function of years in school as an UA. What seems most probable to this writer is that both factors are somehow involved. A partial answer is suggested by the fact that III and IV year UA's did give more unfavorable choices than III and IV year RA's. This fact would seem to implicate underachievement per se as a definite factor influencing negative perceptions of one's school. To what extent just the number of years spent in school increases unfavorable endorsements would necessitate a comparison of mean differences on this variable for II, III, and IV year RA's. Unfortunately, this problem was not anticipated at the start of this study and Ss and data necessary to answer this question were not gathered. At any rate, future research comparing UA and RA groups on environmental variables must consider year level as a potentially significant variable.

Comparison of II, III, and IV year UA's on the mean AD from mean RA responses revealed no significant interyear differences when unfavorable item choices were considered. On the favorable item endorsements, there were significant decreases in mean AD's as one passed from sophomore, through junior, to senior class Ss. Why this difference should have occurred on favorable and not on unfavorable item choices is

presently not clear. If one is willing to make the assumption that the mean response of the RA's represents the environmental situation as it really exists, one might speculate that the younger of the UA's are somehow driven by a need to selectively perceive certain aspects of their environment in an extremely favorable light. Dynamically stated, it may be that the initial response to finding oneself an UA is the defense of reaction formation which later gives way to an overly critical perceptiveness. At any rate, this difference would seem deserving of further attention.

Correlations of UA's GPA with the number of favorable endorsements resulted in a negative correlation of .20 ( $p < .23$ ). This finding, though not highly significant, was similar to that of Davis (1963) who found that high achieving students were most critical of the intellectual aspects of their colleges.

The question thus arises as to why, if GPA and the number of favorable choices are negatively related, the RA's did not have less rather than more such choices. Relevant here is the fact that it was originally assumed that GPA's within the RA group were not significant variables, and thus this data was not collected. One cannot say, therefore, that the GPA's of RA's were any higher than those of the UA's, though the term "underachievement" might suggest this possibility.

In fact, since the UA's in this study were expected to have above average grades, their underachievement has probably resulted in a GPA which is not too different from that of the randomly selected student. If this were so, it would suggest the possibility that the tendency to see the university in an unfavorable light may in fact be positively related to at least three variables; the number of years S has attended the university, his GPA, and the fact of being an UA. If true, it would be expected that if future studies matched groups on the first two variables, the differentiating power of the tendency to respond to unfavorable statements would be enhanced.

Some of the assumptions made during the course of this study should be noted. The first of these refers to the randomness of the RA group. Though the names of those originally selected to participate in the experiment were themselves randomly chosen, the fact that only one-third of these Ss actually partook in the study casts serious doubts on the randomness of the final group. Similar considerations would apply to the actual representativeness of the final group of UA's, though in this case the originally selected Ss were not a random sample but the entire population of students who met the criterion of underachievement. In both cases, it seems probable that the final results were affected by those factors which cause some students to participate in a study and others

to avoid it.

A second point to be noted is the operational definition of UA used in this study. As noted above, the definition used (S being over the 90th percentile on the entrance test with a current GPA of 2.80 or less) was chosen to facilitate a comparison of the findings with the results of previous studies. This definition, however, refers to only a particular segment of UA's and says nothing about other possible groupings (e.g., S being over the 80th percentile on the entrance test with a current GPA of 2.60 or less). Further, there are many who would define underachievement in quite dissimilar ways. Thorndike (1963), for example, while not offering a definition, points out that from one point of view a large part of the concept of underachievement refers solely to the inaccuracy of our measuring instruments. That is, a goodly number of those who are called UA's are considered such simply because psychologists and educators have attempted to predict success in college by means of tests which are far from perfectly reliable. Still others (Holland & Austin, 1962; Holland & Richards, 1965; MacKinnon, 1959) have thought seriously of revamping all traditional definitions of achievement, noting that this concept, almost always defined in terms of GPA, tells little or nothing about who will become an achiever in the society beyond the classroom. Still other definitions are possible. (See Thorndike for an excellent discussion of this



problem.)

