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## Need Achievement Antecedents and Correlates in Intact Social Groups

Robert J. Loveland

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NEED ACHIEVEMENT ANTECEDENTS AND CORRELATES  
IN INTACT SOCIAL GROUPS

by

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Bachelor or Arts, Merrimack College, 1971

A Thesis

Submitted to the Faculty

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for the degree of

Master of Arts

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This thesis submitted by Robert J. Loveland in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota is hereby approved by the Faculty Advisory Committee under whom the work has been done.

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(Chairman)

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Title NEED ACHIEVEMENT ANTECEDENTS AND CORRELATES IN INTACT SOCIAL  
GROUPS

Department Psychology

Degree Master of Arts

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## ABSTRACT

The present paper was concerned primarily with one area of research in human personality, that is, the need to achieve (n Ach). Specifically, it was an attempt to test the strength of several conclusions concerning the antecedents and correlates of n Ach by reversing the research technique most commonly employed in reaching those conclusions. That common technique is to define high and low achievers psychometrically, and then to study antecedent variables and correlates. This study attempted to reverse this process. Rather than defining groups of high and low achievers, the groups chosen for study were intact social groups, which in other contexts have been found to be characterized by several of the antecedents and correlates of n Ach. Psychometric instruments were then employed to find n Ach differences. The intact social groups explored in this context were affiliates of fraternities and sororities, and independents.

The study was also a comparison of three n Ach measuring devices, that is, the Thematic Apperception Test, the Edwards Personal Preference Schedule, and the Costello Scales.

There were 120 freshman and sophomore volunteers who were assigned to 4 groups with 30 subjects each: male and female affiliates, and male and female independents. In addition to the n Ach measures, a biographical questionnaire and an intelligence measure were employed.

The results suggested that: (1) affiliates and independents did not differ in n Ach; (2) the three n Ach measuring devices were not equivalent; (3) male n Ach and female n Ach were different motivational



variables; (4) affiliates and independents did differ on a few biographical and personal variables; and (5) affiliates and independents did not differ in intelligence.

## CHAPTER I

### INTRODUCTION

The study which is presented below was concerned primarily with one area of research in human personality. Specifically, it dealt with the need to achieve (n Ach), its antecedents, and several of its correlates. A second area of research which was dealt with as a vehicle in studying n Ach was membership or non-membership in a distinctive kind of social group, that is, a fraternity or sorority. The manner in which these two research areas were related is explained below.

At the present time the most common n Ach research technique is to first of all define groups of high achievers and low achievers using any one of several psychometric instruments. With these groups defined, the researcher then attempts to discover and study variables which are antecedent to the high or low n Ach, or which are correlated with high or low n Ach.

This study attempted to reverse this process. Rather than defining groups of high and low achievers, the groups chosen for study were intact social groups, which in other studies have been found to be characterized by several of the antecedents and correlates of n Ach. Psychometric instruments were then employed to find n Ach differences. That is, although the available n Ach data contain several inconsistencies, it should be possible to find n Ach differences in intact social groups which have been found to differ on variables that discriminate between high and low achievers. As mentioned above, the intact social groups studied in this context were affiliates and independents.

Therefore, the main thrust of this paper was to see whether or not a reversal of the usual n Ach research technique was feasible within the limitations of the groups studied. The general question answered was as follows: Are independents of both sexes, that is, those who do not become affiliated with a fraternity or a sorority, higher in need achievement, or is the reverse true?

Following is a review of the literature in both research areas. After this background information is presented, an exposition of the logic which led to the posing of the main research question is given, and the specific research questions which were tested are listed.

#### Review of the Literature

##### Research on the Need to Achieve (n Ach)

Over the past two decades psychologists interested in motivational variables have devoted considerable research activity to the need to achieve. In general, recent researchers in this area have settled upon the definition of n Ach as a learned motive to compete and strive for success. In turn, a learned motive or drive is a higher order generalization which involves such concepts as drive antecedents, drive level, drive stimulus, instrumental response, and goal. For the purposes of this research paper only two of these general concepts will be stressed: (1) the basic antecedents of n Ach, and (2) its main correlates. Other elements are of course involved, but are of less importance. Literally hundreds of studies have been published concerning n Ach, and the following review concerns only those which are germane to the purpose of this study.

A history of this research area begins with Henry A. Murray, whose

personality research at the Harvard Psychological Clinic in the 1930's included the formulation of the n Ach concept and the development of the Thematic Apperception Test (TAT). For these personological studies, the achievement motive was defined as the desire or tendency to do things as rapidly and/or as well as possible. Murray's methodological approach was longitudinal in nature.

Current research with the n Ach variable was begun at Wesleyan University in the late 1940's and early 1950's by David C. McClelland, J. W. Atkinson, and others. Unlike Murray, the approach of these investigators was to focus on one motive using many subjects in a large number of experiments. This method prevails today. McClelland acted upon the general hypothesis that motives are learned on the basis of the type of affective experiences which are associated with specific kinds of behavior. With respect to n Ach, the relevant behavior should be that which occurs in situations involving standards of excellence, and competition among individuals to attain these standards.

Since the Wesleyan studies, research has continued at a rather steady rate, and increased considerably in the late 1960's. Studies which compare persons determined to be high or low in n Ach have explored the following antecedents and correlates: (1) family size; (2) ordinal position; (3) age and maturity; (4) sex; (5) intelligence; (6) social class; (7) religion; (8) parental expectations and child rearing practices; (9) certain personality characteristics.

Family size. Angelini (1967) found that children of larger families had less n Ach than children of smaller families. Large families were those with four or more children.

Ordinal position. Sampson (1962), Bartlett and Smith (1966),

Rosenfeld (1966), Sampson and Hancock (1967), and Sinha (1967) found support for the hypothesis that first-borns have higher n Ach than later-borns. However, Wolken (1965) did not find any differences in the first-born and later-born groups which he studied.

Age and maturity. Merbaum (1962), Bruckman (1966), and Angelini (1967) found that n Ach seemed to increase with age. They did not give an age where a stable level is reached. Mussen and Jones (1957) failed to find this relationship in their data, and Feld (1960) reported that n Ach is a stable motivational variable which is learned at a very early age and does not seem to change with increased maturity. McClelland et al. (1953) found that n Ach is stable over time, but is capable of temporary fluctuations in either direction.

Sex differences. This is the most persistent unresolved problem in research on n Ach. For example, Merbaum (1962), and Bruckman (1966) reported no sex difference in their data. Sinha (1967), on the other hand, found that males were significantly higher in n Ach than females. French and Lesser (1964), and Horner (1968) claimed the issue is confused because male n Ach is an entirely different process than female n Ach. They supported this contention by showing sex differences in responses to various Thematic Apperception Test cues.

Intelligence. Bruckman (1966) found a significant positive correlation between n Ach and intelligence. Morgan (1967) found that subjects high in n Ach did significantly better in academic tasks. Callard (1964), on the other hand, reported that these types of relationships are misleading in that n Ach operates independently of mental ability. In the groups Callard studied, no correlation was found between n Ach and intelligence.

Social class. Using similar criteria to differentiate between low, middle, and upper classes, Gilligan (1964), Cameron and Storm (1965), Titus (1966), and Shrivasta and Trivari (1967) all found that middle class subjects were highest in n Ach followed by upper class subjects and finally low class subjects. McClelland (1955), Rosen (1956), and Feld (1960) differentiated between a high and low class, and found upper class subjects highest in n Ach. Merbaum (1962) used race as a criterion for class differentiation, and found that whites were higher in n Ach than blacks on all measures employed. In these studies, race, family income, and parental occupation effectively delineated classes that differed in n Ach. However, a common explanation as to what fosters n Ach in a wealthy or middle class home as compared to a poor home was not specified.

Religion. McClelland, Rindlisbacher, and deCharms (1955), and McClelland (1955) found that Protestants are higher in n Ach than Catholics. Feld (1960), however, found no difference between Protestants and Catholics.

Parental expectations and child rearing practices. A great deal of research has dealt with parental characteristics and behaviors, and n Ach levels in children. Strong evidence exists that parental expectations for achievement along with early training in independence operate together to instill a high, persistent n Ach in children. Levin and Baldwin (1959), Feld (1960), Argyle and Robinson (1963), Callard (1964), and Campanelle (1965) showed that learning occurs by the introjection of parental exhortation and standards, and by identification with achievement oriented parents. Bartlett and Smith (1966) showed how mothers develop high n Ach in their children by more often expressing dissatisfaction with unsatisfactory behavior, and less often telling the children

that they are loved as a reward. Bradburn (1963) published evidence that men low in n Ach perceive their fathers as more dominant than do men high in n Ach. McClelland et al. (1953), McClelland and Friedman (1953), Winterbottom (1953, 1958), McDonald (1956), Gordon (1959), Rosen and D'Andrade (1959), Muthayya (1967), and Scanzoni (1969) concluded that early training in independence and mastery contributes to the development of strong n Ach, and that this development will be reflected in behaviors characterized by independence, persistence, popularity, and success in school. Contrary to this evidence, Young (1957) and Nunn (1967) found that familial and social class variables were significantly more predictive of n Ach than knowledge of parental child rearing practices. Neither Young nor Nunn attempted to correlate types of rearing practices with familial and social class variables.

