

PEER GROUPS AND STUDENT ACHIEVEMENT
The College Campus and Its Students

by

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NATIONAL OPINION RESEARCH CENTER
University of Chicago

Report No. 91

February, 1963

ACKNOWLEDGEMENTS

My sincere thanks go to a number of persons and organizations for making this research possible, for helping with data-processing and analysis, and for making valuable criticisms. First among these are the organizations which contributed to its financial support: the National Institutes of Mental Health, U.S. Department of Health, Education, and Welfare, and the College Entrance Examination Board.

Second are the students, faculty members and administrators of our subject college who gave generously of their time and energy to supply the information analyzed here.

Third are the members of my thesis committee at the University of Chicago: Drs. Peter H. Rossi (chairman), James A. Davis, and Duncan MacRae, Jr. In addition to filling the usual role of thesis advisor, Dr. Rossi contributed the concept and technique of measuring interpersonal environments, made critically important suggestions concerning study design and questionnaire construction, secured financial support for the research, and provided the writer with office space and access to data-processing equipment. Without his help, this study would have taken a greatly narrower and less fruitful shape. Dr. Davis read the manuscript most carefully and made many detailed and helpful suggestions, some of which are not reflected in the present report solely because of time pressures. Dr. MacRae afforded the writer an opportunity to become familiar with techniques of sociometric analysis and also made suggestions for changes in the original manuscript, some of which, again, have not been included here because of time limitations. Dr. Peter M.

Blau is to be thanked for reading and criticizing my original proposal for this research.

Lee Hook, Warren Davis, Harold Levy and Sanford Abrams (the latter two of the National Opinion Research Center), made indispensable technical contributions at various points in the research.

Other members of the data-processing staff of the National Opinion Research Center, University of Chicago, were extremely helpful and considerate throughout the data-processing phase of this research. They include Siegfried Moysich, Steven Jordan, Carolyn Underhill and Richard Heath.

Wardell Haywood, Jerome Kirk, Patricia Denton, Edward Schneidman, Judith Schick, Jalna Hanmer and Sally Giese all performed computations involved in the analysis.

Lastly (in time-sequence only), thanks are due to Helen Miller, of the National Opinion Research Center, who typed the first draft from a stapled and taped hodge-podge, to Billie Paige, who suffered through typing the multilith masters, and to Jack Hester and Dan Tondu for printing them.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS.	ii
LIST OF TABLES.	
LIST OF ILLUSTRATIONS	
Chapter	
I. INTRODUCTION.	1
Major Features of the Research Design	
The College	
General Outline of the Report	
II. FRESHMAN VALUE CHANGES.	21
Absolute Change, November-April	
Relative Change, November-April	
Freshman-Senior Differences	
Associations Between Values	
Relationships Between Changes in Values	
III. ACADEMIC CONSEQUENCES OF ACADEMIC ORIENTATION	49
Academic Achievement	
Behavior	
IV. GRADUATE ASPIRATIONS CHANGE, GRADES-EVALUATIONS CHANGE, AND SOME CORRELATES OF EACH	78
The Student Peer Group	
Faculty Members	
Parents	
Occupational Origins and Ambitions	
Greek-Letter Versus Faculty Influences (A)	
Greek-Letter Versus Faculty Influences (B)	
V. SCHOLARSHIP GRANTS.	179

Chapter	Page
VI. SOME SPECIAL OBSERVATIONS ON THE GIRLS.	186
Grade Achievement	
Dating Evaluation	
Sorority Membership	
Sororities and Occupational Mobility	
Dating Versus Friendship	
Faculty Members	
VII. INTERPERSONAL ENVIRONMENTS I.	213
The Distribution of Recognition, and of Interaction Fre-	
quency and Attractiveness	
Total Size of Freshman Interpersonal Environments in No-	
vember and the Distribution of Recognition, Interaction	
Frequency and Attraction in Them	
November to April Changes in IE Size and Distribution of	
Recognition, Interaction Frequency and Attraction	
Greek-letter Membership	
Faculty Members	
VIII. INTERPERSONAL ENVIRONMENTS II: EFFECTS OF ENVIRONMENTAL DIS-	
TRIBUTIONS OF GRADES-EVALUATION, GRADUATE ASPIRATIONS, AND	
OCCUPATIONAL AMBITIONS.	248
November Environmental Effects on Grades-Evaluation Changes	
November-April Changes	
IE Effects on Graduate Aspiration Changes	
IX. SUMMARY AND DISCUSSION.	269
Major Findings	
Implications for Further Research	
APPENDIX A.	278
APPENDIX B.	288
APPENDIX C.	296
APPENDIX D.	302

LIST OF TABLES

Table	Page
1.	Per cent Giving Specified Ranks to A: Sex, by Date of Response; November-April Change and Per cent Transitive Value Choices (Freshmen). 23
2.	Changes in Ranks of Values from November to April (Freshmen). 24
3.	Per cent Giving High Importance to Selected Values in September (Freshmen). 28
4.	Freshman September-November Grades-Evaluation Turnover Tables (Per cent). 29
5.	Freshman September-November Friendship-Evaluation Turnover Tables (Per cent) 30
6.	Per cent Giving High (1st and 2nd) Rank to Values, by Date of Response (Freshmen and Non-Freshmen 32
7.	Per cent Giving High Rank to Values, by Class 34
8.	Per cent Ranking A High in November, by High School Rank and Class 36
9.	Per cent Ranking A High in November, by Father's Occupation and Class 36
10.	Gamma Coefficients Between Pairs of Values (November), by Class 38
11.	Per cent Freshmen Ranking Given Pairs of Values High or Low in November. 41
12.	Per cent Sophomores and Juniors and Per cent Seniors Ranking Given Pairs of Values High or Low in November 43
13.	Gamma Coefficients of Association Between November-April Change in Ranks of Pairs of Values (Freshmen). 45
14.	Gamma Coefficients of Association Between September Values (Freshmen). 46
15.	Multiple Regression Information 52
16.	Per cent Over-Achieving, by Class, Sex, and November A Rank 56

Table	Page
17. Per cent Over-Achieving, by September-November Change in Grades-Evaluation (Freshmen)	58
18. Per cent High A in April, by A Rank in November and First Semester Grade-Point Average (Freshmen)	59
19. Per cent Over-Achieving by November-April Change in Grades-Evaluation (Freshmen)	61
20. Per cent High Total Grade-Point Average, by High School Rank, A Rank and Class.	62
21. Per cent High First Semester Grade-Point Average (Freshmen)	64
22. Per cent Raising Grade-Point Average in Second Semester (Freshmen).	66
23. Per cent Studying More than Thirty-two Hours Per Week (November), by November A Rank and Class.	67
24. Per cent Over-Achievers, by November A Rank, Number of Hours Studying and Class.	69
25. Per cent Spending More Than Eight Hours Per Week in Non-Athletic Club Activities (November), by November A Rank and Class	70
26. Per cent Dating More Than Eight Hours Per Week (November), by November A Rank and Class	70
27. Per cent Spending More Than Sixteen Hours Per Week With Friends (November), by November A Rank and Class.	71
28. Per cent Spending More Than Eight Hours Per Week Alone (November), by November A Rank and Class	71
29. Per cent Wanting to Attend Graduate or Professional School, by Class.	81
30. Per cent Expecting to Attend Graduate or Professional School, by Class.	82
31. Per cent and Per cent Change in High Grades-Evaluation, by Expectation of Prestige Among Students (Freshmen)	87
32. Per cent and Per cent Change in High Grades-Evaluation, by Desire to be Accepted and Liked by Fellow-Students (Freshmen).	88
33. Per cent and Per cent Change in High Grades-Evaluation, by Desire to be Accepted, by Expectation of Prestige Among Students (Freshmen)	89

Table	Page
34. Per cent and Per cent Change in High Greek-Letter Membership (Freshmen).	90
35. Per cent Belonging to Greek-Letter Organizations, by Desire to be Accepted and Liked by Fellow Students, and Popularity Importance of Greek-Letter Membership (Freshmen)	93
36. Per cent High A Rank, by Greek-Letter Membership (Freshmen and Non-Freshmen).	94
37. Per cent and Per cent Change in High Grades-Evaluation, by Desire to be Accepted and Liked by Fellow Students and Greek-Letter Membership (Freshmen)	95
38. Per cent and Per cent Change in High Grades-Evaluation; and Per cent Having High First Semester GPA, by HSR (Freshmen) .	96
39. Per cent and Per cent Change in High Grades-Evaluation, and Per cent Raising GPA in Second Semester, by First Semester GPA (Freshmen)	97
40. Per cent and Per cent Change in High Grades-Evaluation, by Greek-Letter-Membership and First Semester GPA (Freshmen). .	98
41. Per cent and Per cent Change in High Ranks of X, D, and F by First Semester GPA and Greek-Letter Membership (Freshmen). .	100
42. Per cent Giving High Ranks to A, X, D, and F; by Total GPA and Greek-Letter Membership (Non-Freshmen).	101
43. Associations (Yule's Q) Between Values and GPA, by HSR (Non-Freshmen).	103
44. Associations (Yule's Q) Between Values and GPA, by Greek-Letter Membership and HSR (Non-Freshmen)	103
45. Per cent High GPA, by HSR and Greek-Letter Membership (Non-Freshmen).	106
46. Effects of Greek-Letter Membership on Non-Freshmen's Values and Behaviors, by High School Rank (Per cent).	108
47. Associations (Yule's Q) Between A Rank and Time Spent Studying, and Between X Rank and Time Spent Studying; by HSR and Greek-Letter Membership (Non-Freshmen)	109
48. Friendship and Dating "Satisfactions": Associations (Yule's Q) Between Friendship-Evaluation and Time Spent with Friends Per Week, and Between Dating-Evaluation and Time Spent Dating Per Week, by HSR and Greek-Letter Membership (Non-Freshmen). . .	109
49. Per cent Having Various Types of Majors, by High School Rank (Non-Freshmen)	111

Table	Page
50. Per cent Having Types of Majors, by Greek-Letter Membership and HSR (Non-Freshmen).	112
51. Per cent High GPA, High A, X, D and F, Having Graduate Aspirations, and Admiring More Than Four Faculty Members, by HSR and Major Field Type (Non-Freshmen).	113
52. Per cent High GPA's, Per cent High A Rank, and Associations (Yule's Q) with Greek-Letter Membership; by HSR, Major Type and Greek-Letter Membership (Non-Freshman Males).	114
53. Per cent High Grades Evaluation and High GPA, by Greek-Letter Membership and Major Type (Non-Freshmen).	116
54. Associations (Yule's Q) Between Greek-Letter Membership and X Rank, by HSR and Major Type (Non-Freshman Males).	117
55. Per cent and Per cent Change in Graduate Aspirations, by Expectation of Prestige Among Students (Freshmen)	121
56. Per cent and Per cent Change in Graduate Aspirations, Liked By Fellow Students (Freshmen)	122
57. Per cent and Per cent Change in Per cent Having Graduate Aspirations, by Greek-Letter Membership (Freshmen).	123
58. Per cent Having Graduate Aspirations, by Greek-Letter Membership and Class; Freshman-Non-Freshman "Change".	124
59. Coefficients of Association (Yule's Q) Between Grades-Evaluation and Graduate Aspiration, by Greek-Letter Membership (Freshmen and Non-Freshmen)	125
60. Per cent, and Per cent Change in High Grades-Evaluation by Expectation of Impressing Faculty Members (Freshmen).	127
61. Per cent High A, X, D and F and Deviations of Students from Faculty Preferences (Faculty Members and Non-Freshmen).	128
62. Relationships of Expecting to Impress Faculty Members to Other September Attributes (Freshmen)	130
63. Per cent and Per cent Change in High Grades--Evaluation, by Number of Faculty Admired (Freshmen).	132
64. Per cent and Per cent Change Having Graduate Aspirations, by Number of Faculty Admired (Freshmen).	133
65. Per cent High A, by Number of Faculty Admired (Non-Freshmen).	134
66. Per cent Having Graduate Aspirations, by Number of Faculty Admired (Non-Freshmen).	134

Table	Page
67. Per cent Admiring More Than Two Faculty Members, by Expectation of Impressing Faculty Members (Freshmen)	135
68. Per cent and Per cent Change in High Grades-Evaluation, by Expectation of Impressing Faculty and Number of Faculty Admired (Freshmen)	136
69. Per cent Admiring More Than Two Faculty Members, by First Semester Grade-Point Average Rank (Freshmen)	137
70. Per cent and Per cent Change in High Grades-Evaluations, by Desire to Please Parents (Freshmen).	137
71. Per cent and Per cent Change in Graduate Aspirations by Desire to Please Parents (Freshmen).	138
72. Per cent and Per cent Change in High Grades-Evaluation, by Father's Occupation Index (Freshmen)	143
73. Per cent and Per cent Change in Graduate Aspirations, by Father's Occupation Index (Freshmen)	144
74. Per cent and Per cent Change in Graduate Aspirations and Expectations, by Desired Mobility from Father's Occupation (Freshmen)	145
75. Per cent and Per cent Change in High Grades-Evaluation, by Desired Occupational Mobility from Father's Occupation (Freshmen)	146
76. Per cent and Per cent Change in Graduate Aspirations, by Own Occupational Choice (Freshmen)	146
77. Mean indexes of Father's Occupation and of Own Occupational Choice, by Class	147
78. Frequency Distribution of Socioeconomic Index for the Male Experienced Civilian Labor Force, 1950	147
79. Per cent Belonging to Greek-Letter Organizations, by Father's Occupation and Desired Occupational Mobility from Father's Occupation (Freshmen and Non-Freshmen)	149
80. Per cent and Per cent Change in Graduate Aspirations, by Greek-Letter Membership and Desired Occupational Mobility From Father's Occupation (Freshmen and Non-Freshmen)	151
81. Per cent and Per cent "Change" Desiring Upward Occupational Mobility from Father's Occupation, by Greek-Letter Membership, by Class	152

Table	Page
82. Per cent and Per cent "Change" on Upward Occupational Mobility from Father's Occupation, by Greek-Letter Membership and Father's Occupation Index (Freshmen and Non-Freshmen). . . .	153
83. Per cent and Per cent "Change" in High Occupational Choice, by Greek-Letter Membership and Father's Occupation (Freshmen and Non-Freshmen).	153
84. Per cent and Per cent "Change" in Per cent Having Graduate Aspirations, by Greek-Letter Membership and Father's Occupational Index (Freshmen and Non-Freshmen)	154
85. Per cent and Per cent "Change" in High Own Occupational Choice, by Father's Occupation Index (Freshmen and Non-Freshmen) . .	155
86. Per cent Admiring High Number of Faculty, by Father's Occupation Index and Desired Occupational Mobility (Freshmen and Non-Freshmen).	156
87. Per cent Greek-Letter Members, and Per cent Admiring High Number of Faculty Members, Father's Occupation Index (Freshmen and Non-Freshmen).	157
88. Per cent Greek-Letter Members and Per cent Admiring More Than Two Faculty Members, by Father's Occupation Index and Expectation of Making Good Contacts in College (Freshmen)	157
89. Per cent and Per cent "Change" in Graduate Aspirations, by Number of Faculty Admired, Father's Occupation Index and Class.	159
90. April 1961 Graduate and Professional School Expectations of June 1961 Graduates, by Prior Freshman Plans	160
91. Per cent and Per cent Change in High Grades-Evaluation by Greek-Letter Membership by Number of Faculty Admired (Freshmen).	161
92. Per cent High A Rank, by Greek-Letter Membership and Number of Faculty Admired (Non-Freshmen)	162
93. Per cent High First Semester GPA Rank Per cent Raising GPA in Second Semester; Per cent High Total GPA; Per cent Over-Achieving; by Greek-Letter Membership and Number of Faculty Admired (Freshmen)	163
94. Per cent and Per cent Change in Graduate Aspirations, by Greek-Letter Membership and Number of Faculty Admired (Freshmen) .	164
95. Per cent Having Graduate Aspirations, by Greek-Letter Membership and Number of Faculty Admired (Non-Freshmen).	165

Table	Page
125. "Satisfaction" with Friendship Interaction: Associations (Yule's Q) Between F Rank and Time Spent with Friends, by Time Spent Dating and HSR (Non-Freshmen).	204
126. Per cent Studying More Than Thirty-two Hours Per Week, by HSR, Associations (Yule's Q) Between Time Spent Studying and HSR (Non-Freshmen).	204
127. Friendship "Satisfaction": Associations (Yule's Q) Between F Rank and Time Spent with Friends, by Time Spent Studying and Time Spent Dating (Non-Freshmen).	205
128. Per cent of Faculty Giving High Ranks to Student Values, by Sex of the Student; Per cent of Non-Freshmen Giving High Ranks to Values, by Sex	207
129. Associations (Yule's Q) Between Number of Faculty Admired and Time Spent Dating; and Time Spent with Friends, by Greek-Letter Membership (Non-Freshmen).	208
130. Associations (Yule's Q) Between Time Spent Dating and Time Spent with Friends, by HSR and Greek-Letter Membership (Non-Freshmen).	209
131. Associations (Yule's Q) Between Time Spent Dating and Number of Faculty Admired, by HSR and Greek-Letter Membership (Non-Freshmen).	209
132. Associations (Yule's Q) Between Time Spent Dating and Grade-Point Average, by HSR and Greek-Letter Membership (Non-Freshmen)	210
133. Total and Mean Number of Recognitions, and Distribution of Affect, by Sex and Class of Respondent (November Questionnaire).	218
134. Ranges and Medians of Total Number of Recognitions and Selected Proportions in Freshman November IE's (Freshmen).	220
135. Per cent and Per cent Change High Grades-Evaluation, and Per cent and Per cent Change Having Graduate Aspirations, by Total Number Recognized in November IE's (Freshmen)	221
136. Per cent and Per cent Change High Grades-Evaluation, and Per cent and Per cent Change Having Graduate Aspirations, by November IE Proportion Liked, Neutral, Disliked (Freshmen).	222
137. Per cent and Per cent Change High Grades-Evaluation, Per cent and Per cent Change Having Graduate Aspirations, and Per cent Over-Achieving, by November IE Number Recognized and Proportion Neutral (Freshmen)	224

Table	Page
138. Per cent Over-Achieving, by November IE Affectivity (Freshmen)	224
139. Per cent and Per cent Change High Grades-Evaluation, and Per cent and Per cent Change Having Graduate Aspirations, by November IE proportions Non-Freshman and Freshman Males (Freshmen).	225
140. Per cent and Per cent Change High Grades-Evaluation, and Per cent Change Having Graduate Aspirations, by November IE Proportions Non-Freshman and Freshman Females (Freshmen)	226
141. Per cent and Per cent Change Having Graduate Aspirations, by November IE Proportion Non-Freshman Males and Females Liked (Freshmen).	227
142. Per cent and Per cent Change Having Graduate Aspirations, by November IE Proportion Non-Freshman Males (Freshmen).	227
143. Per cent and Per cent Change High Grades-Evaluations, and Per cent and Per cent Change Having Graduate Aspirations, by November IE Proportion Frequent Interaction (Freshmen).	228
144. Per cent and Per cent Change High Grades Evaluation, by November IE Proportion Non-Freshmen Liked and Proportion Frequent Interaction (Freshmen).	229
145. Per cent and Per cent Change Having Graduate Aspirations, by November IE Proportion Non-Freshmen Liked and Proportion Frequency of Interaction (Freshmen).	230
146. Ranges and Medians of November to April Changes in Total Number of Recognitions and Selected IE Proportions (Freshmen).	232
147. Per cent Above Medians of November-April IE Change, by Greek-Letter Membership of Respondent (Freshmen).	235
148. Associations (Yule's Q) Between Changes in IE Proportions Recognized, by Greek-Letter Membership (Freshmen)	236
149. Associations (Yule's Q) Between Changes in IE Proportions Liked, by Greek-Letter Membership (Freshmen).	237
150. Associations (Yule's Q) Between Number of Hours Spent Dating (April) and Change in IE Proportions (Freshmen)	238
151. Associations (Yule's Q) Between Number of Hours Spent Dating (November) and November IE Proportions (Freshmen)	239
152. Per cent and Change in Per cent Dating More than Eight Hours Per Week, by Greek-Letter Membership and Year in College.	240

Table	Page
153. Per cent Admiring More Than Two Faculty Members (April) by Desire to be Accepted and Liked by Fellow Students and Proportion of November IE Liked (Freshmen)	242
154. Per cent and Per cent Change High Grades-Evaluation, and Per cent and Per cent Change Having Graduate Aspirations, by November-April Changes in IE Size Interaction Frequency and Affectivity (Freshmen)	244
155. Per cent Change in Grades-Evaluation, by Change in Freshman and Non-Freshman, Male and Female, Recognized and Liked IE Proportions (Freshmen)	245
156. Per cent Change in Graduate Aspirations, by Change in Freshman and Non-Freshman, Male and Female, Recognized and Liked IE Proportions (Freshmen).	246
157. Population Proportions Positive on Variables Used in the Analysis of Interpersonal Environments, by Class.	249
158. Per cent Having High and Low Grades-Evaluation IE Segments in November (Freshmen).	250
159. Per cent Change in High Grades-Evaluation and Per cent Over-Achieving, by November Grades-Evaluation IE Segments (Freshmen)	252
160. Per cent Change in High Grades-Evaluation, by September and November Freshman IE Segments (Freshmen)	253
161. Per cent Change in High Grades-Evaluation, and Per cent Over-Achieving, by November IE Grades-Evaluation Biases (Freshmen)	256
162. September-November Grades-Evaluation Change and Per cent Freshmen Over-Achieving by IE Segment	259
163. Associations (Yule's Q) Between Total November and April Grades-Evaluation IE Segments (Freshmen)	260
164. Associations (Yule's Q) Between Greek-Letter Membership and Changes in IE Grades-Evaluation Biases from November-April (Freshmen)	261
165. Per cent Changing IE Grades-Evaluation Bias Between November and April by IE Segment (Freshmen)	263
166. Per cent Change in High Grades Evaluation by Change in IE Grades-Evaluation Bias Between November and April (Freshmen)	264
167. Per cent Change in Graduate Aspirations, by Levels of Graduate Aspirations in November and April IE Segments (Freshmen) . .	265

Table	Page
168. Per cent Change in Graduate Aspirations by Levels of Occupational Choice in November and April IE Segments (Freshmen) . .	266
169. Per cent Change in High Occupational Choice IE Segments, by Sex and Greek-Letter Membership of Respondent	268

LIST OF ILLUSTRATIONS

Figure		Page
1.	Net Change in Values November-April (Freshmen).	27
2.	Change in Grades-Evaluation and in Graduate Aspirations (Freshmen).	83
3.	Per cent High Grades-Evaluation and Per cent Graduate Aspira- tions, by Class (Non-Freshmen).	84
4.	November-April Change in Grades-Evaluation and Graduate Aspira- tions, by Greek-Letter Membership and Number of Faculty Mem- bers Admired (Freshmen)	166
5.	Per cent Ranking Values High (Faculty, Non-Freshman Indepen- dents and Greeks)	168

CHAPTER I

INTRODUCTION

The Problem and Its Background

In a recent publication, Nevitt Sanford cogently describes the problem within which this study finds its place:

The performance of the individual student is determined not only by the abilities and dispositions that are present when he enters college but also by a complexity of factors in the college environment. When the ways in which these latter influence the student are sufficiently well understood, it may become possible to modify them in such a way as to raise the student's level of performance. This is a field in which relatively little work has been done.¹

The present research is aimed at illuminating some of the ways in which certain characteristics of social environment affected students at a small liberal arts college in the midwest. More precisely, our central hypothesis asserts that the informal social structure and expectations existing among students and faculty members at this college influenced the academic values, achievement and aspirations of individual students.

In one of its aspects, this hypothesis represents an approach to the question of why some of the most talented youth do not fulfill in college the promise which they showed in high school, and conversely, why some students exceed their promise. In another and theoretically broader aspect, the hypothesis represents the application, in a substantive area to which it has not often been applied, of one of the most firmly established conclusions of

¹Nevitt Sanford, "Higher Education as a Field of Study," The American College, ed. Nevitt Sanford (New York: John Wiley and Sons, 1962), p. 67.

research in social psychology and formal organizations, namely, that peer group norms affect individual behavior.¹ The juncture between these two sides of our main hypothesis is clearly manifested in Coleman's conclusion, with reference to high school students, that "Students with ability are led to achieve only when there are social rewards, primarily from their peers, for doing so. . . ." ²

As Sanford indicates, relatively little empirical research has been done along the lines of the present study. Nevertheless, researchers and practitioners alike have long and repeatedly observed (supported by varying degrees of methodological rigor) that the values, customs, informal clique structure, faculty-student relations, extra-curricular organizations, etc., of schools affect the degree to which educational goals are attained.³

¹For selections and summaries of this literature, see Dorwin Cartwright and Alvin Zander, Group Dynamics: Research and Theory (rev. ed.; Evanston, Ill.: Row, Peterson, 1960); and Peter M. Blau and W. Richard Scott, Formal Organizations (San Francisco: Chandler, 1961).

²James S. Coleman, "The Adolescent Subculture and Academic Achievement," American Journal of Sociology, LXV (1960), 344.

³See, among others, W. G. Mollenkopf and S. D. Melville, "A Study of Secondary School Characteristics as Related to Test Scores," Educational Testing Service Bulletin RB-56-6 (July, 1956), see esp. p. 37; Orville G. Brim, Jr., Sociology and the Field of Education (New York: Russell Sage Foundation, 1958), see esp. p. 43; Janet A. Kelley, College Life and the Mores (New York: Bureau of Publications, Teachers College, Columbia University, 1949), see esp. pp. 3 and 117-118; W. H. Cowley and Willard Waller, "A Study of Student Life," Journal of Higher Education, VI (1935), see esp. 132; Louise Price, Creative Work Groups on the Campus (New York: Bureau of Publications, Teachers College, Columbia University, 1941), see esp. p. 123; H. H. Remmers and D. H. Radler, The American Teenager (Indianapolis and New York: Bobbs-Merrill, 1957), see esp. chap. ix; Orden Smucker, "The Campus Clique as an Agency of Socialization," Journal of Educational Sociology, XXI (1947), 163-68; Janet A. Kelley, "Varying Mores in School and College Cultures," Journal of Educational Sociology, XXXI (1958), 244-52; and Willard Waller, The Sociology of Teaching (New York: John Wiley, 1932).

For example, Hartshorne writes that

Informal group norms also govern individual behavior in competitive situations. There is pressure for 'success,' but too much success brings with it certain penalties, notably increased social distance between the winners and the losers . . . the normal distribution curve automatically places those who 'distinguish themselves,' either by success or by failure, in a minority group. Thus many individual students actually refrain from doing as well as their aptitude would allow, for the simple reason that they don't want to put a barrier between themselves and their less able friends.¹

To cite another example, Coleman writes:

Consider only a single activity, academic achievement. The importance for status among the adolescents in each school can be measured simply by the proportion of responses which specify 'good grades,' or 'brains' as leading adolescents often put it, as a means of entree into the leading crowd. In all the schools, academic achievement was of less importance than other matters, such as being an athletic star among the boys, being a cheerleader or being good-looking among the girls, or other attributes.²

These two statements seem typical of observations regarding the particular effects of student culture upon individual achievement--although they express somewhat different conclusions. The first statement suggests that the college peer group tends to penalize high achievement of whatever sort and high academic achievement in particular. The second emphasizes the idea that the high school peer group often rewards high achievement in certain activities, although strictly academic activities do not seem to be among these.

In opposition to both of these conclusions, however, Brookover states:

There is little evidence that friendship of the mutual sort, frequently the basis for clique formation, is related to academic achievement or intelligence. Barney³ studied the mutual friendship choices of students from the second through the tenth grade and found no significant relation-

¹Edward Y. Hartshorne, "Undergraduate Society and the College Culture," American Sociological Review, VII (1943), 324.

²Coleman, American Journal of Sociology, LXV (1960), 340.

³M. E. Barney, "A Sociometric Study of the Relationship of Some Factors to Mutual Friendship on the Elementary, Secondary and College Level," Sociometry, IX (1946), 26-34.

ship with academic achievement or intelligence. . . . Barney . . . found no consistently significant correlation between the interests and friendship choices in the elementary grades. At the high school and college level, he found a few significant correlations between specific interests and mutual friends.¹

Brookover goes on to note, however, that "Smucker found that common interests in a given type of recreation and in maintaining academic records were associated with clique relations at the college level."²

Setting aside, for the moment, the important differences between the substantive conclusions drawn by investigators like Hartshorne and Coleman on the one hand and Brookover on the other, the type of concern which they all represent follows one line of attack upon the general problem of environmental influences on student behavior--a line which emphasizes the social relationships among members of the school community. A second, more psychologistic and ecological approach is represented by the work of such men as Heist, Thistlethwaite and Pace and Stern.

In a recent article, Heist reported that when the Omnibus Personality Inventory and Allport-Vernon-Lindzey scores of National Merit Scholarship finalists at institutions of high and low productivity³ were compared, significant differences were found. Heist concludes: "On the basis of our present knowledge of what the OPI and A-V-L scales measure, most of these students of superior ability in the high group can be described as having a different orientation and very likely a different pattern of motivation than students of the

¹Wilbur Brookover, A Sociology of Education (New York: American Book Company, 1955), p. 219.

²Ibid.

³As measured in Robert H. Knapp and Joseph J. Greenbaum, The Younger American Scholar: His Collegiate Origins (Chicago: University of Chicago Press, 1953).

of such answers as our data seem to provide to this question for the main body of the report, we can note the way in which research on the personal characteristics of students seems logically to lead to inquiries about the normative structure of the peer group in which students find themselves.

Pace and Stern¹ have gone a step further than Heist, inasmuch as their aim has been to derive empirically, not only a description of students attending a given college, but a parallel description of the college itself. To this end, two questionnaires were developed for administration to students. The first, called the Activities Index, is designed to measure the student's psychological needs for achievement, affiliation, change, dominance, exhibitionism, order, and the like. The second questionnaire, called the College Characteristics Index, is designed to elicit a description of the college along the same ten dimensions employed in the Activities Index.

With data provided by these instruments, it becomes possible to determine the degree of consonance or dissonance between the profile of a college's measured characteristics (its "press") and the profile of the students attending that college (student "needs"). Stern has tentatively concluded, from an analysis of data from 1,984 students in thirty-two colleges, that between colleges there is more variation in press characteristics than in student need characteristics, while within colleges the reverse is true. Moreover, student bodies tend to resemble the press of their own college slightly more than those of other institutions. Whether this tendency toward consonance is

¹Charles R. Pace and George G. Stern, "An Approach to the Measurement of Psychological Characteristics of College Environments," Journal of Educational Psychology, LXIX (1958), 269-77; Charles R. Pace, "Five College Environments," College Entrance Examination Board Review, XLI (1960), 24-28; and George G. Stern, "Environments for Learning," The American College, ed. Nevitt Sanford.

the result of self-selection or institutional influence has not yet been reported, nor have the consequences of consonance and dissonance been fully explored. However, indications from a controlled classroom experiment conducted by Stern and Cope point in the direction of differential facility in attitude change as one probable consequence.

Thistlethwaite has reported on a second consequence of difference in college press. With aptitude held constant, a certain type of college press was found to be productive of achievement in the natural sciences, while another type of press was found productive of achievement in the social sciences, arts and humanities.¹

The "needs-press" approach views achievement as a consequence of interaction between students and their social environment. At the same time, however, this approach measures individual personal characteristics of students without specifically examining the ways in which these individuals relate to one another and the impact of such relations. Three recent and important studies, however, have taken this latter line of attack.

In the first of these, Gordon² examined three inter-related stratification systems in the social organization of the student-body. The respective dimensions of these systems were academic achievement (represented by grade-point average), participation in extra-curricular activities and interpersonal relations (represented by number of friendship choices received). Relying mainly on interview data, Gordon concluded that the "ultimate motivation" of a given student's behavior was toward establishing his position in the informal

¹Donald L. Thistlethwaite, "College Environments and the Development of Talent," Science, CXXX, No. 3367 (1959), 71-76.

²C. Wayne Gordon, The Social System of the High School (Glencoe, Ill.: Free Press, 1957).

In the third recent study, Hughes, Becker and Geer¹ analyzed student culture at a medical school. Their conclusions are that two factors combine to force as well as enable and encourage the development of peer group norms regarding academic achievement. The first of these is the "enormous and, in any practical sense, unlimited amount of material" with which medical students are presented in courses. The second factor was found to be the intensive interaction among these students, resulting from the fact that those who enter medical school in a given year go through school together, attend lectures, laboratories and examinations together. In addition, long hours of academic work lead to the isolation of these students from groups outside their own school class. As a consequence of these facts, determined by the formal structure and rules of the medical school, students are forced back on their own judgments, and establish norms regarding what materials should be learned and what material may be set aside. During the last two years of medical school, during which the emphasis is on clinical work, rather than the mastery of a body of knowledge on which the students are tested, the problem to which the peer group norms are addressed shifts to "how to deal with the continuous pressure of a heavy load of clinical work and how to get the most out of that work in terms of the future one envisions for himself in medicine."² In response to this new requirement, new peer group norms appear.

Although the three researches just summarized deal variously with high school and medical school students rather than with undergraduate college students, they are substantively related to the present research and provide a solid background for it. Judging from the findings of these studies,

¹Everett Hughes, Howard Becker, and Blanche Geer, "Student Culture and Academic Effort," The American College, ed. Nevitt Sanford (New York: John Wiley, 1962).

²Ibid., p. 526.

our hypothesis rests on supporting circumstantial evidence even before we examine it in the specific context of college life.

While noting the similarities between our own study and those just mentioned, certain important differences should not be overlooked. First, there are the obvious differences among the educational levels studied. In this connection, it should be noted that among the high schools studied by Coleman, peer group norms tended to give high salience as well as evaluation to non-academic behavior. In the medical school studied by Hughes, Becker, and Geer, academic behavior seems to have been salient. It would seem very likely that this difference is due largely to the fact that academic work in medical school is far more demanding, intense and isolating than in high school, but it is also possible that the difference in stages of social maturation also carries some weight. By this, we mean that medical students can look forward to the attainment of fully adult occupational and prestige statuses in the very near future. High school students (especially those who plan to attend college) do not seem likely to think of themselves as verging so closely upon such statuses. Carrying this argument to undergraduate college students, their intermediate position in the succession of age-graded statuses leading to adulthood is apparent. It may therefore be reasonable to expect that the relative salience of academic behavior in the college peer group normative structure may be intermediate between the low level among high school students and the high level among medical students.

Second, there are a series of methodological differences between our own and these previous researches. One type of difficulty with the Gordon study, for example, centers around the lack of specification of variables-- notably dependent variables. Only one of the main variables in Gordon's study is conceptually and operationally defined. That variable is the informal

network of social relations. The dependent variable, behavior, is never defined (although examples are given in the interview data) and we are not told exactly what kinds of behavior are presumed to be affected by status in the school social system, what kinds are presumed unaffected, what kinds affected more, and what kinds affected less. Second, although a strong impression is given in the interviews that a mutual relation does exist between social status and some behavior, the research design is incapable of showing its nature or measuring its extent, since measurement of behavior is not attempted. Third, although the formal school system and the formal student organization system are both analyzed, neither of them, nor any other variable, is systematically introduced to elaborate the hypothesized relation between status and behavior. As a result, the study can cast no light on the conditions under which we may expect the basic relation to exist at all, to exist maximally, or to change its form. In our study, we have tried to seek out at least tentative answers to these questions.

Our research seems closest in approach, method and findings to the Coleman study. The latter is comparative, however, and has this advantage over us. A second difference between the two resides in Coleman's analysis of clique structure, as contrasted with our use of a new approach to interpersonal environments, to be described below.

The Hughes, Becker, and Geer study is chiefly concerned with the origins and development of group norms, rather than with their effects upon individual students. Thus, the cited report of this study gives us no information about differential student response to such norms, which is the central problem of the research which we present here.

One further element distinguishes our study from all others in the literature. As we shall indicate in greater detail below, we call attention

to the entering freshmen, in particular. We are especially interested in finding out how students adapt to the new college environment during their early college days, in the belief that most major adaptations are made relatively quickly in a new environment, if the new stimuli are perceived as being relatively unambiguous. Thus, our contention is that the most profound effects of the college experience are to be observed during the period of first contact, rather than at any later date.

In general, then, our research seems to find its place in the class of studies which have been concerned with influences of the school environment on individual student behavior, and in the sub-class of studies which have drawn attention to the effects of particular kinds of norms and social relationships existing within schools.

