

THE RELATIONSHIP OF SELECTED ACADEMIC ACHIEVEMENT, FAMILY BACKGROUND,
AND COLLEGE ADJUSTMENT VARIABLES TO PERFORMANCE ON THE ACHIEVEMENT
VIA CONFORMITY SCALE OF THE CALIFORNIA PSYCHOLOGICAL INVENTORY

by

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B. S., Fort Hays Kansas State College, 1966

A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Family and Child Development

KANSAS STATE UNIVERSITY

Manhattan, Kansas

1967

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ACKNOWLEDGEMENTS

The writer is indebted to Dr. Marjorie Stith who served as advisor for this thesis. Her immediate concern, encouragement, resourcefulness, and guidance were deeply appreciated. The writer is also very grateful for the time spent and the sacrifices that were made in order for deadlines to be met.

The writer also wishes to express her sincere gratitude to Dr. Ruth Hoeflin and Dr. Ivalee McCord for their helpful suggestions and for serving on the writer's committee.

Appreciation also goes to the writer's husband who was patient and understanding during the time of the writing of this thesis.

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CHAPTER I

INTRODUCTION

In the last two decades the increased concern of college officials to be more effective in selecting and guiding college students accompanied the increasing problem of college enrollment. Most colleges and universities can, at the present time, afford to be selective as they endeavor to admit students who will be successful in the college setting and to minimize the attrition rates. During this short twenty-year period guidance and selection studies have been a research area that was undoubtedly among those most intensively investigated in the entire field of research. Studies both published and unpublished were concerned with finding some workable method of predicting satisfactory performance of entering college students either as a means of selecting applicants for admission, for scholarship programs, or for providing guidance services for college students.

The basic requirement (Brown, 1962) for the success of any study of prediction is the clear and operational statement of what is to be predicted, in other words, the criteria for satisfactory performance. There are both intellectual and non-intellectual criteria. The conventional criterion which measured academic achievement was an intellectual criterion, college grade-point average, usually for the freshman year. Non-intellectual criteria have also been used, but less often than intellectual criteria. These take the form of certain personality test

scores and measures of extracurricular adjustment. These measures were used when success in college was defined in ways other than academic success. Fishman (1962) emphasized his strong interest in the need for the development of other, newer, non-intellective criteria for assessing satisfactory performance in college in addition to the student's ability to remain in school.

Another basic requirement for prediction studies is a precise description of the factors which will help to forecast adequate performance. These factors can also be termed intellective and non-intellective. The most common intellective predictors have been high school grades and scores on standardized measures of scholastic aptitude. Non-intellective factors which contributed to the effectiveness of attempting to determine whether an individual will or will not perform successfully in the college setting usually took the form of biographical data, family background factors, or personality test scores. The inclusion of these so-called "non-intellective" attributes complicated the mechanics of the prediction problem but also considerably increased the rewards to be reaped from a successful solution (Brown, 1962). Brown felt that the educator would have increased power to maximize the intellectual potential of students if the contingent relationship of cognitive power, atmosphere for learning, social class values, and personal predispositions were understood sufficiently to allow bringing each of these attributes to bear on the educational development of the student.

The purpose of the present study was to investigate the relationship of (1) academic predictor (ACT scores) and performance (GPA) variables, which are intellective factors, (2) family background

variables, and (5) college adjustment variables which are non-intellective factors obtained from personal interviews with performance on the Achievement via Conformity scale of the California Psychological Inventory, which is a non-intellective determiner of success in the college environment.

Specifically, the following null hypotheses were tested:

1. There is no significant difference between college freshmen home economics majors who score high and those who score low on the Achievement via Conformity scale (Ac) and selected measures of academic achievement:

- a. ACT score
- b. Grade-point average

2. There is no significant difference between college freshmen home economics majors who score high and those who score low on the Achievement via Conformity scale and selected measures of parent-child relationships:

- a. Number and kind of rules while growing up
- b. Attitudes of students toward parents' rules
- c. Freedom of communication between subjects and parents
- d. Concern of parents for subjects' academic achievement
- e. Concern of parents for daughters' outward behavior versus inward feelings
- f. Participation of parents in organizations and civic groups
- g. Descriptions of mother and father

3. There is no significant difference between college freshmen home economics majors who score high and those who score low on the Ac scale

and selected college adjustment variables:

- a. Evaluation of strictness of dormitory regulations
- b. Evaluation of attitudes and behavior of peers
- c. Expectations concerning amount of study, courses, teachers, extracurricular activities, and dorm life
- d. Changes in methods and habits of study
- e. Acquisition of new ideas since coming to college
- f. Occurrence of new experiences in the college setting

CHAPTER II

REVIEW OF LITERATURE

Intellective Predictors and Criteria of Satisfactory College Performance

The prediction of academic achievement has been notably successful where intellective factors were utilized. Studies (Cronbach and Stuit, 1949) of the correlation between measures of scholastic aptitude and academic achievement (grade point average) indicated that this relationship was of the order of .50-.70. The average multiple correlation of high school grades and scores on a standardized measure of scholastic aptitude with the usual performance criterion, freshman GPA, was .55 (Fishman, 1957).

Differences in scholastic aptitude, however, appeared to account for only part of the variability in academic performance found among college students. Weitz and Wilkenson (1957) felt that only about one-tenth to one-half of the variability in academic performance may be accounted for by variability in intellective factors measured by tests of scholastic aptitude and high school GPA.

Getzels (1960) also questioned the use of standard aptitude tests and grades themselves as measures of academic achievement on grounds that high scores on standard multiple-choice tests and high grades both result more from narrow conformist interpretation of the test and/or demands of teachers than they do from creative and original behavior.

Brown (1962) concluded that intellectual predictors alone did not

throw light on the motivational problem. Inclusion of "non-intellective" attributes would seem to bring about added problems in analysis, but if successfully interpreted would bring about a more rewarding solution. According to his assumption, the educator has increased power to maximize the intellectual potential of students if the contingent relationships of cognitive power, atmosphere for learning, social class values, and personal predispositions were understood sufficiently to allow bringing each of these attributes to bear on the educational development of the student.

Non-intellective Predictors of Satisfactory College Performance

Biographical information. According to Fishman (1962) non-intellective factors may enter into studies of selection and guidance either as predictors of academic success or as criteria of successful college performance or as both predictors and criteria. One of the frequently used non-intellective predictors is the biographic inventory which is administered in a number of different forms. Meyers (1952) investigated the relationship of biographical factors and academic achievement. Among 355 freshmen women at an eastern women's liberal arts college, he compared seven personal history items with the standard predictors which were high school grade average and two aptitude test scores and with the final criterion for academic achievement, freshman GPA (grade point average). No relationship was found between the biographical scores and the two aptitude test scores, nor was there a relationship with the high school grade average. However, the correlation between the biographical inventory and the college grade point

average was .62. A validation of the biographical scoring key was carried out by scoring applications for admission of the class entering in 1952, and the results were the same.

The purpose of a study (Denham, 1966) at the University of Arkansas was to investigate the prediction of success in the College of Education by the use of biographical data and of self ratings completed by students in reply to an eighty-five item multiple-choice questionnaire called the Personal Data Inventory (PDI). College success was measured by grade point average and by the number of college hours completed. PDI scores accounted for 46.2 per cent of the predictable variance of GPA. PDI scores accounted for 36.8 per cent of the predictable variance of hours completed. The personal data and self rating scores, as well as a composite of these scores were found significantly related to the prediction of college success as measured by college hours completed. It seemed that background variables contributed substantially to the prediction of academic achievement, but the question remained, which background variables were predictive and to what extent were these predictive.

Home factors were alleged to exert a great influence over academic achievement. McKnight (1958) hypothesized that the previous research which had shown relationships between achievement and a number of home status variables could represent the direct influences of the variables themselves or the mediating effect of intelligence, intra-family behavior, or extra-familial social forces. The study intended to (1) verify the relationships for status factors where the effects of intelligence were minimized, (2) discover similar relationships for

intra-family variables, and (5) determine the extent to which the intra-family factors mediate between the status factors and achievement. Intra-family variables considered between parent and child were support, involvement, protectiveness, regulation, authority, discipline, acceleration, and educational emphasis. Variables between parents were dominance and harmony. The criterion for college success was relative achievement of 209 freshmen students: grade point average at the end of their freshman year. Number of children in the family, amount of student employment, whether or not the family was Jewish, maternal social affiliations, number of household facilities, desirability of housing, and number of phonograph records considered conducive to achievement by a group of judges were all related to the criterion. It was concluded that certain of the relationships noted in the past between home status factors and achievement were not dependent upon intellectual influences.

In 1963 French compared aptitude, interest, and personality measures as differential predictors of success in major field areas as a step in developing a multi-factor battery for use in counseling. Lunneborg and Lunneborg (1966) confirmed French's conclusion that intellectual measures contribute most to absolute prediction of college grades, but certain non-intellectual measures contribute most to differential prediction (when a goal is of maximum utility to the individual). This study offered challenging support for the notion that biographic information of a kind easily available from admissions applications or brief questionnaires can effectively contribute to the prediction of academic performance.

Though an intellectual predictor discriminated between high and low intellectual aptitudes, Smith (1965) was concerned with identifying differences between achieving and non-achieving high ability college freshmen through the use of interview data. His subjects were 154 male freshmen at the University of Kentucky in the fall of 1960 who had all scored in the top five per cent on the College Qualification Tests. Thirty-eight of the subjects failed to achieve a standing of 2.00 during either first, second, or both semesters. Forty per cent of the subjects failed to achieve acceptable grades. Significant differences were of a non-cognitive or psycho-social nature rather than any lack of ability to do college work. The interview, which contained sixty-seven items relative to student's psycho-social background was given to thirty-one non-achievers and thirty-two achievers. The interview included questions concerning socio-economic background, high school background, attitudes toward authority, personal needs and aspirations, academic adjustment, peer culture, and satisfaction with and perception of the university experience. Smith found that achievers came from communities of 50,000-100,000 population, while non-achievers came from 600,000- population. More achievers than non-achievers were associated with the Protestant church. The achievers by their own admission were more religious than non-achievers. Achievers who came from high schools with an enrollment of 900-1,200 did better in high school, had better study habits, did not feel pressed by parents to achieve high grades, were concerned with cultural aspirations and service to humanity rather than money or the good life, had more hobbies, perceived few personal problems, were satisfied with their subject major, felt academically

adjusted, and thought grades were important.

Watson (1965) in a study of cross validation of certain background variables as predictors of academic achievement found that only one of the variables he selected for study showed a relationship to the criterion for academic achievement, GPA. A personality background inventory was given to eighty-four male junior and senior volunteers from an elementary psychology course at the University of Iowa. Students were asked to report the educational level of their fathers and mothers, number of siblings, size of high school graduating class, high school extracurricular activities, home town population, rural vs. urban home setting, family religious preference, and birth order. Father's educational level was the only predictor which showed a relationship to the criterion.

In a study by Roudabush (1964), which utilized ninety-five test scores, 140 biographical items, age and sex as predictor variables, it was concluded that biographical information could contribute substantially to the prediction of academic achievement as measured by self reported GPA.