Personality characteristics. Several personality characteristics have been correlated with n Ach. Concerning aspiration level, Isaacson (1964) found that students with high n Ach preferred courses of intermediate difficulty, while low n Ach students chose either the easy or the very difficult ones. A study by Atkinson and Litwin (1960) showed the same curvilinear relationship between n Ach and some laboratory tasks.

Concerning risk-taking behavior, which differs from aspiration level in that performance is dependent primarily on chance factors rather than individual skill, Littig (1963) found that high n Ach subjects preferred lower risks than low n Ach subjects. Van der Meer (1966), using similar game tasks, came to the same conclusion.

Upward social mobility strivings have also been measured and correlated with n Ach. Littig and Yeracaris (1965) found that persons of blue-collar origin who achieved white-collar status were higher in n Ach than those who remained in the blue-collar occupational stratum.

A similar finding was earlier reported by McClelland (1955).

Concerning persistence, Winterbottom (1953) found stronger persistence on various tasks in high n Ach subjects than low. Feather (1961) found that this same relationship depends upon the perceived difficulty of the task. High n Ach subjects persisted longer when the probability of success approximated 0.50, whereas the reverse was true at the extremes.

There are indications that n Ach is related to the recall and resumption of incompleated tasks, that is, a measure of task tension. Atkinson (1953) found that high n Ach subjects recalled more incompleated tasks than low n Ach subjects when the conditions were ego-involving. Weiner (1965) interrupted subjects while working at several tasks. After failure experience, high n Ach subjects tended to resume the interrupted tasks while subjects with low n Ach tended to resume the tasks following success experience.

High and low n Ach subjects differ in both time perception and time perspective. Knapp and Garbutt (1958) showed that high n Ach subjects have a dynamic perception of time as opposed to a static time perception in low n Ach subjects. High n Ach subjects perceived time as "a dashing waterfall," "a galloping horseman," or "a bird in flight," while subjects low in n Ach preferred descriptions as "a quiet motionless ocean," or "a vast expanse of sky." Gotzl (1967) demonstrated that high n Ach subjects are more future oriented than low n Ach subjects. High n Ach subjects had better memory for tasks that were to be reported later as compared with closer in time, in contrast to low n Ach subjects.

Concerning partner choice, French (1956) found that high n Ach subjects chose partners perceived as competent but unsympathetic, whereas



incompetent but sympathetic partners were chosen by low n Ach subjects.

Concerning recognition behavior and competition, Kagan and Moss (1962) showed that high n Ach subjects engaged in achievement behavior in order to gain recognition more than achievement for its own sake, and did this more frequently than subjects low in n Ach. Heckhausen and Roelofsen (1962) showed that frequency of achievement-motivated competition and attempts to master failure in childhood play a major role in developing high n Ach.

The degree of conformity has also been measured. McClelland et al. (1953), Krebs (1958), Wilkins (1964), and Titus (1966) published studies in support of the contention that high n Ach subjects, when compared to low n Ach subjects, had higher ego-strength scores, were more internally controlled, and were more resistant to opinion change. An additional finding by Wilkins (1964) that high n Ach subjects have low self-sufficiency on a group dependence measure seems to be contradictory, and is an isolated finding.

#### Research on Affiliates of Fraternities, Sororities, and Independents

Despite the fact that fraternities and sororities have been well-established institutions at American universities for over seventy-five years, empirical studies on those who affiliate with these organizations and those who do not are almost non-existent. The amount of research data, which has been published mainly in professional journals for college student personnel workers, in no way compares to the amount of information found in popular magazines for public consumption. The empirical data which is available deals mainly with grade-point average differences and college attrition rates rather than significant personality characteristics or biographical variables. In addition, most of the data has been

collected using only male subjects. Sororities have not been systematically studied. The review that follows will deal first of all with the available empirical data. Less formalized data will only be mentioned in passing.

The first systematic approach to the problem was taken by the University of Michigan's Survey Research Center (Campbell, 1963). Questions about fraternities were answered by a large sample of undergraduate men. Based on their answers, Campbell (1963) reported that: (1) the typical fraternity man came from very much the same kind of home as the non-member; (2) the member was somewhat more likely to have college educated parents; (3) he was more active in athletics and extracurricular activities; (4) he had more dates with girls and filled more campus offices; (5) he was quite often interested in business or law as a career; (6) religious preferences among affiliates and independents did not differ greatly; (7) affiliates depended less upon their own earnings for support; (8) members received lower grades in their studies. In addition, a consensus view of the undergraduate student body held that fraternity life was generally a "good thing," but that it was becoming a less significant influence on the campus life in general. Fraternity life was considered more expensive than other living accommodations, required more of the members' time, taught social skills and confidences, aided in getting into campus offices and activities, and placed more emphasis on conformity. Adjectives which both independent and affiliated students associated with fraternity men were "well-dressed, well-to-do, aggressive, enthusiastic, and sophisticated." Associated with non-members were the words "individualistic, introverted, studious, and liberal."

Another study, dealing with both males and females, was published

the following year by Jackson and Winkler (1964). The main drawback to this study was that "pledges" were compared to independents. A "pledge" is not fully affiliated with a fraternity or sorority. Nevertheless, through the use of several personality inventories, a college ability test, and a biographical inventory, it was demonstrated that: (1) pledges were different from those students who do not pledge on a number of characteristics, values, and expectations, that is, male pledges had higher EPPS scores in dominance, succorance, intraception, order, and heterosexuality, and female pledges had higher scores in intraception, deference, and heterosexuality; (2) potential pledges participated in more social activities in high school; and (3) pledges had unfulfilled expectations of the role fraternity or sorority affiliation would play in their academic lives (see also Levine and Sussman, 1960).

Other studies have dealt with specific variables. Goodman (1962), Wolf (1965), Goldsen, Rosenberg, Williams, and Suchman (1960), and Kurdeka (1972) lent support to the historical opinion that affiliates are lacking in academic and educational goals, and consequently do poorer in college. However, Crockston (1960), and Willingham (1962) found no difference or better academic performance among affiliates. In addition, despite the findings by Harp and Taietz (1966) that cheating is more common among affiliates than independents, Stannard and Bowers (1970) found that fraternities and sororities provide more a legitimate than illegitimate opportunity structure for meeting academic demands. Stannard and Bowers labeled the test and term paper files kept by many affiliate groups as a legitimate academic opportunity, in addition to the tutoring of new members by older members.

Of particular interest to some researchers is the relationship of

social mobility and affiliation. Both Meuller (1961), and Borhnstedt (1968) claimed that fraternities and sororities represent important social groups used by the students as a means for upward social mobility. The nature of Meuller's evidence was basically anecdotal. Borhnstedt, however, employed a questionnaire designed to measure personality traits, personal values, student orientations, attitudes about work, social class, opinions on getting ahead in the world, and predicted peak earning capacity. Based on his analysis, Borhnstedt reported that subjects from upper social classes who had higher aspirations used the fraternity as an attempt to maintain their fathers' social status as compared to those in the lower strata who joined to improve their status. Thus, the fraternity served as a means for status mobility or status maintenance depending upon the particular affiliate's social background. No other studies bearing on this point have been published.

As mentioned above, the bulk of printed material on affiliates in popular magazines is not empirically substantiated. For examples of this non-empirical data, the following should be consulted: Bogardus, 1940; Senior Scholastic, 73 (9), 1958, p. 18; Levine and Sussman, 1960; Gresham, 1962; Shofstall, 1963; Dalton, 1965; Time, 87, 1966, p. 54; and Rodnitsky, 1969.

#### Statement of the Problem

As was explained in the introduction, the most common n Ach research technique is to define groups of high and low achievers through the use of psychometric instruments, and then to study variables antecedent to and correlated with high and low n Ach. This study attempted to reverse this process by looking for n Ach differences in intact social

groups, which in other studies had been found to be characterized by several of the antecedents and correlates of n Ach.

In attempting such a reverse process the primary and most salient problem was that of choosing the groups to be studied. There are numerous intact social groups in the university population. It seemed to this researcher that a logical choice would be to study affiliates and independents. The reason for the choice of these intact social groups was that several variables have been studied in both the context of n Ach research and research with affiliates and independents. For example, consider the following variables: home background, social class, parental education, career goals, religious preferences, academic ability, educational goals, social mobility, and conformity. As was shown in the literature review, each of these variables at one time or another has been studied in the context of both n Ach and affiliation-independence. However, n Ach and affiliation-independence have not as yet been related.