Major Features of the Research Design

The Focus on Entering Freshmen

As we have already indicated, we here draw special (though not exclusive) attention to the entering freshman and to the manner in which group norms in the new environment influence his attitudes and behavior. This focus springs from the consideration that each freshman is temporarily in transition from prior integration in his high school student-faculty society to future integration in his college society.

It seems important to emphasize that in most four-year colleges an initial heterogeneity of norms probably prevails among the entering freshman class by virtue of differences among the high schools (and presumably different normative backgrounds) from which its members are drawn. Although we do not suggest that this initial heterogeneity is the only factor accounting for any difficulty which a given high school culture finds in being transplanted

intact to the college scene, it is doubtless an important one.¹ For this reason, the transition from high school to college society, and the passage between the spheres of their normative influences, seems likely to be begun by each entering freshman individually and with a minimum of normative support from his fellow-freshmen. Therefore, to the extent to which the high school societies and culture from which entering freshmen come are objectively different from the college society and culture to which they go, we have every reason to expect that the initiation of these students into the new society will involve attitudinal and behavioral changes. Furthermore, to the extent that the differences between the two societies in question are anticipated by the freshmen themselves, freshmen seem likely to expect to change. And lastly, because becoming a college student is generally evaluated as a step up, to a higher and more desirable status than that of high school student or wage-earner, the entering freshman seems likely to want to change.

Taken together, these factors suggest the special sensitivity of entering freshmen to the new external influences which he meets in college. Such sensitivity seems likely to be strategic as well, in the sense that the perpetuation of the college norms depends upon the rapid enculturation of entering freshmen. Whatever durable new patterns entering freshmen learn seem bound to be reflected in the patterns which succeeding generations of freshmen will learn from them. Thus, the changes which are wrought in entering freshmen take on the qualities of a fulcrum for long-range continuation or change in the entire student culture of the college.

In implementation of these considerations, a panel design was employed

¹See Robert K. Merton, "Contributions to the Theory of Reference Group Behavior," Social Theory and Social Structure (Glencoe: The Free Press, 1957), for a similar discussion with regard to soldiers in World War II.

with the freshmen, and identical questionnaires were administered to them in November, 1959 and in April, 1960. We received 98 per cent and 84 per cent return on these questionnaires, respectively. An initial questionnaire was also given to the freshmen during their second day on campus, in September, 1959, on which the return was 100 per cent. The overwhelming majority of the data on non-freshmen which is analyzed here was collected in November, 1959. Ninety-two per cent of non-freshmen returned completed questionnaires at that time. A further questionnaire was administered to all students in April, 1960, but only two items from that questionnaire (father's occupation and number of faculty members admired) figure in the present analysis. Eighty per cent of non-freshmen and 93 per cent of freshmen returned such questionnaires.

The Measurement of Interpersonal Environments

The mention of a student culture suggests mention of informal student norms. But the problem of defining informal group norms is a notoriously thorny one, partly because of difficulties in defining the membership and boundaries of cliques within which given norms may be said to operate.¹ To avoid these problems, however, we may take Rossi's suggestion² and return to the original and unambiguous datum: subject "i" chooses subject "j." We can identify all j's chosen by i and call this aggregate i's "interpersonal environment." Now if we measure, for example, a freshman's desire to get high grades before this desire can be influenced by the college environment and

¹See Gardner Lindzey and Edgar F. Borgatta, "Sociometric Measurement," Handbook of Social Psychology, ed. Gardner Lindzey, I (Reading, Mass.: Addison-Wesley, 1954).

²Peter H. Rossi, "Research Strategies in the Measurement of Peer Group Influence" (unpublished manuscript).

measure it again, after the freshman has entered that environment, and also measure the desire to get high grades of each "j" in his interpersonal environment, we can reasonably infer influence if we can show that the change in grades orientation of freshmen with the same predisposition varied with their interpersonal environments.

The chief shortcoming of the interpersonal environment approach may be seen in the fact that we can no longer apply the term "group" to what we can only be sure are a series of pair-relationships between i and each of his j's, and we cannot therefore detect any extra increment of influence which may derive from the individual's environment taken as an interacting whole rather than as a simple sum of N_j parts. A major consequence of this fact is the possibility of underestimating the strength of interpersonal influence. Against this shortcoming, however, we can list two major advantages of the interpersonal environment (IE) approach: First, the arbitrary operations involved in delineating cliques are removed. The IE is a meaningful entity whose shape and size are determined entirely by the data. Second, it becomes practical to remove the presumption that the persons whom a respondent likes best or spends most time with (i.e., his "best friends") exert the greater part of interpersonal influence on him and to investigate empirically the relative influence of all persons in his interpersonal environment. The difficulties in analyzing the clique structure of large groups have almost always led investigators to impose arbitrary limits on the number and type of persons whom each respondent could name. In the IE approach and with electronic computer help it becomes possible to encourage the subjects in a fairly large group to record the full extent of their choices.

In addition, of course, it is no less possible with the IE approach than with the clique approach to examine norms in the more formally constituted

or "natural" student groupings, such as college class, sex category, dormitory, and fraternity groups, etc.

In line with Rossi's proposals, we wanted each freshman subject to provide us with a more exhaustive list of the students he knew than is elicited by the usual "three best friends" question, and also to distinguish among his relationships with these students in greater detail than is provided by the global term "friendship." Accordingly, each freshman was presented with a complete list of all students registered at the college. He was asked to check the names of all those whom he recognized, to indicate how much time he spent in each one's company during an average week, and how much he liked or disliked each.

Other Variables

On the same questionnaire, each respondent was asked to supply information concerning his background and current college-related behavior, attitudes and aspirations. In addition, we collected data from official college records on each student's rank in his high school graduating class, college entrance examination scores and cumulative total grade-point average.

Major Dependent Variables

We have indicated our focal concern with the influence of student interaction among themselves and with faculty members upon the attainment of formal educational goals, and it is a prime assumption of our study that the following are among these goals at the college level:

- (1) Students should place high value on academic excellence;
- (2) Students should achieve the highest grades of which they are capable; and

- (3) Students of high aptitude and achievement should aspire to undertake graduate work.

These dependent variables were operationalized in the following way:

Academic values

Each respondent to our November and April questionnaires was asked to choose, in paired comparisons, among eleven values related to college life. Four of these values are of major importance and were presented in all possible pairings with each other. These four values were: "Making at least an A-minus average," "Participating in extra-curricular activities as much as I would like to," "Having as many dates as I want, with whomever I want," and "Having close friends on campus and spending time with them." (For the sake of brevity, we shall often refer to these values as A, X, D, and F, for A-minus average, extra-curricular activities, dating, and friendship.) From the choices made among these values by each respondent, we determined the rank of each value wherever choices were sufficiently transitive. In this way, we arrived at an estimate of how important academic excellence was to each respondent, relative to the importance of dating, extra-curricular activities and friendships. In the September questionnaire, freshmen were simply asked how important high grades were to them: highly important, moderately important, or not important.

Academic achievement

The best available indicator of academic achievement was total cumulative grade-point average. There are at least three major objections to this indicator and to other measures derived from it. The first questions the validity of grades, the second questions their reliability and the third ques-

tions the statistical legitimacy of averaging such an ordinally scaled measure.¹ We have meager defense against any of these objections, and rely upon grades only because it is the measure which is considered relevant by the formal college system.

Graduate aspirations

In all questionnaires, respondents were asked whether they would like to go to graduate or professional school, and whether they expected to do so. The direct responses to these questions constitute our measure of the subject's graduate aspirations.

Faculty Members' Expectations of Students

In April, a questionnaire was administered to the teaching faculty of the college, which was designed to measure faculty expectations of students along the same dimensions that student values were measured. This was accomplished by means of an appropriate rephrasing of the same paired-comparisons which students were asked to make, and by asking faculty members to perform the same paired comparisons separately for male and female students. Sixty-seven, or 81 per cent, of the faculty returned completed questionnaires.

The College

The midwestern liberal arts college which is the locale of our study meets two essential criteria for the study design: it is relatively small and self-contained. At the time of our data collection, the college had 1,005 undergraduate and forty-six graduate students on its rolls.² The college is

¹For a study of the reliability of grades, see Robert Ashburn, "An Experiment in the Essay-Type Question," Journal of Experimental Education, VII (1938), 1-3. For a discussion of the implications involved in averaging grades, see Virginia L. Senders, Measurement and Statistics (New York: Oxford University Press, 1958), p. 142.

²Only undergraduate students are included in our analysis.

co-educational, non-denominational in practice and located in a town having a population of about thirty-three thousand, according to the 1960 census. The college is among the top fifty in the nation with regard to its production of younger male American scholars as measured by Knapp and Greenbaum.¹ The college maintains seven nationally-affiliated fraternities and five nationally-affiliated sororities, together with numerous extra-curricular activities, including intercollegiate sports.

The college has two large dormitories for freshman women, four smaller ones for non-freshman women, and two large dormitories for men. Resident freshman men are required to live in the dormitories, but beginning with the sophomore year, men may live either in the dormitories or in fraternity houses. Sorority houses are non-residential. About 86 per cent of students lived on campus.

General Outline of the Report

To conclude this introduction, it may be helpful to describe, in four general steps, the course which our presentation will take. First, we shall attempt to ascertain whether any change in orientation toward academic excellence occurred among the freshmen in our panel, and the academic performance and behavioral correlates of such change. Second, we shall explore the relation of change in orientation to getting high grades and change in desire to attend graduate school to certain other factors relevant to the peer group, faculty members, parents, and student occupational ambitions. Third, following a brief examination of the academic effects of scholarship grants, we shall

¹Knapp and Greenbaum, The Younger American Scholar: His Collegiate Origins.

devote some special attention to seeing college from what seems to be a feminine viewpoint. Fourth, we shall examine our data on interpersonal environments in the light of findings presented in the previous steps of our analysis.

CHAPTER II

FRESHMAN VALUE CHANGES

Let us begin our inquiry by empirically describing our first dependent variable: freshman change in grades-evaluation. In other words, we wish to answer here the following simple questions: Was there any change in the importance assigned to getting high grades among the freshmen? If there was a change, what was its direction? Did the change move the freshmen towards, or away from, the levels of grades-evaluation among sophomores, juniors, and seniors?

Since the data gathered in November and April are strictly comparable (in the sense that identical questions were asked at both times), we shall investigate freshman change over this time period before returning to attempt some inferences about probable changes between September and November.

When we seek to measure change, the first logical problem is what criterion to use, and we must therefore distinguish between the two criteria used here. In the first instance, we shall measure absolute¹ change; that is, the per cent giving a particular rank to A (getting at least an A-minus average) in November will be compared with the per cent giving it the same rank in April. In the second instance, we shall measure change in the ranking of A, relative to the change in the ranking of X (participating in extra-curricular

¹That is, relatively absolute, since the ranks of the values are not absolute but relative to one another.

TABLE 1.--Per cent giving specified ranks to A: Sex, by date of response; November-April change and per cent transitive value choices (Freshmen)

Rank \ Date	Total			Males			Females		
	Nov	Apr	Change	Nov	Apr	Change	Nov	Apr	Change
First	17	10	-41	25	14	-44	11	8	-27
Second	25	20	-20	25	24	-4	24	18	-25
Third	24	24	0	20	27	+35	28	22	-21
Fourth	34	45	+32	30	35	+17	37	52	+40
Base	100 (277) ^a	100 ^b (254)		100 (129)	100 (110)		100 (148)	100 (144)	
Per cent Transitive	86 (321)	87 (291)		87 (148)	83 (132)		86 (173)	92 (159)	

^aIn all tables hereinafter, the base number used in computing percentages or other measures will be enclosed in parentheses.

^bRounding error will not be shown in any table hereinafter.

students changing their A rank by two or three steps, or of many students changing their A rank by one or two steps. Table 2 shows that (1) there was a tendency on the part of some students to raise the rank they gave to A and thus move against the general downward current; (2) the net decrease in A rank was greater among girls than boys; and (3) most changes were one rank changes: Of all freshmen who changed their A rank, 71 per cent changed it by one rank, 25 per cent by two ranks, and 3 per cent by three ranks.¹ A test of differences between matched-sample proportions increasing and decreasing shows that, for all freshmen combined, the A rank decline is significant at $p < .02$.

¹This latter finding is also encouraging with regard to the reliability of the measuring instrument, since a large proportion of big changes would suggest considerable respondent error, a poorly constructed questionnaire, or unexpectedly powerful and contradictory forces at work.

TABLE 2.--Changes in ranks of values from November to April (Freshmen)

Total				
Value	A ^a	X ^a	D ^a	F ^a
Per cent Increasing ^b	19(182)	28(187)	31(91)	61(61)
Per cent Decreasing ^b	48(135)	38(144)	30(137)	17(201)
Net change ^c	-29	-10	+1	+44
Per cent Changing ^b by				
+3	--(83)	2(59)	3(71)	50(6)
+2	5(132)	13(135)	10(129)	38(24)
+1	15(182)	18(187)	23(191)	41(61)
0	55(218)	47(203)	51(208)	66(207)
-1	33(135)	31(144)	22(137)	13(201)
-2	21(86)	12(68)	11(79)	4(183)
-3	8(36)	6(16)	12(17)	1(146)
Males				
Value	A ^a	X ^a	D ^a	F ^a
Per cent Increasing ^b	25(72)	35(74)	29(85)	56(36)
Per cent Decreasing ^b	47(60)	37(68)	43(51)	25(81)
Net change ^c	-22	-2	-14	+31
Per cent Changing ^b by				
+3	--(34)	--(18)	5(41)	50(4)
+2	6(49)	23(48)	10(68)	31(16)
+1	21(72)	20(74)	19(85)	36(36)
0	52(94)	41(86)	49(92)	53(85)
-1	32(60)	31(68)	33(51)	20(81)
-2	18(45)	8(38)	9(34)	4(69)
-3	4(22)	8(12)	29(7)	2(49)

TABLE 2--Continued

Females				
Value	A ^a	X ^a	D ^a	F ^a
Per cent Increasing ^b	14(110)	24(113)	33(106)	68(25)
Per cent Decreasing ^b	49(75)	38(76)	22(86)	12(120)
Net change ^c	-35	-14	+11	+56
Per cent Changing ^b by				
+3	--(49)	2(41)	--(30)	50(2)
+2	5(83)	8(87)	11(61)	50(8)
+1	11(110)	17(113)	26(106)	48(25)
0	57(124)	52(117)	53(116)	75(122)
-1	33(75)	32(76)	15(86)	8(120)
-2	24(41)	17(30)	11(55)	4(114)
-3	14(14)	--(4)	--(10)	--(97)

^aThe total numbers of respondents used in computations involving these values vary from one value to the next because choices sufficiently transitive to locate the rank of one value were not always sufficiently transitive to locate the ranks of other values.

^bAll per cents changing are against the base number of those who could make the indicated change (e.g., 19 per cent of all those who could increase their A rank did so).

^cNet Change = Per cent Increasing minus Per cent Decreasing.

Relative Change, November-April

Although we have now determined that the absolute level of grades-evaluation declined from November to April, the comparison of this change with change in the other ranked values is partly independent of this fact. One possibility, for example, is that the observed decline in A rank may not have been the steepest among the four ranked values. One, or even two of the other values may have dropped at a faster rate, and in an extreme

case of this kind the absolute decline in grades-evaluation might be interpreted as a relative increase.

However, the data presented in Table 2 and in Figure 1 forcibly demonstrate the relative decline of emphasis on academic excellence from November to April. Although this relative decline was greater among girls than boys, the same pattern of change prevailed among both, with the exception that the girls increased their emphasis on dating, while the boys decreased theirs.

September-November Changes

Now we turn to data collected in September during the freshmen's second day on campus, in an effort to infer whether changes in grades-evaluation also occurred between September and November. In this way, we shall try to extend our "moving" picture of the freshmen, so that it will cover the very beginning of their college career in September, through April, its seventh month.

Table 3 presents data on some of the freshmen's orientations as they entered college. Note the relatively strong emphasis which entering freshmen gave to the strictly academic side of college life. Over-all and among the boys, "Learning as much as possible in college" and "Getting the highest grades that I possibly can" rank first and second among the values shown in the per cent of students who assigned high importance to them. The girls were not much different in this regard, since these two intellectual values rank first and third among them. Note also that there was no initial sex-difference in the degree of orientation to learning and only a small difference in the orientation to high grades in contrast with the sizeable sex-differences already found in November and April. With regard to the grades which they expected to achieve, 51 per cent of the total expected to be in

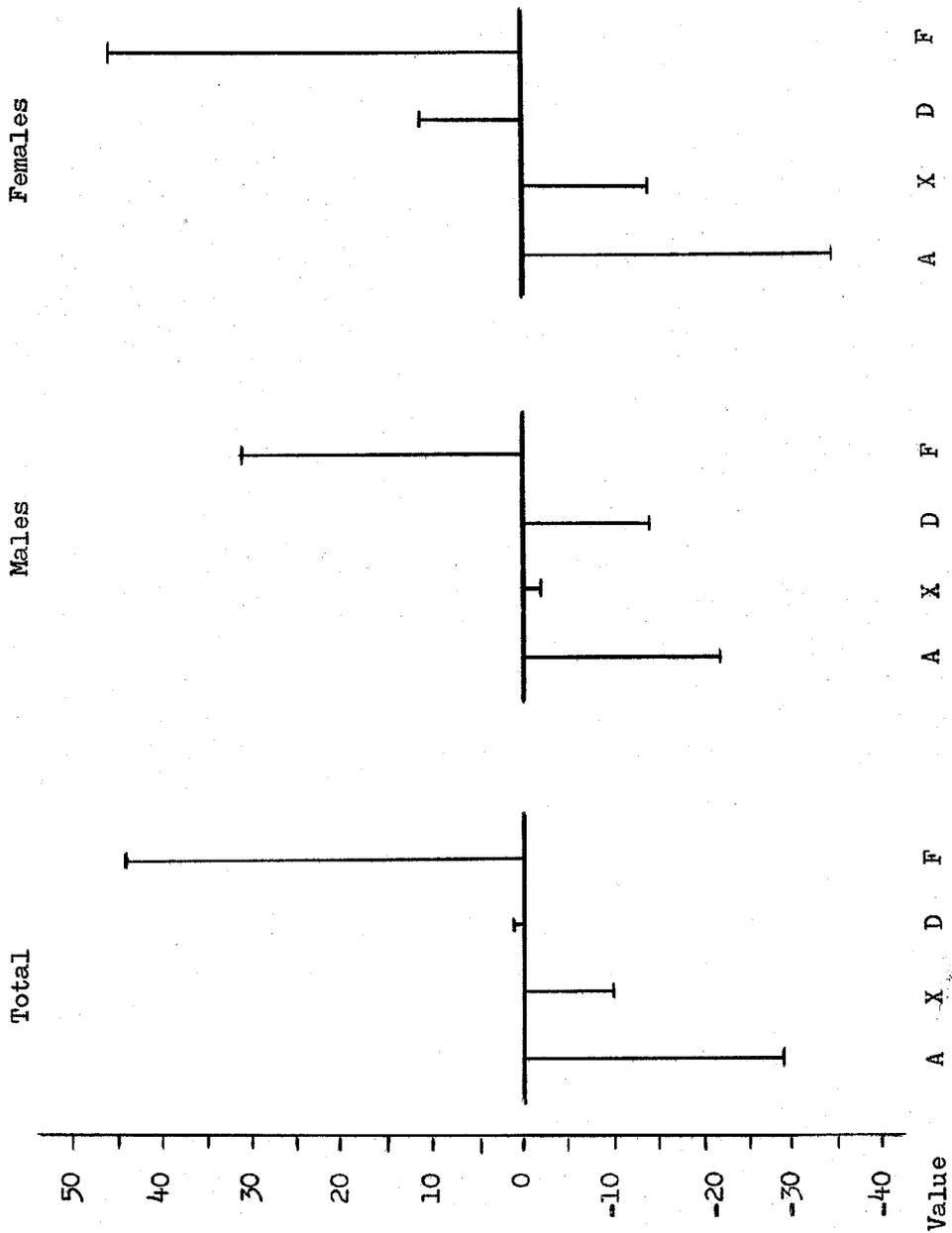


Fig. 1.--Net change in values November-April (Freshmen)

TABLE 3.--Per cent giving high importance to selected values in September
(Freshmen)

	Total	Males	Females
Learning as much as possible	93	93	93
Getting the highest grades I can	76	78	74
Being accepted and liked by fellow students	71	66	75
Pleasing my parents	58	48	66
Having a good time socially	36	26	44
Falling in love and getting married	15	5	24
Base	100 (327)	100 (149)	100 (178)

the top quarter of their class, including 55 per cent of the boys and 48 per cent of the girls. The significance of these expectations is not only the obvious fact that a large number of students overestimated their academic abilities, but that so many of them expected, as well as wanted, to do well academically.

Since the questions asked in September and in November were not identical, we shall have to ask the reader's indulgence in our assumption that, by and large, students who ranked getting good grades high on the absolute scale of importance used in September would have ranked A high on the relative scale used in November if it had also been used in September. With this assumption, it is possible to construct the turnover tables shown in Table 4, and to conclude from them that grades-evaluation dropped from September to November--even more drastically among the girls than among the boys. It would therefore appear that (1) the evaluation of academic ex-

cellence was probably at a higher absolute level, among both boys and girls, in September than in November; (2) these September levels were practically equal between boys and girls; but (3) the girls' level decreased more sharply than the boys' over the entire first seven months of college, but especially from September to November.

TABLE 4.--Freshman September-November grades-evaluation turnover tables
(Per cent)

		Males			Females		
		September Grades Importance			September Grades Importance		
		Hi	Mod Lo	Total	Hi	Mod Lo	Total
November	Hi	39	10	49	22	5	27
A Rank	Lo	37	14	51	57	16	73
Total		76	24	100 (125)	79	21	100 (187)

We have already seen, particularly in Figure 1 above, that the decline in grades-evaluation tended to be paralleled by a rise in friendship-evaluation between November and April. It should therefore be of some interest to inquire whether our data can shed any light on the probable nature of change in friendship-evaluation between September and November.

Let us again, however, state our caution regarding the limited comparability of our September and November data. In September, we asked, ". . . How important is the following goal to you? . . . Being accepted and liked by my fellow-students: Highly important, Moderately important, Not important." In November, as we have said, our data is based upon paired comparisons between the A, X, D, and F values. But if it can be granted that the two questions are at least broadly related in substance, then we

can examine turnover tables of September, importance of being accepted and liked by one's fellow-students with November F rank in the same way that we examined turnover between the September High Grades question and November A rank.

We can see that Table 5 does conform to the November-April data, since it shows that friendship-evaluation probably underwent a sharp increase between September and November. It would appear reasonable, on the

TABLE 5.--Freshman September-November friendship-evaluation turnover tables (Per cent)

		Males			Females		
		September Importance of Being Accepted and Liked			September Importance of Being Accepted and Liked		
		Hi	Mod Lo	Total	Hi	Mod Lo	Total
November	Hi	54	29	83	72	20	92
F Rank	Lo	12	6	18	5	3	8
Total		66	35	100 (122)	77	23	100 (149)

basis of the September-November data we have just presented, to conclude that in general the process of value reorganization among the freshmen extended over their entire first seven months of college, without any gross change in basic direction.

In summary at this point, we have established the following:

- (1) The absolute level of grades-evaluation declined from November to April and probably also from September to November.

- (2) The period of steepest decline in absolute level occurred earlier for the girls than for the boys.
- (3) Grades-evaluation declined, relative to change in the evaluation of extra-curricular activities, dating and friendship, from November to April. It probably also declined, relative to change in friendship-evaluation, from September to November.
- (4) The decline in grades-evaluation was steepest relative to the increase in friendship-evaluation.
- (5) The relative decline in grades-evaluation from November to April (and probably also from September to November) was steeper among the girls than the boys.

Comparison of Freshmen and Non-Freshmen

At this point, it should be of interest to see how the absolute levels of grades-evaluation among freshmen compare with those levels among non-freshmen. This should suggest an answer to the question of whether the changes among freshmen which we have just discussed moved freshmen toward greater or lesser deviance from their seniors in the student peer-group. Obviously, whatever we find in this connection will carry significance for this research, since it will provide the first empirical clue regarding the likelihood that the established student culture influenced the freshman newcomers.

In Table 6, let us first look at the row of percentages which refer to the A value. Two relations may be seen here: The freshman percentages were closer in April than in November to the non-freshman percentages; and the freshman percentages were higher in November, but lower in April, than comparable non-freshman percentages. These facts seem to indicate that the freshman decline in grades-evaluation represented a tendency to conform, even over-conform, to the statistical norms prevailing among their seniors.

When we recall that academic excellence appears to have been held in even higher esteem by the freshmen in September than in November, this conclusion takes on still greater conviction. From these data alone, therefore, we would be inclined to hypothesize that the freshman shift in the importance of grades manifests a socialization of neophytes by old-timers.

TABLE 6.--Per cent giving high (1st - 2nd) rank to values, by date of response (Freshmen and Non-Freshmen)

Value	Date	Total			Males			Females		
		Freshmen		Non-Freshmen	Freshmen		Non-Freshmen	Freshmen		Non-Freshmen
		Nov.	Apr.	Nov.	Nov.	Apr.	Nov.	Nov.	Apr.	Nov.
A		42 (277)	31 (254)	35 (533)	50 (129)	37 (110)	42 (293)	35 (148)	26 (144)	27 (240)
X		32 (273)	36 (241)	32 (526)	42 (128)	49 (102)	36 (291)	23 (145)	27 (139)	27 (235)
D		38 (273)	44 (246)	48 (508)	26 (129)	33 (108)	41 (283)	50 (144)	53 (138)	56 (225)
F		87 (276)	88 (244)	84 (519)	82 (126)	81 (104)	80 (288)	92 (150)	94 (140)	89 (231)

Also relevant to this point is the fact, seen in the F row of Table 6, that freshmen gave high rank to Friendship slightly more often than did comparable non-freshmen of the same sex. This, along with the fact that 71 per cent of freshmen reported that "Being accepted and liked by my fellow students" was of high importance to them (Table 3), suggests that the freshmen may have been more receptive to interpersonal influence regarding their evaluation of high grades than old-timers were. Thus, although we have no measure of the issue-specific pressure exerted by peers in a freshman's interpersonal environment (in the sense of how often, how vigorously, or how directly specific

injunctions about grades-evaluation were transmitted from those peers) we do have this rough indicator of how sensitive to such communications the receiving freshmen were.

This line of reasoning also implies an explanation for the fact that the girls' level of grades-evaluation declined first rapidly and then slowly, while the reverse was true among the boys. Notice that larger percentages of girls than boys gave high importance to "Being accepted and liked by my fellow students" (Table 3), and that the girls gave high rank to Friendship more often than the boys did (Table 6). We might therefore guess that the freshman girls, being more desirous of acceptance by other students, were more sensitive to influence from them and responded to it quickly, while the boys, being somewhat less anxious for such acceptance, responded less quickly.

When we try to infer some relationship between freshman value changes and value levels among each of the three older classes (Table 7), our conclusions are far less unequivocal. It does not seem possible, from these data, to say to which of the older classes freshmen tended most to conform, when sex is taken into account. If our hypothesis of peer-group influence is true, this may be taken as evidence that freshmen were influenced by peers in all three classes, rather than in any one class; the indication that freshman males moved to the senior males' A rank level, notwithstanding.

Freshman-Senior Differences

Before leaving Table 7, the differences between the classes in percentages ranking A high raise the following question: to what extent are they likely to represent long-term changes over time? To what extent can we estimate the change in grades-evaluation over the students' entire college careers? In order to make such an estimate from cross-sectional data on non-freshmen, we must find some characteristic of students which was un-

TABLE 7.--Per cent giving high rank to values, by class

Total					
Class	Freshmen		Sophomores	Juniors	Seniors
Value \ Date	Nov	Apr			
A	42 (277)	31 (254)	37 (204)	38 (146)	31 (183)
X	32 (273)	36 (241)	31 (201)	32 (145)	33 (180)
D	38 (273)	44 (246)	47 (194)	47 (140)	49 (174)
F	87 (276)	88 (244)	85 (195)	82 (148)	85 (176)
Males					
A	50 (129)	37 (110)	52 (85)	45 (85)	33 (123)
X	42 (128)	49 (102)	42 (85)	38 (85)	30 (121)
D	26 (129)	33 (108)	29 (82)	40 (84)	50 (117)
F	82 (126)	81 (104)	77 (83)	77 (86)	85 (119)
Females					
A	35 (148)	26 (144)	26 (119)	28 (61)	27 (60)
X	23 (145)	27 (139)	23 (116)	23 (60)	39 (59)
D	50 (144)	53 (138)	60 (112)	57 (56)	47 (57)
F	92 (150)	94 (140)	90 (112)	89 (62)	83 (57)

questionably prior to the beginning of their college experience, control for that characteristic, and then compare differences in grades-evaluations across the classes. In this way, we shall be creating, by statistical controls, categories of students which may be considered synthetic cohorts with respect to the controlled variable. Rank in high school graduating class (HSR) is one obvious choice of college-prior variable, in spite of the fact that in order to use this variable, we must assume, without evidence, no differences between high school grading practices as applied to the four classes. But since we do know that HSR, as well as A rank, varied with sex, we shall have to take that fact into account. Table 8 presents our results and indicates that not only did grades-evaluation differences exist among the boys of the various classes (as we might have suspected from Table 7), but similar differences also existed among the girls, which do not seem to be accounted for by initial differences in HSR. As a summary comparison, it may be seen that freshmen tended to have higher grades-evaluations than non-freshmen of comparable HSR.

A second student characteristic which is, in the vast majority of cases, likely to be prior to college experience is father's occupation.¹ Table 9 is consistent with Table 8 in showing that differences in grades-evaluations among the classes cannot be accounted for by differences in this prior variable either. On the basis of the evidence shown in these latter two tables, it seems reasonable to conclude that there was an uneven long-term as well as short-term decline in grades-evaluation among all students at this college.

¹The measure of occupation used here is that set forth in Otis Dudley Duncan, "A Socioeconomic Index for All Occupations," Occupations and Social Status, ed. Albert J. Reiss, Jr. (Glencoe: The Free Press, 1961).

TABLE 8.--Per cent ranking A high in November, by high school rank^a and class

Class	HSR	Males		Females	
		>72.8	≤72.8	>85.6	≤85.6
Freshmen		60 (60)	39 (54)	44 (57)	30 (74)
Sophomores		50 (38)	56 (27)	35 (49)	21 (48)
Juniors		58 (40)	30 (33)	34 (29)	20 (25)
Seniors		40 (45)	25 (64)	27 (26)	26 (27)
All Non-Freshmen		49 (123)	33 (124)	33 (104)	22 (100)

^aPercentile.TABLE 9.--Per cent ranking A high in November, by father's occupation^a and class

Father's Occupation Index	Males		Females	
	>70	≤70	>70	≤70
Class:				
Freshmen	46 (69)	53 (58)	31 (89)	41 (59)
Sophomores	54 (39)	40 (55)	27 (59)	24 (58)
Juniors	41 (32)	46 (50)	25 (32)	32 (28)
Seniors	26 (54)	38 (68)	29 (31)	26 (27)
All Non-Freshmen	38 (128)	41 (173)	27 (122)	26 (113)

^aSee Otis Dudley Duncan, "A Socioeconomic Index for All Occupations," Occupations and Social Status, ed. Albert J. Reiss, Jr. (Glencoe: The Free Press, 1961).

Associations Between Values

Thus far, we have dealt with the four ranked values one at a time on the individual level, and have discussed associations between values only on the aggregate level. For example, although we can say that among the freshmen taken as an aggregate, there was a net decline in grades-evaluation and a net rise in friendship-evaluation from November to April (see Figure 1), we have not yet shown whether those students whose grades-evaluation declined were the same students whose friendship-evaluation rose and we have not shown whether grades-oriented students tended at a given time also to be friendship-oriented, or dating-oriented, or oriented toward extra-curricular activities. It is important to examine such questions as these, because only in this way can we gain any picture whatever of students' value systems, as distinct from the rating given to individual values. Such knowledge can prove useful in practice, since, if someone wanted to influence a given value-orientation of students, he would be forewarned of possible ancillary influence upon related values.

Before going to our data, let us take note of one important restriction which its nature places upon our findings. The fact that we have ranked the values means that any measure of association which we could compute between the ranks of any two values will be biased toward the negative. This can easily be understood from the fact that the higher rank of a given value, (a) the fewer ranks there are for other values to occupy above it; (b) the more ranks there are for other values to occupy below it; and (c) in no case can any other value have the same rank.

In Table 10 we find gamma coefficients¹ computed between ranks of

¹See Leo A. Goodman and William H. Kruskal, "Measures of Association for Cross-Classifications," Journal of the American Statistical Association, LXIX (December, 1954), 732-64.

TABLE 10.--Gamma coefficients^a between pairs of values (November), by class

Males												
Class	Freshmen			Sophomores			Juniors			Seniors		
Value \ Value	X	D	F	X	D	F	X	D	F	X	D	F
A	-.24	-.60	-.53	-.30	-.41	-.55	-.25	-.50	-.41	-.39	-.46	-.48
X		-.40	-.46		-.41	-.28		-.56	-.33		-.34	-.08
D			+.24			-.08			-.04			-.12
Females												
A	-.42	-.56	-.33	-.38	-.39	-.50	-.49	-.37	-.18	-.46	-.53	-.09
X		-.36	-.10		-.54	-.34		-.49	-.15		-.18	-.48
D			-.23			-.01			-.16			-.56

^aSee Leo A. Goodman and William H. Kruskal, "Measures of Association for Cross-Classifications," Journal of the American Statistical Association, LXIX (December, 1954), 732-64.

each pair of values in various categories of the student body. To begin with, let us concentrate on the freshman data, where we find that the coefficients tend to fall into two categories: relatively high negative and relatively low negative (and positive in one case). Among the freshman boys, therefore, it appears that the strongest repulsions were between A and D, A and F, X and F, and X and D. Similar strong repulsions prevailed among the girls between A and D, A and X, X and D, and A and F. Looking at the other side of this coin, and taking into account the negative bias which is built into our data, we can think of the less negative coefficients as being "more positive" and conclude that among the boys, A and X, and D and F, tended to have similar ranks, when compared with the considerably stronger tendency

of other pairs of values to have dissimilar ranks. This suggests the presence of two main value-types among the boys: an "A-X" type, and a "D-F" type.

If we look at the freshman girls' coefficients in the same way, we find a somewhat different situation. Here the outstanding thing seems to be the tendency of F to have relatively positive associations with X and D, while A tended to have relatively negative associations with these values. It would therefore seem that two value-types among the girls were the "A" type and the "D-F-X" type.

As Talcott Parsons¹ has suggested, the most socially approved means to success for males lies chiefly in task achievement; while the most appropriate means to the same goal lies, for females, chiefly in socio-emotional achievement. The task area, specified with reference to college life, would appear to include academic work and most extra-curricular club activities, to the extent to which such activities involve administrative practice. The socio-emotional area, on the other hand, would seem to center on friendships and dating, with an extension to extra-curricular club activities insofar as they contribute to friendships and dating.

In this light, the relationships among the freshmen's values may be understood to call attention to two types of male and female students: those who leaned toward the task alternative, and those who leaned toward the socio-emotional alternative. But if our notion about the sexual differentiation of appropriate paths to success is true, when we compare the proportion of boys and girls preferring each alternative, the proportion of task-oriented

¹Talcott Parsons, "Age and Sex in the Social Structure of the United States," American Sociological Review, VII (1942), 604-16.

students will be higher among the boys than among the girls, but the reverse will hold in the socio-emotional area. Table 11¹ shows that this is precisely the case, and that not only are the A-X (task) and F-D (socio-emotional) pairings the only ones in which the clear and predicted sex-difference emerges when both members of the pair are high and when both are low, but whenever either task value is high, the boys' proportion is larger than the girls'.

It should not be overlooked, however, that only 14 per cent of the freshman boys appear in the task category high A and X, while 22 per cent fall in the socio-emotional category high F and D. As one might guess, these latter students tended to have fathers with higher occupations and were therefore likely to consider that their success depended less on their own task achievement and more on their fathers'.