Meade (1963) used a biographical inventory as an essentially non-intellective predictor of college success. The purpose of the investigation was to develop and validate weighted scoring keys for use with a biographical inventory as a predictor of college success. Although academic achievement was taken into consideration, the criterion of college success emphasized non-intellective factors and differed significantly from the usual criterion, grade point average. Analysis of other aptitude, achievement, personality, and interest tests indicated

that the biographical inventory differentiated more effectively than the other predictors.

Blanton and Peck (1964) in a study determining college student motivation and academic performance discovered that ten biographical items relating to activity patterns had a correlation of .815 with grades.

Weitz and Wilkenson (1957) were also concerned with this prediction dilemma. Some students who appeared to have, on the basis of test performance, a high level of academic ability sometimes failed to meet the standards their institutions set while in some instances "less able" students performed beyond their test-measured academic capabilities. They hypothesized that a considerable portion of variability in academic performance was influenced by factors other than those measured or measurable by tests of intellective functioning. They explored the relationship between academic success in college and six different non-intellective conditions or experiences: (1) only child status at time of entering college, (2) one or both parents diseased at time of entering college, (3) parents divorced at time of entering college, (4) graduation from a civilian, private secondary school, (5) graduation from a private military academy, or (6) two or more of the above. College freshmen who had experienced one of the conditions listed above performed less well in college than "normal" freshmen when scholastic aptitude and previous achievement were held constant.

Personality inventories. In his study of non-intellective predictors of academic and extracurricular achievement in college,

Nichols (1966) used the California Psychological Inventory (CPI), the Vocational Preference Inventory (VPI), the Adjective Check List (ACL), and the Objective Behavior Inventory (OBI). He found that a few individual CPI items deserved mention because they reinforced the general impression that the student who gets good grades is likely to be compulsive and conforming. Among the non-intellective predictors, the California Psychological Inventory was the best predictor of grades and the OBI (Objective Behavior Inventory) was the best predictor of extracurricular achievement. For both criteria the CPI and OBI scales were substantially better predictors (average correlation .23) than were the ACL and VPI scales (average correlation .11). For predicting college grades, high school grades were the best predictor (average correlation .33), followed by non-intellective factors (average correlation .27). Aptitude test scores were the least valuable in predicting college grades (average validity .12). For predicting extracurricular achievement the non-intellective scales were the best predictor (average validity .19), high school grades were next (average validity .10), and aptitude test scores were least valid (average validity .07).

Himelstein (1965) found that six of the seven subscales of the Minnesota Multiphasic Personality Inventory yielded significant correlations with the grade point averages of 193 freshmen. However, the correlations between the seven scales and ACT scores were generally even higher. The results of this study strongly implied that the non-cognitive predictors of school performance employed may not be independent of intellectual factors, and may be, in reality, indirect measures of intelligence.

GPI as a non-intellective predictor. The California Psychological Inventory (CPI) was created in the hope of attaining two goals of personality assessment. The first goal was to use and to develop descriptive concepts which possessed broad personal and social relevance. Characteristics of personality explored through the CPI had a wide and pervasive applicability to human behavior and were related to the favorable and positive aspects of personality rather than to the morbid and pathological (Gough, 1957).

The second goal was to devise brief, accurate, and dependable subscales for the identification and measurement of the variables chosen for inclusion in the inventory. The scales were addressed principally to personality characteristics important for social living and social interaction. The CPI include eighteen standard scales. Each scale is intended to cover one important facet of interpersonal psychology, and the total set of eighteen was intended to provide a comprehensive study of an individual from the social interaction point of view. The scales were grouped in four categories, seeking to emphasize some of the psychological and psychometric clusterings which existed among them. The eighteen scales have been correlated with academic achievement and achievement aptitude (Rosenberg, 1962; Holland, 1959; Bendig and Klugh, 1956; Gough, 1953).

Gough (1953) has also analyzed the personality scale as a predictor of academic achievement. He found that the Hr (Honor Point Ratio) scale, later renamed Ai (Achievement via Independence), appeared to be a partial predictor of academic outcomes in its own right without drawing to any great extent on intellectual factors. He obtained a correlation

of .38 between Hr (A1) scores and course grades in eleven cross-validating college samples totaling 1,265 cases.

He also found some social-psychological (non-intellective) implications of higher and lower scores on the Hr (A1) scale. A composite adjective check list was used to carry out an analysis of the social stimulus values of the Hr (A1) scale. Two samples of thirty each were drawn by selecting the ten highest and ten lowest subjects on the Hr (A1) scale from two graduate student groups of forty each and from a class of forty medical students. A study was then made of observer ratings of the thirty highest ranking students as compared with such ratings of the thirty lowest ranking students.

Adjectives checked more frequently for higher scoring subjects than for low scoring subjects were:

adaptable	determined	persevering
alert	efficient	planful
ambitious	foresighted	pleasant
appreciative	honest	rational
capable	industrious	reasonable
clear thinking	intelligent	realistic
conscientious	interests wide	reliable
co-operative	logical	responsible
dependable	organized	resourceful

Adjectives checked more frequently for low scoring subjects than for high scoring subjects were:

cautious	nervous	sentimental
dissatisfied	preoccupied	shy
dull	rebellious	wary
immature	rigid	

Bendig and Klugh (1956) validated Gough's Hr scale. They found that Gough's Hr scale correlated with GPA to about the same degree that it correlated with grades in introductory psychology. Bendig (1957) also found that the use of stanine scores in place of raw scores neither

increased nor decreased the validity of the Hr (Ai) subtest in the CPI.

Holland's (1959) study was performed to test the usefulness of the CPI as a predictor of scholastic achievement for a sample of exceptionally talented college freshmen attending 291 colleges and universities. The study was also designed to provide needed information for the development of a theory of intellectual achievement. High grades were positively associated with the Ac scale. For the CPI the Social Presence (Sp), Socialization (So), Responsibility (Re), Achievement via Conformance (Ac), and Femininity (Fe) scales were also found to have predictive validity. The CPI was found useful in predicting college freshmen grades for a sample of high aptitude high school seniors.

Rosenberg (1962) found that a combination of a measure of intellectual ability and a measure of personality functioning (such as the Ac scale on the CPI) was superior to any one of the eighteen scales taken alone.

Non-intellective Criteria for Judging Successful College Performance

Non-intellective factors may enter into studies of selection and guidance either as predictors of successful performance or as criteria (Fishmann, 1962). Though the use of non-intellective criteria was not as common as the use of intellective criteria, it has been utilized with non-intellective predictors. Hill (1966) studied autobiographical correlates of achievement motivation in both men and women using the Ac (Achievement via Conformity) and Ai (Achievement via Independence) as criteria. These criteria were selected because of their known correlation with intellective criteria, the grade point

index of academic achievement (Gough, 1964). Hill anticipated that a careful examination of the material from a rather structured autobiography given to all of the subjects would lead to a better understanding of the variables affecting achievement motivation and of the way these were different for men and for women.

Each of 352 male and 337 female students entering as freshmen at the University of Texas wrote an autobiography following a structured outline so that information was obtained about his relationships with each of his parents about his childhood, adolescence, current circumstances, self image, and his work and study habits. Each subject answered an abridged form of the CPI including Ac and Ai scales. For each of these scales and separately for males and females, groups were formed of 27 per cent of individuals whose scores were highest and 27 per cent whose scores were lowest. Using chi-square tests, these groups were compared separately on the variables resulting from the content analysis of the autobiographies.

High Ac male and female students perceived their parents and sibling relationships to be more positive than low Ac's. High Ai's reported a less favorable perception of their mothers. During adolescence, high Ac girls apparently fared markedly better than low Ac girls, while high Ai boys seemed significantly less happy and well adjusted during this period.

Parent-Child Relationships in Relation to Achievement Motivation

Much of the literature involving parent-child relationships and their effect on achievement motivation concerned social status of the

family, child-rearing practices, or racial and ethnic grouping. This particular study is primarily concerned with the relationship of selected background variables to academic achievement measured by the Ac scale of the California Psychological Inventory. These variables did not fit precisely into a discussion of authoritarian, permissive, or democratic child-rearing practices, nor did they involve parental social status as such. Religious preference and affiliation, race or ethnic group, birth order, or season of birth were not taken into consideration. Consequently, a review of literature pertaining to these areas of achievement motivation would not be entirely meaningful.

Limited research which supported the researcher's bias that there was some need for the definition of these variables which may be useful as predictors of academic success has been done on more isolated family background variables in relation to academic achievement. Delineation of the interrelationship of self acceptance, differences between parent's perceptions of their children, and goal-seeking effectiveness with an academic setting was discussed by Wyer (1965). Measures were obtained on about 550 male and 400 female college students of their self perceptions and self acceptance, their parents' perceptions and acceptance of them, and parental attitudes toward academic pursuits. Self acceptance and parental attitudes related to academic effectiveness in males but not in females. The discrepancy between parents' perceptions of their children related negatively to self-acceptance in both males and females. Males whose parents either agreed that a college education was primarily for intellectual broadening or agreed that it was primarily for social broadening were more effective than those parents who disagreed on this

matter.

Parental attitudes affected the ultimate college success of their offspring who were highly successful academically in high school but who did poorly during their first year in college (Teahan, 1963). The students revealed no differences in their attitudes toward their parents' child-rearing practices, but, compared to their daughters, the mothers of low achieving girls had stronger attitudes relating to domination and the use of discipline ($p < .01$). In the case of low male achievers, the disparity was primarily between father and son, fathers of low male achievers being more possessive and dominating ($p < .05$). Teahan (1963) suggested that insufficient development in self-sufficiency and independence handicapped the under-achievers.

A previously mentioned study by Leland Smith (1965) concluded that non-achievers felt that their parents pressed them for grades while achievers felt that they applied their own pressure. Non-achievers were more negative and hostile toward authority than were achievers.

Koenigsberg (1962) investigated background factors and selected personality correlates of achievement motivation. He proposed to test the relationship between need achievement and (1) home background factors, (2) parent-child relationships, and (3) selected personality characteristics. Instruments used were the McClelland test of need achievement and the Edwards Personal Preference schedule.

Two variables which did seem to be slightly related to achievement motivation as measured by the McClelland technique were (1) parent-child relationships and (2) anxiety. There appeared to be a slight relationship between five of the variables and need achievement as

measured by the Edwards test: (1) home background; (2) parent-child relationships; (3) sibling relationships; (4) selected personality characteristics (need affiliation, abasement, nurturance, and endurance); and (5) anxiety.

Shore and Leiman (1965) investigated parental perceptions of students as related to academic achievement in junior college. Parents of high achievers and under-achievers responded to an open ended questionnaire. Parental descriptions of vocational goals and interests, assets and liabilities for academic work in college were significantly different for each group. Parents of achievers saw specific goals requiring academic training whereas parents of under-achievers saw indecision or goals requiring little academic training. Parents of achievers saw assets and liabilities in terms of academic abilities; parents of under-achievers saw assets and liabilities in terms of personality traits and social ability.