This study attempted to make such a relation. In the context of so doing, affiliate and independent groups were used as the vehicle for studying the reversal of the usual n Ach research technique. It was seen that the two areas could be related by posing questions similar to the following: Since affiliates have stronger upward mobility strivings than independents, should they not then be higher in n Ach since upward mobility has been correlated with high n Ach? On the other hand, since being an affiliate demands more conformity than being an independent, would not affiliates be lower in n Ach since conformity is correlated with low n Ach? Since affiliates are ordinarily richer than independents, should they not be higher in n Ach since belonging to the upper classes has been correlated with high n Ach? On the other hand, since affiliates receive

lower grades than independents, should they not be lower in n Ach since low grades are correlated with low n Ach? It was assumed that these, and similar variables, were salient to both the n Ach and the affiliation-independence research data, and therefore the affiliate and independent groups were chosen for this study. It seemed that the examination of these social groups for n Ach differences would provide for a reasonably good test of the strength of some of the conclusions concerning n Ach reached through the more conventional research technique.

A second problem in attempting to reverse the usual n Ach research technique was the choice of a proper psychometric instrument to test for n Ach differences in the intact social groups. For reasons that will be more fully explained in Chapter II, this decision was a particularly difficult one since n Ach measuring devices have not been perfected. Therefore, in addition to the main problem, this study was also concerned with a comparison between three n Ach measuring devices.

For this study, the main question posed for both males and females was: Do affiliates differ from independents in need achievement? If they do, are affiliates higher than independents in level of need achievement, or is the reverse true?

Other questions explored by this research design were:

(1) Are the different need achievement measures equivalent, that is, do their results reflect group differences and similarities in the same direction and to similar degrees?

(2) Do males and females differ in level of need achievement?

(3) Do affiliates and independents of either sex differ on some of the biographical variables that have been correlated with need achievement? Specifically, do they differ in family size, ordinal position,

geographic origin, religious affiliation, parents' education, family income, employment aspiration level, future occupation, source of financial support, time spent socializing, college extracurricular activities, time spent studying, affect of affiliation on studies, and parents' opinion regarding affiliation?

(4) Do affiliates and independents of either sex differ in intellectual ability?

## CHAPTER II

### METHOD

#### Subjects

The original pool of subjects consisted of 65 female independents, 58 male independents, 30 female affiliates, and 40 male affiliates, or an  $N = 193$ . This number was reduced later to  $N = 120$  for reasons to be explained in the statistical analysis section. These subjects were volunteers from the University of North Dakota, who were fulfilling a research requirement for an introductory psychology course. The only requirement for participation was that the subjects be either a freshman or sophomore, and that they be single. The former controlled for the natural "drop-out" selection process in college which would influence a measure of  $n$  Ach. The latter was prohibitive to joining any of the fraternities or sororities at the University of North Dakota. This exclusion of married students may have introduced a bias since married independents may be more "adjusted" than single independents. No control was introduced to counteract this potential bias. Since this study was performed in the second part of the academic year, each of the affiliates was a full member and not a "pledge." Since the pledge situation is a probation period, it could easily distort a  $n$  Ach measure.

#### Research Sessions

The data collecting sessions were held in the evening, and varied in length from 50 to 120 minutes depending upon the speed each subject worked. Males and females were tested separately, but no attempt was



made to separate affiliates from independents. There were 8 sessions, 4 for each sex, and at each session there were approximately 25 subjects.

### Measurement Instruments

Five measurement instruments were employed in the study: (1) a biographical questionnaire; (2) a n Ach measure derived from an adaptation of the Thematic Apperception Test (TAT); (3) the Edwards Personal Preference Schedule (EPPS), scored only for n Ach; (4) a n Ach measure devised by Costello (1967); and (5) the ACT score for each subject which served as a measure of intelligence. This score was obtained from the University of North Dakota registrar. The order and method of presentation, and the rationale behind these measures are presented below.

Biographical questionnaire. The biographical questionnaire was divided into two parts, and was the second measurement instrument given to the subjects. Part I was concerned with the subjects' affiliation or non-affiliation, and the few questions asked were not arranged for quantitative analysis. The directions and questions are presented in Appendix I, and a sample of the answers is given in Appendix II.

Part II consisted of 18 questions, each with 4 alternative answers (see Appendix I). These questions dealt with a range of biographical variables significant to both n Ach research and affiliate studies.

Need achievement (n Ach) measures. Three separate n Ach measures were given to the subjects. The main reason for this is that a primary point of dispute among researchers in this area has to do with the method of measuring n Ach. Projective techniques have been the principle devices used to quantify the strength of n Ach. The most commonly used projective measures are McClelland's Thematic Apperception Test (McClelland, Atkinson, Clark, and Lowell, 1953), the French Test of Insight

(French, 1958), and the Iowa Picture Interpretation Test (Johnson, 1957). Sometimes, the TAT is taken together with the Test Anxiety Questionnaire (Mandler and Sarason, 1952) as a combined measure of n Ach (Feather, 1961).

With regard to the projective n Ach measures, several critical problems arise. Klinger (1966) pointed to their lack of internal consistency, lack of test-retest reliability, their deficient validity against performance criteria, and the low intercorrelations among several projective n Ach measures. Carney (1966) showed that the TAT was more sensitive to irrelevant situational cues than a questionnaire measure of n Ach. McClelland et al. (1953) found that the TAT is not independent of test anxiety, a finding which casts doubt upon its discriminant validity.

Questionnaire methods have not been wholly satisfactory either. The most frequently used questionnaire is the achievement scale of the Edwards Personal Preference Schedule (EPPS). Others are two scales of the California Personality Inventory, the Achievement via Conformance scale and the Achievement via Independence scale (Gough, 1953). The validity of these questionnaires against external criteria has been disputed (Hermans, 1967; Weinstein, 1968).

Since a completely satisfactory measure of n Ach does not seem to exist, the two most commonly employed measures were used along with a newly developed questionnaire method. The first is the TAT projective technique. The second is the achievement scale on the EPPS. The third is a short scale (Costello, 1967), which was designed to give an objective self-report n Ach score with a minimum of time and effort. All three methods purport to measure n Ach although each defines n Ach in a different

fashion. This difference in definition will be explored further in the discussion of the results of the test comparisons.

The TAT technique. This n Ach measure was the first psychometric measure administered to the subjects. The administration followed guidelines laid down by McClelland et al. (1953). After the subjects were seated, four 8½ by 11 inch sheets of paper stapled together were handed to each one. On each sheet 4 sets of questions were printed. The sets of questions were spaced on the sheet so that one quarter of the page was allowed for writing about each of them. The questions were intended to insure complete coverage of a story plot. They were:

- (1) What is happening? Who are the persons?
- (2) What has led up to this situation? That is, what has happened in the past?
- (3) What is being thought? What is wanted? By whom?
- (4) What will happen? What will be done?

The experimenter read the following directions:

Part I of this investigation is a test of your creative imagination. During this first part, four pictures will be projected on the screen before you. You will have 20 seconds to look at the picture and then about four minutes to make up a story about it. Notice that there is one page for each picture. The same four questions are asked. They will guide your thinking and enable you to cover all the elements of a plot in the time allotted. Plan to spend about a minute on each question. I will keep time and tell you when it is about time to go on to the next question for each of the stories you will make up. You will have a little time to finish your story before the next picture is shown.

Obviously, there are no right or wrong answers, so you may feel free to make up any kind of story about the pictures that you choose. Try to make each story as vivid and dramatic as possible because this is a test of creative imagination. Do not merely describe the picture you see. Tell a story about it. Work as fast as you can in order to finish on time. Make the stories as interesting as you can. Are there any questions? If you need more space for any question, use the reverse side.

The room was then darkened for 20 seconds while the first picture was

projected on the screen. After 20 seconds the picture was turned off, the lights were turned on, and the subjects began writing. The experimenter kept time as indicated in the directions, and at the end of the final minute he would begin to prepare for the next picture, allowing no more than 15 additional seconds to finish. The same procedure was then followed for the next picture. The four pictures in order of presentation were:

- (1) Two men (inventors) in a shop working at a machine (McClelland et al., 1953);
- (2) Boy with a checked shirt at a desk with an open book in front of him (McClelland et al., 1953);
- (3) Father-son, Card 7BM from the Murray Thematic Apperception Test; and
- (4) Boy with vague operation scene in the background, Card 8BM from the Murray Thematic Apperception Test.