In spite of these limitations, it was felt that the present study lent support to previous findings which point to the necessity of considering the school environment in dealing with the problem of success in college. Though the correlations and other obtained differences were relatively small, it would seem unreasonable to expect any one single measure to account for even one-half the amount of variance already explained by measures of intelligence, undoubtedly the most important single factor. It is realized, of course, that any findings from the present study must first be confirmed through cross-validation; for the risk of obtaining significant findings due to chance alone is particularly great in exploratory studies of this nature where some of the findings were allowed to emerge ad hoc from the data. It is further realized that the present research, concerned as it was with concurrent validity, can only suggest variables which might be significant in studies of a predictive nature. Results obtained by Caldwell (1959) and Bloom and Webster (1960) for instance, demonstrate that personality changes do in fact occur, not only during the four years of college, but even as early as six weeks after entrance. The interyear differences among UA's found in the present study probably refer in part to the same phenomenon.

There are lastly several common practices in doing

research with UA's which might be questioned. One of these is the assumption that the NA or UA groups typically used are alike enough in their composition to be considered as homogeneous groups. Though some studies have found no significant differences on personality tests for ss majoring in different areas (Luddin & Lanthrop, 1963), future investigators interested in the effects of college environmental characteristics might do well to check the applicability of these findings in their research. In this respect, it seems likely that those majoring in different areas surely come into different degrees of contact with various facets of the university. If dividing ss into different majors seems too impractical, one approach which has been found useful is a simpler division into natural science, arts-humanities, and social science majors. The practical difficulty, of course, is that as many as 30 per cent of all students graduate in majors other than those selected upon entrance (Pierson, 1962).

Finally, one might question the usual design based on multiple correlation and regression (Stern et al, 1956). Such an approach, which allows for one factor to compensate for another, is appropriate only if the various influences which combine to produce academic success are themselves capable of such inter-compensation. This may not be the case. One alternative, of course, is to employ a multiple

cutoff approach. Or again, and perhaps more wisely, one might use an approach which allows for compensation of factors within a specified area but not between areas. Relevant to the present topic, a high IQ may, for example, be able to compensate for poor study habits, but it is unlikely that in itself it could offset the effects of social ineptness or a marked intolerance of an authoritarian university setting. The determination of such subgroupings of factors is of course the first step but could readily be accomplished through appropriate techniques of cluster analysis.

## CHAPTER V

### SUMMARY

A literature review suggested that college environments may be a variable in determining underachievement. An 80 item College Environment Rating Scale was devised and given to 36 underachievers (UA's) and 80 randomly selected students (random achievers or RA's). It was hypothesized that UA's would select more unfavorable items, more "very characteristic" ratings where unfavorable items had been selected, and that the number of unfavorable items selected would increase significantly for UA's from sophomore to senior year.

Major significant findings were: 1) that the tendency to select unfavorable items increased for UA's from sophomore to senior year; 2) that UA's endorse more unfavorable items as characteristic than do RA's from the same year levels; 3) that UA's grade point averages are positively correlated with the number of extreme scale value choices and unfavorable endorsements; and 4) that the tendency to respond unfavorably depends on at least three factors which are: a) an Ss grade point average; b) his year level in school; and c) the fact of being an UA.

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# COLLEGE ENVIRONMENT RATING SCALE

Below are 80 sets of statements describing various possible aspects of university life. Each numbered set is divided into 2 separate statements marked 'A' and 'B'. In each case one member of the pair describes a situation which is generally the opposite of the situation described by the other member of the pair. In some cases, the A and B statements will be contradictory or mutually exclusive. More frequently, they will not be absolutely contradictory, but will simply express trends in the opposite direction.

You will notice that under each of the A and B statements are the numbers 3, 2, and 1. After you have selected one of the statements as described above, rate your choice by using the three numbers in terms of just how characteristic you feel the statement is when applied to Loyola.