While there was no difference between achievers and under-achievers on intelligence tests or achievement tests, performance in course work was markedly different. It was clear that under-achievers were learning at a level equivalent to achievers but because of certain difficulties were unable to produce or achieve in the school situation. According to Shore and Leiman (1965) the parent-child relationship may be an important source of this difficulty with parental expectations regarding academic achievement and concern and interest over academic issues very important factors related to motivation for high performance.

Adjustment to College Environment

A review of the literature in the area of adjustment to college

and its relationship to academic achievement uncovered little information. Student failure and social maladjustment was investigated by Gibbs (1965). The proposed hypothesis stated that unsuccessful students show an inadequate personal-social orientation. The California Test of Personality with additional biographical items was administered. The hypothesis was confirmed. Factor analysis pointed to a "failure orientation" which may be attributed to a subcultural clash between social skills, habits, and attitudes learned at home and those appropriate to the academic environment.

Hollenbeck (1965) studied variables in student effectiveness (adjustment and achievement) as outcomes in relation to Rogerian conditions of effective parent-child relationships. He hypothesized that high levels of congruence, empathic understanding and unconditional positive regard by parents, would be positively related to (1) adjustment as measured by correspondence between self and ideal self Q-sorts and (2) achievement as measured by grade point average controlled for ability. The hypothesis with respect to adjustment was given strong support, but the hypothesis with respect to achievement was given minimal support. (The results were discussed in relation to different conditions of the relationships and of the sex of the student and the parent).

Though Heilbrun (1962) found an association between poor adjustment for college females and increased identification with their mothers, a conclusive relationship has not been found between poor adjustment to college and academic achievement. Evidence of the relationship between these adjustment variables and non-intellective criteria (performance

on the Ac scale) has not been previously considered.

The preceding research indicated that there was validity in considering background variables (non-intellective factors) in the search for characteristics and predictors of achievement motivation. It was the purpose of this study to compare selected background variables to the performance of the Achievement via Conformity scale of the California Psychological Inventory, and to examine significant relationships.

CHAPTER III

METHOD

This study was planned to investigate possible differences between two groups of home economics students in regard to selected background variables. The groups were established on the basis of the subjects' performance on the Achievement via Conformity scale of the California Psychological Inventory.

Subjects

The sample was selected from 119 freshmen home economics majors who enrolled at Kansas State University during 1959-1964, and who had been included in one of two on-going research projects in the Department of Family and Child Development. One of these studies involved thirty-seven (37) students involved in the honors program of the College of Home Economics, along with fifty students who served as a control group matched on selected variables, i.e., size of home town, size of high school, and socioeconomic level of the family. The second study involved thirty-six low-scholastic potential students, described in this manner because of low scores on the American College Test.

All freshmen women in these studies who had completed the California Psychological Inventory were considered for inclusion in this study. The sample was selected on the basis of scores on one subscale of the CPI, Achievement via Conformity (Ac). Those in the upper 50 per cent of the distribution and those in the lower 50 per

cent of the distribution made up the comparison groups. From these groups only those who had completed the 38-item questionnaire were finally selected. There were thirty-four subjects in the high Ac group and thirty-one subjects in the low Ac group. Five honor students were in the lower 30 per cent of the Ac distribution, while four low scholastic potential students were in the upper 30 per cent of the Ac distribution (Table 1).

TABLE 1
PLACEMENT OF SUBJECTS ON THE Ac SCALE, INCLUDING INITIAL LABEL

Initial Label	High Ac	Low Ac	Total
Honors	16	5	21
Non-honors	14	7	21
Low scholastic potential	4	19	23
Total	34	31	65

All were from intact families except two subjects who lived with their grandparents. Two subjects were from Missouri, one was from New York, and the remaining sixty-two subjects were all from Kansas. The subjects, however, had a wide range of socioeconomic and educational backgrounds (Kell and Kennedy, 1966). They were from both urban and rural communities, from families of professional workers and families of moderately skilled or less skilled workers. They had attended high schools of from 100 to 2,000 students.

The subjects (S_s) included in this study were not a random sampling of college freshmen women; and, as a result, an entirely con-

clusive test of significance could not be made.

Instruments

Interview. Each of the subjects included in the study had been interviewed during her freshman year in college. The interview (Appendix) contained thirty-eight items covering childhood activities, sibling relationships, peer relationships, parent-child relationships, and the subjects' reaction to the college situation. Each interview followed the prescribed schedule and little probing for additional material was done by any of the interviewers. The interviews were taped and typed transcripts were made. The interview used in this study was developed by Leone Kell and Ruth Hoeflin for use in a longitudinal study of honors students in the College of Home Economics at Kansas State University.^a

Twenty-four of the thirty-eight items were chosen (Appendix) because of their facility of analysis and relevance as background information. These twenty-four questions were assigned to one of two general categories: (1) parent-child relationships, and (2) adjustment to the college situation.

The parent-child relationships category included the following items:

1. Rules which the parents considered important (questions 10 and 11)
2. Reaction of subject to rules of parents (question 12)
3. Communication between subjects and parents (questions 17-23)
4. Concern of parents for subjects' academic achievement (question 13 and 14)

^aLeone Kell was a professor in the Department of Family and Child Development and Dr. Ruth Hoeflin was assistant dean of the College of Home Economics.

5. Concern of parents for daughters' outward behavior versus inward feelings (questions 20 and 24)
6. Participation of parents in organizations and civic groups (question 9)
7. Description of mother and of father (questions 33 and 34)

The adaptation to the college environment category included the following items:

1. Evaluation of strictness of dormitory regulations (question 25)
2. Evaluation of attitudes and behavior of peers (question 27)
3. Expectations concerning amount of study, courses, teachers, extra-curricular activities, and dorm life (question 36)
4. Changes in methods and habits of study (question 35)
5. Acquisition of new ideas since coming to college (question 37)
6. Occurrence of new experiences in the college setting (question 38)

In order to make objective analysis of the interview data possible, a code was designed which allowed the answer to each item to be rated or scored along a continuum moving from a positive response to a less positive response (Appendix). In addition to the coded responses, descriptive data was also taken from the interviews which made these responses more meaningful.

Rater reliability was determined by calculating the percentage of agreement between the investigator and her major professor. After training sessions in which the coding procedure was discussed, reliability was computed on six interviews not included in the sample. Reliability ranged from .91 to .98. The data were transferred to flow sheets and were analyzed by means of the chi-square test.

CPI. The complete California Psychological Inventory was given to each of the 119 subjects included in the initial sample. The CPI is a personality inventory containing eighteen subscales intended to provide a comprehensive survey of an individual from a social interaction point of view (Gough, 1964). Gough (1953) chose the names of the individual scales to describe as closely as possible the kind of behavior they were trying to reflect. The Achievement via Conformity (Ac) subscale seeks to identify those factors of interest and motivation which facilitate achievement in any setting where conformance is a positive behavior.

High Ac scorers can be described as capable, co-operative, efficient, organized, responsible, stable, sincere, persistent, industrious, and as valuing intellectual activity and intellectual achievement. Low Ac scorers can be described as coarse, stubborn, aloof, awkward, insecure, opinionated, easily disorganized under stress or pressures to conform, and pessimistic about their occupational futures.

The vast majority of American colleges are found to emphasize some degree of social and emotional conformity (Stern, 1962). This setting, then, would seem to encourage Achievement via Conformity. The Ac scale of the CPI was employed as a non-intellective measure or criteria for ascertaining successful performance in the college setting.

CHAPTER IV

RESULTS

The purpose of this study was to compare two groups of freshmen home economics students in regard to academic achievement variables, selected family background variables, and certain college adjustment variables. Chi-square analysis was employed to determine significant differences between the two groups.

The subjects in the two groups of college freshmen included in this study were chosen because of their scores on the Ac scale of the CPI. One group of thirty-four was made up of Ss who scored high on this scale. The other was a group of low scorers. Their performance on the Ac scale then, the independent variable, was compared first to measures of academic achievement (ACT and GPA).

Academic Achievement Variables

ACT. A significant difference existed between the two groups and their performance on the ACT test ($p < .01$). Forty-seven per cent of the high Ac group scored high on the ACT while 61 per cent of the low Ac group scored low on the ACT (Table 2).

GPA. There was also a significant difference between high Ac and low Ac groups in relation to grade point average ($p < .01$). Only 8 per cent of the high Ac Ss were on probation at the end of their freshmen year, while 48 per cent of the low Ac Ss were on probation at

the end of their second grading period. Thirty-eight per cent of the high Ac Ss had earned grade averages above 3.00 or a "B" average, while only 13 per cent of the low Ac scorers attained a grade point average at this level of achievement (Table 3).

TABLE 2
RELATIVE PERFORMANCE ON ACT TEST

Relative Scores	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Honors (high ACT)	16	47.0	5	16.1
Non-honors	14	41.1	7	22.5
Low scoring people (low ACT)	4	11.7	19	61.2
Total	34	99.8	31	99.8
	$\chi^2 = 17.777$		$p < .01$	

The subjects in the two groups were determined to be significantly different in both their ACT scores and their grade point average, as well as their scores on the Ac scale of the CPI.

TABLE 3

SUBJECTS' GRADE POINT AVERAGE, A MEASURE OF ACADEMIC ACHIEVEMENT

Coded GPA	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
On probation (below 1.5)	3	8.8	15	48.5
Not on probation (1.5-1.99, below graduation requirement)	2	5.8	3	9.6
Average of 2.00-2.99 (graduation requirement, 2.00)	16	47.0	9	29.0
Average of 3.00 and above (B-average and above)	15	38.2	4	12.9
Total	34	99.8	31	99.8
	$\chi^2 = 10.839$		$p < .01$	

Parent-child Relationships

The second comparison made between these two groups was their relationships with their parents.

Rules persistently mentioned by mothers. Each of the sixty-five subjects were asked to name the rules her mother "kept after" her about while she was growing up. The responses were recorded in two different areas, one which described the presence of rules, the other which described the kinds of rules persistently mentioned. Responses were classified either as an acknowledgment of specific rules, a reported absence of rules, or an indication that the subject had no rules which were persistently mentioned, because she knew what was expected and did not need

constant reminding.

The kinds of rules mentioned by the subjects were specified as rules concerning relationships with peers and siblings, grades, study, and achievement, housekeeping responsibilities, dating regulations, and moral development. All responses not included in any of the previously mentioned categories fell into an "other" category for further explicit definition.

Ninety-one per cent of the high Ac Ss and 93 per cent of the low Ac Ss indicated that they did have rules that their mothers persistently mentioned during their growing-up years. Only three of the subjects in the entire sample indicated that there had been few or no rules. Two of the high Ac Ss felt that there had been no rules which were persistently mentioned for they knew the rules and there was no necessity for either mother to "keep after" them about anything (Table 4).

TABLE 4
PRESENCE OF RULES MOTHERS PERSISTENTLY MENTIONED
(QUESTION 10a)

Responses	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Yes, specific rules	31	91.1	29	93.5
No, or few rules	1	2.9	2	6.4
No "keeping after" Ss knew the rules	2	5.8	-	-
Total	34	99.8	31	99.9

The subjects were asked to be specific about the kinds of rules their mothers persistently mentioned. Some of the subjects reported a number of rules, others reported just a few (Table 5).