The collected stories were then scored according to the procedure developed by McClelland et al. (1953). This procedure was strictly adhered to, including the prerequisite scorer reliability requirement. Each subject received as his n Ach score the sum of the scores received on each of the four stories. See Appendix III for four story examples and how they were scored.

The EPPS technique. This schedule was the last psychometric instrument presented to the subjects. It was administered according to the standardized procedure (Edwards, 1959), and the subjects were allowed to leave the testing session after they finished this schedule. The answer sheets were hand-scored for n Ach only.

The Costello technique. This n Ach scale is composed of two

sub-scales which give a composite measure of n Ach. The scale consists of only 24 yes-no items. Although it is possible to consider scores on both sub-scales, only the composite score was employed in this study. The scale was attached to the biographical questionnaire as Part III, and was thus the third psychometric instrument presented to the subjects. Since the directions were self-explanatory, the subjects were allowed to answer the scale items as part of the questionnaire without special group instruction. The administration and scoring directions, and the entire scale are reproduced in Appendix IV. It should be noted that this scale has not as yet been widely used nor extensively validated.

American College Testing (ACT) scores. The composite ACT score for each of the subjects was obtained from the University of North Dakota. Although it has been demonstrated that in some cases n Ach is correlated with intelligence, this variable was not controlled for in this study for two reasons. First of all, the information would be valuable for comparative purposes. Secondly, statistical procedures are available to partial out the influence of the variable after the fact if necessary. The ACT scores were considered an appropriate measure of intelligence because, unlike college grade-point averages, they were obtained before the subjects affiliated themselves with a fraternity or sorority or chose to remain independent. Previous research indicates that affiliation does affect grade-point averages.

## CHAPTER III

### RESULTS

#### ACT Score Results

The ACT scores were compared through the use of the t statistic (McNemar, 1969) between independents and affiliates for each sex. The results are indicated in Table 1.

TABLE 1

ACT DATA FOR MALE AND FEMALE AFFILIATES AND INDEPENDENTS

Item	Males		Females	
	Affiliates	Independents	Affiliates	Independents
$n$	30	30	30	30
$\bar{X}$	22.62	23.33	22.39	22.23
SD	3.94	3.29	3.39	3.10

None of the six possible comparisons was statistically significant. The implication of these score results was that no differences found between groups and between the two measures cannot, in this case, be attributed to differences in intelligence between the various groups.

#### Three n Ach Measures: A Dual Analysis

To begin the analysis of the results of the three n Ach measures, the original pool of subjects ( $N = 193$ ) was reduced through the use of a table of random numbers to 120, with 30 subjects in each group. With this accomplished, the three sets of raw scores were transformed into standard scores with a mean of 50 and a standard deviation of 10 (McNemar, 1969).

The first analysis was correlational, and was performed to explore the relationships among the three n Ach measures. A Pearson Product-Moment correlation was calculated between Costello and EPPS, Costello and TAT, and EPPS and TAT for the following: all subjects combined, all women combined, all men combined, all affiliates, all independents, and for each group separately. The correlation coefficients are presented in Table 2.

TABLE 2  
CORRELATIONS BETWEEN NEED ACHIEVEMENT MEASURES

Groups	Costello-EPPS	Costello-TAT	EPPS-TAT
All subjects .....	0.2729	0.0798	0.1974
All women .....	.1781	.0898	.0100
All men .....	.3627	.0699	.3714
All affiliates .....	.2355	.0898	.2543
All independents .....	.3095	.0699	.1391
Male affiliates .....	.3144	.0812	.4727 <sup>a</sup>
Female affiliates ...	.1558	.1034	.0100
Male independents ...	.4156 <sup>b</sup>	.0685	.2609
Female independents .	0.1994	0.0800	0.0173

<sup>a</sup><sub>p</sub> < 0.01

<sup>b</sup><sub>p</sub> < 0.05

Only 2 of the 27 correlation coefficients were statistically significant, and these were quite low. No consistent relationship between the measures could be found. This indicated that the three n Ach measures could not be considered equivalent, that is, the scores could not be considered measures of the same variable.

The second analysis of the results was a factorial analysis of variance (Winer, 1971). The different n Ach scores were cast into three separate 2 X 2 factorial analyses. The means, standard deviations, and summary of analysis of variance are shown below.

Costello n Ach. The results summarized in Table 3 revealed that males and females did not differ in level of n Ach as measured by the Costello method. In addition, affiliates were neither higher nor lower in level of n Ach than independents. No significant interaction between these two variables was indicated on the Costello measure.

TABLE 3  
NEED ACHIEVEMENT AS MEASURED BY THE COSTELLO METHOD

Item	Males		Females	
	Affiliates	Independents	Affiliates	Independents
n	30	30	30	30
$\bar{X}$	50.73	46.68	52.51	49.39
SD	10.34	10.49	8.61	9.32

Summary of Analysis of Variance

Source	df	MS	F
A - Affiliation - Independence	1	360.53	2.70
B - Male - Female	1	145.20	1.08
AB - Interaction	1	5.64	0.04
Error	116	133.42	

EPPS n Ach. Results based on the EPPS measure of n Ach are presented in Table 4. Although affiliates and independents did not differ, there was a significant sex difference on this measure of n Ach ( $p < 0.05$ ). Males showed a significantly higher level of n Ach than females. Again, no significant interaction was indicated.

TAT n Ach. On the TAT measure, affiliates did the same as independents, and males were equivalent to females (see Table 5). The significant interaction ( $p < 0.05$ ) between these two variables was due to the high mean for female affiliates. As indicated in Table 5, female affiliates were significantly higher in level of n Ach than female independents.



TABLE 4

## NEED ACHIEVEMENT AS MEASURED BY THE EPPS METHOD

Item	Males		Females	
	Affiliates	Independents	Affiliates	Independents
n	30	30	30	30
$\bar{X}$	51.05	53.03	48.79	47.12
SD	11.46	7.64	11.06	8.12

## Summary of Analysis of Variance

Source	df	MS	F
A - Affiliation - Independence	1	0.69	0.01
B - Male - Female	1	501.43	5.13 <sup>a</sup>
AB - Interaction	1	100.28	1.02
Error	116	97.72	

<sup>a</sup>p < 0.05

TABLE 5

## NEED ACHIEVEMENT AS MEASURED BY THE TAT METHOD

Item	Males		Females	
	Affiliates	Independents	Affiliates	Independents
n	30	30	30	30
$\bar{X}$	47.44	49.59	55.55	48.04
SD	8.74	7.86	11.19	9.85

## Summary of Analysis of Variance

Source	df	MS	F
A - Affiliation - Independence	1	177.39	1.90
B - Male - Female	1	275.12	2.95
AB - Interaction	1	629.75	6.75 <sup>a</sup>
Error	116	93.25	

<sup>a</sup>p < 0.05Biographical Questionnaire Data: Part I

Part I of the biographical questionnaire gathered data concerned with how affiliates describe or think of independents, and how independents describe or think of affiliates. At first glance, the results

seemed to indicate that affiliates of both sexes did not entertain any specifiable or stereotypical descriptions regarding independents. Independents did entertain very specifiable stereotypes regarding both male and female affiliates. This could not be drawn as a safe conclusion, however, due to a serious methodological problem. It is very likely that the manner in which the questionnaire was presented "clued" the subjects to the fact that affiliates were being compared to independents. Since affiliates are undoubtedly aware of the unflattering stereotypes held by others, there may have been pressure on them to answer in a socially desirable or acceptable fashion on both Part I and Part II.

For this reason, the descriptions are mentioned here in passing, and will not be considered further. They are of interest only in so far as they reflect the extent of and negative nature of the stereotypes held by independents. There was not a single completely positive appraisal. The following is a reasonable summary of these stereotypes. For a more elaborate and mundane expression of these stereotypes, a sample of the full descriptions of affiliates and independents is contained in Appendix II.

According to male independent subjects, a male affiliate is wealthy and spoiled, socially cliquish, and a snobbish social climber. Although loud and gregarious, he is basically a conformer, unable to think for himself, and overly dependent on the other members. Often a drunken sports and party-loving "jock," he studies rarely, is unintelligent, and manages to stay in college only because of large scale cheating within the groups. Socially he is uncouth, infantile, inconsiderate, phony, ritualistic, insecure, and insincere. He is sexually permissive and is the Don Juan on campus, or more importantly, he thinks he is.

According to female independent subjects, a female affiliate is an empty-headed, unintelligent, rich, social-climbing snob, who is more interested in a date than an education. Her main concerns are her looks, her friends, and her friends' private affairs. Her moral values are low, and yet she unabashedly lets on in appearance and attitude that she is better than other girls. She is a ritualistic conformer, a fake, a non-thinker, and a member of a social clique.