Do not rate the statement you did not originally select.

1. A. Students here seldom engage in the use of drugs or pre-marital sex.  
3 2 1
- B. Students here frequently engage in the use of drugs and pre-marital sex.  
3 2 1

2. A. In recent years there has been a marked trend toward improvement in practically all aspects of university life.  
3 2 1
- B. Little in the way of real improvement has occurred for quite some time.  
3 2 1
3. A. Students for the most part gain their education through a process of osmosis.  
3 2 1
- B. Students for the most part actively engage in classroom discussion.  
3 2 1
4. A. A relatively large number of students use drinking as a temporary solution to their problems.  
3 2 1
- B. It is rare for students here to resort to drinking as a solution to their problems.  
3 2 1
5. A. One will receive a liberal education here, ie. many humanities courses, whether he likes it or not.  
3 2 1
- B. Though a liberal education may be obtained here, it does not have to be.  
3 2 1
6. A. Registration is so conducted that there are always some students who are unable to take what they desire.  
3 2 1
- B. Students can almost always register for whatever courses they need.  
3 2 1
7. A. Student-administration relations are conducted on a highly impersonalized plane.  
3 2 1
- B. Student-administration relations are friendly and personal in nature.  
3 2 1

8. A. There is an increasing trend to allow lay professors  
to hold positions of importance in the university.  
3 2 1
- B. The religious faculty reserves all positions of  
importance for themselves.  
3 2 1
9. A. College "traditions" which actively involve the  
students are sorely lacking in comparison to many  
universities.  
3 2 1
- B. Like many universities, this one has a number of  
"hallowed traditions" in which all students partake.  
3 2 1
10. A. This school seems to have a policy of flunking out as  
many freshmen as possible instead of helping them.  
3 2 1
- B. Freshmen are given as much help as possible and are  
not flunked out unless absolutely necessary.  
3 2 1
11. A. College life here is a seemingly never ending succes-  
sion of sleepless nights, cups of black coffee, and  
empty packages of cigarettes.  
3 2 1
- B. Outside of exam time, the pressure of studying is  
never very intense.  
3 2 1
12. A. Many of the assistants who teach courses seem a little  
too much aware of their new found status.  
3 2 1
- B. The assistants who teach courses are seldom proud or  
condescending.  
3 2 1

13. A. Attendance at class is a purely voluntary matter.  
3 2 1
- B. Attendance at most classes is mandatory for receiving a passing grade.  
3 2 1
14. A. Many of the teachers are unable to present the subject matter of their course in a manner which is logically understandable to the student.  
3 2 1
- B. Most of the teachers present their subject matter in a logically clear, concise manner.  
3 2 1
15. A. Though a religious university, there seems an over-emphasis on forcing religion upon the students.  
3 2 1
- B. Students are free to choose their own desired degree of religious involvement in spite of the fact that this is a religious university.  
3 2 1
16. A. Campus buildings and facilities are scattered too far apart to be of much real use to the student.  
3 2 1
- B. The campus is a closely compact unit with its facilities readily available to everyone.  
3 2 1
17. A. Required courses are at least intellectually stimulating and encouraging of controversy.  
3 2 1
- B. The main trouble with required courses is that they are too dogmatic and stereotyped in their approach.  
3 2 1

18. A. Parking facilities are grossly inadequate.  
3 2 1
- B. Student parking is readily available.  
3 2 1
19. A. Many of the professors here have attained eminence,  
not only in their home community but across the  
country.  
3 2 1
- B. With rare exceptions, the professors here are unknown  
outside their home communities.  
3 2 1
20. A. The best professors in any department devote almost  
all their time to the graduate school, largely  
ignoring the undergraduate divisions.  
3 2 1
- B. The best professors here try to equally divide their  
time between the graduate and undergraduate divisions.  
3 2 1
21. A. Books and other class necessities are often not  
available until 3-4 weeks after the start of the  
semester.  
3 2 1
- B. Books and other class necessities are available from  
the start of the semester.  
3 2 1
22. A. Professors are kept on the staff only so long as  
they show themselves to be capable teachers.  
3 2 1
- B. Many professors with outmoded ideas are kept on the  
staff because of their past records instead of their  
present teaching ability.  
3 2 1