Let us now look at the rest of the student body in order to see whether the associations between values found among freshmen, hold among non-freshmen as well. Although Table 10 shows that they do seem to hold in general, the senior girls seem to be quite unique among their sex, in showing strong negative relations between D and F and between X and F, on the one hand, and less negative relations between X and D and between A and F, on the other. Similarly, the senior boys differ from boys in other classes

¹It may be worth pointing out that Table 10 and Table 11 are only partially related to each other in terms of the operations performed on the data. Consequently, one need not expect to find the associations shown in Table 10 reflected in Table 11. In Table 10 the ungrouped ranks assigned to each value were the data from which gamma coefficients were computed. In Table 11 "High" rank includes ranks 1 and 2; "Low" rank includes ranks 3 and 4. Thus, "High A and X," for example, includes cases in which A had first rank and X had second rank, and also includes cases in which the order of values was just the reverse of this. Therefore, this category includes cases in which A and X were of the same, and different, orders. Only in the mixed (e.g., "High A and Low X") categories is the order determinate.

TABLE 11.--Per cent freshmen ranking given pairs of values high or low in November

Value Pairs	Total Males	Females	Value Pairs	Total Males	Females	Value Pairs	Total Males	Females
High A	8	14	High A	3	2	High X	3	2
High X			High D		4	High D		
High A	35	37	High A	40	49	High X	29	38
Low X			Low D		32	Low D		20
Low A	23	27	Low A	37	25	Low X	37	23
High X			High D		47	High D		49
Low A	34	22	Low A	21	24	Low X	32	36
Low A			Low D		18	Low D		29
Base	100 (266)	100 (124)	Base	100 (266)	100 (124)	Base	100 (266)	100 (142)
High F	34	22	High X	21	24	High A	32	36
High D			High F		18	High F		29
High F	53	60	High X	10	17	High A	10	15
Low D			Low F		5	Low F		6
Low F	5	5	Low X	66	57	Low A	55	46
High D			High F		74	High F		63
Low F	8	14	Low X	3	2	Low A	3	2
Low D			Low F		4	Low F		
Base	100 (266)	100 (124)	Base	100 (266)	100 (124)	Base	100 (266)	100 (142)

in their low negative association between X and F, and in the high negative association between A and X.

The same conclusions regarding various combinations of values which we drew about the freshman seem to hold among sophomores and juniors, but not among senior boys and girls (Table 12). It seems that the sex differentiation found in all other classes did not exist in the senior class, or was even reversed. In seeking a tentative explanation for this, we may note (1) the relatively small percentage of senior girls who ranked both F and D high, (2) the relatively high percentage of senior boys who ranked D high, and (3) the relatively low percentage of senior boys who ranked X high. Taken together, these findings lead us to suspect that the seniors' deviation from the trend is related to the special, and opposite, dating statuses of senior boys and girls, which we shall discuss more fully in Chapter VI.

In conclusion, it is clear that the greatest enemy of grades-evaluation was dating-evaluation, followed by friendship-evaluation among the males, and extra-curricular-activities-evaluation among the females. It is also clear that the chief differences between the boys and girls were in the associations between D and F, A and F, and A and X. We would guess that these differences reflect the great importance of friendships to girls, coupled with the ability of dating patterns to disturb friendships which may then be reformed along alternative grades-evaluation lines.¹

Relationships Between Changes in Values

We have shown that two types of systems of our four values existed among each sex-group among the freshmen in November, and have conceptualized

¹See chap. vi.

TABLE 12.--Per cent sophomores and juniors and per cent seniors ranking given pairs of values high or low in November

Value Pairs	Total Males	Females	Value Pairs	Total Males	Females	Value Pairs	Total Males	Females
Sophomores and Juniors								
High A	8	4	High A	5	6	High X	3	2
High X			High D		5	High D		
High A	29	23	High A	32	42	High X	29	23
Low X			Low D			Low D		
Low A	24	21	Low A	42	29	Low X	44	57
High X			High D			High D		
Low A	38	24	Low D	21	23	Low X	24	19
Low X			Low A			Low D		
Base	100 (328)	100 (167)	Base	100 (328)	100 (161)	Base	100 (328)	100 (167)
High F	38	24	High X	21	23	High A	24	19
High D			High F			High F		
High F	45	38	High X	11	17	High A	13	8
Low D			Low F			Low F		
Low F	8	10	Low X	62	54	Low A	60	71
High D			High F			High F		
Low F	8	4	Low X	5	6	Low A	3	2
Low D			Low F			Low F		
Base	100 (328)	100 (167)	Base	100 (328)	100 (161)	Base	100 (328)	100 (167)
Seniors								
High A	5	6	High A	4	5	High X	6	11
High X			High D			High D		
High A	28	29	High A	29	30	High X	27	26
Low X			Low D			Low D		

Low A High X	28	24	36	Low A High D	45	44	46	Low X High D	43	46	38
Low A Low X	39	41	36	Low D Low A	22	20	25	Low X Low D	24	24	25
Base	100 (173)	100 (117)	100 (56)	Base	100 (173)	100 (117)	100 (56)	Base	100 (173)	100 (117)	100 (56)
High F High D	39	41	36	High X High F	22	20	25	High A High F	24	24	25
High F Low D	46	44	50	High X Low F	10	9	12	High A Low F	9	11	4
Low F High D	10	8	12	Low X High F	64	65	61	Low A High F	61	62	61
Low F Low D	5	6	2	Low X Low F	4	5	2	Low A Low F	6	3	11
Base	100 (173)	100 (117)	100 (56)	Base	100 (173)	100 (117)	100 (56)	Base	100 (173)	100 (117)	100 (56)

these types as tending toward emphasis on task and socio-emotional aspects of college life. Still, we have been examining relationships among values at a single point in time (i.e., November), and we might well ask the diachronic question: Was change in the rank assigned to one value associated with change in the rank assigned to other values? The freshman class is our panel in this study and we can examine its data (still bearing in mind the restriction which the ranked nature of our data imposes upon our findings) for answers to this question. Table 13 presents gamma coefficients computed

TABLE 13.--Gamma coefficients of association between November-April change^a in ranks of pairs of values (Freshmen)

Value \ Value	Total			Males			Females		
	X	D	F	X	D	F	X	D	F
A	-.35	-.51	-.47	-.12	-.43	-.53	-.53	-.57	-.38
X		-.53	-.40		-.69	-.54		-.38	-.23
D			-.24			-.08			-.42

^aChange measured as Higher rank, Same rank, Lower rank.

on tables which cross-tabulated change (measured by "increase," "stable," and "decrease") in the rank given one value with change in the rank given another value. It is apparent that the freshman boys' gammas fall as we would expect from the cross-sectional conclusions we have just drawn from data on non-freshmen. That is, the least negative (or most positive) gammas are between F and D and between A and X, indicating that when either one of each pair increased in rank, the other one of the pair tended not to decrease in rank. Among the girls, our expectations are also met, but with one interesting exception in the relatively high negative association between change in D and change in F. It would appear that

between November and the following April, the freshman girls began to discover the incompatibility between dating and friends which seems to emerge so fully among the senior girls. Again we suggest, but reserve for later discussion, that this was due to the special dating status of freshman girls--a status which was, in the main, opposite to that of senior girls.

In general, however, the November-April change associations are congruent with the November cross-sectional associations, and each set of findings confirms the other. Now let us go further back in time and see whether those September value questions which are substantively related to those which we have been examining can provide any clue to value systems among the freshmen at the time they entered college. Table 14 presents gammas for the relations between responses to three such questions. Let us

TABLE 14.--Gamma coefficients of association between September values (Freshmen)

	Males		Females	
	Accepted	Love and Marriage	Accepted	Love and Marriage
High Grades	.33	.36	-.01	.37
Love and Marriage	.46		.32	

assume that "getting the highest grades that I possible can" is substantively related to A rank; that "Being accepted and liked by other students" is related to F rank, and that "Falling in love and getting married" is related to D rank. We cannot directly compare these gammas to those taken on ranked values, but we can compare the order of these gammas with the order of gammas computed on the November data, and thus get some minimal idea of change in the associations between related value responses from September to November.

Table 14 indicates that the most positive of the three gammas shown among the boys occurs between "Being accepted and liked by other students" and "Falling in love and getting married." This seems to conform to our previous finding that the association between F and D, in November, was more positive than were the associations between A and F or between A and D. Therefore, no gross change in this part of the freshman boys' value systems is indicated. Among the girls, however, a very different picture is presented. Here we find that the strongest positive association in September was between "Getting the highest grades that I possibly can" and "Falling in love and getting married," while the association between the former value and "Being accepted and liked by other students" is slightest and negative. These findings stand in contrast with related data in Table 10, which showed that among these girls, A and D had a strong negative association in November and that A and F had a somewhat more positive relationship. In short, the September order of relationships in these two pairs of values appears to have been the reverse of what it was in November. Perhaps the clue to accounting for this discrepancy, however, lies in the special dating status of freshman girls which we have previously mentioned.

In sum, in this section we have shown that relationships among the four values with which we are concerned tended to differentiate the student body into two value-types which we have called, following Parsons, "task-oriented" and "socio-emotionally-oriented" and that the two orientations were sex-linked among our respondents. We have also shown that the September-November and November-April change in the importance assigned by various values by the freshman boys was consistent with our conceptualization of these orientations and with the hypothesis of their sex-linkage. We have found that changes in the freshman girls' value-systems, however, suggest

that the evaluation of dating, and love and marriage, exerted a disturbing influence upon these systems such that the two main component values in the socio-emotional orientation (dating and friendships) tended toward increasing opposition.

The principal finding of this chapter, however, remains the declining emphasis on getting high grades. Let us now return to this point and examine its academic consequences.

CHAPTER III

ACADEMIC CONSEQUENCES OF ACADEMIC ORIENTATION

However much the freshmen's orientation to academic excellence may have declined during the first seven months of their college careers, and however much that orientation may have differed among the four college classes, it may still be true that the orientation itself and, consequently, any decline in it, were of no import in terms of academic achievement and behavior. It is possible, for example, that the freshmen's decline was only apparent or superficial; that the freshmen learned to dissemble; that what was altered was only what freshmen said rather than what they actually felt; that freshmen learned to give the socially expected answers but did not lose the privately held orientations with which they entered college. Thus, one might argue that students who get the top grades in a class learn to disclaim desire and effort for such grades, in order to induce their fellows to think them lucky but "regular," rather than socially hapless "grinds." In this way, persistent but covert orientations could be rewarded academically by faculty members, while flexible, overt answers could be rewarded socially by one's peers.

Or one might hypothesize that although the freshmen progressively devalued high grades per se, the impact of this devaluation upon behavior and achievement was effectively blocked by what we might call a "reality factor": i.e., the externally imposed necessity of getting good grades in order to stay in college and be awarded a degree.

Now let us see what the facts are among our respondents. In this chapter, we shall try first to establish the relationship between grades-evaluation on the one hand and achievement and behavior, on the other.

Academic Achievement

Our most important measure of academic achievement is the standardized residual (R) grade-point average, after the variance due to percentile rank in high school graduating class and total score on college entrance examination has been taken out. Before examining our data, let us discuss this measure in some detail, in order to fix its meaning.

In the literature pertaining to the prediction of grade-point average (GPA), the most common procedure has been the multiple correlation and regression of first semester or first year GPA on percentile rank in high school graduating class (HSR) and score on a college entrance examination. These two variables have been found to account for from 25 per cent to 50 per cent of the variance in GPA's.¹ We use the same general procedure here, with similar results, but for a different purpose. We do not seek to predict GPA from these variables, but to control GPA for them. We are therefore interested in the residual variance rather than the variance accounted for. In other words, we are concerned, broadly speaking, with what the college does to students of varying initial characteristics, rather than with the influence of such characteristics upon their achievement there. We would like to control for factors specific to the individual student in order to test our ability to account for the residual variance by factors

¹See, among others, Herbert W. Samenfeld, "Predicting College Achievement," Journal of Higher Education, XXIV (1953), 432-33; Mary A. Hoerres and J. D. O'Dea, "Predictive Value of the ACE," Journal of Higher Education, XXV (1954), 97; and R. A. Jackson, "Prediction of the Academic Success of College Freshmen," Journal of Educational Psychology, XLVI (1955), 296-301.

which are specific to the college and the environment it provided. Thus, for the same reasons that we control for the individual student's sex, or year-in-college, or initial grades-evaluation, etc., whenever it seems possible and appropriate to do so, we now wish to control grade-point achievement in college for what we might think of as achievement aptitude-habit, in order to see how much additional difference achievement values make.

Our use of regression analysis differs from the usual in still other ways. We have not limited ourselves to first semester or first year GPA's, but employ the total cumulative GPA as our dependent variable. For example, a junior's total cumulative GPA is the average of his grades over all college course-hours, which he had completed by the time of our data-collection.¹ We have also performed separate analyses for each class-sex group, i.e., separate analyses for freshman boys, freshman girls, sophomore boys, sophomore girls, etc.

This latter procedure was adopted in view of findings reported in the literature (and borne out among our respondents) that girls get better grades than boys do,² and because we wished to take into account differences which may exist among college classes. Lastly, for all students except freshmen, we use total scores on the American Council on Education (ACE) Psychological Examination. For freshmen, we have total scores on the College Entrance Examination Board Scholastic Aptitude Test (SAT).³

The results of our regression and correlational analyses are shown in Table 15.

¹The college uses a three-point grading system, in which A = 3 points, B = 2 points, C = 1 point, D = no point, and F = no point.

²See Coleman, Adolescent Society, pp. 252-54, and Gordon, The Social System of the High School, p. 36.

³The college changed its entrance examination shortly before this research was carried out.

TABLE 15.--Multiple regression information

Number of Observations	Regression Coefficients	Correlation Coefficients	Means and Standard Deviations		Standard Deviation (Unbiased) of the Residuals
			Variable	Mean SD (Unbiased)	
Freshmen Males					
129	$b_0 = -0.8523$ $b_1 = 0.9409$ $b_2 = 0.0014$	$R_{Y.X_1}$ $R_{Y.X_1X_2}$	Y X_1 X_2	1.269 0.700 1057.6	0.529 0.2190 127.1
Freshmen Females					
151	$b_0 = 0.9869$ $b_1 = 1.1926$ $b_2 = 0.0014$	$R_{Y.X_1}$ $R_{Y.X_1X_2}$	Y X_1 X_2	1.41 0.7944 1004.1854	0.5661 0.1704 164.9713
Sophomore Males					
81	$b_0 = -0.3919$ $b_1 = 1.5776$ $b_2 = 0.0057$	$R_{Y.X_1}$ $R_{Y.X_1X_2}$	Y X_1 X_2	1.46 0.7318 124.2222	0.6142 0.2103 17.9284
Sophomore Females					
111	$b_0 = -0.7866$ $b_1 = 1.3295$	$R_{Y.X_1}$ $R_{Y.X_1X_2}$	Y X_1	1.53 0.8293	0.5542 0.1556

$$b_2 = 0.0098 \quad X_2 \quad 124.6577 \quad 18.6808$$

Junior Males

93	$b_0 = -0.0523$	$R_{Y.X_1}$	$R_{Y.X_1X_2}$	Y	1.59	0.5470	0.4608
	$b_1 = 1.0619$	0.4457	0.5530	X_1	0.7222	0.2125	
	$b_2 = 0.0067$			X_2	129.6774	26.7001	

Junior Females

69	$b_0 = -0.3504$	$R_{Y.X_1}$	$R_{Y.X_1X_2}$	Y	1.63	0.5286	0.4311
	$b_1 = 0.9218$	0.3218	0.5952	X_1	0.8294	0.1592	
	$b_2 = 0.0095$			X_2	128.1014	27.9201	

Senior Males

131	$b_0 = 0.1334$	$R_{Y.X_1}$	$R_{Y.X_1X_2}$	Y	1.47	0.4360	0.3507
	$b_1 = 0.8952$	0.5362	0.6023	X_1	0.6523	0.2327	
	$b_2 = 0.0062$			X_2	121.5420	19.7224	

Senior Females

68	$b_0 = -0.4749$	$R_{Y.X_1}$	$R_{Y.X_1X_2}$	Y	1.64	0.46514	0.3581
	$b_1 = 1.4188$	0.5713	0.6520	X_1	0.8092	0.1595	
	$b_2 = 0.0082$			X_2	116.9118	18.3975	

$$\text{Regression Equation: } Y = b_0 + b_1X_1 + b_2X_2$$

Where: Y = Total cumulative Grade-point Average (GPA_T)

X_1 = Percentile rank in high school graduating class (HSR)

X_2 = Freshmen: Scholastic Aptitude Test (SAT) total score; Non-Freshmen: American Council on Education Psychological Test (ACE) total score.

By way of comparison, it should be noted that the national percentile ranks on ACE test score norms of this college's senior, junior and sophomore classes, at the time of their admission, were sixty-six, seventy, and seventy-one, respectively. Forty, 48 and 55 per cent, respectively, of these students had been in the upper 20 per cent of their high school graduating classes. With respect to freshmen, the 50 per cent of that class which scored 549 points or higher on the verbal section of the SAT, and the 59 per cent which fell in the same range on the mathematical section, compare favorably with 45 per cent and 48 per cent of a national sample (reported by the College Entrance Examination Board) who received similar scores. Forty-five per cent of the freshman class had graduated in the top 20 per cent of their high school classes.¹

In examining Table 15, two findings which we believe are closely connected should be noted. First, it can be seen that the ratio of girls to boys drops rather steeply between the sophomore and junior classes. Second, the sophomore class is the only class in which less of the variance in the girls' GPA's than in the boys' is explained by HSR and entrance examination score. The first finding reflects the tendency of girls at this college to transfer to other schools, chiefly Big Ten universities, at the end of their sophomore year. The second finding means that some factor other than HSR and entrance examination score entered, or increased its relative influence in, the determination of sophomore girls' GPA's. As we shall discuss in Chapters VI and VII, at least one such factor, which can account for both findings, is the girls' search for romance and marriage.

¹This information is taken from an official annual report of the college.

As we have said, however, our main concern is not with what the regression and correlational analyses tell us, but with what they do not tell us. Therefore, we are most interested in the residual, unexplained variance in GPA's. In order to take into account variation in the residuals between groups, and facilitate comparability with other student populations, we express the absolute residuals as per cents of their standard deviations, i.e., as standardized residuals. Thus, a student's standardized residual GPA (R) is his standardized total cumulative GPA, within sex and class, after the variance due to rank in high school graduating class and entrance examination score (both also within sex and class) has been taken out. It seems intuitively helpful to think of a positive R as "over-achievement" and a negative R as "under-achievement," provided that it is understood that these terms have only the purely statistical referents which we have described.

In Table 16 we show the data on November A rank and R, in all class-sex groupings. It is quite clear from these tables that November A rank had a positive relation to total cumulative GPA, over and above the influences of HSR and entrance examination score, among freshmen and among all classes of non-freshmen.¹

From these data we may infer that the general decline in grades-evaluation (discussed in Chapter II) had a deleterious effect on the academic achievement of freshmen, and to the extent that this decline also held true among non-freshmen, it cannot but have had a similarly depressive effect on their achievement as well.

¹It is intriguing to note that among the seniors, the relationship is almost non-existent.

The influence of freshmen's A rank is stronger and more regular than is the influence of their April A rank because (1) the freshman's basic GPA level was set by his first semester grades; second semester grades did not greatly modify this level, and (2) the combination of giving A high rank in November and getting a high first semester GPA tended to lead to a lower April A rank (see Table 18).

TABLE 16.--Per cent over-achieving^a by class, sex, and November A rank

Nov A Rank	All Students			Freshmen			Sophomores			Juniors			Seniors		
	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F
First	59 (98)	57 (69)	66 (29)	55 (38)	54 (24)	b (14)	68 (28)	61 (18)	b (10)	69 (16)	b (13)	b (3)	44 (16)	b (14)	b (2)
Second	53 (157)	52 (84)	55 (73)	56 (61)	45 (29)	66 (32)	59 (32)	67 (15)	53 (17)	50 (32)	55 (20)	b (12)	47 (32)	50 (20)	b (12)
Third	43 (169)	44 (79)	42 (90)	48 (58)	62 (21)	40 (37)	40 (43)	b (13)	40 (30)	37 (35)	32 (22)	b (13)	45 (33)	43 (23)	b (10)
Fourth	35 (264)	34 (122)	35 (142)	34 (82)	34 (35)	34 (47)	28 (57)	23 (17)	30 (40)	34 (44)	17 (18)	46 (26)	41 (81)	44 (52)	34 (29)

^aOver-Achievement defined as positive residual.

^bFrequencies too small for percentaging.

We can look directly at our data to test this inference regarding the influence of change in grades-evaluation on academic achievement as far as freshmen are concerned. While doing this, however, it should be borne in mind that the freshman R's are based on only two semesters of college work, and we cannot be sure that the freshmen's grades-evaluations had stabilized, even by April. Therefore, we should not expect great regularity or closeness of association between change in grades-evaluation and R among these students.

Although our case-bases are too small for percentaging within sex, Table 17 does suggest that in the total freshman group our inference was correct: the negative change in grades-evaluation from September to November appears to have had a parallel influence upon R.

Before examining the influence of the November-April change in grades-evaluation, it must be remembered that between November and April (in February, to be exact) the freshmen received their first-semester grades. Such grades would seem logically likely to influence the change in grades-evaluation itself. By this we mean that the lower a student's first-semester GPA, the more pressed he may feel to give greater emphasis to grades in order to avoid academic probation or worse. Conversely, the higher a student's first semester GPA, the more academically self-confident he is likely to feel, and the more he may turn to other pursuits. Examining the data, we find in Table 18 that the rather small effect of first-semester GPA does not support our hypothesis very well. We find that a high first-semester GPA tended to be associated with a low April grades-evaluation if one's grades-evaluation was high in November, as expected; but if one's grades-evaluation was low in November, a high first-semester GPA tended toward a high April grades-evaluation. It is as though these latter students had found proficiency

TABLE 17.--Per cent over-achieving, by September-November change in grades-evaluation (Freshmen)

	Total			Male			Female		
	Hi	Mod-Lo	Lo	Hi	Mod-Lo	Lo	Hi	Mod-Lo	Lo
Sept. High Grades Importance	52	72	45	47	44	45	58	33	46
Nov. A Rank	(81)	(18)	(40)	(43)	(10)	(40)	(38)	(60)	(240)
Per cent Over-Achieving									

^aFrequencies too small for percentaging.

TABLE 18.---Per cent high A in April, by A rank in November and first semester grade-point average^a
(Freshmen)

	Total			Male			Female			
	Hi	Lo		Hi	Lo		Hi	Lo		
Nov. A	58 (52)	14 (50)	10 (80)	65 (26)	61 (18)	16 (19)	50 (26)	13 (14)	13 (31)	8 (50)
First Sem. GPA	58 (52)	14 (50)	10 (80)	65 (26)	61 (18)	16 (19)	50 (26)	13 (14)	13 (31)	8 (50)

^a"High" defined as above median within sex.

^bFrequency too small for percentaging.

where they expected or desired none and changed their desire to match their proficiency. But clearly, this is not the major finding in Table 18. The really important thing is that first-semester GPA carried almost no weight in the grades-evaluation change, compared to the weight of November grades-evaluation. It appears that whatever reality freshmen's grades-evaluation responded to, actual grades received were not the most decisive element in it.

If we now ask what effect the November-April grades-evaluation change had upon over- and under-achievement, we can see in Table 19 that the only clear conclusion which can be drawn (because of a very small case-base) is that the students who ranked A low both times had comparatively small likelihood of over-achieving. Notice also, that in accord with Table 17, the girls' over-achievement seems to have been more strongly influenced by their grades-evaluations than was the boys'.

Now, having established that HSR and A rank both helped determine total cumulative GPA, and that both factors played roles which were at least partly independent of each other and of entrance examination score, we would like to estimate the relative weights of their effects. We can do this by controlling both HSR (within sex and class) and A rank against total GPA (within sex and class).

Table 20 suggests that over-all, the effect of November A rank was roughly one-third to one-fourth as great as that of HSR. In A rank, therefore, we are dealing with a factor which not only correlates with GPA, but which accounts for a more significant part of the variance than does entrance examination score.

One might expect that the initial September grades-evaluations of freshmen would at least influence their first semester GPA's, when HSR is held constant, even though it is clear from Table 17 that November A rank

TABLE 19.--Per cent over-achieving by November-April change in grades-evaluation (Freshmen)

		Total						Male			Female		
		Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Nov. A Rank													
Apr. A Rank		Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Per cent Over-Achieving		53 (49)	59 (29)	^a 43 (28)	38 (109)	^a 43 (13)	45 (40)	67 (21)	56 (16)	^a 67 (6)	56 (16)	^a 33 (6)	33 (69)

^aFrequencies too small for percentaging.

TABLE 20.--Per cent high total grade-point average, by high school rank, A rank and class.

HSR	Total				Males				Females			
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Freshman												
Sept. High Grades	71 (122)	21 (96)	41 (44)	69 (55)	69 (55)	26 (49)	40 (15)	73 (67)	73 (67)	15 (47)	41 (29)	
Nov. A.	81 (63)	32 (41)	26 (81)	77 (35)	77 (35)	32 (22)	32 (34)	86 (28)	86 (28)	32 (19)	21 (47)	
Apr. A	69 (36)	41 (34)	20 (87)	65 (20)	65 (20)	42 (19)	19 (36)	75 (16)	75 (16)	40 (15)	20 (51)	
Sophomore (Nov. A)												
	84 (31)	45 (29)	22 (54)	87 (15)	87 (15)	44 (18)	14 (14)	81 (16)	81 (16)	63 (11)	20 (40)	
Junior (Nov. A)												
	75 (28)	60 (20)	24 (45)	80 (20)	80 (20)	9 (13)	9 (23)	71 (18)	71 (18)	41 (7)	22 (22)	
Senior (Nov. A)												
	76 (29)	32 (19)	22 (60)	73 (22)	73 (22)	29 (12)	29 (41)	90 (7)	90 (7)	5 (7)	19 (19)	
All Students (Nov. A)												
	79 (151)	40 (109)	24 (240)	78 (92)	78 (92)	42 (65)	112 (112)	81 (59)	81 (59)	39 (44)	22 (128)	

^aFrequencies too small for percentaging.

carried greater influence upon the first year GPA's. But Table 21 shows that September grades-evaluation was, if anything, negatively related to first semester GPA, while November A rank was more strongly and positively related to it. When we recall, from Chapter II, that a general reorganization of values appears to have taken place among the freshmen between September and November, this finding, after all, should not come as a great surprise. It would appear that it was not the values with which freshmen entered college, but the values which they learned there, which bore most heavily upon their first semester GPA's, as well as upon all succeeding GPA's.

Our final measure of academic achievement is the difference between second and first semester GPA's. This difference tells us whether a freshman succeeded in raising his GPA between the first and second semester of his college career. We should expect, from the conclusions drawn so far regarding the influence of grades-evaluation that high evaluation will induce a student to raise his GPA more than will low evaluation.

One obvious condition on raising or lowering the GPA, however, must be the first semester GPA itself. One reason for this can best be understood by posing the extreme case of a student who received the highest possible GPA in the first semester. Such a student could not raise his GPA in the second semester. Similarly, a student who received a first semester GPA of zero could not lower his GPA. In general, therefore, students with high first semester GPA's had less possibility, by virtue of the absolute limits of the grade-point scale, of raising their GPA's than did students with low first semester GPA's. Moreover, the former students are likely to find less ease in doing so, for the additional reason that students with high first semester GPA's probably find it more difficult, in the nature of

TABLE 21.---Per cent high first semester grade-point average (Freshmen)

HSR	Total			Males			Females			
	Hi	Mod Lo	Lo	Hi	Mod Lo	Lo	Hi	Mod Lo	Lo	
Sept. High Grades Importance	72 (121)	77 (22)	23 (95)	41 (44)	70 (54)	26 (49)	47 (15)	73 (67)	20 (46)	38 (29)
Per cent High First Sem. GPA	72 (121)	77 (22)	23 (95)	41 (44)	70 (54)	26 (49)	47 (15)	73 (67)	20 (46)	38 (29)
Nov. A Rank	84 (61)	66 (61)	35 (40)	27 (81)	79 (34)	32 (22)	35 (34)	86 (28)	39 (18)	21 (47)

^aFrequencies too small for percentaging.

the unequal intervals between letter-grades, to raise their GPA's. Still another factor bearing upon the relationship of first semester GPA to GPA change is the likelihood, referred to earlier, that students who received low first semester GPA's were under greater pressure from many sources to raise their GPA's.

All-in-all, then, there are strong constraints which operate against students with high first semester GPA's, regardless of their grades-evaluations, raising their GPA's in the second semester.

In Table 22 we can see that the inferences we have just drawn concerning the role of first semester GPA are borne out, but it is also evident, in the "Total" columns, that grades-evaluation had its own positive effect on raising the GPA. When we examine the breakdown by sex, however, we find an interesting sex-difference: The boys were most influenced by A rank if they had high first semester GPA's, while the girls were most influenced if they had low first semester GPA's.

In summary, we have now been able to show that grades-evaluation is a factor interesting in its own right, as a measure of an important attitudinal concomitant of college life, and also significant for student academic performance. But obviously, when we speak of grades-evaluation, we are referring to an aspect of psychological motivation. Once this is understood, then the influence of grades-evaluation upon grades-achievement becomes an intuitively expected phenomenon, which we have only succeeded in substantiating.

Behavior

Between motivation and achievement there must stand overt behavior. Therefore, the next logical question is: What do students with stronger motivation do that yields them higher achievement? We can here answer only such crude questions as: Do they study more? Date less? Participate in

extra-curricular activities more, etc.?

The behavior to look at first is obviously the amount of time spent studying. Table 23 indicates that, in general, the higher a student's A rank, the more time he spent studying. The relationship seems to be considerably stronger among the girls than among the boys, chiefly because of the much larger per cent of girls ranking A first who studied more than thirty-two hours per week.

TABLE 23.--Per cent studying more than thirty-two hours per week (November), by November A rank and class

Class \ Nov A	Total		Male		Female	
	Hi	Lo	Hi	Lo	Hi	Lo
Freshman	45 (115)	37 (161)	42 (64)	31 (65)	49 (51)	42 (96)
Sophomore	50 (74)	40 (129)	46 (43)	39 (41)	55 (31)	40 (88)
Junior	42 (55)	41 (91)	34 (38)	47 (47)	59 (17)	34 (44)
Senior	44 (57)	29 (125)	34 (41)	27 (81)	69 (16)	32 (44)
All Students	46 (301)	36 (506)	40 (186)	34 (234)	55 (115)	38 (272)

We have already seen that the boys had a higher level of grades-evaluation than girls. But we also know that the girls had higher GPA levels than did the boys, and now, in Table 23, we find that girls studied more than boys did. If this latter finding can be taken as a partial explanation for the girls' higher GPA level, it must also be understood as a contradiction of the hypothesis that students who have higher grades-evaluations study more than those who have lower grades-evaluations. At the same time, however, Table 23 indicates that November A rank correlates with number

of hours studying in November when sex is controlled. We must conclude, therefore, that although some specifically sexual factor was operating to differentiate levels of grades-evaluation, study time and GPA between the sexes, the relations among these three variables were the same within the sexes.

Having thus established that A Rank correlates with R and with study time, we should expect that study time correlates with R, and is thus one behavioral mechanism whereby motivation was translated into over- and under-achievement. But the fact that mere amount of time studying was not of overwhelming importance in this regard is demonstrated by Table 24, where we see that even when we control motivation, we do not find that time spent studying carried much weight in over-achievement. Therefore, although we must acknowledge study time as one mediator between grades-evaluation and grade achievement, it does not seem to have been a very important one.

We may well ask whether the other behaviors on which we have data played such mediating roles. It appears from Tables 25 through 28 that the higher a student's grades-evaluation, the less time he spent dating, with friends, and in extra-curricular activities. No great difference is observable in time spent alone, but notice that in the freshman class, those who ranked A lowest spent more time alone than did those who ranked A highest, and as we look across the table, we can see this relationship finally reverse itself in the senior class. If we could think of the four classes as a single cohort passing through college, such a finding would suggest that the students who had high grades-evaluation gradually withdrew, or were ostracized, from social intercourse of a more general nature than is measured by our time-budget questions. We shall have more to say on this later, in connection with the time-series data on the freshmen's interpersonal environments.¹

¹See chap. viii.

TABLE 24.--Per cent over-achievers, by November A Rank, number of hours studying and class

Nov. A Study	Total		Males				Females					
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo				
	> 32	≤ 32	> 32	≤ 32	> 32	≤ 32	> 32	≤ 32				
Freshman	67 (45)	46 (54)	34 (56)	44 (84)	56 (23)	43 (30)	39 (18)	47 (38)	77 (22)	50 (24)	32 (38)	41 (46)
Sophomore	54 (28)	72 (32)	38 (42)	29 (58)	a (14)	74 (19)	a (14)	25 (16)	a (14)	a (13)	39 (28)	31 (42)
Junior	58 (19)	55 (29)	36 (25)	35 (54)	a (10)	56 (23)	a (12)	18 (28)	a (9)	a (6)	a (13)	54 (26)
Senior	55 (20)	39 (28)	59 (29)	36 (84)	a (11)	44 (23)	50 (18)	41 (56)	a (9)	a (5)	a (11)	25 (28)
Non-Freshman	55 (67)	56 (89)	44 (96)	34 (196)	57 (35)	57 (65)	43 (44)	32 (100)	53 (32)	54 (24)	44 (52)	35 (96)
Total	60 (112)	52 (143)	40 (152)	37 (280)	57 (58)	53 (95)	42 (62)	36 (138)	63 (54)	52 (48)	39 (90)	37 (142)

^aFrequencies too small for percentaging.

TABLE 25.--Per cent spending more than eight hours per week in non-athletic club activities (November), by November A Rank and class

Class \ Nov A	Total		Males		Females	
	Hi	Lo	Hi	Lo	Hi	Lo
Freshman	35 (116)	42 (161)	45 (64)	63 (65)	23 (52)	27 (96)
Sophomore	39 (75)	36 (129)	50 (44)	58 (41)	23 (31)	26 (88)
Junior	31 (55)	43 (91)	34 (38)	55 (47)	24 (17)	30 (44)
Senior	28 (57)	43 (125)	37 (41)	54 (81)	6 (16)	23 (44)
All Students	34 (303)	41 (506)	42 (187)	58 (234)	21 (116)	26 (272)

TABLE 26.--Per cent dating more than eight hours per week (November), by November A Rank and class

Class \ Nov A	Total		Males		Females	
	Hi	Lo	Hi	Lo	Hi	Lo
Freshman	16 (116)	42 (161)	12 (64)	42 (65)	21 (52)	43 (96)
Sophomore	23 (75)	53 (129)	14 (44)	42 (41)	36 (31)	58 (88)
Junior	36 (55)	50 (91)	42 (38)	53 (47)	23 (17)	46 (44)
Senior	28 (57)	54 (125)	27 (41)	62 (81)	31 (16)	41 (44)
All Students	24 (303)	49 (506)	22 (187)	51 (234)	27 (116)	48 (272)

In general, we may conclude that the amounts of time a student spent in studying, dating and with friends were some of the more gross behavioral mechanisms whereby grades-evaluation was translated into over- and under-achievement, but that none of these behavioral measures, taken separately, can account for the magnitude of the relation between A and R.

Finally, it may be useful to recall our discussion of associations between values among our respondents. In that discussion, we pointed out that the strongest negative associations (in the student-body as a whole) were found between A rank and D rank, and between A and F rank. We have now succeeded in showing that these relations were mirrored in the amount of time which differentially motivated students spent in various behaviors. That is, we have found that the higher a student's grades-evaluation, the more time he spent studying, and the less time he spent dating and with friends.¹

It now seems appropriate to attempt a brief summary and discussion of our findings so far regarding grades-evaluation and academic achievement. The most important of these centers on the fact that the entering freshman class turned away from an orientation to getting high grades during their first seven months in college,² and our data show that as the freshmen's

¹It is worth noting, however, that although we found one of the least negative associations (among the boys) between A rank and X rank, in this chapter we have indications that high A rank was not associated with extensive participation in extra-curricular club activities.

²Since we lean rather heavily upon the reliability of this change, we should not omit the observation, untestable with our data, that actual grades-evaluation among all sex-and-year-in-college categories may have undergone seasonal variation due to factors such as quiz grades, mid-term grades, vacations and face-to-face contacts with parents, the football season, campus social events, etc., etc. However, it seems to us that such seasonal factors were likely to affect the entire student population at roughly the same times. Therefore, no matter what point on the seasonal curve our November observations on all students represent, our essential argument would be that the students were probably all at this same point at the same time.

grades-evaluation level was depressed, their grade-achievement was also depressed. We therefore infer that the early college experience of freshmen in some way acted to reduce their academic achievement by reducing their motivation.

When we raise the even more important question of why the freshman grades-evaluation changed as it did, we have offered no empirical answer as yet, but some significance in this regard should be attached to the fact that the freshman changes moved these students toward, and not away from, the levels of grades-evaluations which prevailed among their seniors in the student body. It is therefore reasonable to hypothesize that the freshman changes were adaptive changes, brought about by the process of their socialization into the student culture.