#### Biographical Questionnaire Data: Part II

The results of Part II of the biographical questionnaire were analyzed by employing a 2 X k chi-square (McNemar, 1969). The chi-squares were calculated by sex between affiliates and independents to determine whether the distribution of choices among the four alternatives were different for the two groups. A 0.05 probability level was chosen for evaluating the results of the 36 chi-squares, and for this analysis the data from the original pool of 193 subjects were employed. Due to several expected values less than 5, for both sexes questions 4 and 17 were analyzed in a 2 X 2 chi-square, questions 5, 12, 15, and 18 were analyzed in a 2 X 4 chi-square, and all others in a 2 X 3 chi-square table.

Tables 6 and 7 show the statistically significant differences found for each sex. Not included in these tables are the following variables which did not discriminate between affiliates and independents of either sex at the University of North Dakota: family size, ordinal position, geographic origin\*, religious affiliation\*, father's education\*, mother's education\*, planned eventual income\*, time spent socializing\*, and subjective importance of academic excellence. Those followed by an asterisk (\*) have previously been found to discriminate between affiliates

and independents (Campbell, 1963; Jackson and Winkler, 1964). A fuller elaboration of the statistically significant results follows below.

The reader is referred to the response percentages in Tables 6 and 7.

TABLE 6

## BIOGRAPHICAL QUESTIONNAIRE RESPONSE PERCENTAGES - MALES

Content and Choices	Affiliates	Independents	$\chi^2$
Family income:			
\$10,000 or less . . . . .	28	43	6.63 <sup>b</sup>
\$10,000 to \$20,000 . . . . .	43	47	
\$20,000 or more . . . . .	30	10	
Extracurricular activities:			
5 hours or less . . . . .	50	67	8.38 <sup>b</sup>
6 - 10 hours . . . . .	45	19	
11 hours or more . . . . .	5	17	
Subjective importance of distinction in extracurricular activities:			
Not important at all . . . . .	18	47	8.94 <sup>b</sup>
Somewhat important . . . . .	52	36	
Very important . . . . .	30	17	
Effect of affiliation on a person's studies:			
Positive or negative effect . . .	15	45	8.04 <sup>a</sup>
Effect depends upon the person .	85	55	
Parents' opinion regarding affiliation:			
Favorable members . . . . .	23	2	32.84 <sup>c</sup>
Favorable non-members . . . . .	38	5	
No opinion . . . . .	27	65	
Unfavorable . . . . .	12	28	

<sup>a</sup> $p < 0.05$ ;  $df = 1$

<sup>b</sup> $p < 0.05$ ;  $df = 2$

<sup>c</sup> $p < 0.05$ ;  $df = 3$

Family income. Past research indicates that family income clearly differentiates between affiliates and independents. This remained the case for males, that is, fraternity members were more likely to come from wealthier families than independents. This did not seem to be the case for females. There was no indication that family income affects

TABLE 7

## BIOGRAPHICAL QUESTIONNAIRE RESPONSE PERCENTAGES - FEMALES

Content and Choices	Affiliates	Independents	$\chi^2$
Planned starting salary:			
\$8000 or less . . . . .	63	72	6.70 <sup>a</sup>
\$8000 to \$12,000 . . . . .	27	27	
\$12,000 or more . . . . .	10	1	
Future occupation:			
Business, law, self-employed . .	20	17	6.12 <sup>a</sup>
Physical sciences . . . . .	13	2	
Natural or social sciences . . .	67	81	
Source of financial support:			
Parents or relatives . . . . .	75	37	10.93 <sup>a</sup>
Scholarship or loan . . . . .	22	45	
Own earnings . . . . .	3	18	
Extracurricular activities:			
5 hours or less . . . . .	43	67	7.94 <sup>a</sup>
6 - 10 hours . . . . .	43	32	
11 hours or more . . . . .	14	1	
Time spent studying per week:			
5 hours or less . . . . .	7	23	9.83 <sup>b</sup>
6 - 10 hours . . . . .	30	22	
11 - 15 hours . . . . .	57	32	
16 hours or more . . . . .	6	23	
Parents' opinion regarding affiliation:			
Favorable members . . . . .	21	5	37.60 <sup>b</sup>
Favorable non-members . . . . .	60	11	
No opinion . . . . .	16	58	
Unfavorable . . . . .	3	26	

<sup>a</sup>p < 0.05; df = 2<sup>b</sup>p < 0.05; df = 3

whether a girl joins or does not join a sorority.

Planned post-college starting salary. Anticipated salaries differentiated affiliates from independents for females, but not for males. Sorority members thought they should earn higher starting salaries than female independents. Males, however, aimed for similar wages.

Future occupation. Male independents were just as likely as affiliates to be in business, law, self-employed, or in the physical and

natural sciences. Sorority members, however, were more likely to choose business, law, and the physical sciences, whereas independents choose mainly the natural and social sciences.

Financial support. Despite the fact that their families were financially equal, sorority members were more likely to be supported by their parents whereas independents depended more heavily on scholarships and their own earnings. Males did not differ on this point.

Extracurricular activities. Participation in extracurricular activities discriminated between affiliates and independents for both sexes. Both fraternity and sorority members spend more time than their counterparts being involved in campus extracurricular activities.

Subjective importance of distinction in extracurricular activities. Distinction in extracurricular activities discriminated for males only, a finding that was probably an artifact of greater male participation in campus sports. Those who do attach importance to noteworthy participation were more likely to be fraternity members.

Time spent studying. Female independents reported doing more studying outside the classroom than sorority members. The male groups reported spending an equal amount of time.

Effect of affiliation on studies. Male and female pledges have reported thinking that affiliation would help them receive higher grades (Jackson and Winkler, 1964). Actual affiliates were of a different opinion. In the present study, both male and female affiliates most often said that the effect depends entirely on the person. Female independents agreed. Male independents disagreed, however, and were mostly of the opinion that fraternities and sororities are probably more a hindrance than a help.

Parental opinion regarding affiliation-independence. Of all the variables tested for discriminative properties, this was by far the most powerful variable for both sexes. The parents of male and female affiliates are more likely to have a favorable opinion of fraternities and sororities, whereas the parents of male and female independents are more likely to have no opinion or to have an unfavorable opinion.

Affiliates and independents of both sexes, therefore, did differ on some of the biographical and personal variables that have been correlated with n Ach. Males differed significantly on five of the eighteen variables explored, and females differed on six. However, the non-significant differences were important in that previous studies have found many more differences between affiliates and independents on similar variables.

## CHAPTER IV

### DISCUSSION

#### Research Questions and Findings

The above results provided rather indefinite answers to the questions posed by this study. The first and most salient question was: Do affiliates differ from independents in n Ach? If they do, are affiliates higher in n Ach than independents, or is the reverse true? The answer to these questions was complicated by the apparent non-equivalence of the n Ach measures. If this matter is ignored, however, the answer seemed to be that they did not differ in level of n Ach. The one significant difference found for females on the TAT did not convincingly lead to the conclusion that a general difference exists.

A second relevant question was: Are the different measures equivalent, that is, do their results reflect group differences and similarities in the same direction and in similar degrees? The answer to this question was very strongly negative. The measures were definitely not equivalent within the limitation of the groups studied.

Thirdly: Do males and females differ in level of n Ach? Again, the answer to this question was complicated by the non-equivalence of the measures. On both the Costello and TAT measures, females in general achieved higher scores than males, although not significantly so. On the EPPS, the opposite result was found. On the EPPS, males were significantly higher in level of n Ach than females. Therefore, the answer to the question concerning sex differences in level of n Ach depended upon the measure used.



A fourth question was: Do affiliates and independents of both sexes differ on some biographical and personal variables that have been correlated with n Ach? The groups did differ on a few variables, but these differences must be considered in the light of the methodological problem concerning the order of Part I and Part II on the questionnaire. The differences may have been artifactual due to possible pressure upon affiliates to answer Part II in a socially desirable or acceptable fashion.

A final question was: Do affiliates and independents of either sex differ in intellectual ability? As measured by the ACT, affiliates and independents were of equal intellectual ability.

#### Implications of Research Findings

Several conclusions could be drawn from the above findings. The first broad conclusion that could be drawn was that the area of n Ach measurement is still a viable and important research topic. The results pointed to the fact that at least the Costello, EPPS, and the TAT are not equivalent measures of n Ach when college students are employed as subjects. This non-equivalence had an important effect on this study, but first the non-equivalence itself must be discussed.

A first step in seriously interpreting the non-equivalence would be to examine the definitions of n Ach offered by the authors of the three measures. McClelland's TAT n Ach is defined as:

"A learned motive which, in situations involving standards of excellence and competition among individuals to attain these standards, will give rise to a desire or tendency to do things as rapidly and/or as well as possible (McClelland et al., 1953)."