23. A. Most parts of the university are easily reached by  
public transportation.  
3 2 1
- B. Many parts of the university are difficult to get to  
by public transportation.  
3 2 1
24. A. Though the prices of the cafeteria food are comparable  
with those elsewhere, the quality of the food is not.  
3 2 1
- B. The cafeteria serves good quality food at standard  
prices.  
3 2 1
25. A. Whether or not one will find library facilities  
adequate depends on the major one has chosen and the  
campus one is on.  
3 2 1
- B. The library has sufficient material to meet the  
needs of everyone.  
3 2 1
26. A. Because of physical locations, students on one part  
of the campus seldom get acquainted with the students  
or activities of the other parts.  
3 2 1
- B. Students can easily get acquainted with all aspects  
of the university.  
3 2 1
27. A. Too often when one is doing a term paper, one finds  
that many of the needed books have been taken out by  
some professor, often a month or so previously.  
3 2 1
- B. The professors return books to the library promptly  
so that they will be readily available to all.  
3 2 1

28. A. Professors often get together with students for out  
of class discussions.  
3 2 1
- B. One seldom is able to talk with a professor outside  
of class time.  
3 2 1
29. A. The administration puts too many restrictions on  
fraternity initiations and other practices.  
3 2 1
- B. The administration leaves fraternities to manage  
their own affairs.  
3 2 1
30. A. The "popular" conception of college life, ie. those  
things most often described in newspapers and  
magazines, is generally inapplicable to this  
university.  
3 2 1
- B. College life at this campus generally fits in well  
with the popular conception of university life.  
3 2 1
31. A. There are too few places on campus grounds where  
one can go to study between classes.  
3 2 1
- B. There are an ample number of places where one can  
go to study between classes.  
3 2 1
32. A. Though students are always complaining, most of the  
classes do not really give enough work to prepare  
one adequately for graduate school.  
3 2 1
- B. Most classes give a maximum amount of work which  
prepares the student well for graduate school.  
3 2 1

33. A. Casual wear of most kinds is forbidden on campus.  
3 2 1
- B. Students can wear to class practically anything they wish.  
3 2 1
34. A. Special lectures, movies, etc. are excellent and open to all.  
3 2 1
- B. Special lectures, movies, etc. are excellent but open only to the particular groups that promote them.  
3 2 1
35. A. Many of the professors are highly controversial, presenting many unorthodox and original ideas.  
3 2 1
- B. With few exceptions, the professors present only the most generally acknowledged aspects of their subject matter.  
3 2 1
36. A. Many "big name" speakers are invited to lecture on the campus.  
3 2 1
- B. Compared to other major universities, few big name speakers ever come here to lecture.  
3 2 1
37. A. Most students will not participate in any activity outside of their major field of study.  
3 2 1
- B. Most students are anxious to take part in any outside activity that should arise.  
3 2 1

38. A. Pressure and the ability to withstand it appears to  
be a prerequisite for success at this college.  
3 2 1
- B. Students at this university seldom have to work under  
any real pressure.  
3 2 1
39. A. There is too much emphasis upon grades and how best  
to get high ones rather than on trying to understand  
and get something out of the course.  
3 2 1
- B. Grades are deemphasized in an effort to better  
achieve a true understanding of the subject matter.  
3 2 1
40. A. Individual research efforts are not fostered by the  
science departments.  
3 2 1
- B. Individual research is strongly encouraged by the  
science department.  
3 2 1
41. A. The cafeteria here shows no imagination or any concern  
for a good diet.  
3 2 1
- B. The cafeteria provides for a well balanced diet  
through a large variety of food.  
3 2 1
42. A. Living conditions in the dormitory could stand  
considerable improvement.  
3 2 1
- B. Living conditions in the dormitories are such as  
to satisfy almost all residents.  
3 2 1