TABLE 5
NUMBER OF RULES REPORTED BY HIGH Ac Ss AND LOW Ac Ss

Number of Rules	High Ac Ss	Low Ac Ss
	Frequency	Frequency
No rules	1	2
One rule	11	6
Two rules	14	12
Three rules	6	8
Four rules	-	3
Total	32 ^a	31

^aTwo high Ac Ss reported that there was no "keeping after" by their mothers; they knew the rules.

Rules concerning sibling relationships were mentioned by two high Ac Ss and one low Ac Ss. Three high Ac and three low Ac Ss were "kept after" about relationships with peers. The area of grades, study, and achievement was another in which rules were made by mothers. Three high Ac and six low Ac subjects reported that they had had rules in this area relating to achievement. The area of concern mentioned by a majority of subjects in both groups was that of housekeeping responsibilities. Forty-eight of the sixty-five subjects indicated that they had had housekeeping responsibilities of which their mothers constantly reminded them. Twenty-four of the subjects were high Ac Ss and twenty-four were low Ac Ss. Fifty-one per cent (16 Ss) of the low Ac group mentioned rules concerning

dating regulations, while only seventeen per cent (6 Ss) of the high Ac group reported rules in this area. Just one mother of a high Ac Ss was perceived as being concerned with her daughter's moral development to the extent that it was a constant consideration. Twenty-one high Ac and fifteen low Ac Ss stated the existence of rules in other areas (Table 6).

TABLE 6
KINDS OF RULES MOTHERS PERSISTENTLY MENTIONED
(QUESTION 10b)

Rules	High Ac Ss No. 34	Low Ac Ss No. 31
Sibling relationships	2	1
Peer relationships	3	3
Grades and study	3	7
Housekeeping responsibilities	24	24
Dating regulations	6	16
Moral development	1	0
Other	21	15

Rules persistently mentioned by fathers. The same descriptive categories were used to code the responses of the Ss concerning their perceptions of the presence and kind of rules their fathers persistently mentioned. More than one-half of each group of subjects (58.8 per cent of the high Ac Ss; 54.3 per cent of the low Ac Ss) reported that there had been specific rules of concern to their fathers during their growing-up years (Table 7).

TABLE 7
 PRESENCE OF RULES FATHERS PERSISTENTLY MENTIONED
 (QUESTION 11a)

Responses	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Yes, specific rules	20	58.6	17	54.8
No, or few rules	11	32.3	11	35.4
No "keeping after" Ss knew the rules	3	8.6	2	6.4
Total	34	99.9	30 ^a	96.6

^aOne Ss failed to answer question.

Approximately one-third of the subjects in each group felt that their fathers had had no or few rules. Three high Ac Ss and two low Ac Ss perceived their fathers as having rules, but that they had obeyed without their fathers' persistent reminders. One of the low Ac Ss failed to answer the question.

There was approximately half as many rules (in number) attributed to the fathers of the entire group as were attributed to the mothers. Some subjects perceived their fathers as having no rules for their behavior during their growing-up years, others mentioned a number of rules their fathers persistently mentioned (Table 8).

The subjects not only perceived their fathers as having fewer rules than their mothers, but they also reported these rules to be of a different kind than those of their mothers. Two low scoring Ac Ss indicated that their fathers "kept after" them about peer relationships. Rules concerning grades and study were mentioned by four high Ac Ss and

four low Ac Ss. Housekeeping responsibilities was an area not mentioned by the subjects as being of particular concern to their fathers. These rules were left primarily to the mothers to be made and enforced. Only four high Ac Ss and four low Ac Ss mentioned rules in this area of responsibility about which their fathers were concerned. Low Ac Ss reported fewer dating regulations that were persistently mentioned by their fathers than did high Ac Ss.

TABLE 8
NUMBER OF RULES REPORTED BY HIGH AC Ss AND LOW AC Ss

Number of Rules	High Ac Ss	Low Ac Ss
	Frequency	Frequency
No rules	11	11
One rule	15	12
Two rules	4	3
Three rules	1	2
Total	31 ^a	28 ^b

^aThree Ss reported there was no "keeping after" by their fathers; they knew the rules.

^bTwo Ss reported there was no "keeping after" by their fathers; they knew the rules. One Ss failed to answer the question.

Four subjects indicated that their fathers had regulations concerning their moral development. Approximately one-half (18) of the high Ac group and one third (11) from the low Ac group mentioned other rules of primary concern to their fathers during their growing-up years other than those that could be categorized in the preceding groupings (Table 9).

TABLE 9
 KINDS OF RULES FATHERS PERSISTENTLY MENTIONED
 (QUESTION 11b)

Rules	High Ac Ss No. 54	Low Ac Ss No. 31
	Frequency	Frequency
Peer relationships	0	2
Grades and study	4	4
Housekeeping responsibilities	4	4
Dating regulations	5	1
Moral development	3	1
Other rules	18	11

Attitudes toward parents' rules. The subjects were asked how they felt about their parents' rules when they were growing up. Their responses were classified into one of three categories: (1) agreed; (2) at first disagreed, later agreed; (3) disagreed. A greater percentage of high Ac Ss (64.7 per cent) agreed with the rules enforced by their parents while growing up than did low Ac Ss (51.6 per cent). Both groups more often agreed than disagreed with the rules of their parents (Table 10).

Freedom of communication. Subjects were asked to describe how free they felt to talk things over with their mother when they were growing up. Their responses were termed very free, moderately free, and not free in this area of communication.

There was no significant difference between the high Ac and the

low Ac groups in their freedom to talk to their mothers while growing up. Over half of each group (high Ac, 55.8 per cent and low Ac, 58.0 per cent) felt that they had been very free to talk to their mothers about matters of concern to them. However, a greater percentage of the low Ac subjects (25.8 per cent) than high Ac subjects (14.7 per cent) did not feel free to talk to their mothers (Table 11).

TABLE 10
FEELINGS OF SUBJECTS CONCERNING PARENTS' RULES
(QUESTION 12)

Responses	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Agreed	22	64.7	16	51.6
At first disagreed, later agreed	8	25.5	5	16.1
Disagreed	3	8.8	6	19.3
Total	33 ^a	97.0	27 ^b	87.0

^aOne Ss answered "I don't know."

^bFour Ss failed to answer question.

Forty-one per cent of each group felt even more free to talk to their mothers at the time of the interview, after they had come to college. More high Ac Ss (50 per cent) than low Ac Ss (35.4 per cent) felt that their communication with their mothers was about the same as it had been in high school. One high Ac and two low Ac subjects reported that they felt less free to talk to their mothers since they had come to college than they had while they were in high school. Seven subjects failed to answer the question.

TABLE 11
 SUBJECTS' FREEDOM OF COMMUNICATION WITH MOTHERS
 (QUESTIONS 17 AND 18)

Responses	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Very free	19	55.8	18	58.0
Moderately free	10	29.4	5	16.1
Not free	5	14.7	8	25.8
Total	34	99.9	31	99.9

Freedom of communication with the fathers of the subjects was almost identical for both groups. Few girls felt very free to talk to their fathers during their growing up years (high Ac Ss, 20.5 per cent; low Ac, 16.1 per cent). In both groups, subjects were usually moderately free or not free to discuss problems and concerns with their fathers (Table 12).

TABLE 12
 SUBJECTS' FREEDOM OF COMMUNICATION WITH FATHERS
 (QUESTIONS 21 AND 22)

Responses	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Very free	7	20.5	5	16.1
Moderately free	14	41.1	13	41.9
Not free	13	38.2	13	41.9
Total	34	99.8	31	99.9

More high Ac Ss (55.8 per cent) felt more free to talk to their fathers since they had come to college than did low Ac Ss (38.7 per cent). Two high Ac Ss felt less free to talk to their fathers since they had come to college. Twelve of the subjects failed to answer this question.

Concern of parents for subjects' academic achievement. In an attempt to discover the achievement aspirations of the parents for their daughters, each subject was asked to describe how her parents felt about her doing well in school. The responses were coded (1) concern about the Ss' effort, (2) concern about the Ss' grades, (3) concern about Ss' personal satisfaction, (4) unconcern, (5) unawareness of the parents' attitude concerning academic achievement.

The analysis of the data uncovered no significant differences between the two groups and the parental aspirations regarding their daughters' doing well in school. Fathers of both low and high Ac groups wanted their daughters to do well in school. Doing well was defined by the fathers in terms of grades much more often than in terms of effort or their daughters' personal satisfaction (Table 13).

The mothers of both groups were also concerned about their daughters' success in terms of good grades rather than in terms of effort or the attainment of personal satisfaction. Only one Ss, a low Ac freshman, perceived her mother as unconcerned about her doing well in school (Table 14).

TABLE 15

SUBJECTS' PERCEPTION OF FATHERS' CONCERN FOR
THEIR DOING WELL IN SCHOOL (QUESTION 13)

Response	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Concerned about effort	6	17.6	3	9.6
Concerned about grades	25	73.5	25	80.6
Unaware of attitude	1	2.9	1	3.2
Concerned about personal satisfaction of daughter	2	5.8	2	6.4
Total	34	99.8	31	99.8

TABLE 14

SUBJECTS' PERCEPTION OF MOTHERS' CONCERN FOR
THEIR DOING WELL IN SCHOOL (QUESTION 14)

Response	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Concerned about effort	1	2.9	2	6.4
Concerned about grades	29	85.2	24	77.4
Unaware of attitude	1	2.9	-	-
Concerned about personal satisfaction of daughter	3	8.8	4	12.9
Unconcerned	-	-	1	3.2
Total	34	99.8	31	99.9

Concern of parents for daughters' outward behavior versus inward feelings. Drawing on experience and memory the subjects were

asked to respond to a query concerning their mothers' interest in their outward behavior, their inward feelings, or both (Table 15). The inward feelings, motives, and inclinations were of primary interest to the mothers of the high Ac group. A greater percentage of low Ac Ss' mothers (32.2 per cent) were interested in their daughters' outward behavior than were the mothers of the high Ac group (14.7 per cent).

TABLE 15
MOTHERS' INTEREST IN OUTWARD BEHAVIOR AND INNER
FEELINGS OF SUBJECTS (QUESTION 20)

Responses	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Outward behavior	5	14.7	10	32.2
Both	13	38.2	10	32.2
Inward feelings	14	41.1	10	32.2
Total	32 ^a	94.0	30 ^b	96.6

^aOne Ss failed to answer question; another answered "I don't know."

^bOne Ss did not answer question.

There was a significant difference ($p < .05$) in the fathers' attitudes toward their daughters' behavior between the high Ac and the low Ac Ss. Fathers of high Ac Ss were significantly more interested in their daughters' inward feelings than were the fathers of low Ac Ss. Fathers of low Ac Ss were significantly more interested in their daughters' outward behavior (Table 16).

TABLE 16

FATHERS' INTEREST IN OUTWARD BEHAVIOR AND INNER
FEELINGS OF SUBJECTS (QUESTION 24)

Responses	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Outward behavior	8	23.5	18	58.0
Both	8	23.5	6	19.3
Inward feelings	11	32.3	5	16.1
Total	27 ^a	79.5	29 ^b	93.4
	$\chi^2 = 6.7004$		$(p < .05)$	

^aTwo Ss failed to answer question; five answered "I don't know."