Edwards defines n Ach as:

"A need to do one's best, to be successful, to accomplish tasks requiring skill and effort, to be a recognized authority, to accomplish something of great significance, to do a difficult job well, to solve difficult problems and puzzles, to be able to do things better than others, to write a great novel or play (Edwards, 1959)."

Costello defines n Ach as:

"A combination of two elements: (1) the need to achieve through one's own efforts - i.e., the need to do a job well - and (2) the need to be a success which results in emulation of the successful rather than the hard work (Costello, 1968)."

If only these definitions are considered, it could be argued that the three n Ach measures should be tapping the same basic variable. The definitions certainly contain common elements. However, as was seen in the result section, the statistical results pointed to a different conclusion. From a statistical point of view these three measures did not seem to be measuring the same variable.

In regard to this statistical evidence, it is important to notice the use of the phrase "level of need achievement" in the above answers to the research questions. The reason for this is that a quantification of n Ach is referred to, and not a qualification. Although the majority of possible quantitative differences in this study are non-significant, there exist several patterns that seemed to point to a qualitative difference between the measures themselves. There was first of all a slight sex effect as explained in the result section. Secondly, the measures seemed to be affected by the affiliation-independence variable. Affiliates in general scored higher in n Ach on both Costello and TAT. Again, the EPPS reversed the finding, and independents in general did better. This might lead one to believe that the Costello and TAT measured the same variable, and the EPPS was different. This possibility was contradicted by the correlational data presented in Table 2. When these correlational data were consulted, and when the sex and affiliation-

independence variable effects were considered, it seemed safe to conclude that Costello n Ach, EPPS n Ach, and TAT n Ach scores were not numerical indicators of the same variable at all. This meant that for any one subject they did not equally quantify regnant n Ach. Across samples they were not equally indicating numerically the same qualitative variable. The opinion of many researchers that a satisfactory n Ach measure does not exist seemed to be supported by this study (Klinger, 1966; Carney, 1966; Weinstein, 1968; Hermans, 1967; Costello, 1967; Hermans, 1970).

There is a wide range of possible explanations for this finding. Concerning the sex effect that occurred, French and Lesser (1964) offer the explanation that male n Ach and female n Ach operate differently, and are perhaps not even the same motivational variable. If this is the case, identical instruments should not be used for both males and females. However, at this writing, separate tests are not available.

Other possible explanations for the non-equivalence would concern themselves with differences in projective and questionnaire measurement variables, a possible interaction of situational cues with these variables, the order of presentation of the measures in the design of this study, and other similar considerations.

A second conclusion which could be drawn from this study's results would be that there were indications that at least in recent years there has occurred a leveling of differences between affiliates and independents. This contention was supported by the fact that no difference was found in level of n Ach between the two groups, despite the fact that previous research associated with these groups could lead one to infer such a difference. As was pointed out earlier, affiliates, in relation to

independents, were characterized by several variables which have been correlated with high n Ach. They were also characterized by several variables associated with low n Ach. However, it did not seem that one could infer n Ach differences between the groups based on these characteristics.

A leveling of differences was also indicated by the fact that no difference was found in intelligence between the two groups. This added additional support to the findings previously cited (Crookston, 1960; Willingham, 1962) that affiliates of either sex are not less intelligent than independents. How this finding is related to grade-point average differences between the groups at the University of North Dakota is not clear (Kurdeka, 1971).

Finally, a leveling of differences between the groups was indicated by the fact that fewer biographical and personal variables were found to discriminate between the groups than was the case in studies as recent as 1963 and 1964. The number of biographical and personal differences found between members of the groups was small indeed. However, it must again be noted that the differences which were found may have been due to (or at least influenced by) a methodological error.

As limited as the above evidence was, it nonetheless indicated that perhaps there were not any great differences between affiliates and independents at the University of North Dakota. The reason for the perpetuation of the rather negative stereotypical descriptions given in Appendix II would be an interesting topic for further study.

A third and final conclusion that was drawn from the study's results was that the main goal of this study was not achieved. That goal was to test the strength of several conclusions concerning n Ach by

reversing the usual n Ach research technique. At present it is possible to define groups of high and low achievers, and then to find the antecedents and correlates of high and low n Ach. The attempt to find n Ach differences in intact social groups characterized by these known antecedents and correlates failed in this study for two main reasons. First of all, there was a poor choice of intact social groups to be used as a vehicle for the technique reversal. Apparently, these groups were not different enough to reflect any n Ach differences. This problem was compounded by a methodological error. Secondly, at least for college students, the n Ach measures were non-equivalent, and consequently interfered with the search for n Ach differences between the groups.

These methodological and measurement problems will have to be solved before this type of research, which involves personality characteristics in the context of intact social groups, will produce satisfactory and non-contradictory results. Advances must be made in the proper method for choosing groups for study. Advances must also be made in the development of psychometric instruments to measure the personality characteristics to be studied.

## CHAPTER V

### SUMMARY AND CONCLUSIONS

The present paper was concerned primarily with one area of research in human personality, that is, the need to achieve (n Ach). Specifically, it was an attempt to test the strength of several conclusions concerning the antecedents and correlates of n Ach by reversing the research technique most commonly employed in reaching those conclusions. That common technique is to define high and low achievers psychometrically, and then to study antecedent variables and correlates. This study attempted to reverse this process. Rather than defining groups of high and low achievers, the groups chosen for study were intact social groups, which in other studies have been found to be characterized by several of the antecedents and correlates of n Ach. The intact social groups explored in this context were affiliates of fraternities and sororities, and independents.

The study was also a comparison of three n Ach measuring devices, that is, the Thematic Apperception Test, the Edwards Personal Preference Schedule, and the Costello Scales.

There were 120 freshman and sophomore volunteers who were assigned to 4 groups with 30 subjects each: male and female affiliates, and male and female independents. In addition to the n Ach measures, a biographical questionnaire and an intelligence measure were employed.

The following are summary statements of the conclusions reached in this study:

- (1) Affiliates and independents of either sex did not differ

significantly in level of need achievement.

(2) The TAT, EPPS, and Costello need achievement measuring devices did not seem to be equivalent with college students, that is, their results did not reflect group differences and similarities in the same direction and to similar degrees. Better need achievement measuring devices need to be devised.

(3) The content and operation of male and female need achievement seemed to be different, that is, they did not seem to be the same motivational variable.

(4) Affiliates and independents of both sexes did differ on a few biographical and personal variables.

(5) Affiliates and independents of either sex did not differ significantly in intellectual ability.

It should be noted in conclusion that these summary statements apply only to the affiliate and independent populations at the University of North Dakota. They are not necessarily generalizable to similar populations on other campuses.

APPENDICES



## APPENDIX I

### BIOGRAPHICAL QUESTIONNAIRE

Please fill in the following information. Do NOT sign your name.

Age \_\_\_\_\_ Sex \_\_\_\_\_ Year in college \_\_\_\_\_

#### PART I

Part I of this questionnaire is concerned with your membership or non-membership in a fraternity or sorority. Answer only those questions which apply to you personally, i.e., some are directed only to non-members, some to members. Make sure not to miss or skip any that do apply to you. The importance of answering frankly, honestly, and concisely should be noted.

- 1) Are you presently a member of a fraternity or sorority? Yes No
- 2) If you are a member, what is the name of the organization? \_\_\_\_\_
- 3) If you are a member, please explain as concisely as possible in the space below your main reasons for joining or remaining a member of a fraternity or sorority. (If more space is needed, turn the page over).
- 4) If you are not a member, did you go to the rush proceedings or were you pledged by one of the organizations? Yes No
- 5) If you are not a member, please explain as concisely as possible in the space below your main reasons for quitting if you rushed or were pledged, or for not attempting at all to join a fraternity or sorority. (If more space is needed, turn the page over).
- 6) If you are a member, please describe in one or two sentences your general impression of non-members (of the same sex as yourself) as a group.
- 7) If you are not a member, please describe in one or two sentences your general impression of members (of the same sex as yourself) as a group.

## PART II

Part II of this questionnaire consists of several questions, each with four (4) alternative answers. Please answer each question by circling the letter of the answer most appropriate to your case. Obviously, there are no right or wrong answers. Some of the alternatives are closely related so consider your answer carefully before circling a choice. It should again be pointed out that this information is strictly confidential, and will in no way be associated with you personally.