Parenthetically, it must be emphasized that throughout this report we are careful not to identify true intellectual productivity and orientation with grade achievement and grades-orientation. We avoid this because there is reason to believe that grades are poor estimates of a student's true intellect, and because we believe that orientation to grades also has serious limitations as a measure of his true intellectuality.

Although we can cite no research support for the latter assertion (and, indeed, its validity rests upon one's definition of intellectuality), the former is supportable in a variety of ways. For one thing, the reliability of grades is open to question. One study tested this reliability by asking the same humanities instructors to grade the same set of student examination papers at two different times. The grades given differed significantly when both examination paper and instructor were held constant and

also when different instructors graded the same paper.¹ Thus, if we hold the student's intellect, intellectuality and achievement constant, his grades may vary with different graders and even with changes in the same grader. Secondly, letter grades are only ordinally scaled. Consequently, averaging such values is a statistically illegitimate and misleading operation. And lastly, of course, the very use of the terms "over-" and "under-achievement" is a tacit admission that intellect and grade achievement are not always in correspondence.

But if grades and orientation to them may bear such a tenuous relation to intellect or intellectuality, what can our findings so far tell us, beyond the rather simple-minded fact that motivation to get high grades and actually getting high grades are related?

Essentially, this is a question about the functional significance of grades. The question might be rephrased: What do grades do that makes them interesting, perhaps even important, sociologically? What, in other words, is the social significance of grades and what, therefore, is the generalized meaning of various student attitudes toward them?

In answer to this question, it is our view that the principal function of grades resides in the universalistic demands of the more advanced school or broader social institution for whose recruits the lower school serves as a training-ground. In a highly industrialized, mass society, institutions like the educational system and the labor market develop

¹Ashburn, Journal of Experimental Education, VII (1938), 1-3. In more "objective" courses and examinations, such as mathematics and natural science, the reliability of grades may be higher.

universalistic criteria by which to accept one applicant and reject another, and grades are such a criterion. In the same way that, according to Weber, the institution of objective qualifying examinations shifted the emphasis in bureaucratic recruitment and upgrading from ascriptive to achievement criteria,¹ so the institution of grades rationalizes recruitment and upgrading in schools and in the labor market to which the educational establishment eventually sends its more-or-less finished products.

To be more specific, it seems to us that the paramount function of grades in elementary school is to serve as a recruitment criterion for high school; grades in high school bear a similar relation to college and to the world of wages; grades in college discriminate among applicants to graduate schools and semi-professional jobs; and finally, grades in graduate school discriminate among applicants to professional jobs.² Therefore, even if it were true that grades-evaluation bore no relationship to actual grades received, or to study time, etc., such evaluations would still be important insofar as they relate to the student's understanding and acceptance of this role of grades in recruitment to various status levels both inside and outside of the formal educational structure.

However, universalistic criteria are not the only criteria which operate in our society, nor is formal intellectual achievement the only road to success. A man may have high status in his community solely on the basis

¹Max Weber, "Bureaucracy," From Max Weber: Essays in Sociology, trans. and ed. H. H. Gerth and C. Wright Mills (New York: Oxford University Press, 1958).

²For girls, of course, the emphasis should be less on their own job aspirations and more on the status attaching to the jobs of the future husbands whom many of them look forward to meeting in college. See chap. vi. For documentation of the relationship between levels of education and jobs, see Joseph A. Kahl, The American Class Structure (New York: Rinehart and Co., 1957), pp. 276-79.

of inherited and/or acquired particularistic ties to father, spouse, friends, etc., and even though his formal education may not have gone beyond a poor record in high school. The existence of such alternative paths to success is a prime "given" in our study, for it adds to our concern with grades-evaluation an interest in the way in which college youth regard one of these paths and one type of criterion of social placement as compared with their regard for contrasting paths and contrasting criteria.

Thus, it should be emphasized that our data on grades-evaluation are orientation to high grades, as compared with orientation to dating, extra-curricular activities and friendships (the September data are the exception, since they are not directly comparative), rather than the evaluation of getting high grades as compared with the evaluation of getting lower grades. The dimension of measurement is therefore aspirations toward several alternative modes of success, rather than alternative levels of aspiration toward a single mode of success. In this way, we have tried to operationalize orientations to intellectual versus non-intellectual paths of achievement, and orientations to universalistic versus particularistic criteria of social placement, within the specific context of college life.

But "As the twig is bent, so grows the tree" is an adage well enough supported by theory and research in the behavioral sciences to allow us to extend our view beyond that context, into speculations about the orientations of these college students after they graduate, after they attain fully adult statuses. In the preceding chapter, we have shown that grades-evaluation declined sharply during the freshman year and probably also over the entire four years of college. From this point of empirical fact we might speculate that these students' experiences in college carried over into a relative antipathy toward formal intellectual achievement, or universalistic criteria,

or both, after college.¹

It would appear that this is a highly significant conclusion (if our single case carries any significance for colleges in general), which has heavy and baleful implications for the college as a "character-building" institution and for the popular image of the "college-bred" man and woman.

¹It should be emphasized that the path and the criterion are independent dimensions of grades-evaluations. Thus, we have not tried to show which of the stated alternatives is implied by the decline in grades-evaluation.

CHAPTER IV

GRADUATE ASPIRATIONS CHANGE, GRADES-EVALUATIONS CHANGE, AND SOME CORRELATES OF EACH

The idea that college serves as a training-ground for recruits to graduate school, semi-professional and professional occupations, and generally higher status social positions leads directly to our next investigations.¹

It seems plausible to assume that the preparation which college provides for high status positions is an important consideration in most youths' decisions to go to college, and for this reason college students are apt to be strongly future-oriented;² that is, prepared voluntarily to waive their immediate eligibility for adult statuses and undergo the rigors of at least four more years of formal education in exchange for higher statuses in the future.

But granting such a future-orientation, the fact remains that college students must live and receive gratifications day by day, in the society and culture with which they are in direct and continuous contact. Thus, although it is true that the future attainment of higher adult statuses to which these

¹In this chapter, although we shall show the same data for girls as for boys, we shall adopt an essentially masculine, i.e., occupation-oriented, point of view. This follows from our belief that in such matters as college education, this point of view is dominant in the society as a whole. In chap. vi, we will deal specifically with the girls and we shall then adopt what we think approximates a feminine point of view.

²See Ralph Turner, "Reference Groups of Future-Oriented Men," Social Forces, XXXIV (1955), 130-36.

students aspire is conditional upon their meeting certain requirements set by the adult world, it is no less true that the present attainment of high status in the pre-adult college society must also be conditional upon meeting requirements specific to that society. The requirements of the one society, however, are not always consonant with the requirements of the other, and it is this fact which can give rise to a contradiction between the students' orientation to present gratification and their orientation to future gratification.

Perhaps the subjective reflection of this contradiction may be grasped intuitively by contrasting the situations of elementary school and college students. For an elementary school pupil, any incongruity between the pupil culture and adult culture does not seem likely to loom large, in the psychological sense we have been discussing, simply because the transition into adult status is sufficiently far off not to call for any specific anticipatory socialization on the part of the pupil. This is not to say that the two cultures are not often in conflict, but that the conflict is less internalized within the elementary school pupil. The college student, however, who sometimes rebels against parental, or faculty, or administrative discipline can, at the same time, begin to see himself in the very roles against which he rebels. In addition, however adult-oriented he may be, and however close to adult status he may be, the college student is not yet accepted by adult society as a member in good and equal standing with all the rights and duties pertaining thereto. For these reasons, therefore, a college career may be considered a critical period of status transition, in which inescapable ambiguities and internalized ambivalences inhere for the student.

Our data appear to manifest the present-future conflict in the fol-

lowing way: at the same time that the evaluation of high college grades was declining among the freshmen, the desire to go to graduate or professional school was increasing among them. Tables 29 and 30 show the data on graduate aspirations and expectations. Figures 2 and 3 show the contrasting grades-evaluation and graduate aspiration trends. If we take grades-evaluation as an indicator of orientation to a present behavior and graduate aspirations as an indicator of orientation to a related future behavior, then the contradiction of which we have spoken is clearly suggested by these data.

On the face of it, the opposing freshman trends shown in Figure 2 are quite remarkable if one considers the fact that one well-known prerequisite of being admitted to graduate or professional schools is high grades in undergraduate work. But given this assumption, we are forced to one of two conclusions: The first is that there is some higher level of abstraction at which the two seemingly contradictory trends are resolvable. That is to say, there may be some more general concept within which the contradiction may rationally be understood as no contradiction but merely two expressions of the same thing within the same students. The second approach to an explanation would assume that the contradiction is not resolved at all, but compartmentalized. That is, each half of the contradiction may exist simultaneously but separately, without connection and without any logical correspondence, in different students. We shall try to find an empirical basis for evaluating these alternative conclusions.

We have just set forth the two conceptual points which are most pivotal to our study, and the relationship between them may bear some brief clarification. First of all, in advance of the presentation of data, we have put forward the idea of a status ambiguity which is translated into an attitudinal conflict between orientation to present and future gratification,

TABLE 29.--Per cent wanting to attend graduate or professional school, by class^a

	Total	Males	Females
Freshmen			
Sept.	36 (321)	48 (147)	26 (174)
Nov.	52 (319)	71 (147)	36 (172)
Apr.	55 (289)	74 (130)	39 (159)
Sophomore	61 (234)	79 (101)	48 (133)
Junior	71 (185)	83 (108)	53 (77)
Senior	69 (208)	79 (138)	50 (70)
All Non-Freshmen	66 (627)	80 (347)	50 (280)

^aIn all tables following this one, this variable will be called "Having graduate aspirations."

as a broad framework within which we may try to understand various behaviors of college students. Secondly, we have shown evidence, among our respondents, of apparently contradictory changes in attitudes toward related present and future behaviors. This evidence serves both as a tentative confirmation of the usefulness of our conceptual scheme and as a phenomenon to be explained by the test of hypotheses derived, in part, from it. The question confronting us at this juncture, then, may be divided into two parts: (1) How may the objectively contradictory trends in grades-evaluation and in graduate aspirations be understood? (2) Of what use to this understanding is the notion of simultaneous orientations to present gratifications and to future gratifications?

TABLE 30.--Per cent expecting to attend graduate or professional school, by class.

	Total	Males	Females
Freshmen			
Sept.	39 (259)	56 (123)	24 (136)
Nov.	37 (313)	56 (143)	22 (170)
Apr.	41 (280)	65 (124)	23 (156)
Sophomore	42 (229)	62 (99)	27 (130)
Junior	50 (183)	65 (106)	30 (77)
Senior	48 (203)	59 (134)	28 (69)
All Non-Freshmen	47 (615)	62 (339)	28 (276)

In a first step toward answers to these questions, let us assume that most of the adult gratification to which these students look forward will derive from the occupations and related life-styles which they finally enter. Let us now set that problem aside, for the time-being, and turn to the possible nature of present gratifications and sources of such gratifications. This is a problem not so easy to answer.

To start with, we must rule out most of the goods and services which money can buy. Although such benefits will undoubtedly differentiate among the students' future occupations, there seems to be far more of an equality of material life conditions among students at a given college than is likely to prevail among these same students when they have reached adult statuses. The facts that students who live on campus (86 per cent of the students at this college did) reside in dormitories or dormitory-like fraternity houses;

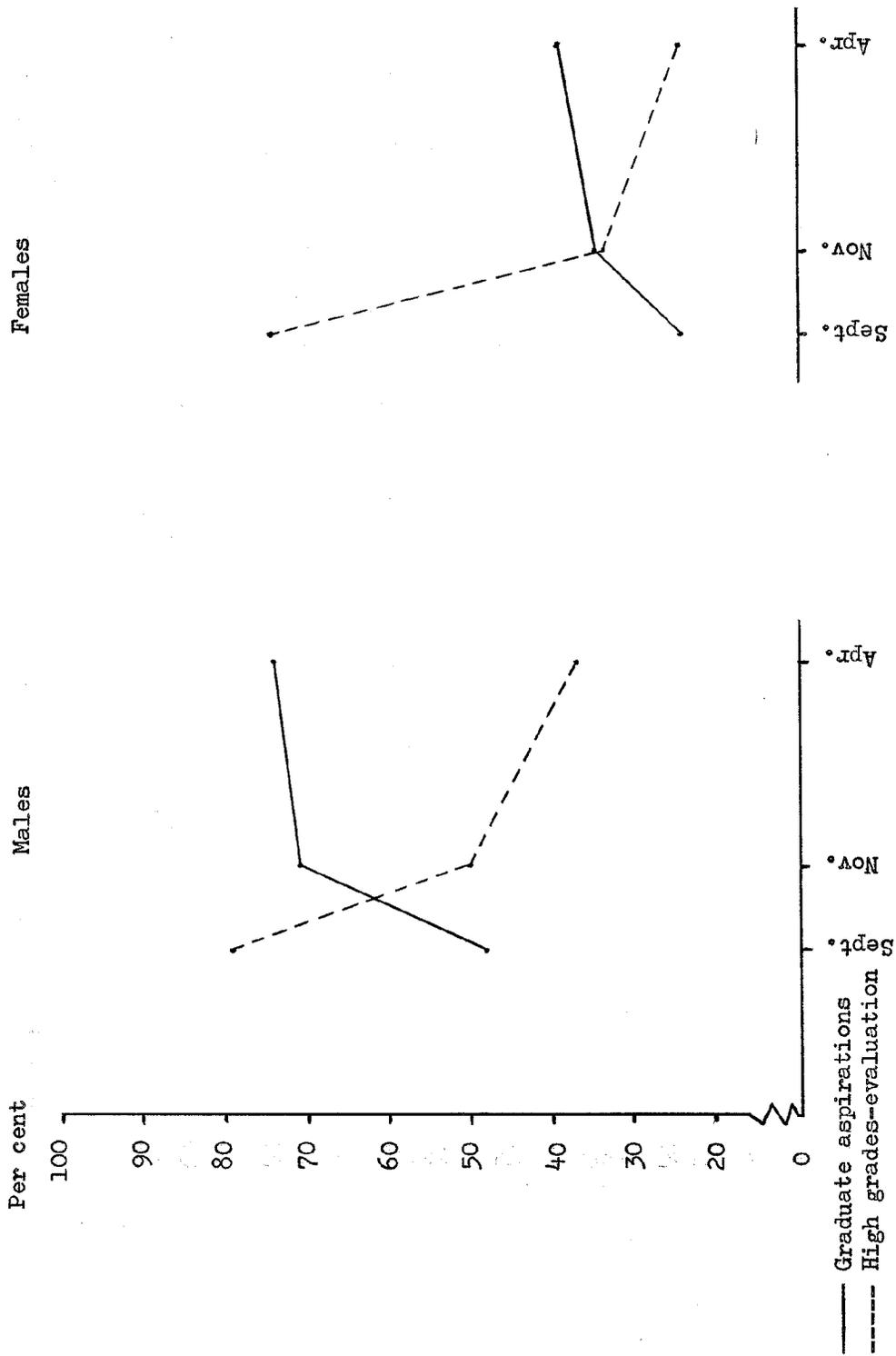


Fig. 2.--Change in grades-evaluation and in graduate aspirations (Freshmen)

— graduate aspirations
- - - - high grades-evaluation

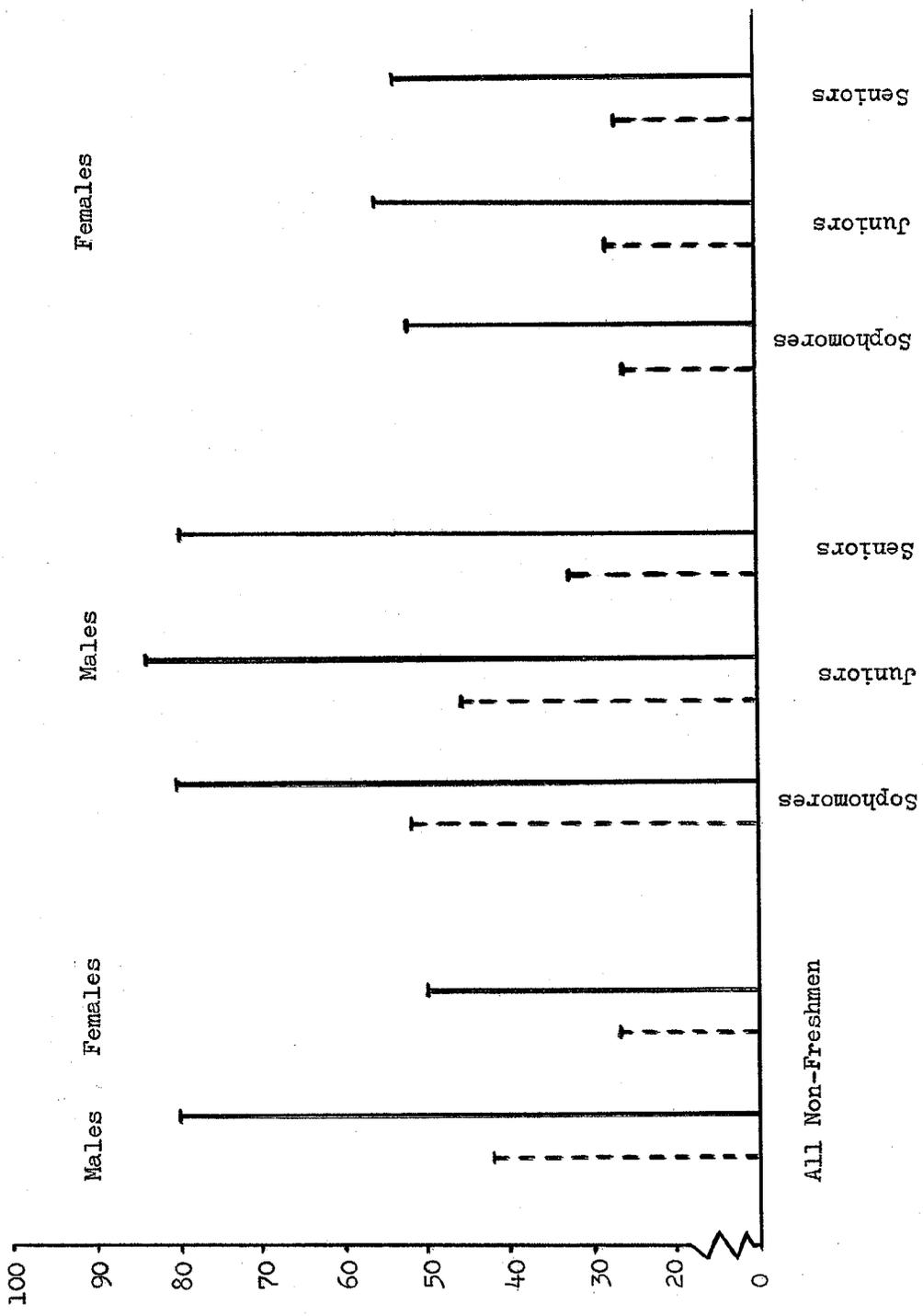


Fig. 3.--Per cent high grades-evaluation and per cent graduate aspirations, by class (Non-Freshmen)

eat the same food in the same dining hall; take courses from the same instructors in the same buildings, etc., makes for such equality. It is true, of course, that certain material differences do exist: some students have cars while others do not; some students live in fraternity houses, and some students have more spending money than others. Still, such differences seem small and few beside the differences which can separate the life-styles of physician and public school teacher or advertising executive and professor. The essential point, therefore, seems to be that there is relatively little that students themselves can do to increase their material comforts, both because the available comforts have a limited range of variation and because students are not usually rewarded in money or the material things it can buy for performing well in a given sphere of college activity.¹

It would appear that present gratification is much more apt to derive directly from social interaction, since in interaction there are always valuable rewards of acceptance, approval and prestige to be won. The persons with whom college students have social interaction must therefore be the main sources which can best tell us something about his orientation to present gratification and its effect upon his grades-evaluation and graduate aspirations.

In this chapter, we shall therefore begin by examining the influences of three kinds of persons in the student's social environment, viewed as sources of present gratification: other students, faculty members, and parents. After that, we shall turn to an investigation of the effects of the student's occupational ambitions, viewed as an indicator of his anticipated future gratifications.

¹The exception to this generalization is, of course, scholarship grants. See chap. v.

of prestige desires remained constant over time, then it appears that those who most vigorously sought prestige quickly learned that it was not in the field of grades-evaluation that such rewards were to be reaped and hastened to more promising acres.

TABLE 31.--Per cent and per cent change in high grades-evaluation, by expectation of prestige among students (Freshmen)

Expectation of prestige	Total		Male		Female	
	Hi	Mod Lo	Hi	Mod Lo	Hi	Mod Lo
Sept. High Grades	85 (66)	73 (241)	91 (33)	75 (109)	79 (33)	70 (132)
Nov. A	34 (58)	43 (206)	39 (31)	51 (92)	30 (27)	37 (114)
Apr. A	24 (53)	32 (184)	33 (27)	36 (76)	15 (26)	29 (108)
Change						
Sept.-Nov.	-60	-41	-57	-32	-62	-47
Nov. -Apr.	-29	-26	-15	-29	-50	-22
Sept.-Apr.	-72	-56	-64	-52	-81	-59

Similarly, the freshmen who most wanted to become socially integrated (Table 32) turned more rapidly away from high grades-evaluations--even more rapidly than did freshmen who strongly expected to gain prestige among their peers. This latter fact suggests that the change in grades-evaluation was more closely related to the desire for integration than it was to expectations of prestige. Table 33, in which we cross-tabulate both social integration and prestige attitudes against grades-evaluation (without a sex-break and with a different cutting-point on the prestige attitude, in order to preserve

TABLE 32.--Per cent and per cent change in high grades-evaluation, by desire to be accepted and liked by fellow-students (Freshmen)

Desire to be Accepted	Total		Males		Females	
	Hi	Mod Lo	Hi	Mod Lo	Hi	Mod Lo
Sept. High Grades	77 (231)	71 (91)	82 (97)	70 (50)	72 (134)	73 (41)
Nov. A Rank	34 (194)	60 (78)	42 (82)	63 (43)	28 (112)	57 (35)
Apr. A Rank	23 (184)	48 (64)	32 (75)	47 (32)	17 (109)	50 (32)
Change						
Sept.-Nov.	-56	-16	-49	-10	-61	-22
Nov. -Apr.	-32	-20	-24	-25	-39	-12
Sept.-Apr.	-70	-32	-61	-33	-76	-32

percentageable bases) tends to confirm this interpretation. Here we can see that students who were less interested in prestige but more interested in integration decreased their grades-evaluations more, between September and November, than did students who were of opposite mind. If we think of these two types of students as willing to sacrifice prestige for integration, in the first instance, and willing to sacrifice integration for prestige, in the second instance, then we may interpret these data as showing that the first type of student tended to be more conformist with respect to grades-evaluation than did the second type. A further and less supportable inference would lead us to suspect that grades-evaluation was less a dimension of prestige than of social integration, among students at this college.

TABLE 33.--Per cent and per cent change in high grades-evaluation, by desire to be accepted, by expectation of prestige among students (Freshmen)

Total				
Desire to be Accepted	Hi		Mod Lo	
Expectation of prestige	Hi Mod	Lo	Hi Mod	Lo
Sept. High Grades	79 (199)	56 (23)	74 (65)	65 (20)
Nov. A	34 (169)	33 (21)	54 (69)	47 (15)
Apr. A	24 (157)	20 (20)	52 (46)	a (14)
Change				
Sept.-Nov.	-57	-41	-27	-28
Nov. -Apr.	-29	-39	-4	
Sept.-Apr.	-70	-64	-30	

^aFrequency too small for percentaging.

Greek-Letter Membership: Grades-Evaluation

If the early desire to be accepted and liked by one's fellow students and to gain prestige among them can be thought of as predispositional attitudes toward the student peer group, then the later act of joining or not joining a Greek-letter organization can be thought of as subsequent accomplishment or failure among the same dimensions. In this sense, we may think of the predispositions and the accomplishment as a kind of "before-and-after" data. Certainly, in a college in which 62 per cent of the non-freshman boys and 57 per cent of the non-freshman girls belonged to prestigious, nationally-affiliated fraternities or sororities, being pledged by one of these organizations must have constituted some realization of social aspirations for freshmen.

But being so pledged was associated with an almost cataclysmic loss of grades-evaluation, as may be seen in Table 34. In the aggregate, the freshmen who belonged to fraternities or sororities lowered their grades-evaluations very sharply between November and April while freshmen who did not belong managed to retain a stable grades-evaluation level. Of all the variables whose zero-order relationship to grades-evaluation change was tested, membership in a fraternity or sorority was the most powerful.

TABLE 34.--Per cent and per cent change in high Greek-letter membership (Freshmen)

Greek-letter Membership	Total		Male		Female	
	Yes	No	Yes	No	Yes	No
Sept. High Grades	76 (194)	74 (128)	80 (85)	76 (62)	72 (109)	73 (66)
Nov. A	33 (164)	55 (113)	40 (72)	61 (57)	27 (92)	48 (56)
Apr. A	21 (145)	54 (89)	24 (67)	58 (43)	14 (98)	50 (46)
	Change					
Sept.-Nov.	-56	-26	-50	-20	-62	-34
Nov. -Apr.	-36	-2	-40	-5	-48	+4
Sept.-Apr.	-72	-27	-70	-24	-81	-32

Freshmen were pledged into the Greek-letter societies toward the end of the first semester, and we must therefore distinguish between the September-November period (before pledging) and the November-April period (essentially after pledging). This means that the differences between September-November change rates, also shown in Table 34, may be interpreted in at least three possible ways: as manifestations of differential anticipatory sociali-

zations, or as manifestations of fraternity-sorority selectivity, or both. In other words, the fact that freshmen who later became fraternity-sorority members lost their grades-evaluations more rapidly between September and November than did other students who did not become members can mean that the former anticipated invitations to join the societies and adapted their attitudes to actual members' attitudes, or that the societies selected freshmen who had lost their grades-evaluations most precipitously for some other reason, or some combination of these two tendencies.

Although our data will not allow us to separate the two tendencies, we can make some estimate of their joint effect--an effect which we may call selection, whether self-selection by prospective members or by Greek-letter societies.

On our September questionnaire, we asked two questions which can help in such an estimate: First, as we have said, freshmen were asked to indicate how important being accepted and liked by their fellow students was to them. Second, we requested freshmen to indicate how important they thought belonging to a certain fraternity or sorority should be in making a student popular. Let us assume that (1) answers to the second question were substantially unbiased by the two days of college experience which the freshmen had had when we administered the September questionnaire, and that these answers therefore actually reflected what the respondents thought should be the case, rather than their estimate of the real state of affairs, and (2) that the relative intensities of desire for acceptance reported in September remained stable between September and April. Under these assumptions, selection would be expected to bear most heavily upon freshmen who more strongly wanted to be accepted and like by their fellow students and who also thought that belonging to a fraternity or sorority should be rather more important in de-

termining the degree of that acceptance (i.e., his popularity). In Table 35, we find that the selection hypothesis is confirmed by the fact that the stronger the general and specific sociability predisposition toward Greek-letter societies, the greater the likelihood of joining them. But sociability is not the only conceivable basis for selection, and a comparison of male and female percentage differences suggests that it was less often a strong basis for boys than for girls.

Thus, it would seem that the September-November differences in grades-evaluation change (Table 34) may be at least partly attributed to selection on the basis of sociability predispositions. In any case, however, the powerful effect of actual fraternity-sorority membership is obvious in the November-April changes and there can be no doubt that such membership had a profoundly depressing influence upon grades-evaluation.

We have referred to selection and post pledging socialization of freshman fraternity-sorority members, and it now remains to be shown (in Table 36) that a compelling, homophilous basis of that selection and socialization was an especially low grades-evaluation among non-freshman Greek-letter members. Furthermore, a comparison of Table 34 with Table 36 generates the suspicion that new freshman members not only conformed, but over-conformed to the grades-evaluations prevailing among older members from the fact that by April the grades-evaluation levels of freshman pledgees were lower than the over-all levels among comparable older members, while the reverse was true of freshman non-members relative to comparable older non-members. We shall return to this point in Chapters VII and VIII when we analyze our data on interpersonal environments.

When we employ the data on desire for integration and the Greek-letter membership data in "before-and-after" cross-tabulations (Table 37) we find that

TABLE 35.--Per cent belonging to Greek-letter organizations, by desire to be accepted and liked by fellow students, and popularity importance of Greek-letter membership (Freshmen)

	Total			Male			Female		
	Hi	Mod	Lo	Hi	Mod	Lo	Hi	Mod	Lo
Desire to be Accepted	74	60	56	51	56	56	82	64	28
Importance of Greek-letter Membership	74	60	56	51	56	56	82	64	28
Per cent Greek-Letter Members	(100)	(131)	(25)	(47)	(18)	(32)	(50)	(84)	(32)

^aFrequency too small for percentaging.

TABLE 36.--Per cent high A rank, by Greek-letter membership (Freshmen and Non-Freshmen)

Greek-letter Membership	Total		Male		Female	
	Yes	No	Yes	No	Yes	No
Freshman (April)	18 (165)	54 (89)	24 (67)	58 (43)	14 (98)	50 (46)
Sophomore	30 (123)	47 (81)	44 (54)	64 (31)	19 (69)	36 (50)
Junior	32 (100)	50 (46)	37 (60)	64 (25)	25 (40)	33 (21)
Senior	22 (104)	43 (79)	23 (70)	47 (53)	21 (34)	35 (26)
Total Non- Freshman	28 (327)	46 (206)	34 (184)	56 (109)	21 (143)	35 (97)

there was a sequential rather than overlapping order in the influences of initial desire for social integration and of subsequent achievement of such integration via Greek-letter membership. Prior to fraternity-sorority pledging, the desire was of paramount effect, but after pledging such effects washed out completely, leaving the powerful influence of actual attainment. It is as though the peer reference group to whose norms freshmen tried to conform was at first diffuse and heterogeneous, but with the advent of pledging, this reference group became more clearly defined and perceptibly more monolithic with respect to grades-evaluation. It was then that the freshmen appear to have found out which "side" they were on, exactly what grades-evaluation changes were expected of them in order to be permitted to stay on that side, and set out to accomplish this requirement.

Greek-Letter Membership: Grades-Evaluation
and Grade Achievement

It will be recalled that in Chapter III we demonstrated the relevance of grades-evaluation to actual grades achieved. Since we have now shown, in the present chapter, that attainment of membership in Greek-letter organizations strongly influenced the change in grades-evaluation, let us examine its repercussions upon academic achievement. One of the most important things we would like to know, of course, is what consequences Greek-letter membership carried for the college achievement of students of higher or lower high school achievement.

In Table 38 it may be seen that a freshman's rank in high school graduating class bore a positive relation to grades-evaluation at each observation date. The changes in grades-evaluations, however, seem to have

TABLE 38.--Per cent and per cent change in high grades-evaluation; and per cent having high first semester GPA, by HSR (Freshmen)

HSR	Males		Females	
	Hi	Lo	Hi	Lo
Sept. High Grades	81 (68)	77 (64)	88 (76)	62 (76)
Nov. A	59 (59)	39 (56)	43 (65)	25 (76)
Apr. A	41 (49)	34 (55)	25 (63)	23 (66)
Change				
Sept.-Nov.	-27	-49	-51	-60
Nov. -Apr.	-30	-13	-42	-8
Sept.-Apr.	-49	-56	-72	-63
Per cent high first semester GPA	65 (68)	37 (67)	60 (76)	33 (75)

occurred in two phases. During the September-November phase, students of low high school rank lost their grades-evaluations more rapidly than did students of high rank; but during the November-April phase, the reverse was true. Here again, we have to contend with the "reality factor" of first semester grades, and since it seems to have been the case that high HSR freshmen tended to get higher first semester GPA's than did low HSR freshmen (Table 38), we might well conclude that the sharp November-April decline in grades-evaluation among high HSR freshmen was a consequence of this fact. The hypothesis would be that high HSR freshmen, having done better than low rank freshmen during their first semester in college, could "afford" to devalue grades in their second semester and divert some energies to other activities. But contrary to this expectation, we find that freshman boys who received higher first semester GPA's tended thereafter to decrease their grades-evaluations slightly less than did other boys who received lower GPA's (Table 39). The relationship of the girls' November-April grades-evaluation changes to their first semester GPA's was more in accord with our expectations, however.

TABLE 39.--Per cent and per cent change in high grades-evaluation, and per cent raising GPA in second semester, by first semester GPA (Freshmen)

First Semester GPA	Males		Females	
	Hi	Lo	Hi	Lo
Nov. A	52 (62)	45 (60)	38 (64)	28 (85)
Apr. A	40 (52)	31 (55)	26 (58)	25 (81)
	Change			
Nov.-Apr.	-23	-31	-32	-11
Per cent Raising GPA in Second Semester	48 (67)	69 (87)	49 (71)	67 (84)

Now if we introduce Greek-letter membership as an intervening variable as in Table 40, it is revealed that the hypothesis that grades-success led to grades-devaluation was contravened among Greek-letter members (though

TABLE 40.--Per cent and per cent change in high grades-evaluation, by Greek-letter-membership and first semester GPA (Freshmen)

Greek-letter Membership	Males				Females			
	Yes		No		Yes		No	
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Nov. A	45 (33)	34 (38)	59 (29)	64 (22)	32 (40)	17 (59)	46 (24)	50 (26)
Apr. A	32 (31)	14 (35)	52 (21)	60 (20)	20 (41)	11 (54)	41 (17)	52 (27)
	Change							
Nov.-Apr.	-29	-59	-12	-6	-38	-35	-11	+4

in a more pronounced form among fraternity members than sorority members), but not among independents. The latter group of students had a stronger tendency to devalue grades over the November-April period, if they met with academic success in the meantime, whereas the reverse was the case among Greek-letter members.

In order to generate a hypothesis which can account for this Greek-independent difference, let us refer back to our previous findings concerning associations between values (Chapter II) and suppose that freshmen perceived two main arenas of student competition, centering on grade achievement (fueled by a source of interpersonal influence which we shall shortly discuss) and sociability achievement; arenas which may conveniently be thought of in

the more abstract Balesian-Parsonian terms of "task" and "socio-emotional" or "expressive" alternatives.¹ Since we have already shown that sociability achievement was probably implicit in being "tapped" by a Greek-letter organization, we may go on to make the obvious suggestion that freshman Greeks who had succeeded in getting high first semester GPA's were at the top of the freshman heap in both arenas. The problem confronting these freshmen after first semester grades became known, and after rush week, was the analog of a critical economic and ecological problem: the redistribution of values such that the chances of retaining dominance in both arenas would be maximized. By the same logic, the problem faced by independents who received low first semester GPA's was to maximize their chances of future success in both arenas, and the problem of students who had met with success in only one arena was to maximize their chances for future success in the other.

In Table 41 we find data on values other than grades-evaluation and on changes in these values. Two major conclusions may be drawn from these data: (1) inside the Greek-letter societies, the effect of a high, as compared to a low, first semester GPA was toward a relative increase in the evaluations of grades and dating, while outside the societies the effect was toward emphasis on extra-curricular activities and friendship; and (2) freshmen who were successful in neither arena (i.e., low first semester GPA's and non-Greek) changed, relatively speaking, toward high evaluation of grades and dating and toward low evaluations of extra-curricular activities and friendship more emphatically than did any other category of students. Thus, the value changes of freshmen at the top and bottom of the heap were parallel in direction but different in degree.

¹See Talcott Parsons and Robert F. Bales, "The Dimensions of Action Space," Working Papers in the Theory of Action, Talcott Parsons, Robert F. Bales and Edward A. Shils (Glencoe: Free Press, 1953).

TABLE 41.--Per cent and per cent change in high ranks of X, D, and F by First Semester GPA and Greek-letter membership (Freshmen)

Greek-letter membership	Males				Females			
	Yes		No		Yes		No	
First Semester GPA	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Nov. X	45 (33)	53 (38)	36 (28)	32 (22)	29 (38)	26 (49)	18 (22)	12 (26)
Apr. X	52 (29)	74 (31)	40 (20)	21 (19)	34 (38)	33 (51)	17 (18)	18 (27)
X Change	+13	+45	+6	-34	+7	+9	-6	+7
Nov. D	22 (32)	34 (41)	21 (28)	23 (22)	43 (37)	54 (50)	59 (22)	38 (26)
Apr. D	32 (31)	28 (32)	26 (23)	53 (19)	54 (39)	61 (51)	50 (16)	37 (27)
D Change	+13	-18	+6	+39	+16	+15	-15	-3
Nov. F	88 (32)	77 (39)	82 (28)	81 (21)	95 (39)	94 (52)	83 (23)	100 (26)
Apr. F	86 (29)	78 (32)	86 (21)	68 (19)	92 (38)	94 (53)	94 (16)	93 (28)
F Change	-2	+4	+22	-16	-3	0	+65	-7

These two sets of findings appear to confirm our notion of the way in which competition operated among freshmen, for they demonstrate that low achievement in either or both arenas induced heightened motivation in these arenas and that high achievement in both induced what might be called a "holding operation" in both.