^bOne Ss failed to answer question; one answered "I don't know."

Participation of parents in organizations and civic groups. Each subject was questioned concerning her parents' activity in organizations and civic groups. The parents were described by the subjects as being very active, moderately active, or not active. Though not significantly different, more of the fathers of the low Ac group (35.4 per cent) were very active in organizations than the fathers of the high Ac group (29.4 per cent). Fathers of low Ac Ss tended to be either very active or not active at all while fathers of high Ac Ss tended to moderately active (Table 17).

TABLE 17
 EXTENT OF FATHERS' INVOLVEMENT IN ORGANIZATIONS
 (QUESTION 9a)

Involvement	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Very active	10	29.4	11	35.4
Moderately active	18	52.9	10	32.2
Not active	6	17.6	8	25.8
Total	34	99.9	29 ^a	93.4

^aTwo Ss failed to answer question.

Mothers of the low Ac Ss were also more often described as very active (41.9 per cent) than were the mothers of the high Ac Ss (32.3 per cent). Fifty-nine per cent of the mothers of high Ac Ss were termed moderately active by their daughters' responses. One of the low Ac Ss failed to respond to the question (Table 18).

TABLE 18
 EXTENT OF MOTHERS' INVOLVEMENT IN ORGANIZATIONS
 (QUESTION 9b)

Involvement	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Very active	11	32.3	13	41.9
Moderately active	20	58.8	13	41.9
Not active	3	8.8	4	12.9
Total	34	99.9	30 ^a	96.7

^aOne Ss did not answer question.

Description of parents. To more completely analyze the implications of the parent-child relationship, each subject was asked to describe the sort of persons she felt her mother and father to be. Their responses were termed as being positive, fairly positive, or negative in regard to their perceptions of their parents. Both high and low Ac groups tended to describe their mothers positively. Approximately two thirds of each group gave positive descriptions of their mother and replies from only four subjects were judged to be negative (Table 19).

TABLE 19
SUBJECTS' PERCEPTION OF MOTHER AS A PERSON
(QUESTIONS 32 AND 33)

Coded Response	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Positive	23	67.6	19	61.2
Fairly positive	9	26.4	9	29.0
Negative	2	5.8	2	6.4
Total	34	99.8	30 ^a	96.6

^aOne Ss failed to answer questions.

Over half of the high Ac group described their fathers positively, while the descriptions given by the low Ac group were more often given a "fairly positive" rating (Table 20).

TABLE 20

SUBJECTS' PERCEPTION OF FATHER AS A PERSON
(QUESTIONS 31 AND 34)

Coded Response	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Positive	18	52.9	9	29.0
Fairly positive	14	41.1	18	58.0
Negative	2	5.8	3	9.6
Total	34	99.8	30 ^a	96.6

^aOne Ss failed to answer questions.

Adjustment to College

Reaction to dormitory regulations. The subjects were questioned concerning their reactions to dormitory life and their evaluation of the strictness of dormitory regulations in comparison with the restrictions they had had at home. Their responses were placed in one of three categories: (1) more restrictions, (2) no difference in restrictions, and (3) less restrictions than expected.

The high Ac group reported more restrictions in the dormitory than they had at home. There was a trend for the low Ac group to report markedly less restrictions in the dorm than at home ($p < .10$). This trend was reported in Table 21.

Adjustment to separation. The subjects were questioned as to the occurrence of homesickness since they had come to college. There was no significant difference between the high Ac and the low Ac groups in the occurrence of homesickness. Approximately one-half of each group had had a "bout" with homesickness, the other one-half had not.

TABLE 21

EXTENT TO WHICH DORM REGULATIONS DIFFERED FROM
RESTRICTIONS AT HOME (QUESTION 25)

Responses	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
More restrictions	17	50.0	9	29.0
No difference	11	32.3	12	36.7
Fewer restrictions	4	11.4	9	29.0
Total	32 ^a	95.7	30 ^b	96.7
	$\chi^2 = 4.584$		(p .10)	

^aTwo Ss failed to answer question.

^bOne Ss failed to answer question.

Evaluation of attitudes and behavior of peers. Adjustment to the college environment involved for some the ability to cope with the attitudes and behavior of their peers. Each subject was asked how the attitudes and behavior of the other girls in the dormitory compared with that to which she was accustomed. The behavior was termed more strict, the same, or less strict than that of her high school peers.

For both groups of subjects the behavior and attitudes of other girls in the dorm tended to be the same or less strict than that of the girls to whom they were accustomed. Forty-one per cent (14) of the high Ac Ss felt that the attitudes and behavior of the girls in the dorm were the same as that of the girls they had known previously, while 55 per cent (17) of the low Ac Ss felt this way. Forty-seven per cent of the high Ac Ss and 39 per cent of the low Ac Ss indicated that the attitudes and behavior of the girls in the dorm were less strict than that to which they were accustomed (Table 22).

TABLE 22

COMPARISON OF BEHAVIOR OF COLLEGE PEERS TO HIGH SCHOOL PEERS

Responses	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
College peers more strict	4	11.7	2	6.4
About the same	14	41.1	17	54.8
College peers less strict	16	47.0	12	38.7
Total	34	99.8	31	99.9

Expectations concerning courses, teachers, amount of study, extracurricular activities and dorm life. For many of the subjects college life was different from what they had expected in regard to courses, teachers, amount of study, extracurricular activities, dorm life in general, and other areas. Teachers and courses differed most often from what was expected for subjects in both groups (Table 23).

TABLE 23
 EXTENT TO WHICH CERTAIN COLLEGE VARIABLES DIFFERED
 FROM EXPECTED (QUESTION 36)

Responses	High Ac Ss Frequency	Low Ac Ss Frequency
Courses		
Differed from expected	22	18
No different from expected	7	6
Teachers		
Differed from expected	25	24
No different from expected	7	3
Amount of study		
Differed from expected	15	10
No different from expected	6	7
Extracurricular activities		
Differed from expected	11	9
No different from expected	13	14
Dorm life		
Differed from expected	15	9
No different from expected	13	14
Other		
Differed from expected	1	3
No different from expected	2	0

Changes in methods and habits of study. Adjustment in a more academic setting was measured by a question which concerned study efforts. Subjects were asked whether they had had to rearrange their schedule for study since they had come to college. Rearrangement of schedules involved more study or less study than was done previously.

There was a significant difference between the number of high Ac Ss who had to rearrange their study habits and the number of low Ac Ss who had to rearrange their study schedules. Significantly more ($p < .05$) low Ac subjects had to rearrange study schedules than did high Ac Ss.

TABLE 24
 EXTENT TO WHICH SUBJECTS HAD TO REARRANGE STUDY SCHEDULES
 (QUESTION 35)

Response	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Study more	18	52.9	26	83.8
Study same	9	26.4	2	6.4
Study less	3	6.4	3	9.6
Total	30 ^a	85.7	31	99.8
	$\chi^2 = 6.144$		$(p < .05)$	

^aFour Ss failed to answer question.

Acquisition of new ideas. The acquisition of new ideas since the subjects had come to college was common for both groups. Subjects reported acquiring specific new ideas, general new ideas, or no new ideas.

A greater percentage of high Ac Ss (84.7 per cent) than low Ac Ss (48.5 per cent) reported that they had become acquainted with specific new ideas since coming to college. A greater percentage of low Ac Ss (32.2 per cent) than high Ac Ss (17.6 per cent) reported that they had become acquainted with no new ideas. One high Ac Ss reported that she didn't know of any distinctly new ideas with which she had become acquainted (Table 25).

TABLE 25
ACQUAINTANCE WITH NEW IDEAS (QUESTION 37a)

Responses	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Yes, specific new ideas	22	64.7	15	48.3
General new ideas	5	14.7	6	19.3
No new ideas	6	17.6	10	32.2
Total	33 ^a	97.0	31	99.8

^aOne Ss answered "I don't know."

There were a number of sources for these new ideas. Teachers, speakers, classes, friends and acquaintances were mentioned frequently. For some there were other sources which had provided new ideas (Table 26).

TABLE 26
SOURCES OF NEW IDEAS (QUESTION 37b)

Source	High Ac Ss	Low Ac Ss
	Frequency	Frequency
Teachers	5	3
Speakers	5	0
Classes	6	7
Friends and acquaintances	17	11
Other sources	3	3

Occurrence of new experiences. Since the college setting was a unique environment, for most of the subjects it offered many new experiences. There was no difference between the low Ac group and the

high Ac group in either the number or kind of new experiences. Over 95 per cent of both groups could name specific new experiences which they had had since coming to college (Table 27).

TABLE 27
SIGNIFICANT NEW EXPERIENCES SINCE COMING TO COLLEGE
(QUESTION 38a)

Response	High Ac Ss		Low Ac Ss	
	Frequency	Percentage	Frequency	Percentage
Specific new experiences	33	97.0	30	96.7
General new experiences	-	-	-	-
No new experiences	1	2.9	1	3.2
Total	34	99.9	31	99.9

These new experiences mentioned by the subjects were grouped into eight descriptive categories. Experiences were related to the academic setting, dating, living conditions, social occasions, independence, friendships, or to other kinds of experiences (Table 28).

Of the subjects who indicated that they had had new experiences on the college campus, nine high Ac Ss and eleven low Ac Ss mentioned only one new experience each, while two high Ac Ss and one low Ac Ss mentioned as many as five new experiences (Table 29).

TABLE 28
SOURCE OF NEW EXPERIENCES ENCOUNTERED SINCE
COMING TO COLLEGE (QUESTION 38b)

Responses	High Ac Ss No. 34	Low Ac Ss No. 31
Academic setting	8	8
Dating	10	11
Living conditions	14	12
Social occasions	5	5
Independence	6	7
Friendships	13	16
Other	14	11

TABLE 29
NUMBER OF NEW EXPERIENCES

New Experiences	High Ac Ss	Low Ac Ss
None	-	1
One	9	11
Two	14	6
Three	6	9
Four	2	3
Five	2	1
Total	33 ^a	31

^aOne Ss failed to answer question.

CHAPTER V

DISCUSSION

Out of twenty-five dependent variables that were analyzed, four were found to show significant differences between the two groups. Because previous research had indicated that the assessment of background factors would contribute to the success of predicting college adjustment and performance it was felt that more significant differences would have been found between the two groups of students. Perhaps the grossness of the instrument and the homogeneity of the group (in terms of geographical, socio-cultural location, and in terms of their interests their inclusion in the home economics curriculum) were contributing factors to the sameness of the groups.

Academic Achievement Variables

Academic achievement variables were considered in the form of ACT (American College Testing Program scores) and GPA (grade point average at the end of the freshman year). The two groups of subjects were significantly different in regard to these intellectual factors. Significant differences were at the .01 level. The hypothesis concerning these academic achievement variables was rejected as a result of the significant difference between the groups in their performance on the ACT, and a significant difference between the groups in GPA attained at the end of their freshman year. High Ac Ss had high ACT scores and high grade point averages. Low Ac Ss had low ACT scores

and low grade point averages. This finding supports Gough's (1964) statement that there is a high correlation between performance on Ac and college grades.