43. A. The institutionalized atmosphere here is not particularly conducive to the spirit of creativity.  
3 2 1
- B. The spirit of creativity is encouraged and fostered by the atmosphere of the university.  
3 2 1
44. A. The school paper is relatively free of administrative controls.  
3 2 1
- B. The administration keeps a strict censorship over everything that is printed in the school paper.  
3 2 1
45. A. Between classes, card playing and "bull sessions" -- only infrequently studying -- occupies the time of most students.  
3 2 1
- B. Between classes, most students spend their time studying rather than in frivolities.  
3 2 1
46. A. Student demonstrations are practically unheard of at this university.  
3 2 1
- B. Students frequently demonstrate for what they feel is a just cause.  
3 2 1
47. A. Frequently top name teachers are preoccupied with research so much so that a minimal amount of time is devoted to teaching and student needs.  
3 2 1
- B. Top-name teachers put their teaching duties ahead of any particular research interests they may have.  
3 2 1

48. A. Libraries are often noisy and poorly ventilated.  
3 2 1
- B. Libraries are quiet and well ventilated.  
3 2 1
49. A. The landscaping of and the site for the campus have  
been chosen with excellent taste.  
3 2 1
- B. The campus site as well as its landscaping could  
have been greatly improved if a little thought had  
been given to the matter.  
3 2 1
50. A. Maintenance of school buildings leaves much to be  
desired.  
3 2 1
- B. The school grounds and buildings are well kept.  
3 2 1
51. A. Curriculums are well balanced, a fact which  
facilitates a change in major.  
3 2 1
- B. Curriculums have been poorly designed so that  
changing majors creates insurmountable difficulties.  
3 2 1
52. A. There is much waste of money by the faculty and  
administration through the duplication of already  
existing facilities.  
3 2 1
- B. University monies are wisely spent due to  
excellent program plannings.  
3 2 1

53. A. Members of fraternities and sororities are quite friendly and very seldom snobbish.  
3 2 1
- B. Members of fraternities and sororities tend to form in-groups which snub outsiders.  
3 2 1
54. A. College is supposed to be a broadening experience, but here one finds a narrowing of interests into one specialty.  
3 2 1
- B. The students here cultivate genuine interests in many areas in addition to the field of their specialty.  
3 2 1
55. A. There are many students here who simply come for a class and are more interested in their 20-30 hour a week job than in the school itself.  
3 2 1
- B. There are few students who while attending the university do not consider their schooling as their primary interest.  
3 2 1
56. A. The students here form a geographically diverse group.  
3 2 1
- B. Most of the students come from a very small geographical region.  
3 2 1
57. A. It is a rare occurrence to be able to get the whole student body -- or even a large group of them -- to unite for a particular activity.  
3 2 1
- B. The student body typically shows an excellent turnout for a given activity.  
3 2 1

58. A. The social life here offers something for all students.  
3 2 1
- B. The social life here is limited and appealing only to those with special types of interests.  
3 2 1
59. A. The school has excellent teams in practically all areas of athletics.  
3 2 1
- B. School teams are non existent in several of the major sports.  
3 2 1
60. A. Many of the students here are in college simply because they are unprepared to face adult responsibilities or because of parental expectations.  
3 2 1
- B. The vast majority of students come here because they are desirous of learning, not in order to please someone or because they have not made a decision as to their future.  
3 2 1
61. A. Both social and academic events are not published early enough to allow students to plan their studies around them.  
3 2 1
- B. Students are notified about social and academic events well in advance of their actual occurrence.  
3 2 1
62. A. The choice of electives a student might take is much too restricted.  
3 2 1
- B. Students have a wide variety of electives to choose from in planning their curriculum.  
3 2 1