But it should be emphasized that of the four values ranked, only grades-evaluation declined almost uniformly across all categories of first semester GPA and Greek-independent freshmen. Thus, if the freshmen did perceive two competitive arenas at first, it would again appear that they were

in the process of being disabused of the idea that high motivation for success in grade achievement had important social rewards attached to it. It seems to follow, when we look at comparable data on the non-freshmen (Table 42), that we find no evidence here of a low GPA having been associated with a high evaluation of grades, either inside or outside the Greek-letter organizations, or of non-freshmen having striven simultaneously for status in the two arenas which we proposed were relevant to freshmen. On the contrary, these data suggest that non-freshmen found it more necessary to make an exclusive choice between orientation to grades and orientation to extra-curricular activities, dating and friendship. But more on this in a moment.

TABLE 42.--Per cent giving high ranks to A, X, D, and F; by total GPA and Greek-letter membership (Non-Freshmen)

Greek-letter membership	Males				Females			
	Yes		No		Yes		No	
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
A	40 (84)	28 (76)	76 (41)	32 (44)	28 (57)	16 (63)	40 (47)	28 (39)
X	40 (85)	44 (72)	14 (42)	30 (46)	35 (52)	28 (61)	20 (44)	18 (40)
D	35 (81)	51 (72)	35 (40)	42 (45)	54 (48)	64 (61)	49 (43)	60 (38)
F	81 (86)	76 (71)	74 (42)	93 (44)	82 (49)	90 (60)	89 (46)	92 (40)

Let us now return to high school rank, a basic input variable into the college system. Table 38 has shown that although first semester GPA and rank in high school graduating class were highly correlated, the correlation was not perfect. Therefore, our pursuit of an answer to how Greek-letter membership affected students of different college grade achievement

has not directly illuminated the fate of students of different high school achievement and different Greek-letter statuses.

It seems appropriate that we focus on non-freshmen rather than freshmen in order to answer this question, even though we shall have to rely upon cross-sectional findings. The reason for this is simply that Greek-letter influences should be most clearly and reliably manifested among non-freshmen rather than freshmen, since the former had accumulated at least four semesters of grades and at least a year of experience with fraternities and sororities. In addition, fraternity members were permitted to move into fraternity house living quarters only after their freshman year was completed¹ and non-freshmen members should therefore show the effects of a much closer spatial and social relationship to fraternities than prevailed among freshman novices.

In approaching the problem of identifying effects of Greek-letter membership on academic achievement, let us first examine the relationships which A rank (as well as the other ranked values) bore to GPA among non-freshmen of high and low HSR. Table 43 indicates a number of things which will be relevant to our analysis, but let us take particular note of the following one: Grades-evaluation was more closely associated with the grade achievement of non-freshmen who had low high school ranks than with that of high HSR non-freshmen. This seems best understood as expressing a degree of interchangability between scholastic aptitude-habit (represented by HSR), on the one hand, and motivation (represented by grades-evaluation), on the other. High aptitude-habit students seem to have required less motivation toward high grades as compared with their motivations toward the other ranked values,

¹Sorority members were not permitted to reside in the sorority houses at any time during their college careers.

TABLE 43.--Associations (Yule's Q) between values and GPA, by HSR (Non-Freshmen)

HSR	Males		Females	
	Hi	Lo	Hi	Lo
Value				
A	.38 (124)	.49 (121)	.12 (98)	.47 (106)
X	.00 (125)	-.39 (120)	.34 (97)	-.18 (100)
D	-.26 (122)	-.18 (116)	-.27 (91)	-.03 (99)
F	-.22 (125)	-.12 (118)	-.29 (94)	-.51 (101)

while low aptitude-habit students seem to have required more motivation, in order to do well.

Without further comment, at the moment, on the other relationships shown by this table, let us go on to call attention to Table 44 in which we

TABLE 44.--Associations (Yule's Q) between values and GPA, by Greek-letter membership and HSR (Non-Freshmen)

Greek-letter Membership	Males				Females			
	Yes		No		Yes		No	
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Values								
A	.25 (81)	.31 (79)	.71 (43)	.72 (42)	.07 (52)	.51 (68)	.17 (46)	.41 (38)
X	-.01 (81)	-.32 (76)	-.28 (44)	-.55 (44)	.33 (51)	.08 (62)	.35 (46)	-1.00 (38)
D	-.30 (80)	-.21 (73)	-.19 (42)	-.12 (43)	-.20 (47)	-.21 (62)	-.34 (44)	-.24 (37)
F	.12 (81)	.04 (76)	-.71 (44)	-.56 (42)	-.44 (47)	-.35 (62)	-.07 (47)	-.43 (39)

find that although the original higher positive association between grades-evaluation and GPA among low HSR students is quite clearly visible among sorority members and non-members, it has all but disappeared among fraternity members and non-members. In the latter case, fraternity membership status emerges as by far the more powerful determinant of the relevance of grades-evaluation to grade achievement. Let us therefore concentrate attention upon the boys although in most cases the findings we point out will be seen to hold, less strongly, among the girls as well.

From the way in which the four key values were ranked (i.e., relative to one another, rather than relative to an absolute criterion of importance), it is possible that since A rank had such a small bearing upon fraternity members' GPA's, some other value could have a more profound positive or negative relation to it. But what we find in the rest of Table 44 is that this was not the case--at least not by any wide margin--and that grades-evaluation still retains the strongest positive association of all four values with GPA, even among high HSR fraternity members. This suggests that the weak relation of grades-evaluation to GPA among fraternity members was not a result of a strong emphasis upon any one other value, but rather of diffuse and varying emphasis upon all three other values.

At the same time, however, it should be noted that when we compare fraternity members with non-members, there seem to have been four main differences between them: first is the A rank difference which we have already noted. Second is the F rank difference. It seems that a high evaluation of friendship contributed a little to fraternity members getting high grades, but greatly hindered non-fraternity members from doing so. Third is the fact that X rank hindered fraternity members from getting high grades less than it did non-members, and fourth is the fact that D rank hindered frater-

nity members more than non-members from getting high grades.

One possible interpretation of these findings would depend upon the idea that the F and X values indirectly contributed toward fraternity members getting high grades, as compared with the more negative effects of these two values on the GPA's of non-members. If we think of the F and X values as involving orientations toward social relations more directly than did the A value, then it would appear that a positive orientation to social relations (not specifically including dating) helped the academic achievement of fraternity members much more than it did the achievement of non-members. The very wide differences between the directions and magnitudes of the association of F rank with GPA among fraternity members and non-members are exemplary in this respect, as is the fact that the GPA's of high HSR members were most elevated, while those of high HSR non-members were most depressed, by a strong orientation to friendship. All of this suggests that there was something about social relations in the fraternities which tended to contribute to high academic achievement, and something about the same relations outside the fraternities which had the opposite effect.

Let us complicate the picture a little further by showing, in Table 45, that fraternity (and sorority) membership had seemingly opposing effects upon the grade achievement of high and low HSR students. Now it is a commonly recognized fact that fraternities on a given campus are in competition with one another, for the most desirable pledgees, for the most attractive "queen," for the highest positions in student politics, for the highest achieving students, etc. Clearly, not all fraternity members can participate in all areas of inter-fraternity competition and some division of labor is apt to be maintained among each fraternity's members. Thus, one might think of fraternities as seeking "well-roundedness" as organizations, though not every member seeks

TABLE 45.--Per cent high GPA, by HSR and Greek-letter membership (Non-Freshmen)

HSR	Males				Females			
	Hi		Lo		Hi		Lo	
Greek-letter Membership	Yes	No	Yes	No	Yes	No	Yes	No
Per cent High GPA	75 (99)	59 (54)	29 (100)	36 (53)	75 (65)	69 (61)	26 (77)	32 (44)

to be, or can be, as well-rounded individually. Moreover, given a high cultural valuation of well-roundedness, it is conceivable that organizational competence in diverse fields can make the specialization of its individual members physically more possible and psychologically more acceptable to them. It can relieve specializing members of the necessity of spending time and energy striving for diversity of competence on their own, and provide them with an organizational identity of diffuse competence to supplement their individual identities of specialized competence.

Let us suppose, then, that a competitive situation prevailed among the fraternities we are examining, and that one of the arenas of competition was indeed academic achievement. We would expect that the fraternities' banners would be entrusted, in that, as well as other arenas, to those who were best equipped by nature and nurture to defend them. In the grade-achievement arena, high HSR students would thus become the Greek-letter champions, and would gain two kinds of rewards for high grade achievement. First, they would receive the internal gratification which comes from being able to perform well and doing so. But in addition, they would gain the social prestige and integration rewards which come from having contributed to the esteem of the fraternity as a whole and to the self-esteem of each of its members. Still

another such benefit, of course, might result from being expected and asked to tutor some of the floundering brothers.

With respect to the first reward potential, high HSR students inside the Greek-letter organizations would be no different from high HSR students outside. It is therefore the second potential which appears to have been decisive in raising the GPA's of members above those of non-members. In substantiation of this inference, we have already pointed out in Table 44 that F rank was most positively, and X rank was least negatively, associated with a high GPA among the high HSR fraternity members. Moreover, in Table 46 we may note that (1) high HSR members were more differentiated from high HSR non-members in their X rank than were low HSR members from low HSR non-members; and (2) high HSR students tended to study more if they belonged to fraternities than if they did not, while low HSR students tended to study less if they belonged to fraternities than if they did not. Next, we can see in Table 47 that the importance which high HSR Greek-letter members assigned to participation in Greek-letter and other extra-curricular club activities was positively related to the amount of time they spent studying, while these variables were negatively related among all other categories of students. The relationship between grades-evaluation and study time is also shown to have been least positive (and negligible in strength) among the high HSR Greek-letter members. Finally, in Table 48, we see that (1) the high HSR fraternity members' friendship "satisfaction"¹ was not only higher than that

¹Our measure of "satisfaction" is merely the association (Yule's Q) between the rank of a given value and the amount of time spent in the corresponding behavior, when both are dichotomized. The aim of this measure is essentially to control amount of a behavior for desire for that behavior. The term "satisfaction" must remain in quotation marks which signify that (1) the measure is not a subjective evaluation on the part of the respondents, but a statistical association between two separate responses; and (2) the measure does not attempt to estimate satisfaction in the qualitative sense. For references to a similar conception of "success" see Merton, Social Theory and Social Structure, p. 152, n. 35.

TABLE 46.--Effects of Greek-letter membership on non-freshmen's values and behaviors, by high school rank (Per cent)

HSR	Males				Females			
	Hi		Lo		Hi		Lo	
Greek-letter Membership	Yes	No	Yes	No	Yes	No	Yes	No
Per cent high A rank	37 (81)	63 (43)	32 (79)	43 (42)	25 (52)	39 (46)	19 (68)	32 (38)
Per cent high X rank	44 (81)	18 (44)	40 (76)	27 (44)	31 (51)	24 (46)	31 (62)	13 (38)
Per cent high D rank	35 (80)	38 (42)	51 (73)	40 (43)	57 (47)	45 (44)	61 (62)	65 (37)
Per cent high F rank	83 (81)	80 (44)	75 (76)	88 (42)	85 (47)	92 (47)	87 (62)	90 (39)
Studying > 32 hours per week	39	30	28	38	46	43	39	54
Extra Curricular Activities > 8 hours per week	63	26	63	29	35	25	31	5
Dating > 8 hours per week	45	32	60	40	44	41	53	39
With friends > 16 hours per week	29	26	38	38	18	36	30	32
Alone > 8 hours per week	24	38	35	35	10	36	20	39
BASE for behaviors	(98)	(47)	(98)	(48)	(63)	(56)	(77)	(41)

of similar boys who did not belong to fraternities, but higher than that of any other comparable category of non-freshmen; but (2) the high HSR fraternity members' dating "satisfaction" was the lowest of all the boys'. Apparently, the social rewards of high academic ability and achievement inside the fraternities did not include a high degree of success with girls, even though their desires for dates were at a relatively low level (Table 46).

TABLE 47.--Associations (Yule's Q) between A rank and time spent studying, and between X rank and time spent studying; by HSR and Greek-letter membership (Non-Freshmen)

HSR	Males				Females			
	Hi		Lo		Hi		Lo	
Greek-letter Membership	Yes	No	Yes	No	Yes	No	Yes	No
A Rank	-.10 (81)	.07 (42)	.24 (79)	.32 (42)	.10 (52)	.81 (46)	.28 (68)	.24 (38)
X Rank	.23 (81)	-.56 (34)	-.13 (76)	-.34 (44)	.32 (51)	-.33 (46)	-.25 (62)	-.23 (38)

It is an interesting contrast that the students who seem to have been most "satisfied" with their dating were high HSR girls in sororities--but more on this in Chapter VI.

TABLE 48.--Friendship and dating "satisfactions": Associations (Yule's Q) between friendship-evaluation^a and time spent with friends per week, and between dating-evaluation and time spent dating per week, by HSR and Greek-letter membership (Non-Freshmen)

HSR	Males				Females			
	Hi		Lo		Hi		Lo	
Greek-letter Membership	Yes	No	Yes	No	Yes	No	Yes	No
Friendship "Satisfaction"	.69 (81)	.46 (44)	.58 (76)	.31 (42)	.18 (47)	.20 (47)	.38 (62)	.63 (39)
Dating "Satisfactions"	.36 (80)	.53 (42)	.69 (72)	.67 (43)	.86 (47)	.42 (44)	.48 (62)	-.18 (37)

^aF rank dichotomized between ranks one and two.

Thus, the different effects of fraternity membership upon the grade achievements of high and low HSR students might be accounted for by (1) a

division of labor inside the fraternities which tended to relieve low HSR students from striving to achieve high grades and placed the main social burden of such achievement on the shoulders of those deemed best able to carry it, and (2) the valued social rewards which seem likely to have gone to the fraternities' champions, probably in every specialized arena of inter-fraternity competition.¹

We should also call attention to the fact that if our interpretation is correct, then our earlier statement (based on Table 43), to the effect that high motivation tended to make up for low aptitude-habit needs the following specification: The GPA's of high aptitude-habit boys seem to have benefited more by high social rewards from their peers for getting high grades than by a strong orientation to getting high grades for their own sake, or rather, apart from the immediate social rewards which they brought from the peer group. But we cannot say simply that the reverse was true of low HSR boys, because in neither case--neither inside nor outside the fraternities--does it seem likely that important peer rewards were available to them for high academic achievement. All that can be drawn with any certainty from our data and analysis on this point is the near-truism that in the absence of social rewards from their peers for high GPA's, these students were better

¹One may hypothesize further that not all fraternities and sororities are likely to participate with the same commitment and vigor in all active arenas of inter-Greek competition. Some Greek-letter societies may concentrate their energies on certain arenas, while others concentrate on other arenas. In this way, various Greek-letter societies may seek campus reputations for superiority or inferiority in different areas of campus life, either instead of, or prior to, reputations for generalized superiority or inferiority. In short, the individual specialization we have been discussing may be paralleled by organizational specialization. To the extent that this was true at the college which we studied (unfortunately, we did not collect data on this matter), the percentage differences shown in Table 45 underestimate the true influence of peer group rewards on grade achievement, since they do not discriminate between Greek-letter societies which actively competed in the academic arena and therefore rewarded their champions in this arena from those which did not.

off if they had strong individual orientations toward getting high grades for their own sake, and therefore better off if they did not belong to fraternities.

Now it is an intriguing side observation that although among non-freshmen as a whole, a high HSR was associated with choosing a natural science major¹ (Table 49), among non-fraternity members a high HSR was associated with choosing an arts, humanities or language major (Table 50). Only among fraternity members was the over-all association between a high HSR and choosing a natural science major evidenced. Further, Table 51 indicates that the GPA's of non-freshman boys who chose a natural science major were considerably less determined by their HSR's than were the GPA's of boys who were behavioral or social science majors, and that contrary to what we observe among the latter, the A rank difference between high and low HSR natural science majors was in just the opposite direction from that of their GPA difference.

TABLE 49.--Per cent having various types of majors, by high school rank (Non-Freshmen)

HSR	Males		Females	
	Hi	Lo	Hi	Lo
Natural Sciences	43	22	23	9
Behavioral and Social Sciences	50	58	44	56
Arts, Humanities, and Languages	7	20	29	34
Other	--	--	5	--
Base	100 (98)	100 (96)	100 (62)	100 (64)

¹Students at this college were permitted to choose a major field only after their freshman year.

TABLE 50.--Per cent having types of majors, by Greek-letter membership and HSR (Non-Freshmen)

Greek-letter Membership	Males				Females			
	Yes		No		Yes		No	
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
HSR								
Natural Sciences	48	18	33	29	22	6	23	17
Behavioral and Social Sciences	45	71	61	32	47	59	40	50
Arts, Humanities and Languages	8	11	6	39	25	35	33	33
Other	--	--	--	--	6	--	3	--
Base	100 (65)	100 (65)	100 (33)	100 (31)	100 (32)	100 (46)	100 (30)	100 (18)

This is a picture which is quite similar to the one we have just seen in our analysis of high and low HSR students, and similarly suggests that factors other than HSR and A rank were operating on the GPA's of natural science majors who were fraternity members. And Table 51 does, in fact, show that of the four ranked values only the evaluation of extra-curricular club activities were positively related to the GPA's of natural science students. Thus, the suggestion of these data seems to be that the inter-fraternity competition to which we have referred may have been carried on largely by fraternity members who were natural science majors. If such were indeed the case, it would not seem difficult to understand, considering the general prestige which having high performers in these disciplines could bring to a fraternity.

Because of our small case-base, it is not possible to make the indicated fifth-order cross-tabulation (i.e., sex by HSR by major by Greek-letter membership by GPA) and thus put our suspicions to the most detailed

TABLE 51.--Per cent high GPA, high A, X, D and F, having graduate aspirations, and admiring more than four faculty members, by HSR and major field type (Non-Freshmen)

HSR	Male				Female							
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo				
Major	Nat. Sci.	Behav. and Soc. Sci.	Arts, Hum. and Lang.	Nat. Sci.	Behav. and Soc. Sci.	Arts, Hum. and Lang.	Nat. Sci.	Behav. and Soc. Sci.	Arts, Hum. and Lang.			
High GPA	71 (42)	71 (48)	a (7)	48 (21)	20 (56)	37 (19)	a (14)	74 (27)	83 (18)	a (6)	19 (36)	27 (22)
High A	52 (31)	43 (47)	a (6)	63 (19)	20 (46)	20 (15)	a (12)	33 (24)	a (14)	a (6)	13 (30)	30 (20)
High X	45 (33)	38 (45)	a (6)	12 (19)	46 (41)	22 (18)	a (13)	32 (25)	38 (16)	a (6)	38 (29)	6 (17)
High D	23 (31)	38 (45)	a (6)	50 (19)	52 (40)	73 (15)	a (12)	41 (22)	a (14)	a (6)	61 (28)	67 (18)
High F	76 (33)	83 (46)	a (6)	80 (20)	79 (43)	87 (15)	a (13)	91 (22)	a (14)	a (6)	87 (31)	94 (17)
Having Graduate Aspirations	86 (42)	84 (49)	a (7)	90 (20)	77 (56)	68 (19)	a (14)	59 (27)	83 (18)	a (6)	42 (36)	36 (22)
Admiring > 4 Faculty	59 (37)	41 (41)	a (5)	63 (19)	28 (50)	a (12)	a (11)	56 (23)	a (14)	a (5)	52 (33)	68 (19)

^aFrequency too small for percentaging.

test. However, in Table 52 we have attempted two fourth-order cross-tabulations (one using GPA and the other using A rank) employing data on the male, non-freshman, natural science and behavioral-social science majors only.¹

TABLE 52.--Per cent high GPA's, per cent high A rank, and associations (Yule's Q) with Greek-letter membership; by HSR, major type and Greek-letter membership (Non-Freshman Males)

HSR	Hi				Lo			
	Natural Science		Behavioral and Social Science		Natural Science		Behavioral and Social Science	
Major								
Greek-letter Membership	Yes	No	Yes	No	Yes	No	Yes	No
	Per cent High GPA	77 (31)	^a (11)	69 (29)	70 (20)	^a (12)	40 (15)	22 (46)
Q (Greek: GPA)	.48		-.02		-.60		.43	
Per cent High A Rank	43 (21)	^a (10)	36 (28)	53 (19)	^a (10)	^a (9)	20 (39)	^a (7)
Q (Greek: A Rank)	-.51		-.33		-.56		.22	
Algebraic Difference Between Q's	.99		.31		.04		.21	

^aFrequency too small for percentaging.

If we look at the bottom row of algebraic differences between Q's we can see that the difference between the effect of belonging to a fraternity on GPA and its effect on A rank was more than three times as great among high HSR natural science majors as among other boys. This, together with the facts that the (Greek:GPA) and the (Greek:A rank) Q's of these students were in

¹Other categories were omitted from the analysis because they contained too few cases.

opposite directions, and that their (Greek:GPA) Q was more positive than that of any other category of students, means that our suspicions tend to be upheld by these data. That is to say, belonging to a fraternity tended to create the greatest disparity between the grade achievement and grades-evaluations of these students and the disparity was accomplished by a strong upward push on GPA combined with a downward push on A rank and (Table 54) an upward push on X rank.

But obviously, there is another interesting finding which we can extract from Table 52. If we compare the Q's of low HSR boys, we find that belonging to a fraternity raised both the grades-evaluation and GPA of behavioral or social science majors, but lowered both among natural science majors. Table 53 indicates two things which seem to be related to this fact: First, although natural science majors in general tended to have slightly higher GPA's inside the fraternities than outside, they had higher grades-evaluations outside than inside. Second, behavioral or social science majors had lower GPA's inside than outside and also had lower grades-evaluations inside than outside.

Now let us suppose that individual competition for grades occurred, not between each student and every other student, but among students who had contact with each other and who also had the same academic interests and took largely the same courses; that is, among friends and acquaintances who had chosen the same major fields. If this assumption were true, then behavioral or social science majors would be in a relatively low GPA environment if they belonged to fraternities, and in a relatively high GPA environment if they did not. Consequently, if a behavioral-social science fraternity member had a low aptitude-habit, he would probably find that he was more of a contender in the competition for high grades if he belonged to a fraternity

TABLE 53.--Per cent high grades evaluation and high GPA, by Greek-letter membership and major type (Non-Freshmen)

Greek-letter Membership	Males				Females					
	Yes		No		Yes		No			
Major	Nat. Sci.	Behav. and Soc. Sci.	Arts, Hum. and Lang.	Nat. Sci.	Behav. and Soc. Sci.	Arts, Hum. and Lang.	Nat. Sci.	Behav. and Soc. Sci.	Arts, Hum. and Lang.	
Per cent High A Rank	47 (24)	25 (73)	a (11)	67 (24)	44 (32)	a (12)	17 (42)	a (8)	33 (21)	27 (15)
Per cent GPA	65 (43)	40 (75)	a (12)	60 (20)	50 (30)	a (14)	33 (42)	a (10)	62 (21)	56 (16)

^aFrequency too small for percentaging.

than if he did not. As a result, we would expect to find that low HSR behavioral or social science majors strove more diligently for high grades, and achieved them more often, inside the fraternities than outside them. This is apparently the situation we find in Table 52.

TABLE 54.--Associations (Yule's Q) between Greek-letter membership and X rank,^a by HSR and major type (Non-Freshman Males)

HSR	Hi		Lo	
	Natural Science	Behavioral and Social Science	Natural Science	Behavioral and Social Science
Major	.68 (33)	.35 (45)	1.00 (19)	-.26 (41)

^aX rank dichotomized between ranks 2 and 3.

As far as natural science majors are concerned, the situation would be somewhat different. A low aptitude-habit natural science major would find that competition was slightly stiffer and his relative ability slightly less adequate inside the fraternities than outside. The consequence for him might well be what we observe in Table 52: retirement from the competitive GPA arena.¹

A high aptitude-habit natural science major, however, would find the grades competition inside the fraternities still within his reach and he would therefore be inclined to stay in the running. Indeed, the very closeness of the competition might not only drive his own GPA up, but those of other fraternity members as well. A high aptitude-habit behavioral-social science

¹It would, of course, be interesting to see whether such students tended to change their major fields more than other students, but we do not have the data with which to test this possibility.

major, on the other hand, finding it easier to stay "on top" inside a fraternity, might relax his competitiveness and thus help maintain the lower behavioral-social science achievement level in the fraternities than among independents.

To conclude, we seem to have been able to tease out of our data evidences that two main kinds of competitive arenas (i.e., task and socio-emotional) were relevant to the behavior and attitudes of both freshman and non-freshman boys. Apart from inter-individual competition in the task arena, which we have suggested operated among non-freshmen who shared major fields and interaction, we have presented evidence that competitive behavior without regard for major field seems to have taken different forms among freshmen and non-freshmen. Among freshmen, it appears that each individual student sought to attain success in each arena. But among non-freshmen, the fraternities seem to have facilitated the specialization of individual members in order to reach a diversified organizational superiority. Non-freshman boys who did not belong to fraternities seem to have been like the freshmen in their individualized efforts, but like the non-freshman fraternity members in the relative exclusiveness of their choices between competing in the task or in the socio-emotional arena.

The fact that our analysis has highlighted the connection between the task and expressive arenas, and the central role which inter-group competition played in making this connection, would seem to emphasize the complex impact of peer group structural components in the determination of student academic achievement. The influence of fraternities upon achievement, at this particular college, at least, seems to have been neither as simple nor as uniformly negative as some popular conceptions of fraternities would imagine. Yet it is this very complexity and the mixed nature of fraternity influence

which permits the most interesting and most constructive questions to be raised. For example, although we do not have the data at hand which would be necessary to identify the influence which a different peer group structuring might have upon the achievement of low aptitude-habit students, our guess is that social rewards could be built into a college peer structure which would result in the same higher achievement which we have observed among high aptitude-habit fraternity members. Indeed, it seems reasonable to us to infer that such rewards were available to low aptitude-habit fraternity members, but for achievement in arenas other than the strictly academic one (e.g., student politics, athletics, etc.)--arenas toward which, for reasons of high aptitude-habit along the appropriate dimensions, they may have gravitated. For educators who may be interested in raising the whole level of student academic achievement, as distinct from elevating the achievement only of those students who have the highest potential, the problem of creating social rewards for high achievement on the part of students with lower potential is a critical one.

And even for the educator whom, for lack of a better term and without pejorative intent, we might call "elitist," this is a critical problem because of the admitted inadequacy of current knowledge about the measurement of aptitude. In our analysis, we follow the common practice of educators, and rely heavily upon the rank which a college student had in his high school graduating class as an indicator of what we hesitantly call aptitude-habit. But the fact that HSR itself is by no means a "pure" measure of inherent aptitude, but seems likely to be influenced by social forces similar to those which we here describe at the college level, should not be overlooked. The implication of these considerations is that some high aptitude students are likely to graduate from high school with low ranks and become erroneously identified and self-

identified as "low aptitude" students. In college, the system of peer group relationships which we have described may only perpetuate, strengthen and at last make true this identification, driving these high aptitude students even farther out from the ranks of high achieving students and resulting in a loss not only in the general level of achievement, but in the numbers of identifiable high potential students.

Predispositions Toward Integration and Prestige in
the Peer Group: Graduate Aspirations

On the basis of what we have shown so far, it seems fair to say that the student peer group exerted a definite influence upon the extent to which individual students believed the attainment of high grades was a worthy goal, and upon the extent to which they actually attained such grades. This conclusion is clearly in accord with the idea, suggested earlier in this chapter, that sources of present gratification affected student attitudes toward present behavior.

But when we inquire about the influence of the same sources of present gratification upon attitudes toward future behavior, i.e., attending graduate or professional school after college, the situation is apt to be different. One can easily imagine that a student's attitude toward getting high grades in college would have greater salience to his peers than would his graduate aspirations, merely because the former can be expressed constantly and visibly in such facts as the time he spends in the library as compared with the time he spends in the campus snack shop, for example. By contrast, a student's graduate aspirations may not be acted on directly until he reaches the junior or senior year.

Still, such aspirations can be thought about and talked about at any time, and though less salient to a student's peers, they may be highly salient

to the student himself. Graduate aspirations may therefore be subject to a subtler interpersonal influence, more as a result of the student's own receptivity than of his peers' insistence.

Turning to the data, we find that Tables 55 and 56 show that (1) wanting to go to graduate or professional school seems to have been an initial attribute of freshmen who most expected prestige among their fellow

TABLE 55.--Per cent and per cent change in graduate aspirations, by expectation of prestige among students (Freshmen)

Expectation of prestige	Total		Male		Female	
	Hi	Mod Lo	Hi	Mod Lo	Hi	Mod Lo
Sept.	48 (66)	32 (241)	61 (33)	44 (109)	36 (33)	15 (132)
Nov.	58 (66)	50 (234)	82 (33)	67 (106)	33 (33)	35 (128)
Apr.	63 (6)	51 (209)	79 (29)	71 (92)	48 (31)	35 (117)
Change						
Sept.-Nov.	+19	+26	+54	+41	-8	+24
Nov.-Apr.	+12	+2	-4	+12	+22	0
Sept.-Apr.	+29	+28	+46	+48	+19	+24

students but not of those who most strongly desired social integration; (2) the desires for prestige and social integration were positively related to the boys' September-November graduate aspirations change, but negatively related to their November-April change; (3) the girls' prestige desires were at first negatively, and afterward positively, related to their graduate aspirations change.

These findings seem to suggest that predispositions toward the peer

group may have operated on graduate aspirations in different ways between September and November and between November and April, and that there was a sex-difference in the manner of their operation which seems to be in accord with the idea of sexually differentiated sub-cultures emphasizing task and socio-emotional alternatives.

TABLE 56.--Per cent and per cent change in graduate aspirations, liked by fellow students (Freshmen)

	Total		Male		Female	
	Hi	Mod Lo	Hi	Mod Lo	Hi	Mod Lo
Desire to be Accepted						
Sept.	33 (231)	46 (90)	47 (97)	50 (50)	22 (134)	40 (40)
Nov.	50 (228)	58 (86)	73 (97)	65 (46)	33 (131)	50 (40)
Apr.	51 (205)	64 (77)	75 (84)	71 (42)	35 (121)	54 (35)
Change						
Sept.-Nov.	+25	+22	+49	+30	+14	+17
Nov. -Apr.	+2	+14	+7	+17	+3	+8
Sept.-Apr.	+27	+33	+53	+42	+17	+23

Greek-Letter Membership: Graduate Aspirations and
Their Relationship to Grades-Evaluation

When we turn to the influence of fraternity-sorority membership on graduate aspirations, we find (in Table 57) that in the November-April period, non-Greek-letter members (particularly among the boys) increased their graduate aspirations, while members decreased or did not change theirs. This is in logical accord with the differences in grades-evaluation changes in the same period which we have just reviewed. But it is an anomalous finding that

TABLE 57.--Per cent and per cent change in per cent having graduate aspirations, by Greek-letter membership (Freshmen)

Greek-letter Membership	Total		Male		Female	
	Yes	No	Yes	No	Yes	No
Sept.	32 (194)	43 (127)	46 (85)	52 (62)	21 (109)	35 (65)
Nov.	49 (195)	57 (124)	71 (86)	71 (61)	33 (109)	44 (63)
Apr.	48 (194)	68 (95)	70 (85)	80 (45)	31 (109)	58 (50)
Change						
Sept.-Nov.	+25	+25	+46	+40	+15	+14
Nov. -Apr.	-2	+26	-1	+31	-6	+25
Sept.-Apr.	+24	+44	+44	+58	+13	+35

anticipatory socialization and selection seem either not to have operated with respect to graduate aspirations, or to have tended very slightly in the opposite direction from what might have been guessed from the depressive effect of actual membership. To further complicate matters, Table 58 shows that the over-all levels of graduate aspirations among non-freshman fraternity members and non-members were identical, and that these levels among sorority members and non-members were not as far apart as were their grades-evaluations levels. Altogether, these and the previously discussed findings with respect to predispositions toward the student peer group warrant the conclusion that graduate aspirations must have been influenced in a more complex and indirect way by peer group pressures (if they were so influenced at all) than were grades-evaluations.

One of our earlier findings showed a far from perfect association be-

TABLE 58.--Per cent having graduate aspirations, by Greek-letter membership and class; Freshman-Non-Freshman "Change"

Greek-letter Membership	Total		Male		Female	
	Yes	No	Yes	No	Yes	No
Freshman (April)	48	68	70	80	31	58
Sophomore	57 (142)	67 (92)	76 (66)	86 (35)	41 (76)	56 (57)
Junior	68 (124)	75 (61)	82 (77)	87 (31)	47 (47)	63 (30)
Senior	71 (123)	66 (85)	82 (80)	72 (58)	49 (43)	52 (27)
All Non- Freshmen	65 (389)	69 (238)	80 (223)	80 (124)	45 (166)	57 (114)
Freshman - Non-Freshman "Change"						
	+33	+3	+33	0	+20	+2

tween freshman marginal changes in grades-evaluations and in graduate aspirations. In this light, the discrepancy in the relation of Greek-letter membership to changes in grades-evaluations and graduate aspirations, while not yet explained, is not inconsistent with our previous findings.

Nevertheless, it must be emphasized that in measuring these changes, we have been concerned only with aggregate, or marginal, change. The measures of change shown in Tables 34 and 57 do not give us any idea of how the relationship between grades-evaluation and graduate aspiration changed. Therefore, we may ask: granted that the marginal changes in graduate aspirations and grades-evaluations did not go hand-in-hand among fraternity-sorority members or non-members, did the association between grades-evaluation and graduate aspirations grow stronger or weaker? In Table 59 we show

TABLE 59.--Coefficients of association (Yule's Q) between grades-evaluation and graduate aspiration, by Greek-letter membership (Freshmen and Non-Freshmen)

Greek-letter Membership	Males		Females	
	Yes	No	Yes	No
Freshmen				
Sept.	.28	.38	-.09	.24
Nov.	.25	.54	.10	.14
Apr.	.56	.83	.09	.18
All Non-Freshmen	.43	.67	.61	.71

Yule's Q's as measures of association between grades-evaluation and graduate aspirations. It can be seen that among the freshman Greek- and non-Greek boys (but not the girls) the association between these two attitudes became markedly stronger over time. The period of greatest increase in strength of the relationship came after pledging, for those who joined fraternities, but took a smoother and steeper curve upward among those who did not. When we compare the freshman Q's with those of non-freshmen, it appears that although the aggregate freshman changes in grades-evaluations and in graduate aspirations observed in Tables 34 and 57 moved in discrepant directions with respect to non-freshman aggregate levels, the joint effect of these changes was to bring the relationship between the two attitudes among the freshman boys into better accord with the same relationship among comparable non-freshman boys. It would therefore appear that, among the boys, the opposing trends in grades-evaluation and graduate aspirations reflected growing, rather than lessening, sophistication with respect to the relationship between college attitudes and graduate aspirations, and that the degree of this sophistica-

tion was partly dependent on whether or not they belonged to fraternities. The gross disparities shown in this table between freshman and non-freshman girls, both inside and outside the sororities, seem likely to be a further consequence of selective drop-outs and the relatively special dating status and behavior of freshman girls in April.

In general, then, it seems clear from the survey-type data that the established student culture exercised considerable influence over the academic attitudes of incoming freshmen. Not only were freshman grades-evaluations profoundly affected, but we have shown that graduate aspirations were probably also influenced, though by some more subtle or devious means than we have uncovered so far.

Faculty Members

Predispositions Toward Faculty Members: Grades-Evaluation

The second type of person in the student's social environment whose influences we shall examine is the teaching staff. In Table 60 we find the influence of a predisposition toward faculty members upon grades-evaluation and change in it. In these data we encounter the perhaps surprising fact that the more an incoming freshman expected to impress faculty members, the more his orientation to getting high grades declined. This finding becomes even more puzzling when we observe that expecting to impress faculty members and having a high grades-evaluation were positively related in September, but negatively related at later dates. Does this mean that incoming freshmen anticipated that faculty members would be impressed by high grades-evaluations but later found that this was not actually the case?