- 1) How many members are there in your family including your parents?
  - a) 3
  - b) 4
  - c) 5
  - d) 6 or more
  
- 2) What is your position in your immediate family?
  - a) First born or oldest
  - b) Last born or youngest
  - c) Somewhere in between the first and last born
  - d) An only child
  
- 3) Your family lives in what geographic setting?
  - a) A large urban center or city
  - b) In a suburb of a large city
  - c) In a small city, town, or village which is not a suburb
  - d) In a rural setting (farm or otherwise)
  
- 4) Your religious affiliation is which of the following?
  - a) Protestant
  - b) Jewish
  - c) Catholic
  - d) Other
  
- 5) What is the extent of your father's education?
  - a) Completed grade school or less
  - b) Completed or some years of high school
  - c) Completed or some years of college
  - d) Completed or some years of graduate study
  
- 6) What is the extent of your mother's education?
  - a) Completed grade school or less
  - b) Completed or some years of high school
  - c) Completed or some years of college
  - d) Completed or some years of graduate study
  
- 7) Which of the following is the best estimate of your family's annual income?
  - a) Under \$5000
  - b) \$5000 - \$10,000
  - c) \$10,000 - \$20,000
  - d) \$20,000 or over

- 8) After graduation, you plan on a starting salary of which of the following?
- Under \$5000
  - \$5000 - \$8000
  - \$8000 - \$12,000
  - \$12,000 or over
- 9) Which of the following do you eventually plan on having as your highest annual income (either singly or as a family)?
- Under \$5000
  - \$5000 - \$10,000
  - \$10,000 - \$20,000
  - \$20,000 or over
- 10) Which of the following approximates most closely the nature of your future occupation as you see it now?
- Business or law
  - The physical sciences, engineering, architecture, etc.
  - The natural and social sciences such as doctor, dentist, social worker, psychologist, etc.
  - Self-employed (include here "housewife with no outside employment")
- 11) While here at college your main financial support comes from what source?
- Parents or relatives
  - A scholarship or loan
  - Your own earnings from summer employment
  - Your own earnings from a job presently held
- 12) Up till now, estimate the number of hours per week spent in dating, partying, or socializing at college:
- 5 or less
  - 6 - 10
  - 11 - 15
  - 16 or over
- 13) Estimate the number of hours per week spent on college extracurricular activities:
- 5 or less
  - 6 - 10
  - 11 - 15
  - 16 or over
- 14) For you personally, how important is it to receive distinction or recognition for extracurricular activities?
- Not important at all
  - Somewhat important
  - Important
  - Most important part of college life
- 15) Estimate the number of hours per week spent in curricular or academic matters outside the classroom:

- a) 5 or less
  - b) 6 - 10
  - c) 11 - 15
  - d) 16 or more
- 16) For you personally, how important is it to receive distinction or recognition for academic excellence?
- a) Not important at all
  - b) Somewhat important
  - c) Important
  - d) Most important part of college life
- 17) What is your opinion concerning whether or not a fraternity or sorority has an affect on a person's studies?
- a) They are probably more a hindrance than a help
  - b) They do not affect a person's studies one way or the other
  - c) It depends entirely on the person
  - d) They are definitely helpful to a person's studies
- 18) Estimate your parents' opinion regarding fraternities or sororities:
- a) They were members themselves (one or the other) and like it
  - b) They like the idea even though they had never been members
  - c) They have no opinion one way or the other
  - d) They dislike the idea, whether they were members or not

## APPENDIX II

### SAMPLE ANSWERS TO THE BIOGRAPHICAL QUESTIONNAIRE

#### Male Independents' Answers to Questions 5 and 7

1. I saw nothing that I was interested in and have heard that the fraternities are nothing but a bunch of screw-offs.

A bunch of big headed drunks.

2. Frankly I didn't have the money and now that I've seen what they are all about, I wouldn't join such an infantile, lazy, and inconsiderate bunch of slobs who call themselves fraternities, even if they paid me!

Mentally imbalanced, and very, very discriminating.

3. I feel that fraternities are merely a social clique, that are not at all conducive to good study habits and getting an overall education.

Usually they are a bunch of guys out for a good time, don't give a hoot about school (grades), and get drunk every weekend.

4. Frats are completely ridiculous as far as I am concerned. You can do everything you can do in a frat far cheaper if you don't belong. They talk about brotherhood. You can make more friends being a non-member because you aren't always dependent on your so called brothers for friendship.

Some are good guys, but they all mostly seem not to want to have anything to do with you if you don't belong.

5. I felt that most of the fraternities were more concerned with social life and not with academic matters. I felt that that kind of life could only hamper my progress as a person and as a student.

They are generally carefree, they never have had to worry about working, and they only want to have a good time no matter who gets hurt.

6. I thought they operated on a "holier than thou" system, and that they were not fair to everyone, even those in the fraternity.

Overly friendly, phony, but careful not to hurt others.

7. Too much hassle. Poor study conditions. Too much expense. Too permissive, etc.

Liberal, fun-loving guys.

8. They are mostly a haven for insecure, insincere, non-thinkers. They serve mostly as an outlet for perversions, etc. The idea of the frat is acceptable, but the general B.S. now connected with it is pure 100% U.S. Government inspected B.S.

Same.

9. Fraternities did not appeal to me and I felt they were remnants of the past. I did not want to be lumped together with many other people of an organization like that. Most people in frats seem to care about little else than their frat.

Most seem quite ignorant of what is going on anywhere other than their house, and seem to be very impressed with themselves. Most were rich spoiled brats when they were younger.

10. Fraternities are a farce. They are nothing more than places where groups of social climbers gather. They are of no use to anyone who wants to retain his individuality. Fraternities are places where loners can go to say that someone is there who really likes them. They can also impress people in their home community by saying they belong to a fraternity. Fraternities are a place to turn when you can't accept having to face the world by yourself.

Most fraternity men really think they've got something going for them. They can wear brightly colored jackets, and run around in brightly colored groups. They're usually zeroes who can't make it without a lot of buddy buddies.

Female Independents' Answers To Questions 5 And 7

1. I did not see any individuality in the girls - their common questions in rush - "Do you have a boyfriend? What's your major? Do you like UND so far?" On the outside they appeared a little too plastic for me. Not enough individual freedom.

The girls seemed to be stamped "Sally Sorority" right across their faces. In the Union you can pick them out like flies.

2. I'd rather live in the dorm. Sorority girls are too high-classed for me. Their moral code is too low. I don't believe sororities help one's studies.

As a group, they seem snobbish and self-centered. They look down on other people and seem boring because all they talk about are parties and how many boys they know.

3. Costs too much money and I think most of the girls are snots with no time at all for anyone but frat boys (who are slob) and the sorority girls (who are snots).

I think most of the girls dress super-fancy, wear too much make-up,

just chase frat boys, and are snots.

4. I'm too independent and I don't think I'd like it - plus it's too expensive. And I don't like the way the Greek system tends to change people for the worse.

Many sorority girls tend to be superior about their belongings. They feel they're an elite group. There are exceptions of course to this. In fact, I'd say the snobs are a minority who give the whole group a bad name.

5. I can't stand sororities. The majority of girls in them are a bunch of snobby sluts. They put on this innocent act but really they'll screw anything with or without pants on.

I think sorority girls have a superiority complex. Since they're in the sorority they assume they're better than the rest.

6. I feel that when a person gets to college he should be strong enough to make it without such crutches.

I have nothing against them personally although I sometimes feel the games they play are ridiculous.

7. I had no desire to join one. I feel they are a bunch of cliques, and I don't like cliques. Another thing it's too expensive and really there's no need for it in my life.

The girls I know are really nice. Sometimes they are a little snobbish.

8. I did not pledge a sorority because I simply didn't like them. To me it seemed all for show. I just couldn't dig all the smiling and over-friendliness. Some seemed sincere but it just wasn't for me.

They are either very friendly or very snobbish. They seem to put a lot of emphasis on clothing.

9. I did not attempt to join a sorority because I was not interested in them. I had heard bad things about them. The things that I had heard, and in some cases experienced, were that most sorority girls were snobs. They were girls that were from rich families, and they not only knew it, but they made sure everybody else knew it too. Another reason is that if you're in a sorority you tend to get classified as an Alpha Phi or Alpha Chi Omega girl. The sororities each have their own reputation; and even if you don't deserve that reputation you're stuck with it. For myself, I'd rather be thought of as me and not as a girl from a certain sorority.

My general impression of sorority girls at UND is that they are friendly, but still tend to look down on non-members.

10. To join a sorority shows a need and dependence on other people for approval and the whole society bit. You go from one nest to another.

Never really sorting out your mind or getting it together by yourself. The typical conversation of sorority girls is clothes, and superficial things which do not interest me.

Members of sororities collectively speaking are society girls - generally babbling fools.

Male Affiliates' Answers To Questions 3 And 6

1. The desire for brother fellowship and social gains for myself and others and for desire for more friends.

They are doing their own thing by not joining and it is not for everyone and they do not socially fit in.

2. A need for close friendship and the recourse of a home value instead of a mere number.

It is their own prerogative whether or not to be a member, but I believe they are missing an important factor in an all around education.

3. To hopefully establish deeper friendships than in the anonymity of outside the fraternal system. To have a place to go where I'd have many good acquaintances and a few friends.