63. A. Critical thinking and intelligent questioning are encouraged in most classes.  
3 2 1
- B. Most classes tend to stress acceptance of the "party line"  
3 2 1
64. A. Many teachers seem determined to give a predetermined number of each type of grade without considering the intellectual characteristics of the particular class.  
3 2 1
- B. Most teachers consider the individual student in determining the grade rather than referring to a set of pre-established norms.  
3 2 1
65. A. Regardless of one's work during 4 years of college it is the Graduate Record Exam and the Departmental Comprehensives taken in the senior year which really count.  
3 2 1
- B. It is the quality of one's day to day work, rather than the score on any special exam, which is important.  
3 2 1
66. A. Grades too often depend on personality characteristics instead of intellectual ability.  
3 2 1
- B. Grades rarely if ever depend on personality features.  
3 2 1
67. A. Financial assistance in the form of scholarships, loans, and part-time jobs is readily available to those who need aid and are otherwise qualified.  
3 2 1
- B. The needy and qualified have a very hard time obtaining financial assistance.  
3 2 1

68. A. Generally the libraries are inadequate for doing  
good scientific research.  
3 2 1
- B. The libraries are well stocked with all kinds of  
scientific journals and manuscripts.  
3 2 1
69. A. Most university buildings are old and terribly  
outmoded.  
3 2 1
- B. Most university buildings are relatively new and  
equipped with the latest modern facilities.  
3 2 1
70. A. There is a growing trend for the graduate assistants  
to be allowed to teach courses while the professors  
devote their time to other activities.  
3 2 1
- B. Graduate assistants teach courses only in rare cases  
of a faculty shortage or illness.  
3 2 1
71. A. Too much emphasis is placed upon final exams while  
work done during the rest of the semester is  
slighted.  
3 2 1
- B. Good work during the course of a semester is the  
main determinant of a grade, not how one does on  
the final.  
3 2 1
72. A. Student gatherings usually have as their subject of  
conversation some intellectual topic.  
3 2 1
- B. Intellectual debate is seldom the topic of student  
gatherings.  
3 2 1

73. A. One is able to sense a great spirit of cooperation among fellow students.  
3 2 1
- B. Students generally go their own ways, caring little about what happens to one another.  
3 2 1
74. A. There are many required courses which are forced upon the students, not for their benefit, but to uphold an administratively determined image.  
3 2 1
- B. Required courses have been chosen solely with the aim of furthering the student's intellectual development.  
3 2 1
75. A. Summer school sessions are much too short and poorly taught to be really profitable.  
3 2 1
- B. Summer school sessions are well taught and long enough to be truly profitable.  
3 2 1
76. A. Outside lecturers are permitted to speak on campus only if they agree, or at least say nothing against, beliefs which the administration holds "sacred."  
3 2 1
- B. Guest lecturers are permitted to speak on any topic they should so choose.  
3 2 1
77. A. The students today have become accustomed to the long wait (often 2-3 hours) from everything from registration to basketball tickets.  
3 2 1
- B. Whenever many students have to be taken care of, programs are so organized that waiting lines are quite short.  
3 2 1

78. A. The professors at this university are really  
interested in teaching their subject matter.  
3 2 1
- B. Most professors act as if teaching were merely a job  
which has little interest for them outside of their  
weekly salary.  
3 2 1
79. A. The dorm regulations are more appropriate for high  
school than for college students.  
3 2 1
- B. Dorm regulations reflect the university's policy  
of treating students as adults responsible for  
t heir own actions.  
3 2 1
80. A. Counseling services of various kinds are readily  
available to help the student in planning a  
curriculum or just to discuss individual problems.  
3 2 1
- B. Students upset by personal problems relating to  
college life have no place to turn to for help.  
3 2 1

### APPROVAL SHEET

The thesis submitted by James C. Young has been read and approved by the director of the thesis. Furthermore, the final copies have been examined by the director and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the thesis is now given final approval with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

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Date

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Signature of Adviser