We asked faculty members to indicate their preferences among students with different value-orientations, and the results (Table 61) show that faculty

TABLE 60.--Per cent, and per cent change in high grades-evaluation by expectation of impressing faculty members (Freshmen)

Expect to Impress Faculty	Total		Male		Female	
	Hi	Mod Lo	Hi	Mod Lo	Hi	Mod Lo
Sept. High Grades	91 (92)	68 (225)	93 (43)	72 (102)	90 (49)	65 (123)
Nov. High A	35 (80)	43 (189)	41 (39)	52 (85)	29 (41)	36 (104)
Apr. High A	26 (73)	31 (171)	33 (33)	36 (72)	20 (40)	27 (99)
	Change					
Sept.-Nov.	-62	-37	-56	-28	-68	-45
Nov. -Apr.	-26	-28	-20	-31	-31	-25
Sept.-Apr.	-71	-54	-64	-50	-78	-58

members gave considerably more emphasis to students getting high grades than non-freshman students themselves did, although there was a notable sex-difference which helps to account for the fact that freshman girls who expected to impress faculty members lost their grades-evaluations most rapidly of all. And, after all, it could hardly have been the case that faculty members valued high grades motivation less than students, since faculty members have already experienced the importance of high grades for admission to graduate school and for placement in high occupations, and further, being academicians, they should be expected to give weight to their own academic judgments of students.

Thus, if we assume that faculty as well as student respondents gave reliable answers to our questionnaires, and that students did not grossly misperceive the attitudes of faculty members, then the disillusionment hypothesis cannot hold in its original and simple form.

TABLE 61.---Per cent high A, X, D and F and deviations of students from faculty preferences (Faculty Members and Non-Freshmen)

Students	Faculty Members				Non-Freshman Students				
	Male and Female (Mean Per cent)	Male	Female	All Students	Deviation from Faculty	Male	Deviation from Faculty	Male	Deviation from Faculty
Value									
A	53	62 (58)	43 (58)	35 (533)	-18	42 (293)	-20	27 (240)	-16
X	19	20 (54)	18 (55)	32 (526)	+13	36 (291)	+16	27 (235)	+9
D	42	30 (56)	45 (55)	48 (508)	+6	41 (283)	+11	56 (225)	+11
F	88	88 (57)	89 (55)	84 (519)	-4	80 (288)	-8	89 (231)	0

The thread which will lead to a more reasonable understanding of the students' data, however, begins with the fact that expecting to impress faculty members and expecting to impress fellow students were very highly correlated. Moreover, as Table 62 also shows, expecting to impress faculty members was associated with what appears to have been a generally more utopian orientation to college life. Those who expected to impress faculty members most not only wanted most to get high grades, but had higher expectations of getting such grades, and at the same time expected other students to look up to them. These same students also wanted most to be accepted and liked by their fellow students, to have a good time socially while in college, to fall in love and get married, to please their parents and to go to graduate or professional school. Thus it may be said that two kinds of freshmen entered this college in September, 1959; one seems to have been more idealistic in expectations and desires, and to have imagined college as a utopia where alternatives were not mutually exclusive. The other type of entering freshman seems to have been more realistic, more wary of utopian harmonies.

In the actual living of a college career, however, it is clear that freshman utopianism was shattered by the real conflict between the attitudinal requisites of prestige among faculty members and integration among students. Freshmen must have grown aware that the attitude among faculty members toward students getting high grades confronted a quite different attitude among the students themselves. Thus, from a pre-vision of college as an harmonious society, the more idealistic freshmen quickly found themselves subjected to unexpected cross-pressures.

The significant thing, therefore, which the sharp drop in grades-evaluation among freshmen who most expected to impress faculty members (Table 60) is telling us is not that freshmen grew disillusioned with the

TABLE 62.--Relationships of expecting to impress faculty members to other September attributes (Freshmen)

Expectation of Impressing Faculty	Total		Male		Female	
	Hi	Mod Lo	Hi	Mod Lo	Hi	Mod Lo
High Expectation of Prestige Among Students	59 (90)	6 (217)	60 (43)	7 (99)	57 (47)	5 (118)
Expecting to be in Upper 25 per cent of Class	56 (92)	49 (219)	63 (43)	53 (100)	51 (49)	46 (119)
High Expectation of Having a Good Time	49 (92)	31 (225)	30 (43)	24 (102)	65 (49)	36 (123)
High Desire to be Accepted	83 (92)	68 (225)	74 (43)	63 (102)	90 (49)	72 (123)
High Desire to Please Parents	73 (92)	52 (225)	65 (43)	42 (102)	80 (49)	60 (123)
High and Moderate Desire for Love and Marriage	58 (92)	42 (225)	32 (43)	24 (102)	80 (49)	58 (123)
Having Graduate Aspirations	39 (92)	35 (225)	56 (43)	45 (102)	24 (49)	26 (123)

importance which faculty members attached to students getting high grades, but that they were disillusioned with their anticipations of value-homogeneity in college and that in the balance between faculty and student cross-pressures, the student pressures were weightiest.

Admiration of Faculty Members: Grades-Evaluation and Graduate Aspirations

But the influence of actual contact with faculty members was by no means weak. In April, we asked our respondents to indicate the number of

faculty members whom they admired or would like to be like later in life.¹ In Table 63 we show the influence of this variable upon grades-evaluation, and in Table 64 we show the same variable's influence upon graduate aspirations. Since the number of admired faculty members depends upon actual experience with faculty members and was not requested until our April questionnaire, the most relevant dependent variable observations are those taken in November and in April. We also include observations on the dependent variable which were taken in September, however, for the sake of indicating the initial inclinations of students who later came to admire given numbers of faculty members.

¹Since we do not know which specific faculty members a given student admired, we shall have to rely on the argument that because a larger proportion of faculty members than of students had high grades-evaluations, the probability that a given admired faculty member would have a high grades-evaluation was greater than the probability that a given student-in-contact would have a high grades-evaluation. Consequently, the more faculty members a student admired, the stronger this influence toward high grades-evaluation would be. But it is entirely conceivable that such a model, which assumes randomly distributed admiration of faculty members, does not fit the actual facts. For example, it would be in accord with the principle of homophily (see Paul F. Lazarsfeld and Robert K. Merton, "Friendship as Social Process," Freedom and Control in Modern Society, eds. Morroe Berger, Theodore Abel and Charles H. Page (New York: Van Nostrand, 1954) that a student who gave little emphasis to getting high grades would seek out and admire many faculty members who gave equally little emphasis to students getting high grades. On the other hand, and in defense of the assumptions we adopt here, it may be argued that students are likely to have a strong preconception of all faculty members as valuing a high grades-evaluation among students. Such a preconception would result from the fact that a prime, formally defined and universally performed role of college instructors is to assign grades to student performance. Every college student knows and observes this fact, even though not every student knows how every faculty member feels about it. Therefore, in the absence of knowledge about faculty members' subjective attitudes, students probably conclude from objective behavior that all faculty members want students to get high grades. And although experience with faculty members accumulated over the four years of college is likely to bring more accurate student knowledge of faculty attitudes and more homophilous allocation of admiration, the fact that even the least grades-oriented faculty members do assign grades, coupled with the larger proportion of faculty members than of students whose attitudes favored high grades-evaluation, would uphold the reasonableness of our assumptions for the student population as a whole.

TABLE 63.--Per cent and per cent change in high grades--evaluation, by number of faculty admired (Freshmen)

Number of Faculty ^a	Total		Male		Female	
	Hi	Lo	Hi	Lo	Hi	Lo
Sept. High Grades	72 (176)	81 (108)	71 (70)	84 (57)	72 (106)	76 (51)
Nov. A	39 (158)	46 (90)	43 (65)	55 (47)	36 (93)	35 (43)
Apr. A	34 (155)	25 (91)	41 (59)	33 (46)	29 (96)	18 (45)
Change						
Sept.-Nov.	-46	-43	-39	-34	-50	-54
Nov. -Apr.	-13	-46	-5	-40	-19	-49
Sept.-Apr.	-53	-69	-42	-61	-60	-76

^a"High" defined as more than two.

In both of these tables, it is clear that admiration of faculty members influenced changes in grades-evaluation and in graduate aspirations in precisely the ways we would expect. If, for example, freshmen found more than two faculty members whom they admired, they were much less likely to decrease their grades-evaluation between November and April than were others who found two or fewer admirable faculty members. Similarly, freshmen who admired more than two faculty members were far more likely to increase their desire to attend graduate or professional school than were freshmen who did not find that many admirable faculty members. These later differences are all the more striking when we note that the differences in September-November changes were very small, by comparison. It should be noted, however, that the influence of number of admired faculty members was weaker among the girls

than among the boys. Some November-April effect is found upon the girls' grades-evaluation changes, but none upon changes in their graduate aspirations.

TABLE 64.--Per cent and per cent change having graduate aspirations, by number of faculty admired (Freshmen)

Number of Faculty ^a	Total		Male		Female	
	Hi	Lo	Hi	Lo	Hi	Lo
Sept.	38 (176)	36 (108)	50 (70)	47 (57)	30 (106)	24 (51)
Nov.	49 (176)	56 (107)	69 (71)	73 (56)	35 (105)	37 (51)
Apr.	53 (176)	57 (107)	76 (70)	71 (56)	38 (106)	41 (51)
Change						
Sept.-Nov.	+18	+31	+38	+49	+7	+17
Nov. -Apr.	+8	+2	+23	-3	+5	+6
Sept.-Apr.	+24	+33	+52	+45	+11	+22

^a"High" defined as more than two.

Tables 65 and 66 indicate that the non-freshman data are generally consistent with freshman data.

Now the question arises: Which came first; did freshmen come to admire faculty members because they (the freshmen) emphasized high grades, or did admiration of faculty members cause emphasis on high grades? Some answer to this question may be seen in the fact that those students who

TABLE 65.--Per cent high A, by number of faculty admired (Non-Freshmen)

Number of Faculty Admired ^a	Total		Males		Females	
	Hi	Lo	Hi	Lo	Hi	Lo
Sophomore	40 (79)	34 (95)	61 (28)	49 (49)	29 (51)	17 (46)
Junior	38 (68)	32 (56)	44 (34)	39 (36)	32 (34)	20 (20)
Senior	26 (66)	28 (78)	27 (37)	29 (58)	24 (29)	25 (20)
Total Non-Freshmen	35 (213)	31 (229)	42 (99)	38 (143)	29 (114)	20 (86)

^a"High" defined as more than four.

TABLE 66.--Per cent having graduate aspirations, by number of faculty admired (Non-Freshmen)

Number of Faculty Admired ^a	Total		Males		Females	
	Hi	Lo	Hi	Lo	Hi	Lo
Sophomore	65 (92)	57 (107)	86 (35)	73 (55)	53 (57)	40 (52)
Junior	72 (88)	70 (69)	91 (44)	77 (47)	52 (44)	55 (22)
Senior	70 (76)	71 (92)	93 (42)	75 (67)	41 (34)	60 (25)
All Non-Freshmen	69 (256)	65 (268)	90 (121)	75 (169)	50 (135)	48 (99)

^a"High" defined as more than four.

later came to admire more faculty members began their college careers with lower grades-evaluations than did students who admired fewer faculty members, but by April, the former students had the higher grades-evaluations

(Table 63). Furthermore, it can be seen in the same table that the September-November grades-evaluation change was not differentiated by the number of faculty members freshmen later said they admired. In contrast with this early similarity, the November-April changes were dramatically different between the two categories of students. Thus, this evidence underscores the causal, rather than the selection, interpretation of faculty influence.

But there is another way in which we can weigh these two interpretations, and that is by utilizing initial expectations of receiving admiration from faculty members (i.e., expecting to impress them) and actual number of faculty members later admired as "before-and-after" data. First, however, it is necessary to know that the freshmen who initially most expected to receive admiration from faculty members were slightly more averse to giving admiration to them at a later date (Table 67). Thus, in Table 68, it can be seen that only the boys who gave admiration somewhat against their wills succeeded in moving against the downward tide between November and April,

TABLE 67.--Per cent admiring more than two faculty members, by expectation of impressing faculty members (Freshmen)

Expectation of Impressing Faculty	Total		Males		Females	
	Hi	Mod Lo	Hi	Mod Lo	Hi	Mod Lo
Per cent Admiring > 2 Faculty	57 (82)	64 (199)	53 (36)	56 (89)	61 (46)	71 (110)

and raised their grades-evaluations slightly. Boys who were less resistant to giving admiration but did not manage to find many admirable faculty members show the greatest grades-evaluation decline during this period, in spite of the fact that they had manifested the mildest decline over the

initial September-November period. All-in-all, then, the evidence seems to warrant a causal interpretation of the faculty influence data.

TABLE 68.--Per cent and per cent change in high grades-evaluation, by expectation of impressing faculty and number of faculty admired (Freshmen)

Expectation of Impressing Faculty	Total				Males				Females			
	Hi		Mod Lo		Hi		Mod Lo		Hi		Mod Lo	
Number of Faculty Admired ^a	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Sept. Grades	85 (46)	97 (35)	67 (128)	73 (70)	84 (19)	100 (17)	68 (50)	77 (39)	85 (27)	94 (18)	67 (78)	68 (31)
Nov. A.	37 (43)	31 (29)	38 (110)	52 (61)	37 (19)	40 (15)	44 (43)	62 (32)	38 (24)	^a 34 (14)	34 (67)	41 (29)
Apr. A	28 (39)	23 (31)	34 (110)	25 (57)	40 (15)	27 (15)	38 (40)	33 (30)	21 (24)	19 (16)	31 (70)	15 (27)
Change												
Sept.-Nov.	-56	-68	-43	-29	-56	-60	-35	-19	-55		-49	-40
Nov. -Apr.	-24	-26	-10	-52	+5	-32	-14	-47	-45		-9	-63
Sept.-Apr.	-67	-76	-49	-66	-52	-73	-44	-57	-75	-80	-54	-78

^a"High" defined as more than two.

It is an interesting side observation that the number of faculty members admired by a freshman was apparently little related to the first-semester grades which the student received (Table 69). This indicates that admiration for faculty members probably had more complex determinants than that simple exchange of admiration on the part of the student for high grades received from faculty members which is politely called "apple-polishing," and also rules out low grades as an intervening variable accounting for faculty influence.

TABLE 69.--Per cent admiring more than two faculty members, by first semester grade-point average rank (Freshmen)

First Semester GPA Rank ^a	Total		Males		Females	
	Hi	Lo	Hi	Lo	Hi	Lo
Per cent Admiring > 2 Faculty	64 (136)	61 (148)	55 (65)	58 (64)	72 (71)	63 (84)

^a"High" defined as above median within sex.

Parents

Parents: Grades-Evaluation and Graduate Aspirations

Last among the types of persons likely to influence students, and on which we have relevant data, are the students' parents. Table 70 shows that students' predispositions toward their parents did not sharply differentiate

TABLE 70.--Per cent and per cent change in high grades-evaluations, by desire to please parents (Freshmen)

Desire to please parents	Total		Males		Females	
	Hi	Mod Lo	Hi	Mod Lo	Hi	Mod Lo
Sept. High Grades	76 (186)	74 (136)	79 (71)	78 (76)	74 (115)	70 (60)
Nov. A.	41 (154)	42 (118)	52 (59)	45 (66)	34 (95)	36 (52)
Apr. A	29 (127)	32 (101)	36 (55)	36 (52)	24 (92)	26 (49)
Change						
Sept.-Nov.	-46	-43	-34	-42	-54	-49
Nov. -Apr.	-29	-24	-31	-20	-29	-28
Sept.-Apr.	-62	-57	-54	-54	-68	-63

between their grades-evaluations at any time, or between changes in their grades-evaluations. This generalization may apply more to the boys than to the girls, where we find a weaker orientation toward pleasing her parents tended to brake a girl's declining grades-evaluation slightly. This finding seems related to the fact, shown in Table 71, that attitude toward pleasing one's parents differentiated the desires of the girls to go to graduate school, at each observation date and over time. It appears that the more independent the girls were of their parents, the more they were interested in attending graduate school and the less their grades-evaluations declined.

TABLE 71.--Per cent and per cent change in graduate aspirations by desire to please parents (Freshmen)

Desire to Please Parents	Total		Males		Females	
	Hi	Mod Lo	Hi	Mod Lo	Hi	Mod Lo
Sept.	32 (185)	42 (136)	51 (71)	46 (76)	21 (114)	37 (60)
Nov.	46 (181)	60 (133)	75 (69)	66 (74)	29 (112)	52 (59)
Apr.	47 (165)	65 (117)	71 (63)	76 (63)	32 (102)	52 (54)
Change						
Sept.-Nov.	+21	+31	+49	+37	+10	+24
Nov. -Apr.	+2	+12	-5	+29	+4	0
Sept.-Apr.	+22	+40	+41	+56	+14	+24

One might think of this as reflecting the long-term increase in the national proportion who achieve graduate degrees and enter professional occupations who are women and therefore explain it on the basis of a more rapid generational rise in the education aspirations of women than of men. It fol-

lows from this that parents would tend to hold their daughters back from serious undergraduate as well as graduate work, and independence from parents would be more of a requirement for graduate aspirations among women than among men. Consistent with this idea, Table 71 shows that attitude toward parents influenced the boys' desires to go to graduate school to a much weaker degree. Nevertheless, over the entire time period covered by our observations, independence from parents had the same positive effect on change in graduate aspirations among the boys as among the girls.

But the most important thing to notice is the over-all contrast between the two tables: Attitudes toward pleasing one's parents seem to have influenced the September-April change in desire to go to graduate or professional school more than it affected the change in desire to get high grades in college.

Now it would appear that in one sense, parents hold a peculiar position among the main kinds of people with whom students have contact. Although parents are undoubtedly a source of some present gratification, they are also likely to be an important source of future gratification. In fact, the amount of day-to-day gratification to be derived from parents is almost certainly small for students who live on campus and have infrequent contact with their parents, as compared with the frequency of contact with fellow students or faculty members. On the other hand, the amount of anticipated future gratification may be large, especially for those students who want to do graduate work (and subsequently enter professional occupations), and who may expect or hope that their parents will support them during this final phase of formal education.

The special present-future gratification role of parents leads us to suggest that attitude toward parents is apt to be related to what we have posed as the major source of future gratification, namely, occupational and

social status ambition. And not merely because of the dependence of college students, including recent graduates, upon their parents until they get their first jobs or husbands, but because of the way in which the parent's occupational status and related attitudes influence the son's or daughter's occupational and matrimonial ambitions.¹

But in a second sense, parents are not altogether unique among the types of persons with whom college students interact, because they are one of two such categories of adults. The other category, faculty members, also exercised influence over graduate aspirations. Thus, along this dimension of adult status, we have shown that the pre-adult group did not seem to have as direct an influence on such aspirations as did both adult categories. The student peer group, on the other hand, seems to have had great influence over grades-evaluation and in most cases its influence was stronger in this regard than was either adult influence.

At the beginning of this chapter we suggested that the chief present gratifications for college students seem most likely to originate in the social interaction in which they are currently engaged. Since then, we have shown that the three most important categories of persons with whom our respondents interacted had different kinds of influence over attitudes toward present academic behavior and over attitudes toward future academic behavior. If we think of the student peer group as exemplifying a source of gratification which is most exclusively present; of faculty members as exemplifying a combination of present and future gratifications; and of parents as exemplifying future gratifications with minimal connections to present gratifications, then these differential effects are reducible to the statement that sources of present gratification exerted their main influence over attitudes

¹See Joseph A. Kahl, The American Class Structure (New York: Rinehart, 1957).

toward present behavior, while sources of future gratification were stronger in their influence over attitudes toward future behavior. The mixed source, faculty members, seem to have influenced both attitudes strongly and equally.

It would seem that faculty members were able to play such a dual role because they were (1) adults, and thereby associated with the future statuses of their students, and (2) objects of frequent and continuing interaction within the college community and thereby associated with the students' present statuses and gratifications. In this sense, faculty members take on the critical quality of mediators between the present and future orientation of students.

Thus it should be emphasized that we have been dealing so far in this chapter with a special case of the differential effects of alternative sources of social support. The alternative sources in the case of college students relate, not only to attitudes toward present behavior, but toward future behavior as well. Therefore, our data and reasoning lead to the conclusion that a college social structure which provides differential access to sources which exemplify one or the other, or a combination, of present-future orientations must be expected to have the indicated influences upon student attitudes.

However, our hypothesis is that graduate aspirations, as distinct from grades-evaluations, were affected not only by interpersonal influences, but by intrapersonal influences stemming from the anticipation of future gratifications. What we have shown so far is that in the college social structure faculty members exerted influence which was parallel to what we expect to be the influence of occupational aspirations, probably because they tended most to personify the goal of these aspirations.

Let us now turn to an estimation of occupational influence, directly.

Occupational Origins and Ambitions

Perhaps the first occupational variable to investigate is father's occupation, not so much because it is directly related to a student's own occupational ambition, but because it can tell us whether "class consciousness" played an appreciable role in changing grades-evaluations and graduate aspirations. Given our hypothesis that the student society demands and gets conformity from student newcomers (at least with respect to grades-evaluation), it is entirely conceivable that student sub-cultures, organized along lines of the socio-economic origins of students', should exist and maintain different norms¹ to which the freshmen conformed. A comparison of grades-evaluation and graduate aspiration change indexes between socio-economic origin categories should educate our guess on this question.

Table 72 shows that father's occupation,² although negatively related to grades-evaluation at each observation date, was not at all related to change in grades-evaluation. Therefore, it appears that such student pressure as may have been exerted upon freshmen to modify their grades-evaluation was not exerted along lines of socio-economic origin, and the differential predispositions toward getting high grades which were related to these origins remained undisturbed during the freshmen's first seven months of college. In Table 73, however, we can find some evidence that origin was

¹See August B. Hollingshead, Elmtown's Youth (New York: John Wiley, 1949), and Coleman, The Adolescent Society.

²The index of occupational status used here is that presented by Otis Dudley Duncan, "A Socioeconomic Index for All Occupations," Occupations and Social Status, ed. Albert J. Reiss, Jr. (Glencoe: Free Press, 1961). This index was arrived at by substituting age-adjusted census data on the mean income (X_2) and education (X_3) of each census occupation in the following regression equation: $X_1 = 0.59X_2 + 0.55X_3 - 6.0$.

TABLE 72.--Per cent and per cent change in high grades-evaluation, by father's occupation index (Freshmen)

Father's Occupation Index	Total		Males		Females	
	Hi	Lo	Hi	Lo	Hi	Lo
Sept. High Grades	67 (177)	85 (140)	71 (75)	86 (69)	64 (102)	85 (71)
Nov. A	38 (158)	47 (117)	46 (69)	53 (58)	31 (89)	41 (59)
Apr. A	28 (145)	34 (109)	35 (60)	40 (50)	24 (85)	29 (59)
Change						
Sept.-Nov.	-43	-45	-35	-38	-52	-52
Nov. -Apr.	-26	-28	-24	-24	-23	-29
Sept.-Apr.	-58	-60	-51	-53	-62	-66

related to change in graduate aspirations, among the boys. No clear cross-sectional relation of origin to graduate aspirations emerges, however.

These latter two findings seem to be closely related to the very definite effect of the student's anticipated occupational mobility from his father's competition on the increase in desire to attend graduate or professional school (Table 74). This is particularly true among the boys, for graduate school obviously did not have the same mobility utility for girls that it had for boys. Table 74 also shows that the effect, among the boys, was even stronger on expectations of attending graduate school, and although anticipated mobility also affected the grades-evaluation change (Table 75), this influence was considerably weaker than that on graduate aspirations and expectations, and therefore probably more indirect. The influence of occupational mobility, in turn, was partly due to the effect of the student's

own choice of occupation, as Table 76 shows. It should not be overlooked, however, that the positive effect of own occupation which seems to have been present in the September-November change suffered a reversal, among the boys at least, between November and April.

TABLE 73.--Per cent and per cent change in graduate aspirations, by father's occupation index (Freshmen)

Father's Occupation Index	Total		Males		Females	
	Hi	Lo	Hi	Lo	Hi	Lo
Sept.	34 (176)	40 (140)	43 (75)	54 (69)	27 (101)	27 (71)
Nov.	52 (176)	52 (141)	69 (74)	73 (71)	40 (102)	31 (70)
Apr.	52 (162)	58 (127)	75 (68)	73 (62)	35 (94)	45 (65)
Change						
Sept.-Nov.	+27	+13	+46	+41	+18	+5
Nov. -Apr.	0	+12	+19	0	-12	+20
Sept.-Apr.	+27	+23	+56	+41	+11	+25

The fact that occupational mobility appears to have carried more weight than own occupational choice in the graduate aspirations change is an interesting, but partly artifactual, finding. Two pieces of information seem to suggest this explanation. As can be seen in Table 77, the students at this college generally aspired to lower occupations than their fathers', and their fathers' occupations tended toward the high side of the index scale (compare with Table 78). Together, these findings suggest that many upwardly mobile students who are categorized in this study as choosing

TABLE 74.--Per cent and per cent change in graduate aspirations and expectations, by desired mobility from father's occupation (Freshmen)

Desired Occupational Mobility	Total		Males		Females	
	Up	Same Down	Up	Same Down	Up	Same Down
Graduate Aspirations						
Sept.	50 (84)	40 (82)	67 (46)	52 (29)	29 (38)	34 (53)
Nov.	65 (85)	55 (83)	87 (47)	69 (29)	37 (38)	48 (54)
Apr.	68 (74)	53 (75)	86 (42)	67 (27)	44 (32)	46 (48)
Change						
Sept.-Nov.	+30	+25	+61	+35	+11	+21
Nov. -Apr.	+8	-4	-1	-3	+11	-4
Sept.-Apr.	+36	+22	+58	+31	+21	+18
Graduate Expectations						
Sept.	47 (73)	32 (65)	64 (42)	50 (24)	23 (31)	22 (41)
Nov.	48 (84)	35 (82)	72 (47)	50 (28)	16 (37)	28 (54)
Apr.	59 (73)	37 (73)	81 (42)	54 (26)	29 (31)	28 (47)
Change						
Sept.-Nov.	+2	+4	+22	0	-9	+8
Nov. -Apr.	+21	+3	+32	+8	+15	0
Sept.-Apr.	+23	+7	+47	+8	+8	+8

TABLE 75.--Per cent and per cent change in high grades-evaluation, by desired occupational mobility from father's occupation (Freshmen)

Desired Occupational Mobility	Total		Males		Females	
	Up	Same Down	Up	Same Down	Up	Same Down
Sept. High Grades	83 (84)	70 (83)	87 (46)	79 (29)	79 (38)	65 (54)
Nov. A	53 (75)	38 (74)	60 (43)	44 (27)	44 (32)	34 (47)
Apr. A	41 (71)	28 (65)	46 (41)	27 (22)	33 (30)	28 (43)
Change						
Sept.-Nov.	-36	-46	-31	-44	-44	-48
Nov.-Apr.	-23	-26	-23	-39	-25	-18
Sept.-Apr.	-51	-60	-47	-66	-58	-57

TABLE 76.--Per cent and per cent change in graduate aspirations, by own occupational choice (Freshmen)

Own Occupational Index ^a	Males			Females		
	Hi	Lo	Occupation Not Chosen	Hi	Lo	Occupation Not Chosen
Sept.	70 (54)	38 (21)	35 (69)	31 (65)	35 (26)	20 (80)
Nov.	87 (55)	62 (21)	61 (71)	38 (65)	56 (27)	29 (80)
Apr.	82 (49)	70 (20)	67 (57)	38 (56)	62 (24)	32 (76)
Change						
Sept.-Nov.	+57	+39	+40	+10	+32	+11
Nov.-Apr.	-6	+21	+15	0	+14	+4
Sept.-Apr.	+40	+52	+49	+10	+42	+15

^a"High" defined as greater than 72 for males; greater than 68 for females.

TABLE 77.--Mean indexes of father's occupation and of own occupational choice, by class

	Father's Occupation		Own Occupation	
	Males	Females	Males	Females
Freshmen	65.8 (130)	71.2 (157)	49.8 (130)	46.3 (157)
Sophomore	65.2 (88)	68.9 (124)	59.7 (88)	55.0 (124)
Junior	63.1 (98)	68.1 (71)	51.9 (98)	58.9 (71)
Senior	63.9 (127)	66.8 (64)	57.0 (127)	63.7 (64)
Total	64.5 (443)	69.3 (416)	54.3 (443)	53.7 (416)

TABLE 78.--Frequency distribution of socioeconomic index for the male experienced civilian labor force, 1950^a

Socioeconomic Index	Number (Millions)	Per cent
Total	42.1	100.0
0-9	6.3	15.0
10-19	14.2	33.9
20-29	4.5	10.8
30-39	4.8	11.4
40-49	3.9	9.3
50-59	2.4	5.6
60-69	2.8	6.7
70-79	1.6	3.8
80-89	1.1	2.5
90-99	0.4	1.0

^aFrom Albert J. Reiss, Jr., Occupations and Social Status, p. 147, table VII-3.

relatively "low" occupations for themselves would find graduate degrees advantageous in order to attain occupations higher than their fathers', while some downwardly mobile students who are categorized as choosing "high" occupations might not find graduate work especially functional, since they might expect to take over Dad's business or otherwise rely on ascriptive qualities of their SES.

Before moving into the next step in our analysis, let us recall that so far we have identified two types of influences upon students' attitudes toward present and future academic behavior. The first is interpersonal, and the Greek-letter organizations together with faculty members are outstanding among influences of this type. The second is intra-personal, and the student's desired mobility from his father's occupation is foremost in this category.

The idea that the peer and faculty groups stand in different, though overlapping, relations to the students' future gratification and the notion of alternative routes to its attainment (insofar as it is represented by occupations) suggests that an investigation of relations between the interpersonal sources and the intra-personal source should be instructive.

Greek-letter Societies and Occupational Mobility

Perhaps the first thing to note is the fact that upwardly mobile students whose fathers had low occupations tended to belong to Greek-letter organizations more often than did upwardly mobile students whose fathers had high occupations (Table 79). This seems to have been true particularly in the case of freshmen. We might infer from this that Greek-letter membership had higher mobility utility for low SES freshmen than for high SES freshmen. Perhaps the former recognized and pursued the value of knowing powerful people and belonging to prestigious organizations for the achievement of high

TABLE 79.---Per cent belonging to Greek-letter organizations, by father's occupation and desired occupational mobility from father's occupation (Freshmen and Non-Freshmen)

Father's Occupation Index	Total											
	Male						Female					
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Occupational Mobility	Up	Same Down	Up	Same Down	Up	Same Down	Up	Same Down	Up	Same Down	Up	Same Down
Freshmen	42 (19)	60 (75)	52 (66)	8 (8)	33 (15)	65 (26)	47 (32)	3 (3)	a (4)	57 (49)	56 (34)	a (5)
All Non-Freshmen	59 (54)	60 (131)	65 (200)	58 (31)	62 (42)	66 (44)	63 (110)	a (14)	a (12)	56 (87)	68 (90)	47 (17)
All Students	55 (73)	60 (206)	63 (266)	59 (39)	54 (57)	66 (70)	59 (142)	76 (17)	56 (16)	57 (136)	64 (124)	45 (22)

^aFrequency too small for percentaging.

occupational status, while the latter, having more of these ties built into their family backgrounds, "needed" and pursued them less. This conclusion serves to relate Greek-letter membership not only to socio-emotional needs of freshmen for status in their current college society, but directly to the statuses which these students anticipated that they would achieve after the completion of their formal educations. More specifically, it would seem that the freshmen who were most "on the make" with respect to their future statuses in adult society found that membership in a Greek-letter organization provided them with an avenue toward upward occupational mobility which was either an alternative or a supplement to task achievement.

In spite of a woefully small case-base, we can see in Table 80 that fraternity membership tended to raise the graduate aspirations of upwardly mobile freshman boys while non-membership may have had the opposite effect. When we compare the same data on non-freshmen with the freshmen "April" row (also in Table 80), we find that the difference between the non-freshman and freshman percentages wanting to go to graduate school were greater if an upwardly mobile boy belonged to a fraternity than if he did not. This suggests that the effect of fraternity membership on graduate aspirations was not limited to the short-run among freshmen, but extended over a longer period of time.¹

¹In the tables which pertain to longer-run change, note (1) that change is measured between freshmen and all non-freshmen, and (2) that the freshman graduate aspirations used in this comparison were measured in April, rather than in November as were the non-freshman measures. These two qualifications mean that we have temporarily ignored non-freshman inter-class differences and that we have not controlled for seasonal changes which may have resulted in some lack of comparability between the freshman (April) and non-freshman (November) measures. We have chosen to bear the first qualification because (a) our basic hypothesis of freshman socialization does not assume any necessary distinction in this regard among non-freshman classes, (b) for the sake of simplicity, and (c) in order to preserve a respectable case-base. The second qualification, i.e., the use of April measures on the freshmen, arises from the logical time restrictions, discussed above, placed upon the influence of Greek-letter membership and admiration of faculty members.

TABLE 80.--Per cent and per cent change in graduate aspirations, by Greek-letter membership and desired occupational mobility from father's occupation (Freshmen and Non-Freshmen)

Occupational Mobility	Total				Males				Females			
	Up		Same Down		Up		Same Down		Up		Same Down	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Greek-letter Membership												
Freshmen:												
Sept.	42 (41)	58 (43)	40 (50)	41 (32)	58 (19)	74 (27)	60 (20)	^a (9)	27 (22)	31 (16)	27 (30)	44 (23)
Nov.	57 (42)	72 (43)	50 (50)	64 (33)	80 (20)	93 (27)	75 (20)	^a (9)	36 (22)	38 (16)	33 (30)	67 (24)
Apr.	63 (41)	73 (33)	46 (50)	68 (25)	85 (20)	86 (22)	65 (20)	^a (7)	43 (21)	^a (11)	33 (30)	67 (18)
Freshman Change												
Sept.-Nov.	+26	+33	+17	+39	+52	+73	+38		+12	+10	+8	+41
Nov. -Apr.	+14	+4	-8	+11	+25	-8	-13		+11		0	0
Sept.-Apr.	+36	+36	+10	+46	+64	+46	+12		+22		+8	+41
Freshmen (April)	63 (41)	73 (33)	46 (50)	68 (25)	85 (20)	86 (22)	65 (20)	^a (7)	43 (21)	^a (11)	33 (30)	67 (18)
All Non- Freshmen	75 (162)	81 (92)	59 (96)	58 (67)	92 (95)	89 (57)	79 (39)	75 (20)	52 (67)	71 (35)	46 (57)	51 (47)
Freshman-Non-Freshman "Change"												
	+32	+30	+24	-15	+47	+21	+40		+16		+19	-24

^aFrequency too small for percentaging.

Now it was also true that a larger percentage of non-freshman than of freshman Greek-letter members were upwardly mobile, but a smaller percentage of non-freshman than of freshman independents were upwardly mobile, as can be seen in Table 81. These data immediately suggest that Greek-letter membership may have induced an increase in mobility aspirations, over the longer-

TABLE 81.--Per cent and per cent "change" desiring upward occupational mobility from father's occupation, by Greek-letter membership, by class

Greek-letter Membership	Total		Males		Females	
	Yes	No	Yes	No	Yes	No
Freshmen	46 (92)	57 (76)	50 (40)	75 (36)	42 (52)	40 (40)
Sophomore	61 (98)	57 (61)	72 (43)	81 (21)	53 (55)	45 (40)
Junior	67 (70)	58 (41)	81 (36)	79 (19)	75 (24)	41 (22)
Senior	61 (90)	58 (57)	64 (55)	68 (37)	57 (35)	40 (20)
All Non-Freshmen	63 (258)	58 (159)	71 (134)	74 (77)	59 (114)	43 (82)
Freshman-Non-Freshman "Change"						
	+32	+2	+42	-1	+29	+5

run. But again we have to face the problem of inter-class comparability, and we can attempt to do so in the same way that we handled a similar problem in Chapter II; namely, by controlling on a relevant variable which is known to have been prior to college experience. Such a variable is father's occupation, and in Table 82 we show that among the boys there seems to have been a very definite tendency in the expected direction which sharply distinguished fraternity members from non-members. The girls' data are more complicated and may best be dealt with in Chapter VI.