Parent-child Relationships

There was no significant difference between the number of mothers of high Ac Ss who had rules which they persistently mentioned and the number of mothers of low Ac Ss who "kept after" the subjects about specific rules. However, there was a tendency for low Ac Ss to name more specific rules than did high Ac Ss. While almost half of each group listed two rules, one third of the low Ac group indicated three or four rules and one third of the High Ac group listed only one rule.

Peer relationships was an area of concern for three high Ac Ss and three low Ac Ss. The high Ac Ss were encouraged by their mothers to be co-operative and to share. One mother of a low Ac Ss did not want her daughter to spend too much time by herself, and wanted her to have more friends. Another mother of a low Ac Ss insisted that her daughter "know the right people." Two high Ac and one low Ac Ss had rules regarding their relationships with siblings. A common injunction was to "quit arguing."

Three high Ac Ss and seven low Ac Ss had rules regarding grades, study, and achievement. The implication received from the high Ac responses suggested that they were encouraged to do their best. The low Ac responses carried the concern of the mothers for the subjects to "just make A's." Another low Ac Ss felt, from her mother's insistence, that she always had to be first.

Rules falling in the housekeeping category were mentioned by

more Ss than any other type rule. Twenty-four high Ac Ss and twenty-four low Ac Ss were reminded to care for their room, do dishes, etc. One low Ac Ss reported that her mother insisted that she not just go half way with a job, but that she complete each one so that it would pass inspection.

More mothers of low Ac Ss than high Ac Ss had dating regulations (16 low Ac Ss; 6 high Ac Ss). A common stipulation was that the subject call home if she were going to be late returning from a date. One high Ac Ss' mother was more than normally interested in her daughters moral development, persistently mentioning honesty and obedience.

There were many other kinds of rules indicated by the high Ac Ss. Mothers were concerned about their daughters' appearance and enforced rules for the Ss' cleanliness, posture, complexion, nailbiting, eating habits, and for their teeth and hair. The mothers had rules for their daughters' behavior which included keeping clothes off the furniture, not talking back, getting to bed on time, practicing the piano, minding, being pleasant to people, coming right home from school, talking correctly, using manners, and behaving like a lady. High Ac Ss also had telephone rules. One high Ac Ss had orders not to speak to strangers, and if her parents were not at home, she was not to let anyone in the house; she was to pretend there was nobody home.

Low Ac Ss reported less "other" rules than did high Ac Ss. They included rules about cleanliness and personal appearance, posture, practicing the piano, car privileges, telephone, manners, respect for other people, behavior (act like a lady), and television (don't sit too close).

One low Ac mother also insisted that her daughter "quit crying."
Another insisted that her daughter not be snooty. One low Ac Ss had a rule concerning the completion of 4-H projects.

Slightly more than fifty per cent of each group indicated that their fathers had rules which they persistently mentioned to their daughters during their growing-up years. Of those who mentioned the presence of rules of concern to their fathers, the majority of both groups reported just one rule. Though one father of a low Ac Ss encouraged his daughter to have a wide circle of friends, the fathers were not generally concerned with peer relationships. Little overt interest was shown in the area of achievement, grades, and study, by the fathers of the subjects. Housekeeping responsibilities were usually delegated to the subjects by their mothers, but some of the fathers did reinforce these rules (four high Ac; four low Ac). The fathers of high Ac Ss were reported to be more concerned about dating than were the fathers of the low Ac group.

Fathers of high Ac Ss stressed more abstract moral characteristics than did the fathers of low Ac Ss. Fathers of high Ac Ss stressed honesty, obedience, and responsibility, while the father of a low Ac Ss stressed moral behavior, "act like a lady so that the boys will respect you."

Other stipulations attributed to fathers included for the high Ac Ss rules concerning staying out too late, practicing the piano, telephone limitations, driving the car on a restricted license, and getting enough rest. Other rules included turning off lights behind you, minding mother, telling parents where you were going, and taking

responsibility for the care of livestock. One father of a high Ac subject insisted that his daughter not let anyone influence what she did.

Fathers of low Ac Ss were concerned with the Ss' helping and minding their mothers, taking responsibility to be on time, practicing, and showing more respect for parents. One father established a rule that his daughter could not cut pictures out of magazines. Fathers of low Ac Ss seemed more concerned about the appearance of their daughters than did the fathers of the high Ac Ss. Fathers were concerned with their daughters' skirt lengths, the manner in which the Ss dressed in front of people and when going out, and the lack of support in the Ss' shoes. They were bothered about their daughters' make-up, feeling that at times the Ss used too much, and at times too little, and that they changed their hair color too often.

The fathers of the subjects were reported to have made specific rules for their daughters less often than did the mothers of the sample. When Ss did report rules which their fathers "kept after" them about, they most often indicated just one rule. As a result, the total number of rules attributed to the fathers of the subjects was approximately one half the total attributed to the mothers of the sample.

The rules reported for the fathers of the subjects not only were fewer in number but also were different in kind from the rules reported for the mothers. In fact, the fathers' rules did not fit into the descriptive categories established to code the rules. Approximately half of the rules mentioned by each group could not be categorized into the coded groups and consequently were placed in an "other" category.

Housekeeping regulations were made primarily by the mothers of

the subjects. Fathers were reportedly not as concerned as were the mothers in this area of responsibility, though they probably enforced the rules the mothers made.

Fathers of high Ac Ss enforced dating regulations more often than did fathers of low Ac Ss. It seemed that dating was a concern of the fathers of high Ac Ss and for the low Ac Ss, dating was a concern of the mothers.

The majority of both groups of subjects agreed with their parents' rules even during the years that they were being enforced. Eight high Ac Ss and five low Ac Ss disagreed with their parents' rules during the time that they were being administered, but decided later that the rules had been valid and had been enforced for their own good. Of the nine Ss who disagreed with their parents' rules, three were high Ac Ss and six were low Ac Ss. Two high Ac Ss who generally agreed with their parents' rules reported that at times their parents were too lenient. One low Ac Ss who generally agreed with her parents' rules indicated, however, a wish that her parents had been more strict.

More low Ac than high Ac subjects disagreed with their parents' rules. Smith's (1965) contention that low achievers were more negative and hostile toward authority than were achievers is partially supported by the data.

There was no difference between the two groups in their ability to communicate freely with their mothers during the growing-up years, for over half of each group reported a very free communication pattern between themselves and their mothers. One low Ac Ss indicated that she and her mother were just like sisters in their ability to talk with one

another. A greater percentage of low Ac Ss than high Ac Ss did not feel free to talk to their mothers while growing up.

Over 90 per cent of both groups felt that their ability to communicate with their mothers had either remained the same or improved since their coming to college. Of those who indicated that it was easier to talk to their mothers now, one low Ac Ss explained that her parents had been having marital difficulties and that her mother had more often come to her to discuss this family problem. Another low Ac Ss indicated that it was easier to talk to her mother now, and termed it an "older relationship." Another low Ac Ss reported that she could see now that her mother wasn't against her, that she could be of help.

A low Ac Ss who indicated ease of communication with her mother as about the same since coming to college, reported that now she said things to entertain her mother. One low Ac Ss implied that since coming to college she felt less free to talk to her mother. It was difficult for her to discuss dating with her mother because "she's afraid they're (the dates) feeding me a line. It's hard for her to see how I can like so many at a time. It's hard to tell her how I feel about school because I'm always changing my mind myself."

Few subjects in either group reported that they felt very free to talk to their fathers while growing up. Most of the Ss in both groups felt only moderately free or not free at all. A greater percentage of high Ac Ss felt more free to talk to their fathers since their entrance into college than did low Ac Ss. This finding supports Hill's (1966) conclusion that high Ac Ss describe their relationships with both parents as close.

The increase in communication which the subjects felt since they had come to college could have been initiated by a number of different factors. The subjects had fewer chances to communicate with their parents when they were in the college environment, and as a result, may have taken advantage of the opportunities they did have. The subjects could have chosen the topics for discussion more often when they were separated from the home environment. Their parents were not aware of their every action, and as a result, communication was more often discussion between parents and daughter than it was interrogation or confrontation.

The adjustment to the college setting implied some nurturance of independence and the attainment of more adult roles. Perhaps this change in role contributed significantly to the increased freedom of communication for subjects who no longer viewed their parents only as authority figures; they had come to see them also as friends. The parents no longer viewed their daughters only as dependents, but also as adults and companions.

The change in the structure of the family that occurred when the daughter came to college helped to minimize the generational gap which existed during the daughters' growing-up years and further reduced the communication gap which was caused by the intensity of the varying interests and concerns of the daughter and her parents.

The parents of the subjects were overwhelmingly concerned about their daughters' academic achievement. Fifty of the subjects reported that their fathers were primarily interested in grades and fifty-three of the sixty-five subjects indicated that their mothers were primarily interested in their grades.

Six high Ac Ss and three low Ac Ss reported that their fathers were primarily interested in their effort. One high Ac Ss remarked that her father wanted her to do her best, but that the "main push came from me." Smith (1965) reported that achievers felt they applied their own pressure for grades.

Another father simply encouraged his high Ac daughter to "get through" college. The father of a low Ac Ss wanted his daughter to "get in there and do your best. Don't worry about it if you get one or two "B's"; I did when I was a freshman. But I don't want you messing around and never studying."

Twenty-five high Ac Ss and twenty-five low Ac Ss were encouraged by their fathers to get good grades in school. For one low Ac Ss, success was defined by her father as getting a degree. Four fathers were primarily concerned about their daughters' personal satisfaction with the college experience (two high Ac Ss; two low Ac Ss). One father was concerned with his daughter's satisfaction, but also communicated to the low Ac Ss that he didn't think she would make it.

The mothers of the subjects were just as interested in the Ss' making good grades as were the fathers; however, one low Ac Ss interpreted her mother's attitude as being unconcerned about the Ss' doing well in school. Fewer mothers than fathers were interested in their daughters' success in terms of effort. The parents as a whole encouraged competition and a creditable performance in terms of concrete evidence, GPA.

The similarity in the parental aspirations for academic achievement for both groups of subjects does not support Smith's (1965) con-

clusion that achievers did not feel pressed by their parents to achieve high grades.

A greater percentage of mothers of low Ac Ss were interested in their daughters' outward behavior than were the mothers of high Ac Ss. The larger percentage of mothers of high Ac Ss were interested in their daughters' inward feeling. While this was a trend for mothers, there was a significant difference ($p < .05$) in the attitudes of fathers of high Ac Ss and fathers of low Ac Ss. Significantly more low Ac fathers were interested in the Ss' outward behavior while high Ac fathers were interested in the Ss' inward feelings. Hypothesis 2e was thus rejected.

The parents of the high Ac group were significantly more interested in their daughters' inward feelings than were the parents of the low Ac group. Their concern, however, did not minimize acceptable outward behavior. They were interested in their daughters' development of inner controls which would ultimately be their guide for acceptable behavior. The high Ac Ss did not perceive their parents as being unconcerned about their outward behavior; they just realized their parents' concern for their having proper motives and inclinations.