Non-members are good guys, as good as all people are, and they have their own circle of friends and I have mine - it's no big deal. They probably have a little different ideas about frat life than I do, and it's okay.

4. To meet new friends (girls and boys), and to have good drinking parties.

Most of my friends are non-members so I would have to say that as a group I like them.

5. The brotherhood of living with so many people.

They seemed to be opposed to the Greek system, and are trying to do away with it.

6. There is no main reason for being a member. I do feel that the Greek system has a lot to give me in that it will help establish me into certain organizations - BOG. Also, experience in living with different people, all friends, and the outside social functions and just enjoying life, leadership, etc. The Greek system for males offers a lot in social graces, meeting a lot of people, leadership, opportunity, and fun.

I have a lot of non-Greek friends, and I feel that there is no difference between us except in that I wear a Greek pin.



7. Fellowship - get to know a large group of men very well. Social activities.

The same as anyone who is in a frat. No difference.

8. Leadership and social benefits. Close relationships with persons my own age which is something I believe is extremely valuable.

I have nothing which is disfavorable in opinion toward non-fraternity members.

9. The advantages far out-weigh the disadvantages. The social program alone would be enough but the friends you gain and the things you learn, i.e., how to live with people are an added advantage.

There is no difference except they are missing an important part of college life.

10. I joined because I wanted to have a good time in college. I figure that I would probably be in college only once when I am young and wanted to make the most of it. I have made many friends that I really love and wouldn't give it up for the world.

I haven't formed any opinion.

Female Affiliates' Answers To Questions 3 And 6

1. Friendship, social life, scholarship, home atmosphere, the ability to get to know more people, enrichment of all parts of life.

The same as members. Maybe a few are more "freaky" but then outward appearance isn't always indicative of personal values.

2. I joined a sorority because I felt it was something I could work for and be rewarded for at the same time. It has meant many close friendships and has developed in me the ability to give much more than I used to.

Non-members are in a sense in an organization all their own. Many of my closest friends remained independent.

3. I joined because of all the friendships I made. To know someone really cares about you at a large campus is really something, and to know that other girls know you care about them. It's more than just a house - it's people, it's a family. It's a place to go when you're down or when you're up. It's sharing and reaching out. It's giving of yourself and being involved.

I don't think there's any difference. They're not for everyone.

4. For the friends that are made, for the security of a home, for the people you get to meet.

Most of them are individuals who do not like to be told what to do. They like to feel that they can make it on their own.

5. My sorority has given me many close friends who I know I will always have. Living in an informal environment has a more relaxed as well as convenient atmosphere.

Everyone is the same to me. They're are going to be a few who will not understand and will disagree with everything a Greek does.

6. I enjoy the friendship and closeness offered by being in a sorority. It gave me an opportunity to meet people.

My general impression is no different than when I meet a sorority member only I get the impression that they are anti-Greek.

7. I love the girls in the sorority and it's a home away from home. It isn't that expensive and it's a place I always know I'm welcome just as my DDD sisters and all others are.

Non-members probably don't want to join and that is their right. I certainly don't resent them! My best friends are independent.

8. Lots of close friends, feeling of being wanted, getting away from home more often, feeling more a part of college life.

No specific impressions. It doesn't bother me if they're non-members.

9. I feel very warm there. I feel that the girls are very friendly. Also, I am from Grand Forks and I live at home, and if I hadn't joined a house I think I would be bored to death with school.

I feel that they are people just like everyone else. Nothing has changed them as far as not being a member.

10. Meet people (both girls and boys), friendships, always having somewhere to go, someone to talk to.

I see no difference in them. They have friends the same as I do. Just because my closest friends are in one club (sorority) makes no difference.

## APPENDIX III

### EXAMPLES OF TAT STORIES

The following are four stories told by a male subject and four stories told by a female subject. The score for each story is indicated in parentheses after the story. The possible score range for each story was from -1 to +10.

#### Male Subject

1. Joe Thompson and Howard Ritz are two middle age men working on a new invention in the lines of mass production. These two men had been co-partners in a 19th century blacksmith shop and had seen the need for faster production. How to forge and shape iron in fast and convenient way is what is wanted but they have just failed and are wondering how they can change it. They will eventually discover the use of the iron lathe to make the shape of metals faster than the previous forgery method. (4)
2. This boy doesn't know how to read well and can't concentrate on his work. His name is Tom Zilch. Tom is not overly intelligent and over his six years of schooling has fallen behind the rest of his classmates. He doesn't like school and he can't see why he has to go to school and would like to quit. Tom will fail his grade and later will study enough so that he will be equal to his new classmates and take a new interest in school and eventually be one of the better students in school. (4)
3. This is an old wise college professor who has taken a liking to a young college student who wants to be a scientist. This old professor is trying to guide this young student. The old professor had the student in a few of his classes and was impressed with his intelligence and later had private talks with him leading to their friendship. The old professor has new dreams for the young man, dreams which he himself is too old to fill. The young man is amazed at the old man's wisdom and wants to succeed as a scientist to please the old man. The old professor will die but the young student will have immense fame for his discoveries as a scientist. (5)
4. This is the story of a young med student, Louie Hoople, who is recalling his post as an army medic of the 19th century. The young man was a medic during the civil war and worked under a real butcher in poor conditions but decided that he, Louie, would someday be a doctor. Louie is reflecting on the lives of the men he could have saved during the war if he would have had the knowledge he has now. He wishes he had these men back to save them. Louie will become a

famous surgeon noted especially for his dedicated, quiet work. (3)

Female Subject

1. The people are two men who are working around a bench. The men have discovered something and are trying to elaborate on it. They are having difficulties in trying to produce a finished product. They will eventually come up with an invention that will be used everyday in the future and will be of vital importance. (4)
2. A young boy is trying to study his assignment for the evening but is having some difficulty at it. The day before the teacher called on him for an answer but he didn't know it, so in case if she does the something tomorrow he wants to be ready with an answer. He knows he must study hard at it but he can't seem to understand his math equation. He studies all evening and hardly gets any sleep worrying about it. The next day they have a test. The boy gets an A and he's really happy he studied so hard. (4)
3. A young man in college who wants to get married asks his father if he is doing the right thing. The young man, Bob, had a disagreement the night before with his girlfriend and he is wondering now if he really loves her. His father tells Bob that the something usually happens before a young couple gets married, and that the something happened to him. He offers other helpful advice too. The next day Bob has a long talk with his girlfriend and the matter is straightened out. He is now sure about both of their feelings for each other. (-1)
4. A boy is having a dream about a story that someone had told him. It is during the war and a good friend of the one who has told the story was shot. His buddies try to get the bullet out from his side but are having a hard time. The story teller emphasizes the point that they can't get the bullet out and that the man may die. The boy wakes in the morning actually believing that this happened and that the man died. (-1)

APPENDIX IV

COSTELLO NEED ACHIEVEMENT SCALE

Directions: Following are 24 short questions that can be answered by simply circling either a yes or a no. Please choose your answers carefully.

1. Are you inclined to read of the successes of others rather than do the work of making yourself a success? Yes No
- 2.\* Would you describe yourself as an ambitious person? Yes No
- 3.\* Do you work for success rather than daydream about it? Yes No
4. Would you describe yourself as being lazy? Yes No
- 5.\* Do you usually work to do more than just get through an examination?  
Yes No
6. Will days often go by without your having done a thing? Yes No
- 7.\* Do you do things "today" rather than putting them off to do "tomorrow?" Yes No
8. Are you inclined to take life as it comes without much planning?  
Yes No
- 9.\* Do you work hard at a job? Yes No
10. Do you, or did you, do little preparation for examinations? Yes No
- 11.\* Do you grow excited when telling someone about the work you are doing? Yes No
12. Do you usually remain free from boredom when on vacation? Yes No
- 13.\* Are you very interested in the lives of successful people? Yes No
14. Do you remain relaxed at the thought of a difficult task you are about to undertake? Yes No
15. Are you usually unimpressed by how hard others work? Yes No
16. Are you usually able to sleep even when engaged in an exciting job?  
Yes No
- 17.\* Are you usually awed in the presence of very successful people?  
Yes No
18. Can you usually concentrate on what people are saying to you even when an important job is unfinished? Yes No

- 19.\* Does the great achievement of others sometimes make you feel small?  
Yes No
- 20.\* Have you at any time tried to model your life on that of a successful person? Yes No
21. Do you readily forget your work when you are on vacation? Yes No
- 22.\* Are you influenced by those around you in the amount of work you do?  
Yes No
23. Do you usually remain free from envy when others are successful?  
Yes No
- 24.\* Do you often compare how well you can do something with how well others can do it? Yes No

Items followed by an asterisk (\*) are scored for a "yes" response. The other items are scored for a "no" response.

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