The only way in which such differential effects on occupational mobility could have occurred is via effects upon the student's own choice of occupation and this is borne out in Table 83, but with the important qualification that the occupational ambitions of boys from lower SES homes were far more affected by Greek-letter membership than were the ambitions of boys

TABLE 82.--Per cent and per cent "change" on upward occupational mobility from father's occupation, by Greek-letter membership and father's occupation Index (Freshmen and Non-Freshmen)

Greek-letter membership	Males				Females			
	Yes		No		Yes		No	
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Freshmen	23 (22)	83 (18)	53 (19)	100 (17)	10 (31)	90 (21)	5 (22)	83 (18)
All Non-Freshmen	47 (55)	87 (79)	52 (31)	91 (45)	11 (55)	88 (69)	14 (44)	76 (38)
"Change"	+31	+24	-2	-8	+1	-2	+9	-8

TABLE 83.--Per cent and per cent "change" in high occupational choice,^a by Greek-letter membership and father's occupation (Freshmen and Non-Freshmen)

Greek-letter Membership	Males				Females			
	Yes		No		Yes		No	
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Freshmen	44 (41)	22 (45)	41 (34)	50 (26)	6 (66)	7 (44)	19 (36)	11 (27)
Non-Freshmen	45 (101)	42 (123)	50 (52)	39 (66)	10 (81)	16 (85)	17 (58)	12 (50)
"Change"								
	+2	+26	+15	-22	+4	+10	-10	+1

^aBases are total number having an occupational choice plus total number not having made a choice.

from higher SES homes. This fact is reflected in the stronger and more positive influence of fraternity membership on longer-run graduate aspirations change among low SES boys than among high SES boys (Table 84). One might

TABLE 84.--Per cent and per cent "change" in per cent having graduate aspirations, by Greek-letter membership and father's occupational index (Freshmen and Non-Freshmen)

Greek-letter Membership	Males				Females			
	Yes		No		Yes		No	
Father's Oc- cupational Index	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Freshmen (April)	74 (42)	67 (43)	77 (26)	84 (19)	26 (66)	37 (43)	57 (28)	59 (22)
All Non- Freshmen	78 (100)	82 (123)	81 (52)	79 (66)	42 (81)	47 (85)	52 (58)	66 (50)
"Change"	+15	+45	+17	-6	+22	+16	-9	+17

think, at first, that among low SES boys the relatively large increases among low father's occupation students was the natural result of the fact (shown in Table 85) that sons and daughters of low occupation fathers tended, as freshmen, to choose high occupations for themselves less often than did children of high occupation fathers, and hence there was more room for increase among the former students. But the manner in which we measure change negates this explanation. The measure we have adopted from Hovland, Lumsdaine and Sheffield¹ standardizes actual change against the total possible change and thus equalizes the over-time starting points of the categories into which we have divided students. Therefore, we must regard the observed high effects among low father's occupation children as a real and special one.

One way in which we might interpret this special effect springs, indeed, from the fact that children of low occupation fathers tended initially

¹Hovland, Lumsdaine and Sheffield, Experiments on Mass Communication.

TABLE 85.--Per cent and per cent "change" in high own occupational choice, by father's occupation index (Freshmen and Non-Freshmen)

Father's Occupational Index	Males		Females	
	Hi	Lo	Hi	Lo
Freshmen	43 (75)	32 (71)	11 (102)	8 (71)
All Non-Freshmen	46 (153)	41 (189)	13 (139)	15 (135)
"Change"	+5	+13	+2	+8

to avoid choosing high occupations for themselves. This suggests that when compared with children of high occupation fathers these students had fewer or weaker family background influences toward high occupational ambitions, and therefore had an "influence-vacuum" which prestigious groups of peers or role-models among faculty members more easily and effectively filled.

But the fact of special and positive longer-run influence of fraternity membership upon occupational ambitions and graduate aspirations among sons of low occupation fathers dovetails with our earlier finding that such freshmen, when they were upwardly mobile, tended to join fraternities. Thus, it appears that not only did fraternities attract such boys, but having enlisted them, raised their occupational and graduate ambitions even higher in the long run.

Faculty Members and Occupational Mobility

Unfortunately, our already meager case-base dwindles considerably when we try to examine the relation between occupational mobility and admiration of faculty members with father's occupation held constant (Table 86). Nevertheless, there is one clear contrast between this table and Table 79, and

TABLE 86.--Per cent admiring high number of faculty, by father's occupation index and desired occupational mobility (Freshmen and Non-Freshmen)

Total				
Father's Occupational Index	Hi		Lo	
	Up	Same Down	Up	Same Down
Freshmen	a (14)	65 (66)	59 (58)	a (8)
All Non-Freshmen	48 (44)	63 (108)	50 (173)	29 (21)

^aFrequency too small for percentaging.

that is the absence of any difference in admiration between upwardly mobile high and low SES freshmen, coupled with the sharp difference between non-upwardly mobile high and low SES students. The impression given by these two tables, that low SES boys had a slightly stronger tendency to join fraternities and that high SES boys had a somewhat stronger tendency to be attracted to faculty members, is borne out in Table 87 and we may note that these relationships were clearest among male freshmen. From this, we may conclude that fraternities and faculty members were initially more attractive to students of different family backgrounds: the fraternities drew freshman boys of comparatively low SES origins, while faculty members had more of a tendency to attract the higher SES boys.

When we inquire why this was so, one answer is suggested in Table 88 where we find that although low SES boys who expected to make good contacts in college which would help them later in life were attracted to faculty members as well as fraternities more than any other comparable category of freshman boys, the difference between high and low SES boys was smaller in admira-

TABLE 87.--Per cent Greek-letter members, and per cent admiring high number of faculty members,^a father's occupation index (Freshmen and Non-Freshmen)

Father's Occupation Index	Total		Males		Females	
	Hi	Lo	Hi	Lo	Hi	Lo
Per cent Greek-letter Members						
Freshmen	60 (180)	61 (148)	55 (78)	62 (72)	65 (102)	59 (96)
All Non- Freshmen	61 (301)	64 (335)	65 (159)	65 (198)	58 (142)	63 (137)
Per cent Admiring High Number of Faculty Members						
Freshmen	62 (155)	61 (135)	61 (66)	53 (66)	67 (93)	70 (69)
All Non- Freshmen	52 (255)	46 (290)	42 (135)	40 (171)	59 (120)	55 (119)

^a"High" defined as more than two for freshmen; more than four for non-freshmen.

TABLE 88.--Per cent Greek-letter members and per cent admiring more than two faculty members, by father's occupation index and expectation of making good contacts in college (Freshmen)

Father's Occupation Index	Males				Females			
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Expectation of Good Contacts	Hi	Mod Lo	Hi	Mod Lo	Hi	Mod Lo	Hi	Mod Lo
Joining Greek Letter Or- ganizations	50 (26)	56 (48)	88 (16)	57 (53)	85 (20)	60 (81)	54 (24)	64 (47)
Admiring More Than Two Faculty	50 (22)	62 (40)	69 (16)	46 (48)	50 (20)	71 (73)	71 (21)	67 (43)

tion of faculty members than in joining fraternities. Moreover, this reduction of difference was apparently due to the smaller percentage of low SES, high expect-contacts boys who admired several faculty members. These findings seem to indicate that (1) the differential attractiveness of fraternities and faculty members to freshman boys was at least partly based upon SES-linked perceptions of the occupation-furthering roles of each; and (2) low SES boys saw fraternities as more functional in this regard, relative to faculty members, while the reverse was the case among high SES boys.

We have already seen that fraternity membership tended to have its greatest longer-run effect upon change in the occupational and graduate ambitions of the boys to whom they were initially most attractive and now in Table 89 it may be seen that faculty members tended to have their strongest influence on the changing ambitions of the boys to whom they were initially most attractive. Thus, it seems that the two most important sources of interpersonal influence which we have identified so far acted in the longer-run to move the boys' ambitions upward, but one exerted more influence among low SES boys while the other was more effective on high SES boys.

In brief summary at this point, it seems fair to say that we have shown that the college social structure and the differential opportunities it provided for affiliation with an organized segment of the student peer group on the one hand and with the superordinate faculty group on the other, brought about changes in the attitudes of students toward their current and future academic behavior. That the long-term graduate aspirations change was durable and meaningful with respect to actual behavior was demonstrated by a study,¹ carried out independently of the present one, which included students at this college in a national sample of graduating college seniors.

¹James A. Davis and Norman Bradburn, Great Aspirations: Career Plans of America's June 1961 College Graduates (Chicago: University of Chicago, National Opinion Research Center, 1961). This is the official report of NORC Survey No. 431.

TABLE 89.--Per cent and per cent "change" in graduate aspirations, by number of faculty admired, father's occupation index and class

Father's Occupation Index	Males				Females			
	Hi		Lo		Hi		Lo	
Number of Faculty Admired ^a	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Freshmen (April)	74 (39)	77 (26)	77 (31)	67 (30)	34 (61)	35 (31)	42 (45)	50 (20)
Sophomore	84 (19)	83 (23)	88 (16)	66 (32)	58 (26)	46 (26)	48 (31)	35 (26)
Junior	81 (16)	70 (20)	96 (28)	81 (27)	48 (27)	^b (10)	59 (17)	^b (12)
Senior	90 (20)	70 (30)	95 (22)	78 (37)	28 (18)	^b (10)	56 (16)	60 (15)
All Non- Freshmen	85 (55)	74 (73)	94 (66)	75 (96)	46 (71)	48 (46)	53 (64)	49 (53)
Freshman-Non-Freshman Change								
	+42	-4	+74	+24	+18	+20	+19	-2

^a"High" defined as more than two for freshmen; more than four for non-freshmen.

^bFrequencies too small for percentaging.

Data were collected from seniors in April, 1961. Students at our subject college who were juniors at the time of our own data-collection were therefore its subjects. Findings of this study (some of which are shown in Table 90) indicate that 31 per cent of the graduating boys and 19 per cent of the graduating girls at this college who had not planned to go to graduate or professional school when they were entering freshmen nevertheless expected to be attending such a school in the fall of 1961. Similar percentages said they had taken the critical step in this direction by submitting

TABLE 90.--April 1961 graduate and professional school expectations of June 1961 graduates, by prior freshman plans^a

	College Which is Subject of this Study				10 per cent Representative National Sample			
	Male		Female		Male		Female	
Planned to do Graduate Work on Entering College	Yes	No	Yes	No	Yes	No	Yes	No
Expect to be enrolled by fall, 1961	70	31	48	19	49	20	35	15
Expect to be enrolled in future	25	43	43	45	40	45	51	48
Other and NA	5	26	9	36	11	35	14	37
Applied to at least one grad. school	70	34	43	17	47	22	25	14
Base	(40)	(35)	(21)	(47)	(816)	(1202)	(375)	(991)

^aData from National Opinion Research Center Study. See James A. Davis and Norman Bradburn, Great Aspirations: Career Plans of America's June 1961 College Graduates (Chicago: University of Chicago, National Opinion Research Center, 1961).

at least one application for admission. A total of 74 per cent of the senior boys and 64 per cent of the senior girls who (when they were freshmen) had not planned to do graduate work said (when they were seniors) that they did expect to attend graduate school at some time in the future.

As Table 90 also indicates, the graduating seniors at this college compared favorably in these regards with a representative 10 per cent sample of all respondents to the nation-wide study.

Greek-Letter Versus Faculty Influences (A)

Let us return now to the problem presented by the contrasting fresh-

men trends in grades-evaluations and graduate aspirations with which we began this phase of our analysis. It will be remembered that our data show that faculty and student attitudes toward high grades were at loggerheads. It should therefore prove interesting to cross-tabulate the most powerful and most negative student influence found so far, namely Greek-letter membership, against the strongly positive effect of faculty members.

In Table 91 we can see that the relevant November-April grades-evaluation change effect of faculty members was a positive one, even among fraternity and sorority members. Table 92 shows the consistency of cross-sectional

TABLE 91.--Per cent and per cent change in high grades-evaluation by Greek-letter membership by number of faculty admired (Freshmen)

Greek-letter Membership	Total				Males				Females			
	Yes		No		Yes		No		Yes		No	
Number of Faculty Admired ^a	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Sept. Grades	70 (116)	85 (78)	75 (60)	70 (30)	74 (47)	87 (38)	65 (23)	79 (19)	67 (69)	82 (40)	81 (37)	^b (11)
Nov. A	31 (102)	35 (62)	52 (56)	68 (28)	40 (43)	41 (29)	50 (22)	78 (18)	25 (59)	30 (33)	53 (34)	^b (10)
Apr. A	19 (101)	17 (64)	60 (55)	44 (27)	26 (38)	21 (29)	67 (21)	53 (17)	14 (63)	14 (35)	56 (34)	^b (10)
Change												
Sept.-Nov.	-56	-59	-31	-3	-46	-53	-23	-1	-63	-63	-63	
Nov. -Apr.	-39	-51	+17	-35	-35	-49	+34	-32	-44	-53	+6	
Sept.-Apr.	-73	-80	-20	-37	-65	-76	+6	-33	-79	-83	-31	

^a"High" defined as more than two.

^bFrequencies too small for percentaging.

TABLE 92.--Per cent high A rank, by Greek-letter membership and number of faculty admired (Non-Freshmen)

Greek-letter Membership	Total				Male				Female			
	Yes		No		Yes		No		Yes		No	
Number of Faculty Admired ^a	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
High A Rank	29 (151)	27 (176)	50 (62)	45 (53)	33 (70)	34 (114)	66 (29)	55 (29)	26 (81)	15 (62)	36 (33)	33 (24)

^a"High" defined as more than four.

data on non-freshmen with this finding. But the most striking thing about Table 91 is the fact that the change is shown to have been uniquely and sharply upward among freshmen who did not belong to Greek-letter organizations and admired more than two faculty members. This must be considered a rather imposing finding when seen against the background of the generally precipitous decline in grades-evaluation which our data have brought out so far. Notice that the boys who shared the increase began their college careers with the lowest grades-evaluation of all categories shown. But just seven months later, their grades-evaluations were highest of all--a change which is apparently attributable to their relationships with Greek-letter societies on the one hand and faculty members on the other. The only other factor which could reasonably account for this increase would be low first-semester grades, and Table 93 indicates that these freshmen had about the same or even higher first semester grades as other freshmen. Therefore, we cannot attribute the increase in grades-evaluation which took place among independent freshmen who admired more faculty members to what we might call an objective need (resulting from poor academic success during their first semester) to emphasize grades more. In fact, as Table 93 also shows, although these freshmen generally had higher first semester grades, they were the ones who had the strongest ten-

TABLE 93.--Per cent high first semester GPA rank per cent raising GPA in second semester; per cent high total GPA; per cent over-achieving; by Greek-letter membership and number of faculty admired (Freshmen)

Greek-letter Membership	Males				Females			
	Yes		No		Yes		No	
Number of Faculty Admired ^a	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
High first semester GPA Rank	46 (50)	49 (57)	56 (23)	58 (19)	49 (67)	40 (40)	49 (37)	^b (11)
Raising GPA in second semester	56 (50)	49 (57)	61 (23)	58 (19)	60 (67)	45 (40)	62 (37)	^b (11)
High total GPA	42 (50)	51 (57)	61 (23)	58 (19)	43 (67)	55 (40)	49 (37)	^b (11)
Over- Achieving	44 (43)	54 (55)	52 (21)	35 (17)	41 (63)	49 (37)	50 (34)	^b (9)

^a"High" defined as more than two.

^bFrequencies too small for percentaging.

dency to increase their second semester grade-point average over their first semester average. The available evidence, then, appears to support the idea that the November-April grades-evaluation change was more affected by the relationship of the student to the two major sources of interpersonal influence than by grades actually received.

Now let us look at the other side of the apparent contradiction between grades-evaluations and graduate aspirations. In Table 94, we find that the extremes illuminate this problem as well, at least among the boys. The freshmen who increased their graduate aspirations most were those who did not belong to Greek-letter societies and admired several faculty members, while the students who decreased their graduate aspirations most were those

who were in just the reverse relations with Greek-letter organizations and faculty members. Table 95 shows that, with the exception of girls who did not belong to sororities, the cross-sectional non-freshman data are not inconsistent with the freshman change data.

TABLE 94.--Per cent and per cent change in graduate aspirations, by Greek-letter membership and number of faculty admired (Freshmen)

Greek-letter Membership	Total				Males				Females			
	Yes		No		Yes		No		Yes		No	
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Sept.	34 (116)	29 (78)	47 (60)	53 (30)	49 (47)	42 (38)	52 (23)	58 (19)	23 (69)	18 (40)	43 (37)	b (11)
Nov.	47 (117)	53 (78)	53 (59)	66 (29)	73 (48)	67 (38)	61 (23)	83 (18)	29 (69)	38 (40)	47 (36)	b (11)
Apr.	46 (117)	51 (77)	66 (59)	73 (30)	75 (48)	65 (37)	77 (22)	84 (19)	26 (69)	38 (40)	59 (37)	b (11)
Change												
Sept.-Nov.	+20	+34	+11	+28	+47	+43	+19	+60	+8	+24	+7	
Nov.-Apr.	-2	-4	+28	+21	+7	-3	+41	+6	-10	0	+23	
Sept.-Apr.	+18	+31	+36	+43	+51	+40	+52	+62	+4	+24	+28	

^a"High" defined as more than two.

^bFrequencies too small for percentaging.

The two sets of findings which we have just presented help to resolve the problem of opposition between freshman change in grades-evaluations and in graduate aspirations during the November-April period. It appears that the opposition is partly to be accounted for by the existence of two contrasting reference groups in the college society (i.e., Greek-letter or-

TABLE 95.--Per cent having graduate aspirations, by Greek-letter membership and number of faculty admired (Non-Freshmen)

Greek-letter Membership	Total				Males				Females			
	Yes		No		Yes		No		Yes		No	
Number of Faculty Admired ^a	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Per cent Having Graduate Aspirations	69	69	61	68	92	72	84	83	47	41	55	67
	(187)	(202)	(69)	(66)	(90)	(133)	(31)	(36)	(97)	(69)	(38)	(30)

^a"High" defined as more than four.

gанизations and faculty members) and the consequent cross-pressures exerted upon entering freshmen. To the extent that a freshman became affiliated with only one of these reference groups, the changes in his grades-evaluation and in his graduate aspiration were consistent in one direction or the other, depending on the group of his affiliation. To the extent that a freshman boy became affiliated with both groups, or neither group, these changes were inconsistent. This is graphically shown in Figure 4.

Parenthetically, two interesting characteristics of freshmen who did not join the Greek-letter organizations and found more than two admirable faculty members were a weaker orientation toward gaining acceptance by their fellow students (Table 96). It would therefore appear that freshmen who tended to be more independent of both parents and peers, but who found several admirable faculty members, tended also to raise their grades-evaluations and graduate aspirations most; which is to say, they tended to become like faculty members in these regards. Thus, if we ask under what conditions did freshmen tend to model their academic attitudes and aspirations after those

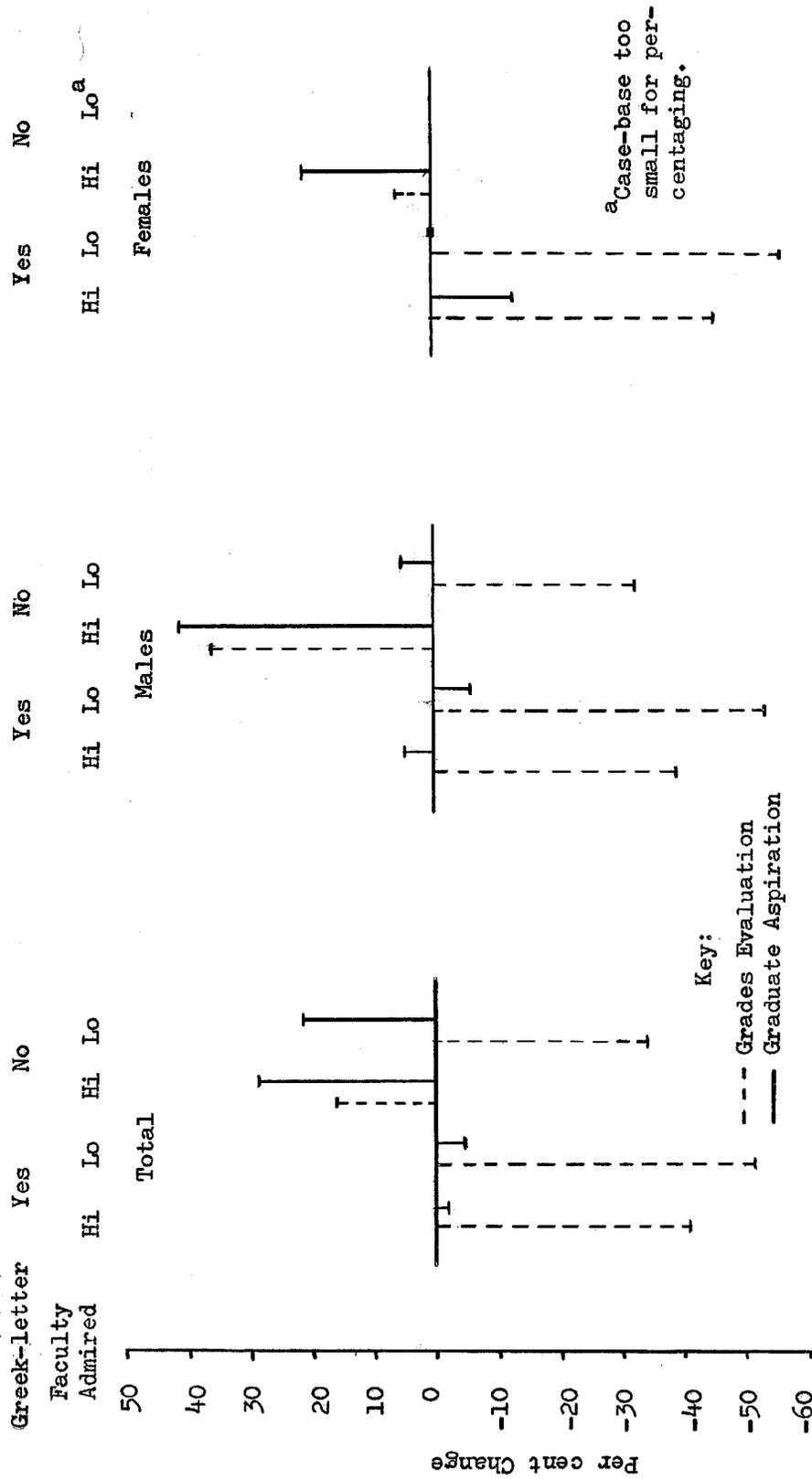


Fig. 4.--November-April change in grades-evaluation and graduate aspiration, by Greek-letter membership and number of faculty members admired (Freshmen)

of most faculty members, our data seem to point to the conditions of relatively weak orientations to the major alternative sources of present gratification, namely, parents and fellow students.

TABLE 96.--Per cent high desire to please parents, and to be accepted and liked by fellow students, by Greek-letter membership and number of faculty admired (Freshmen)

Greek-letter Membership	Total				Males				Females			
	Yes		No		Yes		No		Yes		No	
Number of Faculty Admired ^a	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
	Please Parents	64 (116)	62 (78)	43 (60)	53 (30)	55 (47)	47 (38)	39 (23)	42 (19)	70 (69)	75 (40)	46 (37)
Accepted	81 (116)	74 (78)	55 (60)	60 (30)	70 (47)	63 (38)	57 (23)	68 (19)	88 (69)	85 (40)	54 (37)	^b (11)

^a"High" defined as more than two.

^bFrequencies too small for percentaging.

Returning to the contrast between Greek-letter and faculty influences, the comparison of importance attached to each of our four student values by faculty members, non-freshman Greek-letter members and non-freshman independents, which is shown in Table 97 and Figure 5 is worthy of attention. First, the polarization between faculty and Greek-letter on all four values is revealed here in an unmistakable manner. Greek-letter members had considerably higher estimates of the importance of extra-curricular activities and dating, than did faculty members. Second, the data reveal the predicted intermediate position of students who were not Greek-letter members. The exception to this generalization, of course, is the fact that independents gave a higher evaluation to friendship than did Greeks. And it is this exception which

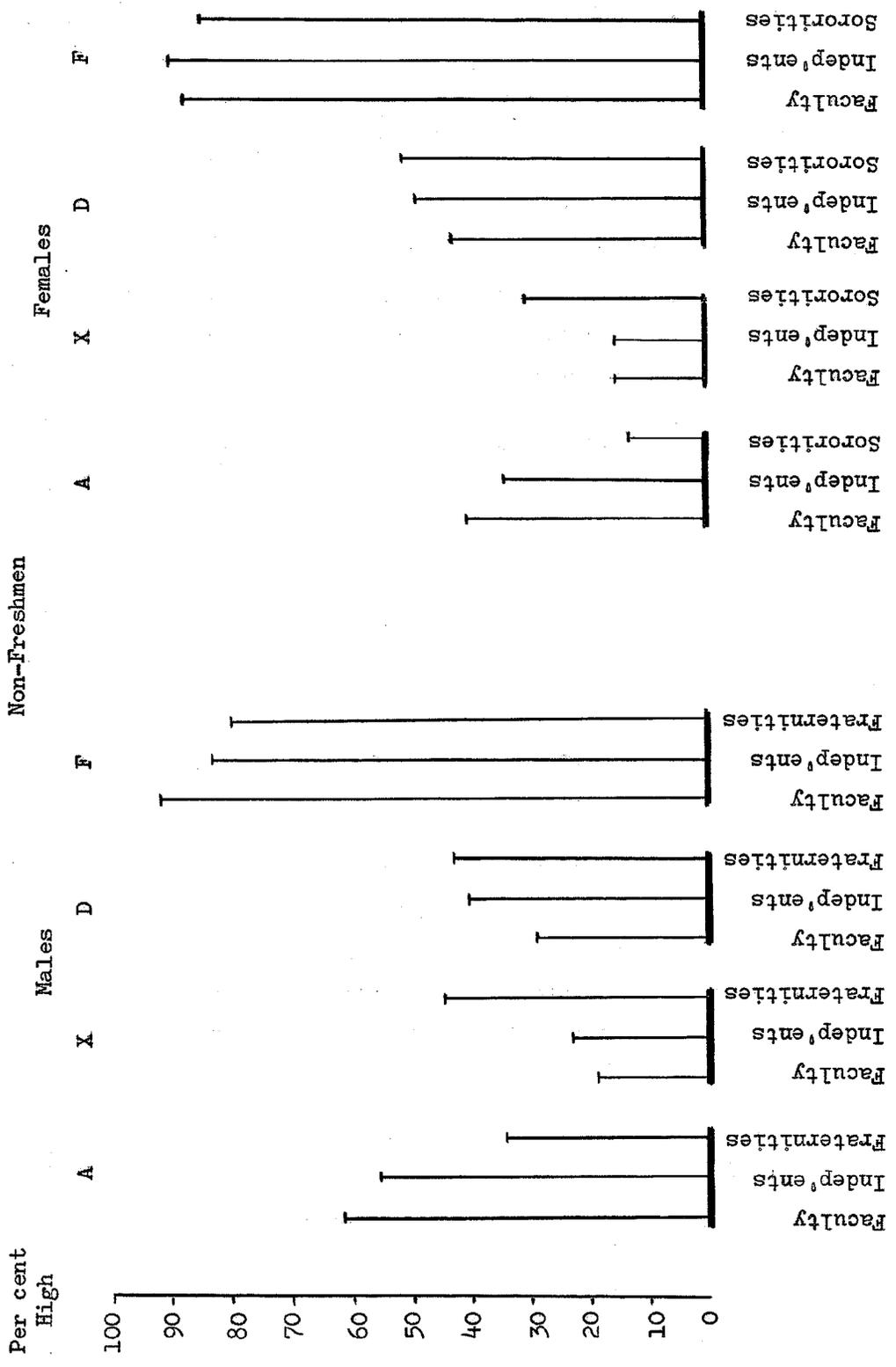


Fig. 5.--Per cent ranking values high (Faculty, Non-Freshman Independents and Greeks)

TABLE 97.--Per cent high rank of values, by sex of student and Greek-letter membership (Faculty Members and Non-Freshmen)

Faculty Members				
Students	Male	Female		
Values				
A	62 (58)	43 (58)		
X	20 (54)	18 (55)		
D	30 (56)	45 (35)		
F	88 (57)	89 (55)		
Students: Non-Freshman Males				
	Fraternity Members	Deviation from Faculty	Non- Fraternity Members	Deviation from Faculty
A	34 (184)	-28	56 (109)	-6
X	44 (179)	+24	23 (112)	+3
D	42 (174)	+12	38 (109)	+8
F	79 (179)	+9	82 (109)	-6
Students: Non-Freshman Females				
	Sorority Members	Deviation from Faculty	Non- Sorority Members	Deviation from Faculty
A	21 (143)	-22	35 (97)	-8
X	33 (136)	+15	19 (99)	+1
D	57 (131)	+12	54 (94)	+9
F	87 (131)	-2	91 (100)	+2

provides a clue to why the independents tended to vary from faculty values in the same directions as the Greeks varied. It would appear that independents responded to not being on the "inside" of the student society by emphasizing their peer group friendships more, which in turn inclined them away from faculty values and toward the student values emanating from the Greek-letter organizations.

In drawing all of these conclusions together, one might imagine the student culture in this college as a series of concentric, interfering rings around the Greek-letter organizations and faculty members--perhaps similar to a diffraction pattern with two foci. The closer a student approached this two-fold center and the more critical boundaries he crossed, the more influenced he was. Such an image would seem to be supported by that fact that the true cross-pressured freshmen boys who were close to (i.e., affiliated with) both foci changed their grades-evaluations and graduate aspirations more than did the most distant, non-cross-pressured, and unaffiliated students.

One problem remains, of course, and that is the contradiction between September-November grades-evaluation and graduate aspiration trends--a contradiction which appears to have been even sharper than that between November and April. Although our sociometric data will cast the best empirical light upon this problem, let us suggest in advance that essentially the same conclusions which we have just drawn regarding the November-April changes can generate an explanatory hypothesis concerning the earlier and apparently more drastic changes. In other words, it seems plausible that given initially strong orientations toward getting high grades, and weak orientations toward graduate or professional school, freshmen entered a culture which was manifestly of opposite mind and quickly made a gross adjustment to its expectations. Using the diffraction pattern analogy, we may think of the freshmen

as having crossed its outer boundary when they passed through the college gates. Thereafter, they were within the general sphere of influence of the Greek-letter societies and faculty members and moved according to their dictates--making gross adaptations at first, then finer ones as they more closely approached the two focal points of influence.

Greek-Letter Versus Faculty Influences (B)

Having arrived at this general picture of the college social system, it should be emphasized that this conceptualization was developed primarily by analysis of data on incoming freshmen. Essentially, we inferred the nature of the extant society and culture into which freshmen entered by noting certain patterns of freshman change and then reasoning backward to reconstruct the general kind of social organization and culture which could have caused these changes. In this sense, we have used the freshman data as a mirror. But we can develop a much more direct image by referring to the non-freshman data which, always providing that we asked the right questions well, should contain direct information about the student social organization and culture which was already functioning when the freshmen were still high school seniors.

Let us start, this time, with the role of attraction to faculty members. Table 98 indicates evidence that students tended to choose between being attracted to faculty members versus being oriented toward, and engaging in the activities of, the student peer group. This is in accord with the alternatives which seem to have confronted a more naive and utopianist freshman class. Table 99 also substantiates the finding that admiration of faculty members usually had a positive influence over grade achievement. However, when we introduce Greek-letter membership, as in Table 100, it becomes very clear that only when a boy did not belong to a fraternity did he experience

TABLE 98.--Associations (Yule's Q) between number of faculty members^a admired and values, and behaviors (Non-Freshmen)

	Males		Females			Males		Females	
Values:					Behaviors:				
A	.08 (242)		.25 (200)		Studying	.16 (291)		.29 (234)	
X	.18 (240)		-.13 (194)		Participating in Extra-Cur- ricular Club Activities	.04 (291)		.14 (234)	
D	-.25 (231)		-.10 (186)		Dating	-.23 (290)		-.02 (234)	
F	-.11 (237)		-.16 (190)		Spending time with Friends	-.03 (291)		-.24 (233)	

^a"High" defined as more than four.

TABLE 99.--Per cent high GPA, and associations (Yule's Q) between number of faculty members admired and GPA, by HSR (Non-Freshmen)

HSR	Males				Females			
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Number of Faculty Admired ^a	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Per cent high GPA	82 (60)	65 (68)	44 (48)	28 (79)	75 (63)	79 (38)	30 (59)	24 (41)
Q	.42		.34		-.09		.15	

^a"High" defined as more than four.

the full positive GPA effect of attraction to faculty members and, curiously enough, only when a girl did belong to a sorority was her GPA positively influenced. (We shall return to this latter point in Chapter VI.) Thus, the idea of two distinct centers of influence would seem to be confirmed, at least in broad outlines.

TABLE 100.--Associations (Yule's Q) between number of faculty members admired and GPA, by Greek-letter membership and HSR (Non-Freshmen)

Greek-letter Membership	Males				Females			
	Yes		No		Yes		No	
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Q (No. Faculty GPA)	.26 (99)	.29 (100)	.79 (29)	.54 (27)	.14 (65)	.26 (77)	-.68 (36)	-.07 (23)

Now it seems important to emphasize that it was not that fraternity members admired significantly fewer faculty members than did independents (Table 101) but that they simply were not as strongly influenced by this admiration. Why they were not is the central question of the following analysis.

TABLE 101.--Per cent admiring more than four faculty members, by Greek-letter membership (Non-Freshmen)

Greek-letter Membership	Males		Females	
	Yes	No	Yes	No
Admiring More than Four Faculty Members	40 (231)	44 (75)	58 (168)	54 (71)
Q =	-.09		.10	

One way of approaching this question is to hypothesize that fraternities performed some function for their members which operated to block faculty influence. Or, to put this idea in its reverse form: we may hypothesize that only when a student was, by reason of his position in the student social structure, deprived of some as yet unspecified satisfaction could his attraction to faculty members act most efficiently upon his grade achievement.

Employing our previously defined measure of "satisfaction" we find in Table 102 that the non-freshmen at this college tended, in general, to be fairly well "satisfied" along each of the four activity dimensions shown.¹

TABLE 102.--Student "satisfactions": associations (Yule's Q) between evaluation of and time spent in, four activities (Non-Freshmen)

Value Behavior	Male	Female
A/Study	.14 (291)	.60 (240)
X/XC participation	.57 (291)	.58 (235)
D/Dating	.59 (281)	.50 (225)
F/ Friendship Leisure	.59 (288)	.60 (231)

Further, the only noteworthy sex difference is in the association between grades-evaluation and amount of time spent studying.

In Table 103 we find measures of association computed along the same four lines of activity, but with Greek-letter membership as a control. Three findings, in particular, seem to stand out in this table: first, fraternity members had greater "satisfaction" of all peer-oriented desires, and especially the desire for friendship, than did independents. Second, sorority members had greater "satisfaction" of their dating desires, but less "satisfaction" of other desires, than did non-members. Third, the association between grades-evaluation and time spent studying were stronger outside the Greek-letter or-

¹Another interpretation of these data would emphasize the theoretically interesting fact that our respondents tended to value activities according to the degree of their engagement in these activities, rather than the inverse.

ganizations than inside them.¹ Table 104 contains comparable data where admiration of faculty members is the control variable. In the latter table, the fact that being attracted to more faculty members was linked with being less "satisfied" along the dating dimension for both boys and girls and also along the friendship dimension for girls, is further evidence of the peer-versus-faculty orientational schism.

TABLE 103.--Student "satisfactions": associations (Yule's Q) between evaluation of, and time spent in, four activities; by Greek-letter membership (Non-Freshmen)

Greek-letter Membership	Males		Females	
	Yes	No	Yes	No
A/Study	.08 (184)	.28 (107)	.53 (143)	.68 (97)
X/XC participation	.52 (179)	.50 (112)	.29 (136)	.92 (99)
D/Dating	.60 (173)	.57 (108)	.63 (131)	.27 (94)
F/Friendship Leisure	.75 (179)	.27 (109)	.57 (131)	.65 (100)

We can, of course, take the reverse causal interpretation of the data in Table 104. In other words, rather than assuming that admiration of more faculty members led to decreased dating and friendship "satisfaction," we may assume that low "satisfaction" led students to turn away from the peer group and toward faculty members. This interpretation also is borne out in Table 105.

Thus, it appears that what blocked the full exercise of faculty influence on grade achievement within the fraternities was the fact that fraternities tended to "satisfy" more of the friendship desires of their mem-

¹At present, we cannot account for the seemingly anomalous finding that sorority members were much less "satisfied" with the degree of their participation in extra-curricular club activities than were non-members.