Mothers of both groups were reported by the Ss to be very active in civic organizations. Mothers were reported "not active" less often than were the fathers of both groups. The largest percentage of both mothers and fathers of high Ac Ss were termed moderately active.

The majority of the subjects in both groups described their mothers positively. The majority of high Ac Ss also described their fathers positively, but the larger percentage of low Ac Ss described their fathers only fairly positively. Though not a significant dif-

ference, this trend supports Hill's (1966) finding that high Ac scorers report their fathers and mothers temperaments as positive.

Adjustment to College

There was a trend for high Ac Ss to report more restrictions than they expected in the dormitory setting than did low Ac Ss. A greater percentage of low Ac Ss reported less restrictions than they had expected in the dormitory.

This is understandable in terms of the emphasis placed on inward feelings versus outward behavior by the parents of the subjects. The high Ac Ss reacted negatively to increased restrictions; inner controls had been stressed by their parents. Low Ac Ss reported less restrictions in the dormitory than they had expected. They had been used to overt controls on their outward behavior and the dormitory setting seemed less restrictive than their home setting.

Approximately half of each group reported bouts with homesickness. One low Ac Ss reported that she had been homesick until she went home the first time and found that it just wasn't home anymore. Another Ss suggested that she became homesick when she got a bad grade and there was no one around to comfort her.

This fact was not surprising, for though the subjects were learning to be independent and were beginning to make their own decisions, they were not too far removed from their home and parents and were still dependent on them to some extent.

A majority of the subjects reported that the attitudes and behavior of the girls in the dorm were the same or less strict than the attitudes and behavior to which they were accustomed. One high Ac Ss

who considered the behavior of her college peers less strict than that of her high school peers felt that smoking gives a "false feeling of security." A low Ac Ss who also considered the behavior less strict reported a freedom among the girls to discuss experiences including those involving heavy petting. A low Ac Ss who indicated that the behavior was about the same as that to which she was accustomed also said that "what was thought bad in high school is nothing in the college environment." Another low Ac Ss who considered the attitudes and behavior of the girls in the dorm as being more strict than the behavior of her high school peers reported that "anything is right as long as it is at the right time and with the right attitude."

Differences in what was actually true and what was expected in regard to college courses, teachers, amount of study, extracurricular activities, dorm life in general and other areas were reported by approximately equal numbers of each group. Some high Ac Ss reported that classes were smaller and harder than expected. Others reported that they were easier and better than they had expected. Low Ac Ss reported classes as being larger and/or easier, as well as harder than expected. One low Ac Ss reported that classes were harder than she expected, but admitted that she had never read a book before.

Teachers were described by high Ac Ss as being more helpful, more adept at learning names, more human, friendlier, easier, less stern, and as more interested in students than was expected. Amount of study differed from more to less than expected. A high Ac Ss felt that extracurricular activities had more purpose than she expected; "they develop girls into women able to function in a community." A

low Ac Ss felt that the extracurricular activities were "more disorganized on the college campus" than she had expected.

Dorm life was termed friendlier, noisier, and more fun by high Ac Ss. One Ss reported that there were more rules than she had expected. Low Ac Ss described dorm life as better and nicer than they expected. One subject, however, hadn't counted on floor meetings. One high Ac Ss mentioned that there was more conversation about a wider variety of topics than she had expected among dorm friends. For one low Ac Ss the boys on campus differed from what she had expected. One low Ac Ss reported that there were a lot more people around than she expected.

There was a significant difference between the high Ac Ss and the low Ac Ss' adjustment to study in the college setting ($p < .05$). Low Ac Ss significantly more often rearranged their schedules to study more than did high Ac Ss. This question did not measure the intensity of the adjustment, but the presence of adjustive measures in the area of study. Low Ac Ss had significantly more adjustments to make in this area than did high Ac Ss, for they had not expected to study as much as they were required to in the actual situation.

There was no difference of significance between the low Ac group and the high Ac group in their reported acquisition of new ideas. Teachers were sources of new ideas for some, while classes served as sources for others. Friends and acquaintances were sources for learning tolerance and religious concepts for high Ac Ss. Foreign students helped low Ac Ss break down some of their prejudices. Low Ac Ss also learned about religion and dating from friends and acquaintances. An assembly on student government was a source of ideas for a high Ac Ss,

as was a meeting of People to People.

Over 95 per cent of both groups of subjects reported that they had had new experiences since coming to college. There was no significant difference in either the number or kind of experience between the two groups.

Academic experiences for high Ac Ss ranged from participation in the honors program in the College of Home Economics to experiences using the library and attendance at speeches and convocations. Academic experiences reported by the low Ac group included realization that teachers were more frank; "they're not afraid to talk about sex."

Both high and low Ac Ss valued their independence and the experience of making decisions. Both low and high Ac Ss had had experiences relating to dating on the college campus. One low Ac Ss reported that she did not like blind dating. "When I walk downstairs for a date, I like to know what he looks like. It is sort of frustrating to walk down, and there is a whole mess of boys there and you have no idea which one you're going with." For another low Ac Ss becoming "levelier" was a new experience. A low Ac Ss reported a new dating experience for her was an invitation from a Negro boy. She didn't accept, indicating "it just isn't done."

Seated service in the dormitory was mentioned as a new experience by subjects in both groups. The practice was supported as a means of learning manners. Social occasions which involved drinking were reported by both groups as being a completely new experience. Further study is needed to discover how low Ac Ss and high Ac Ss coped with these new experiences, and whether these experiences had a negative or

positive effect on their adjustment.

Friends and acquaintances including contact with foreign students, agnostics, atheists, fellow dorm members were a source of distinctly new experiences for Ss in both groups. One low Ac Ss commented that she had never met anyone before who didn't believe there was a God.

Other new experiences reported by high Ac Ss included involvement with college registration, membership in a sorority, being chosen a 4-H representative to the college chapter, attendance at a university of this size, lack of identity which implies having to work to be known, and becoming acquainted with polite boys. Low Ac Ss reported seeing Big-Eight basketball, attending religious retreats, learning to budget money, being a candidate for Barn-warmer queen, and serving as mascot for a fraternity as meaningful new experiences. Going through rush week was also a memorable experience for some in both groups.

CHAPTER VI

SUMMARY

Not until the last two decades has there been an immediate concern for the effective selection and guidance of college students, for until that time college enrollments were manageable and admission increases were absorbed by the available facilities. Though much research in the area of college student selection has been done, no completely effective method of deciding which applicants will be successful in the college setting has been determined.

The majority of the research done in this area has concerned itself primarily with intellectual factors that helped forecast academic achievement in the college setting, e.g., high school grade point average and ACT scores. Academic achievement has been evaluated largely by means of grade point average at the end of the freshman year.

A number of researchers, however, believe that there are certain other factors which contribute to the successful prediction of college success and that these non-intellectual factors must be considered if educators are to have increased power to maximize the intellectual potential of the student. These non-intellectual factors examined by means of biographical information and personality test scores have been found to have meaningful relationships with student success in the college setting.

The purpose of this study was to describe two groups of freshmen

women in the College of Home Economics in regard to selected measures of academic achievement, home background variables and college adjustment variables as reported in interview data in an effort to find significant differences between these two groups. Individual high and low scores on the Ac scale of the CPI served as criteria for the selection of these groups. It was hoped that these comparisons would provide some indication of the characteristics and motivational antecedents which must be present for successful college performance.

The results of this research indicated that although the two groups of subjects were significantly different ($p < .01$) in regard to ACT scores and college grade point averages, they were not significantly different in regard to most of the other variables considered. Comparison of the high Ac and low Ac groups in the area of parent-child relationships revealed that fathers of low Ac Ss were significantly more interested in their daughters' outward behavior than were the fathers of high Ac Ss. High Ac Ss reported that their fathers were primarily interested in their inward feelings, their motives and inclinations.

In the area of college adjustment, low Ac Ss rearranged their schedules significantly more often than did high Ac Ss. This rearrangement involved making provision for more study than was expected. There was a trend for the high Ac group, more often than the low Ac group, to report more restrictions in the dormitory than they had had at home.

The discovery of so few differences between the two groups could be attributed to the grossness of the measure and the homogeneity of the group in terms of geographic location, college major, and cultural back-

ground.

The subjects in the study were from differing socio-economic backgrounds, but the majority of the subjects had mid-western, middle-class, conservative views and similar cultural backgrounds. They were by design all majors in the College of Home Economics which is also a factor influencing the resultant lack of difference between the two groups and the variables. It would seem that choice of a college major would partially indicate the subjects' interests and inclinations.

Implications

Perhaps if the subjects had come from more diverse areas of the country and had been from different colleges within the University, there might have been more significant differences between the groups in regard to the three variables.

The instrument used for analysis in this study was an interview, conducted previously with each of the sixty-five subjects. Perhaps a lack of refinement in the coding of the instrument contributed to the failure to uncover significant differences. Structured autobiographies and biographical information sheets have been used in previous studies and are perhaps more precise measures of background information, but researchers must not fall into the error of thinking that only that which can be measured objectively is worthy of consideration.

Case studies might be an alternative method of describing differences between individuals and between groups. Perhaps this technique used in descriptive analysis of the subject's college performance in relation to family background variables would more effectively indicate antecedents for successful college performance.

Interview questions could focus on additional important areas. Perhaps the question could be structured differently so that a more precise measure of the subjects' attitudes concerning their parents and their adjustment in the college setting could be utilized. Interviewers might have recorded more information if follow-up questioning had been stressed.

Further study must be done to determine the kinds of differences between students, which will be predictive of their college performance. These differences may be the result of background factors which are measurable and overt, or they may be the result of more covert factors which are not as easily measurable but which are equally significant.

The Achievement via Conformity scale of the California Psychological Inventory was used as a criterion for the selection of the groups used in this study. The use of an independence-dependence scale in regard to these areas of parent-child relationships and academic adjustment might have uncovered differentiating factors between the high A_c and the low A_c groups.

Counseling services might well take advantage of research in this area. As they realize what significant factors are contributing to the successful college performance of some, they can better understand those who are having difficulty performing well in the college situation.

High school counselors could benefit from this information to help them prepare students for the transition between the high school and the college environment, and to help guide their students into areas in which they can successfully perform.

Vocational counselors should utilize this information as they consider not only an individual's aptitude and achievement in certain areas, but also consider the significant non-intellective factors that play an even greater role in the student's eventual success in college.

Research in the area with regard to its implication for parent education should also be undertaken. If there are some factors that contribute to successful achievement, parents should be cognizant of these factors and develop a relationship with their child that will afford the most rewarding results. The parent's attitude toward his child, his emphasis on achievement, his ability to communicate with his child, his interest in the child's feelings as well as his overt behavior, may well be factors which influence the student's adjustment and success in the college environment. Parents, then, should be aware of the part they play in their child's eventual success in the college situation as well as other fields of endeavor.

There are non-intellective factors which are significant in the attainment of success by college students. The challenge of researchers in this area is to consider the backgrounds of the students in the college setting and to discover those relationships within the family which are the antecedents and correlates of success in college. The student, then, should not be viewed in isolation in regard to his performance in college; but as a member of a family and as being affected by its structure and the relationships of those members.

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DEPARTMENT OF THE INTERIOR

Geological Survey

APPENDIX

Kansas

STUDENT INTERVIEW

1. Where did you live during your elementary school days? High school days?
2. What kind of play did you enjoy most when you were a small child?
3. What activities did you like best while growing up?
4. How have the likes and interests of your older brothers and sisters compared with yours?
5. How did you and your older brothers and sisters get along together?
6. Did you want to be like them?
7. While you were growing up, did you have many casual friends, a few intimates, or were you more of a lone wolf? Did you belong to a clique or a gang?
8. Can you describe just what your father's work is like?
9. Do your parents have time to be active in P.T.A., church, lodge, etc.?
 - a. Father
 - b. Mother
10. What rules did your mother keep after you about?
11. What rules did your father keep after you about?
12. How did you feel about your parents' rules when you were growing up?
13. What does your father feel about your doing well in school?
14. What does your mother feel about your doing well in school?
15. How did you feel about your parents' supervision when you were growing up?
16. How were important decisions affecting you made when you were home?
17. While growing up, how free did you feel to talk things over with your mother?
18. Did she encourage and welcome your questions?
19. How free do you feel to talk things over with her now?

20. Do you think your mother was more interested in how you behaved outwardly or in how you felt about things?
21. While growing up, how free did you feel to talk things over with your father?
22. Did he encourage and welcome your questions?
23. How free do you feel to talk things over with him now?
24. Do you think your father was more interested in how you behaved outwardly or in how you felt about things?
25. How does dormitory life differ from rules at home as far as restrictions and freedom are concerned?
26. How does dormitory life differ from what you had expected? Have you been homesick?
27. How do the behavior and attitudes (toward dating, petting, smoking, drinking, study habits, etc.) of the other girls at the dorm compare with that to which you are accustomed?
28. What does a good mother do?
29. What does a good father do?
30. What does a good child do?
31. Do you think your father has a sense of humor?
32. Do you think your mother has a sense of humor?
33. What sort of person is your mother? (Feelings for parents, and reasons)
34. What sort of person is your father?
35. How about study efforts--have you had to rearrange your schedule for that?
36. How do college courses and teachers, amount of studying, extra-curricular activities differ from what you had expected?
37. Have you become acquainted with any new ideas from assembly-speakers, teachers (outside of subject-matter) and other students? What are they?
38. What significant new experiences have you had since coming to college?

CODE FOR INTERVIEW QUESTIONS

ITEM	CODE
Identification Code	0418
Initial label	0. honors 1. non-honors 2. low scoring people
Subject code number	
Placement on Ac	0. top 30% 1. bottom 30%
Actual raw score	
GPA at end of freshman year	
Question No.	
9. a. Father active in organizations	0. very active 1. moderately active 2. not active 3. question not asked 4. I don't know or answered
9. b. Mother active in organizations	0. very active 1. moderately active 2. not active 3. question not asked 4. I don't know or answered
10. a. Did your mother keep after you about anything (rules)	0. yes 1. no or few rules 2. no "keeping after"; I knew the rules 3. question not asked or answered 4. I don't know
10. b. What were the rules that your mother kept after you about?	A. achievement 0. yes 1. not mentioned B. peer relationships 0. yes 1. not mentioned C. grades and study 0. yes 1. not mentioned D. housekeeping responsibilities 0. yes 1. not mentioned E. dating regulations 0. yes 1. not mentioned F. moral development 0. yes 1. not mentioned G. other 0. yes 1. not mentioned

11. a. Did your father keep after you about anything (rules)?
0. yes 1. no or few rules
 2. no "keeping after"; I knew the rules
 3. question not asked or answered
 4. I don't know
11. b. What were the rules that your father kept after you about?
- A. achievement 0. yes
 1. not mentioned
 B. peer relationships
 0. yes
 1. not mentioned
 C. grades and study
 0. yes
 1. not mentioned
 D. housekeeping responsibilities
 0. yes
 1. not mentioned
 E. dating regulations
 0. yes
 1. not mentioned
 F. moral development
 0. yes
 1. not mentioned
 G. other
 0. yes
 1. not mentioned
12. How did you feel about your parents' rules?
0. agreed
 1. at first disagreed, later agreed
 2. disagreed
 3. question not asked or answered
 4. I don't know
13. How did your father feel about your doing well in school?
0. concerned with effort
 1. concerned with grades
 2. unaware of attitude
 3. unconcerned
 4. concerned about personal satisfaction of daughter
 5. question not asked or answered
14. How did your mother feel about your doing well in school?
0. concerned with effort
 1. concerned with grades
 2. unaware of attitude
 3. unconcerned
 4. concerned about personal satisfaction of daughter
 5. question not asked or answered
- 17.-18. Were you free to talk with mother while growing up?
0. very free
 1. fairly free
 2. not free
 3. question not asked or answered

19. How free do you feel to talk with mother now?
0. more free
1. same
2. less free
3. question not asked or answered
- 21.-22. How free were you to talk with father while growing up?
0. very free
1. fairly free
2. not free
3. question not asked or answered
23. How free do you feel to talk with father now?
0. more free
1. same
2. less free
3. question not asked or answered
20. Is mother interested in outward behavior or inward feelings?
0. outward behavior
1. both
2. inward behavior
3. question not asked or answered
4. I don't know
24. Was father interested in outward behavior or inward feelings?
0. outward behavior
1. both
2. inward behavior
3. question not asked or answered
4. I don't know
25. Does dorm life differ from expected? Rules?
0. more restrictions
1. same restrictions
2. less restrictions
3. question not asked or answered
4. I don't know
26. Have you been homesick?
0. yes
1. no
2. question not asked or answered
27. How do the behavior and attitudes of the other girls in the dorm compare with what you are accustomed?
0. more strict
1. same
2. less strict
3. question not asked or answered
4. I don't know
- 32.-33. What sort of person is your mother?
0. positive
1. fairly positive
2. negative
3. question not asked or answered
4. I don't know
- 31.-34. What sort of person is your father?
0. positive
1. fairly positive
2. negative
3. question not asked or answered
4. I don't know

35. Study efforts, have you had to re-arrange your schedule for that?
0. study more
 1. study same
 2. study less
 3. questioned not asked or answered
 4. I don't know
36. How do college courses, teachers amount of studying, extra-curricular activities differ from what you expected?
- A. Courses
 0. yes 1. no
 2. not mentioned
 - B. Teachers
 0. yes 1. no
 2. not mentioned
 - C. Amount of study
 0. yes 1. no
 2. not mentioned
 - D. Extracurricular activities
 0. yes 1. no
 2. not mentioned
 - E. Dorm life
 0. yes 1. no
 2. not mentioned
 - F. General
 0. yes 1. no
 2. not mentioned
 - G. Other
 0. yes 1. no
 2. not mentioned
- 37.a. Have you become acquainted with any new ideas since coming to college?
0. yes, specific
 1. general new ideas
 2. no new ideas
 3. question not asked or answered
 4. I don't know
- 37.b. What is the source of these new ideas?
- A. Teachers
 0. yes 1. not mentioned
 - B. Speakers
 0. yes 1. not mentioned
 - C. Classes
 0. yes 1. not mentioned
 - D. Friends and acquaintances
 0. yes 1. not mentioned
 - E. Cultural events
 0. yes 1. not mentioned
 - F. Other
 0. yes 1. not mentioned
- 38.a. Have you had any significant new experiences since coming to college?
0. yes, specific
 1. general new experiences
 2. no new experiences
 3. question not asked or answered
 4. I don't know

38.b. What significant new experiences have you had since coming to college?

- A. Academic
O. yes 1. not mentioned
- B. Dating
O. yes 1. not mentioned
- C. Living conditions
O. yes 1. not mentioned
- D. Social occasions
O. yes 1. not mentioned
- E. Independence
O. yes 1. not mentioned
- F. Friendships
O. yes 1. not mentioned
- G. New horizons
O. yes 1. not mentioned
- H. Other
O. yes 1. not mentioned

THE RELATIONSHIP OF SELECTED ACADEMIC ACHIEVEMENT, FAMILY BACKGROUND,
AND COLLEGE ADJUSTMENT VARIABLES TO PERFORMANCE ON THE ACHIEVEMENT
VIA CONFORMITY SCALE OF THE CALIFORNIA PSYCHOLOGICAL INVENTORY

by

BEVERLY BROOKS KAUPP

B. S., Fort Hays Kansas State College, 1966

AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Family and Child Development

KANSAS STATE UNIVERSITY

Manhattan, Kansas

1967

Not until the last two decades has there been an immediate concern for the effective selection and guidance of college students, for until that time college enrollments were manageable and admission increases were absorbed by the available facilities. Though much research in the area of college student selection has occurred, no completely effective method of deciding which applicants will be successful in the college setting has been determined.

The majority of the research done in this area has concerned itself primarily with intellectual factors that helped forecast academic achievement in the college setting, e.g., high school grade point average and ACT scores. Academic achievement has been evaluated largely by means of grade point average at the end of the freshman year.

A number of researchers, however, believe that there are certain other factors which contribute to the successful prediction of college success and that these non-intellectual factors must be considered if educators are to have increased power to maximize the intellectual potential of the student. These non-intellectual factors examined by means of biographical information and personality test scores have been found to have meaningful relationships with student success in the college setting.

The purpose of this study was to describe two groups of freshmen women in the College of Home Economics in regard to selected measures of academic achievement, home background variables and college adjustment variables as reported in interview data in an effort to explore significant differences between these two groups. Individual high and low scores on the Achievement via Conformity scale (Ac) of the

California Psychological Inventory (CPI) served as criteria for the selection of these groups. It was expected that these comparisons would provide some indication of the characteristics and motivational antecedents which must be present for successful college performance.

The results of this research indicated that though the two groups of subjects were significantly different ($p < .01$) in regard to ACT scores and college grade point averages, they were not significantly different in regard to most of the other variables considered. Comparison of the high Ac and low Ac groups in the area of parent-child relationships revealed that fathers of low Ac Ss were significantly more ($p < .05$) interested in their daughters' outward behavior than were the fathers of high Ac Ss. High Ac Ss, more often than low Ac Ss, reported that their fathers were primarily interested in their inward feelings, their motives and inclinations.

In the area of college adjustment, low Ac Ss rearranged their schedules significantly more ($p < .05$) often than did high Ac Ss. This rearrangement involved making provision for more study than was expected. There was a trend for the high Ac group, more often than the low Ac group, to report more restrictions in the dormitory than they had had at home.

The discovery of so few differences between the two groups could be attributed to the grossness of the measure and the homogeneity of the group in terms of geographic location, college major, and cultural background.

Perhaps if subjects had been chosen from more diverse areas of the country or from different colleges within the University, more

significant differences between the groups would have been noted. The conclusion by other researchers that non-intellective factors do contribute to successful college performance indicates that there is a need for further study in this area. The challenge of researchers in this area is to consider the backgrounds of the students in the college setting and to discover those relationships within the family which are the antecedents and correlates of success in college. The student, then, should not be viewed in isolation in regard to his performance in college, but as a member of a family and as being effected by its structure and the relationships of its members.