TABLE 104.--Student "satisfactions": associations (Yule's Q) between evaluation of, and time spent in, four activities; by number of faculty members admired (Non-Freshmen)

Number of Faculty Admired ^a	Males		Females	
	Hi	Lo	Hi	Lo
A/Study	.19 (81)	.05 (139)	.45 (114)	.56 (86)
X/XC Participation	.61 (101)	.52 (139)	.62 (108)	.40 (86)
D/Dating	.49 (97)	.66 (134)	.43 (104)	.70 (82)
F/Friendship Leisure	.84 (101)	.49 (136)	.42 (104)	1.00 (86)

^a"High" defined as more than four.

TABLE 105.--Student "satisfactions" and admiring faculty members: association (Yule's Q) between spending time in four activities and number of faculty members admired, given high evaluation of the activities

	Males	Females
Study	.31 (93)	.14 (50)
Participation in Extra-Curricular Activities	.15 (90)	.26 (55)
Dating	-.39 (95)	-.36 (104)
Friendship	-.01 (190)	-.17 (169)

bers, and presumably, knit a collectivity together into a genuine social group having all of the familiar group properties. Attraction to faculty members, on the other hand, does not seem to have been able to accomplish group formation. It seems likely that students who were attracted to faculty members

tended to remain a collection of individuals, each maintaining his own private relation to the admired instructor, but without the development of any strong group bonds among students who admired a particular instructor, not to mention students who admired different instructors. Thus the behavior which was most positively influenced by admiration of faculty members was the essentially individual one of studying. Thus also, among the boys, attraction to faculty members was positively associated with the relation between only one value--grades-evaluation--and GPA, and quite negatively related to the bearing of friendship-evaluation and GPA (Table 106). A com-

TABLE 106.--Associations (Yule's Q) between values and GPA, by HSR and number of faculty admired (Non-Freshmen)

HSR	Males				Females			
	Hi		Lo		Hi		Lo	
Number of Faculty Admired	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Value								
A	.72 (51)	.43 (55)	.78 (35)	.23 (65)	-.27 (50)	1.00 (30)	.61 (51)	-1.00 (38)
X	-.41 (52)	.03 (55)	-.57 (36)	-.21 (63)	-.02 (49)	.73 (31)	-.10 (46)	-.07 (37)
D	-.05 (51)	-.45 (55)	-.34 (34)	-.15 (60)	.17 (46)	-.88 (28)	-.09 (45)	.06 (37)
F	-.35 (52)	.16 (55)	-.46 (37)	.14 (60)	.17 (47)	-1.00 (29)	-.57 (44)	1.00 (39)

parison between these data and those in Table 44 should bring out the different effects of Greek-letter membership and attraction to faculty members in the clearest manner, and leads us to conclude that the only way faculty members were able to bring about a higher grade achievement among these boys was by strengthening the bearing of individualistic motivation, i.e., grades-

evaluation, on GPA. In clear contrast with this finding, we have already seen that fraternities were able to affect grade achievement in a variety of more social ways, because they were social groups.

However, the development of student groups around instructors has some precedent in history, from Socrates' to Meikeljohn's coteries, and ought to be possible in the contemporary college setting. Indeed, such groups may presently flourish on college campuses which do not have Greek-letter societies, and a study of them should prove interesting.

In concluding this chapter, let us address a few words of an entirely different nature to the problem of the dual focus of interpersonal influence at this college and others like it. In thinking about Greek-letter organizations and faculty members, it may be useful to realize both have roots which are external to the individual college. College faculty members are bound together regionally, nationally and even internationally by their professional societies and by the fact that they are adults with relatively high status in the adult world. Greek-letter organizations also have their supra-college organizations, national charters, constitutions and by-laws, and these are also administered by adults of high social status. In this sense, then, it may not be too fanciful to think of the fraternity-faculty schism which we have documented as a reflection of two adult orientations in the adult world. In this light, when the freshman entered our subject college, the shock of conflict and the necessity for choice which he met, while clearly not of his own creation, was just as clearly not the creation of his seniors in the peer group. To some extent, then, what we have is not only a picture of adult versus pre-adult orientations, but a meeting of two kinds of adult orientations. Forcing the freshman's recognition of this social reality may have been the college's first major contribution to his social maturation.

CHAPTER V

SCHOLARSHIP GRANTS

Although our main focus is on the various interpersonal sources of present gratification which are available to college students, we cannot overlook the fact that scholarship grants are a reward, though non-interpersonal, which can have significant influence over the academic attitudes and behavior of students. The granting and continuation of scholarships to students constitutes a means of generating and supporting student incentive over which the adult society has direct control, and whose application is even more direct than the selection of faculty members. Since we are broadly concerned with influences emanating from the formal college system as well as the informal system of social relations in college, it seems appropriate briefly to examine the effects of scholarships.

In Table 107 we can see that in this college, as probably in all others, scholarships were held by students on the basis of (1) their high school performance and (2) their financial need. About 60 per cent of all students who did well in college and whose fathers had relatively low occupations held scholarships of one kind or another, as compared with about 10 per cent of students who had achieved less well in high school and whose fathers had high occupations. Therefore, if we wish to partial-out the effects of having a scholarship per se, we must control for father's occupation and high school performance and compare students who were alike in both latter respects while differing only in whether or not they held a scholarship.

TABLE 107.--Per cent holding any kind of scholarship, by father's occupation and high school rank (Freshmen and Non-Freshmen)

Father's Occupation	Males				Females			
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
High School Rank	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Freshmen	50 (28)	6 (36)	54 (39)	23 (26)	39 (41)	12 (51)	56 (34)	9 (23)
Non-Freshmen	42 (52)	10 (72)	64 (90)	13 (69)	45 (56)	11 (63)	60 (55)	11 (55)
All Students	45 (80)	8 (108)	61 (129)	16 (95)	42 (97)	11 (114)	58 (89)	10 (78)

Such a cross-tabulation reduces our case-base to such an extent (particularly in the scholarship-holding, low HSR categories) that we can show only cross-sectional data on the entire student-body without differentiating between the sexes or among college classes. Table 108, therefore, indicates that having a scholarship increased the likelihood that a student would be a high achiever, that he would have a high grades-evaluation and a low dating-evaluation and that he would admire more faculty members and want to attend graduate or professional school. It also reduced the likelihood that he would belong to a Greek-letter society in all but one father's occupation-HSR category and increased the likelihood that he would be upwardly mobile from his father's occupation. Over-all, then, holding a scholarship seems to have been a factor which influenced students in all of the academically and occupationally desirable directions.

This table also suggests that the students whose college achievement benefited most from holding scholarships were those who had done less well in high school, since these students show the greatest scholarship-no scholarship

differences in per cent over-achieving, high achieving and having high grades-evaluations. However, these students also show larger positive differences in

TABLE 108.--Per cent of all students having various characteristics, by father's occupation, high school rank, and scholarship-holding

Father's Occupation	Hi				Lo			
	Hi		Lo		Hi		Lo	
High School Rank	Yes	No	Yes	No	Yes	No	Yes	No
Scholarship	Yes	No	Yes	No	Yes	No	Yes	No
High GPA	87 (77)	65 (101)	91 (22)	26 (203)	76 (131)	54 (90)	56 (23)	20 (153)
High A Rank (Nov.)	45 (66)	37 (89)	50 (18)	29 (178)	48 (111)	43 (74)	43 (21)	28 (130)
High X Rank (Nov.)	27 (67)	28 (88)	37 (19)	31 (171)	28 (109)	40 (74)	30 (20)	32 (126)
High D Rank (Nov.)	40 (62)	48 (85)	22 (18)	52 (172)	36 (107)	33 (73)	38 (21)	53 (124)
High F Rank (Nov.)	81 (63)	86 (88)	89 (18)	87 (178)	89 (108)	84 (74)	86 (21)	82 (124)
Having Graduate Aspirations (Nov.)	70 (77)	58 (102)	59 (22)	54 (202)	77 (130)	53 (90)	78 (23)	58 (153)
Admiring More Than 4 Faculty Members	54 (67)	41 (93)	59 (17)	38 (179)	47 (120)	39 (79)	57 (21)	34 (134)
Belonging to Greek-letter	56 (77)	70 (102)	50 (22)	66 (204)	65 (131)	56 (90)	61 (23)	71 (153)
Upwardly Mobile	35 (48)	26 (62)	33 (15)	20 (120)	97 (87)	91 (53)	83 (18)	81 (101)

per cent belonging to Greek-letter societies. It therefore seems likely that some of their college achievement differences were due directly to these factors and only indirectly to scholarship-holding. Nevertheless, it is worth emphasizing that scholarship-holding seems to have meant most, whether directly or indirectly, to the college academic achievement of those students who had

performed relatively poorly in high school. This is entirely understandable when we realize that the improvement in achievement which is logically possible for a student who has an habitually low achievement is greater than the improvement which is possible for a student who already achieves highly. Therefore, any factor which tends to raise the level of achievement can show greater effect on the first type of student than on the second type.

It is also noteworthy (with the same caveat regarding direct and indirect effects) that scholarship-holding seems to have had different influences on graduate aspirations from those which it had on undergraduate academic attitude and achievement. Although low HSR students seem to have benefited most with regard to academic achievement and attitude, high HSR students seem to have benefited most with regard to graduate aspirations. And although students whose fathers had high occupations show some evidence that their college attitude and achievement were more affected by scholarships than were their graduate aspirations, students whose fathers had low occupations appear to have had their graduate aspirations influenced more.

Thus, the students whose college achievement was most affected by scholarship-holding were those whose fathers had high occupations but who had not done well in high school, while the students whose graduate aspirations were most influenced had fathers of low occupations and had done well in high school. Table 109, which presents some of the data from Table 108 in a different form, shows this and also facilitates other observations

First of all, we can see that the effect of scholarship-holding among high SES students was much stronger on college achievement than on graduate aspiration. In interpreting this fact, a conceptual distinction

TABLE 109.--Associations (Yule's Q) between scholarship-holding and (1) GPA and (2) Graduate Aspirations, by father's occupation and HSR (All Students)

Father's Occupation	Hi		Lo		
	HSR	Hi	Lo	Hi	Lo
Q (GPA)		.64 (178)	.70 (225)	.44 (221)	.67 (176)
Q (Graduate Aspiration)		.26 (179)	.10 (224)	.49 (220)	.45 (176)

between the utilitarian, instrumental side of scholarships and the honorific side may be useful. By this distinction, we wish merely to note that scholarships involve both money and prestige for the recipients. If we assume that the honorific side was most salient for those students who needed the money least (i.e., students with fathers of high occupations), than we find that this aspect of scholarship-holding had a stronger influence on college achievement than on graduate aspirations. When the financial side is added to the honorific (as in the case of students with fathers of low occupations), the influences on college achievement and graduate aspirations seem to have been more nearly equal.

The suggestion of these findings seems to be that scholarship money, to those who needed it, may have been perceived not only as facilitating present college work, but as pointing out a potential stepping-stone to future graduate work. If a student can hold a scholarship in college, he may well look upon a scholarship in graduate school as a real possibility. Thus, what may once have seemed so out of reach for financial reasons as to be only a vague hope might now be expressed as an entirely feasible desire. The student who needed scholarship money less, however, seems also likely to have needed graduate tuition money less and the influence of the honor represented

by scholarship awards was more closely limited to his college achievement. From these findings, one might conclude that college scholarships can "buy" more in terms of long-run student accomplishment when they are awarded to low SES students, in spite of the fact that they do not seem to buy more in the short-run.

A second finding in Table 109 requires for its interpretation evidence found in other studies of correlates of socio-economic status differences,¹ leading us to expect that students whose fathers had lower occupations would respond to influences toward graduate and professional school more positively than would students of higher status origins. Such an expectation is obviously borne out in Table 109. But it is interesting that of the high social origin students (who would be expected to, and did, respond less radically), those who had higher HSR's responded more than did those who had lower HSR's. We also find that of the students who would be expected to show a weaker response to influences toward high GPA's (i.e., the high HSR students), those whose social backgrounds were higher show the greater effect of scholarships.

Therefore, it would appear that scholarship-holding had greatest influence, not in terms of absolute effect, but in terms of effect relative to expectation, on the academic performance and aspirations of those students who were already most favored by social background and past academic performance. In this sense, the use of scholarships as a lever with which to raise the level of academic achievement at this college was a more complex problem than one might think. The indications of our data are that if one wishes to bring about the largest absolute increase in performance and aspirations, one

¹See Kahl, The American Class Structure, pp. 184-220.

should grant scholarships to the students who need them most. But if one wishes to create the largest marginal increases along these dimensions, scholarships should be granted to the students who need them least.

CHAPTER VI

SOME SPECIAL OBSERVATIONS ON THE GIRLS

The most general starting point of this study is the assumption that the primary function of college is the transmission of intellectual and attitudinal equipment necessary for adequate role-performance in salaried jobs and graduate school. Using the measures at our disposal, we seek to illuminate factors which operated upon our student respondents to condition the extent to which this function was accomplished. However, from time to time in the foregoing analysis it has been clear that such a research orientation serves more satisfactorily in analyzing the boys' data than the girls'. Obviously, a somewhat different heuristic orientation is required and, setting aside all other empirical researches, theoretical speculations and impressionistic generalizations which we might draw upon, our own data appear to provide sufficient clues as to what that orientation should be.

Looking back at Table 3, note that freshman girls, while differing little or not at all from freshman boys in their initial emphases on learning and on high grades, were much more inclined (proportionately five times as inclined) to emphasize the goal of falling in love and getting married; more inclined to stress social integration with their fellow-students; more inclined to want to please their parents; and more desirous of a good time socially. Moreover, although the boys clearly favored getting high grades over being accepted and liked by their fellow-students, the girls placed these two goals on a par with one another.

Similarly, when we examine the data on these students two months and

then seven months after they entered college (Table 6), we see that the proportions of girls who gave high ranks to the D and F values were higher than the proportions of boys who did so, and it is also evident at those times that the girls definitely gave lower ranks to the A as well as X values. In the same table, the identical observations may be made concerning the differences between non-freshman boys and non-freshman girls, and it will further be recalled that we demonstrated sex differences parallel to these in the associations between freshman and non-freshman values and change in values (Tables 10 through 14).

From these data, it looks as though going to college and being in college had different significances for boys and girls. In an article published some years ago, Mirra Komarovsky¹ noted "the existence of serious contradictions between two roles present in the social environment of the college. . . . One of these roles may be termed the 'feminine' role. . . . the other and more recent role is, in a sense, no sex role at all, because it partly obliterates the differentiation in sex. It demands of the woman much the same virtues, patterns of behavior, and attitude that it does of the men of a corresponding age." It seems to us that our data manifest the contradiction, and the development of its perception over time, of which Komarovsky wrote. It would appear that the freshman girls, as they entered college in September, were relatively unaware of the contradictory nature of the task and socio-emotional orientations but became increasingly aware of it as their experience in college lengthened. The fact that even as they entered college, their orientations toward love and marriage and friendships were stronger, and their graduate aspirations weaker, than the boys' suggests

¹Mirra Komarovsky, "Cultural Contradictions and Sex Roles," American Journal of Sociology, LII (1946), 184-89.

that their sex role educations had "progressed" to some considerable degree in high school and before. But the college changes which we have shown and will show indicate that significant further sex role differentiation occurred in college.¹

Grade Achievement

It would be an oversimplification, however, to think that "men go to college for knowledge and women go to college for men," for our data (Table 110) show that in every class the girls had a higher mean HSR and a higher mean college GPA. Therefore, despite their stronger socio-emotional desires, the girls

TABLE 110.--Means of HSR and GPA, by sex and class

	HSR ^a		GPA ^b	
	Males	Females	Males	Females
Freshmen	70	79	1.27	1.41
Sophomores	73	83	1.46	1.53
Juniors	72	83	1.59	1.63
Seniors	65	81	1.47	1.64

^aPercentile.

^bAbsolute total cumulative GPA.

out-performed the boys along the task dimension when we measure performance absolutely, without reference to ability. However, once we by-pass the question of why and how the girls out-performed the boys in high school as lying outside the purview of this research, we must consider the possibility that the girls' superior performance in college was due to their higher academic aptitude-habits as reflected in HSR. To the extent that this was the case,

¹For a discussion of the process of sex role differentiation, see Talcott Parsons, American Sociological Review, VII (1942), 604-16.

the girls would not have out-performed the boys in college, relatively speaking. Indeed, the possibility which we have mentioned is reinforced by observing in Table 15 that in all classes except sophomore more of the variance in girls' than in boys' GPA's was accounted for by HSR and college entrance examination scores.

We can take the indicated sex differences, as well as differences among classes, into account more directly by putting the grade-point average, high school rank and college entrance examination score of each non-freshman boy and girl for whom we have these data into a single linear multiple regression equation.¹ We will then be able to compare the proportions of girls and boys who had positive residuals (i.e., who were "over-achievers") and thus estimate the extent to which either sex out-performed the other, after HSR and ACE scores have been taken into account.

The pertinent results of such an analysis are shown in Table 111 and Table 112. From data shown in Table 112, it would appear that (1) the girls' higher college GPA's were, in fact, entirely attributable to their higher academic aptitude-habits; (2) the boys actually did a little better, after HSR and ACE scores are taken into account, than the girls did; and (3) it therefore seems likely that attitudinal factors and influences specific to the college rather than to the individual may have played a part in tipping the scales in favor of the boys slightly out-performing the girls in college, despite the fact that the girls studied more than the boys (Table 23).

Dating Evaluation

Let us now attempt to trace out some of these attitudinal and college

¹Freshmen were not included in this regression because their entrance examination data were Scholastic Aptitude Test scores. All non-freshmen took the American Council on Education Psychological Examination.

TABLE 111.--Multiple regression information

Non-Freshman Males and Females		
<u>Equation fitted:</u> $Y = b_0 + b_1X_1 + b_2X_2$		
Where $Y = \text{GPA}_T$		
$X_1 = \text{HSR}$		
$X_2 = \text{ACE}$		
<u>Number of Observations:</u> 553 Non-Freshman males and females		
<u>Regression Coefficients:</u> $b_0 = -0.2184$		
$b_1 = 1.0687$		
$b_2 = 0.0077$		
<u>Correlation Coefficients:</u>		
$R_{Y.X_1}$	$R_{Y.X_1X_2}$	
0.4765	0.5718	
<u>Means and Standard Deviations:</u>		
Variable	Mean	SD(Unbiased)
Y(GPA _T)	1.54	0.5251
X ₁ (HSR)	0.7526	0.2065
X ₂ (ACE)	124.1772	21.8833
<u>Standard Deviation (Unbiased) of the Residuals:</u> 0.4316		

TABLE 112.--Per cent over-achieving^a in over-all non-freshman regression,^b by class

	Males	Females
Sophomores	40 (81)	39 (111)
Juniors	46 (93)	41 (69)
Seniors	54 (130)	57 (69)
All Non-Freshmen	48 (304)	44 (249)

^a"Over-Achieving" defined as positive residual.

^bEquation: $\text{GPA} = \text{HSR} + \text{ACE total score}$

influences. To begin with, we have already shown, in Table 14, a positive association, among freshman boys as well as girls, between seeking love and marriage in college and seeking high grades in college. But now Table 113 shows that one side of this association--a strong orientation to high grades--was positively related to the dating success of boys but negatively related to similar success on the part of the girls. As a consequence, the association between grades-evaluation and romantic values was pressed further apart among the girls than among the boys, as may be seen in Table 13 (which refers to November-April changes) and Table 114 (which refers to September-November

TABLE 113.--Per cent dating more than eight hours per week in November and per cent spending more than sixteen hours per week with friends, by September grades-evaluation (Freshmen)

September Grades-Evaluation	Males		Females	
	Hi	Mod Lo	Hi	Mod Lo
Dating more than eight hours	30 (112)	19 (31)	35 (124)	40 (47)
Friends more than sixteen hours	15 (112)	19 (31)	19 (124)	25 (47)

changes). The latter table, for example, indicates that by November, the girls who were most interested in love and marriage had lowered their grades-evaluations very sharply, while those girls who were less anxious for romance lost their grades-evaluations even less rapidly than the boys did. Not only this, but we can also note in Table 115 that romantically-oriented girls raised their graduate aspirations least of all comparable categories of students. High grades-evaluation also proved somewhat negatively related to friendship-orientation especially among the girls, with the result (shown in Tables 32 and 56) that grades-evaluation declined most, and graduate as-

TABLE 114.--Per cent and per cent change in high grades-evaluation, by desire for love and marriage in college (Freshmen)

Desire for love and marriage	Males		Females	
	Hi Mod	Lo	Hi Mod	Lo
September High Grades	87 (38)	75 (109)	78 (113)	63 (62)
November A Rank	50 (32)	48 (93)	29 (97)	46 (50)
April A Rank	30 (33)	39 (74)	21 (90)	31 (51)
Change				
Sept.-Nov.	-42	-36	-63	-28
Nov. -Apr.	-40	-17	-11	-28
Sept.-Apr.	-66	-48	-73	-51

TABLE 115.--Per cent and per cent change in graduate aspirations, by desire for love and marriage in college (Freshmen)

Desire for love and marriage	Males		Females	
	Hi Mod	Lo	Hi Mod	Lo
Sept.	45 (38)	50 (109)	27 (112)	26 (62)
Nov.	76 (37)	79 (106)	34 (111)	42 (60)
Apr.	76 (33)	73 (93)	37 (100)	43 (56)
Change				
Sept.-Nov.	+56	+58	+10	+22
Nov. -Apr.	0	-8	+4	+2
Sept.-Apr.	+56	+46	+14	+23

pirations rose least, among girls who were most anxious about being accepted and liked by their peers. In sum, it appears that social pressure was applied to freshman girls along the two dimensions of their greatest vulnerability: their relationships with peers of the opposite sex, and (assuming that most friendships were within-sex) with peers of the same sex. The result seems to have been increased conformity to an established student culture which did not encourage passes at girls who wore glasses.

Sorority Membership

In taking a closer look at the role of dating behavior, it will be remembered from Table 103 that non-freshman sorority girls were more "satisfied" with regard to dating than were other non-freshmen, and from Table 46, that they had higher dating-evaluations as well as spent more time on dates. Together, these findings mean that sorority members' dating "satisfaction" was at a higher level of both desire and gratification. The freshman girls seem to have known about this aspect of sorority life from the beginning, since (1) those who invested love and marriage with strong emphasis also thought that Greek-letter membership should be important in determining a student's popularity, and (2) such girls were therefore especially apt to join sororities (Table 116). Furthermore, as one might expect, after joining sororities, they increased their dating much more than did other freshmen (Table 117).

It would seem reasonable to conclude, from the data we have discussed so far, that one of the prime functions of college for girls was to provide opportunities to make friends and have dates, and within college, one of the prime functions of sororities was to provide the means whereby girls could meet boys in date-eliciting situations. However, as we have already seen in Tables 36 and 58, non-freshman sorority members had lower

TABLE 116.--Per cent thinking Greek-letter membership should be highly important or moderately important in determining a student's popularity, and per cent having Greek-letter societies, by desire for love and marriage in college (Freshmen)

	Males		Females	
	Hi Mod	Lo	Hi Mod	Lo
Desire for love and marriage				
Popularity Importance of Greek-letter	63 (38)	40 (109)	44 (111)	13 (62)
Joining Greek-letter	60 (38)	57 (109)	74 (113)	56 (62)

TABLE 117.--Per cent and per cent change dating more than eight hours per week, by desire for love and marriage in college and Greek-letter membership (Freshmen)

	Males				Females			
	Hi Mod		Lo		Hi Mod		Lo	
Desire for love and marriage								
Greek-letter membership	Yes	No	Yes	No	Yes	No	Yes	No
Dating more than eight hours per week (Nov.)	32 (22)	13 (15)	37 (62)	16 (44)	36 (74)	38 (37)	51 (35)	12 (26)
Dating more than eight hours per week (Apr.)	27 (22)	^a (12)	39 (61)	21 (34)	55 (74)	42 (26)	56 (34)	14 (22)
Change								
Nov.-Apr.	-16		+3		+30		+6	

^aFrequency too small for percentaging.

grades-evaluations and graduate aspirations than other non-freshmen, and in Tables 34 and 57, we saw that freshman girls who joined sororities lost their grades-evaluations more rapidly and increased their graduate aspirations more

slowly than did other freshmen. Thus, girls who joined sororities seem to have been subjected to even more severe downward pressure on their grades-evaluations and graduate aspirations than they had experienced prior to joining. Starting in September with an expectation that high grades-evaluation would be at least compatible with dating popularity, girls who were most interested in finding love and marriage in college seem to have pursued this goal by joining sororities, an environment in which this early utopianism was quickly extinguished.

It is essential, however, to bear in mind the degree to which grades-evaluation and grade achievement varied independently of one another. We have already directed attention to this fact in a different context, and it may be recalled most clearly from Table 44 and by comparing Table 45 with Table 46. Thus, although dating and opportunities for dating may have depressed grades-evaluation, it is not a logically foregone conclusion that they also depressed grade achievement. When we examine this problem, specifically and on its own merits, we find that although all non-freshman GPA's seem to have been negatively influenced by frequent dating, this effect was clearly more emphatic among the girls (Table 118). When, in addition, we

TABLE 118.--Associations (Yule's Q) between hours spent dating and GPA, by HSR (Non-Freshmen)

HSR	Males		Females	
	Hi	Lo	Hi	Lo
Q (Hours dating: GPA)	-.17 (145)	-.13 (146)	-.24 (119)	-.37 (118)

control for Greek-letter membership, in Table 119, we can note the following: (1) the original stronger effect of dating on GPA among the girls persists throughout all comparable categories of male and female students with

TABLE 119.--Associations (Yule's Q) between hours spent dating and GPA, by HSR and Greek-letter membership (Non-Freshmen)

HSR	Males				Females			
	Hi		Lo		Hi		Lo	
Greek-letter Membership	Yes	No	Yes	No	Yes	No	Yes	No
Q (Hours dating: GPA)	.02 (98)	-.59 (47)	-.05 (98)	-.26 (48)	-.06 (63)	-.41 (56)	-.35 (77)	-.42 (41)

the exception of high HSR non-Greeks; (2) the original stronger effect among low HSR than high HSR girls occurred in the sororities; (3) the relation of time spent dating to GPA was more negative outside the Greek-letter organizations than inside them. It is this last finding which seems most interesting, especially in light of the fact that Greeks valued dating and actually dated more than non-Greeks.

One speculative interpretation would suggest that in much the same way that Greek-letter organizations may have relieved their members of the necessity to strive as individuals for multiple competences by gearing individual specializations into organizational well-roundedness these societies may also have relieved members of the anxiety, maneuvering and frequent failure which often attend individual efforts to make and sustain romantic contact with members of the opposite sex. The fact that Greek-letter organizations regularized and certified the status-appropriateness of cross-sex contacts by organizing dances, parties, teas and the like, means that individual members had many of the initial search problems and many of the problems of "what to do?" "where to go?" "what to wear?" "is my date of suitable family background?" etc., solved for them by impersonal committees,

without personal embarrassment or anxiety to the individuals involved. Moreover, the sheer number of potential dating partners which seem likely to have been made available (both situationally and with respect to appropriateness of status) to each member would seem to make for a greater degree of personal security.

As a consequence, the academic achievement of Greek-letter members might well be less disturbed by dating, since such members could spend their date-related hours more efficiently; putting in more time on actual dates, less time building up courage to ask or be asked for a date and less time deciding what to do on the date. Thus the Greek-letter member could value dating more highly than non-members, and at the same time with less anxiety, because of this role of Greek-letter societies.

To the extent that what we have suggested operated at all, however, it must not be overlooked that it was more effective among boys than girls, whose data suggest higher anxiety levels under the same conditions. The persistence of this sex difference seems simply to emphasize that dating was a more crucial and ego-involving college activity for girls than for boys.

Sororities and Occupational Mobility

But there was still another, and related function of sororities; one which was more fraught with long-range social consequences. In Table 81 we demonstrated a positive relationship between the freshman girls' social mobility aspirations and their membership in a sorority, but a slight negative relation between these two factors among the freshman boys. And we also found, in Table 74, a stronger positive relation between the boys' social mobility aspirations and their graduate aspirations than was true of the girls. In other words, the sex difference which we noted at the beginning of this chapter, namely, the inclination of girls toward socio-emotional

achievement and of boys toward task achievement as paths to more general life-success, was reflected in a tendency of the girls to join sororities if they were upwardly mobile and a contrasting tendency of the boys to want to attend graduate school if they were upwardly mobile. Table 120 presents this phenomenon in sharper relief, by showing that Greek-letter membership had a strong

TABLE 120.--Associations (Yule's Q) between graduate aspirations and Greek-letter membership, by desired mobility from father's occupation (Non-Freshmen)

Desired Mobility	Males		Females	
	Up	Same Down	Up	Same Down
Q (Graduate aspirations: Greek-letter membership)	.12 (152)	.13 (59)	-.39 (102)	-.11 (104)

negative effect on the graduate aspirations of non-freshman upwardly mobile girls and a mildly negative effect on the aspirations of non-upwardly mobile girls. The first, and most important of these findings, indicates that if an upwardly mobile girl joined a sorority, she was quite likely not to want to attend graduate or professional school; which in turn suggests that something about sororities was preferred to graduate work as a means toward upward mobility.

Let us suppose that this alternative means was dating-and-matrimony with high SES boys. But unfortunately, this hypothesis is not precisely testable with our data. We do not know whom any of our respondents dated; all we know is how much time they spent on dates. In addition, we cannot distinguish between the student who spent a great deal of time on dates with her "steady" or fiance and the student who spent an equal amount of time "dating around." Still, if in spite of all such limitations, we assume that

time spent dating roughly measures the extent of romantic involvement--no matter how wide or narrow its focus--and cross-tabulate this variable against Greek-letter membership and desired social mobility, we uncover an interesting finding. Thus in Table 121 it is shown that Greek-letter membership had its strongest influence on the dating habits of upwardly mobile girls and

TABLE 121.--Association (Yule's Q) between time spent dating and Greek-letter membership, by desired mobility from father's occupation (Non-Freshmen)

Desired Mobility	Males		Females	
	Up	Same Down	Up	Same Down
Q (hours dating: Greek-letter)	.25 (151)	.41 (59)	.42 (102)	.20 (104)

non-upwardly mobile boys. Perhaps these findings can best be interpreted if we bear in mind the generalization that when SES lines are crossed in mate-selection, girls tend to marry up the SES scale, while boys tend to marry down.¹

In this light, although it appears that upwardly mobile (chiefly low SES-origin) girls tended to be left out of the dating market if they were not sorority members, the attainment of sorority status seems to have given them a "union card," formally admitting them to candidacy for membership by marriage in a higher social status than that from which they came. Non-upwardly mobile (chiefly high SES-origin) girls, however, were relatively little influenced by sorority membership, probably for a reason analogous to the small effect of grades-evaluation on the grade achievement of high aptitude-habit students, i.e., their SES origins had already endowed them with a high degree

¹See August B. Hollingshead, "Cultural Factors in the Selection of Marriage Mates," American Sociological Review, XV (1950), 610-27.

of desirability as dates and wives (note that their dating levels were higher than low SES girls'), such that sorority membership added relatively little to it. Non-upwardly mobile boys were strongly affected by fraternity membership, but it seems unlikely that the same factors operated on them as on upwardly mobile girls. We might speculate that it was the boys' own SES-conferred desirability as dates and husbands, coupled with the fraternities' organized facilitation of date-making with sorority members that produced the observed effect. One might even guess that high SES fraternity members typically found themselves much sought after by the girls, rarely refused, and therefore "played the field" more than their counterparts among non-fraternity boys. For their part, upwardly mobile boys were almost as little influenced by fraternity membership as non-upwardly mobile girls were by sorority membership, but again, it does not seem likely that the effects were small for the same reasons. Our guess is that for upwardly mobile, low SES-origin boys, either the addition of fraternity membership did not sufficiently enhance their desirability to allow them to compete for dates on a par with high SES fraternity members, or did not divert them strongly enough from their task-orientations.

The observation which we wish to single out for special emphasis, however, is that on this campus a peer group social structure functioned to legitimate and facilitate the strivings of socio-emotionally oriented, upwardly mobile girls. Thus, to the extent that students found husbands or wives at their college, it was not entirely an individualized, random search process but one which was structured and guided by the way in which the peer group was organized. And to the extent that girls achieved upward mobility by marriage to male students, it was partly due to the operation of a peer group system which judged, permitted, prevented. In this way, our

data seem to emphasize the contrast between the determination of mobility by particularistic criteria applied by one's peers (in the case of girls who chose the socio-emotional, marital path to this goal) and determination of mobility by universalistic criteria applied by trained superordinates (in the case of boys who chose the task, academic path).

Dating Versus Friendship

One more set of findings flow from the line of investigation we have been following. Table 122, when compared with Table 121, shows that the students on whose dating habits Greek-letter membership had the strongest positive

TABLE 122.--Associations (Yule's Q) between time spent with friends and Greek-letter membership, by desired mobility from father's occupation (Non-Freshmen)

Desired Mobility	Males		Females	
	Up	Same Down	Up	Same Down
Q (Hours with friends: Greek)	.21 (151)	.02 (59)	-.38 (102)	-.07 (104)

effects were also the students whose friendship habits were most negatively affected. That is to say, belonging to a sorority increased the likelihood that an upwardly mobile girl would date often, but decreased the likelihood that she would spend much time with her friends; and in the same way, belonging to a fraternity increased the likelihood that a non-upwardly mobile boy would date often, but decreased the likelihood that he would spend much time with his friends. But there seems to have been an important sex difference in this dissociation between dating and friendships.

One way to examine the possibility of acute dating-friendship conflict among the girls which these data suggest is shown in Table 123 where

TABLE 123.--Associations (Yule's Q) between time spent dating and time spent with friends, over-all and by Greek-letter membership (Non-Freshmen)

Over-All					
		Males		Females	
Q(Hours dating: Hours with friends)		.05 (347)		-.31 (280)	
Greek-letter Membership	Yes	No	Yes	No	
Q(Hours dating: Hours with friends)	.12 (224)	-.09 (123)	-.46 (166)	-.08 (114)	

the hypothesis is confirmed and indication is given that the incompatibility of dating and friendship was probably most keen just where we would expect it to be, judging from Tables 121 and 122: i.e., among sorority members. But perhaps a better way to test the hypothesis is to ask whether students who dated often tended to be more or less "satisfied" with the amount of time they spent with their friends. In this way, we can take into account the possibility that desire for friendships, as well as amount of interaction with friends, may have varied with amount of time spent dating. Table 124

TABLE 124.--"Satisfaction": Associations (Yule's Q) between F rank^a and time spent with friends, by time spent dating (Non-Freshmen)

		Males		Females	
Hours Dating Per Week	> 8	≤ 8	> 8	≤ 8	
Q (F rank: Hours with friends)	.58 (122)	.51 (166)	.16 (99)	.31 (132)	

^aF rank dichotomized between ranks one and two.

clearly demonstrates that the more the girls dated, the less "satisfied" they were with their friendship interaction; but if there was any effect

of dating on the boys' "satisfaction" with their friendship interaction, it was a positive one.

These findings seem to support and amplify the data on relationships between values, previously shown in Table 10. In that table, it may be seen that the negative association between D rank and F rank increased sharply from sophomore to senior girls, but increased only slightly from sophomore to senior boys. Moreover, the strength of the dissociations between these two values was generally higher among the girls than among the boys. Consistent with these findings among non-freshmen, we have also shown that the tendency of freshman girls to change their D and F ranks in opposite directions was in contrast with the boys' tendency to change them in the same direction (Table 13). On the whole, it would therefore appear that dating patterns were apt to break up friendship patterns among the girls, but left these patterns undisturbed or strengthened among the boys.

Thus, our data seem to point to two successive bifurcations in the girls' sex roles. The first one involved an emerging contradiction between a task orientation and a socio-emotional orientation. The second appears to have taken place within the socio-emotional area and involved the development of conflict between having dates and having close friends. In brief, the girls seem to have been pressed not only further and further away from a task orientation, but, if they chose the dating side of the socio-emotional orientation, further away from interaction with members of their own sex.

It is interesting to note that Table 125 shows that the degree of friendship "satisfaction" varied in the same direction as HSR and time spent dating among the boys, but in the opposite direction and more strongly so among the girls. Consequently, it would appear that boys tended to be rewarded with intimate within-sex social integration for their romantic prowess

TABLE 125.--"Satisfaction" with friendship interaction: Associations (Yule's Q) between F rank^a and time spent with friends, by time spent dating and HSR (Non-Freshmen)

HSR	Males				Females			
	Hi		Lo		Hi		Lo	
Hours Dating Per Week	>8	≤8	>8	≤8	>8	≤8	>8	≤8
Q (F: Hours with friends)	.64 (49)	.58 (76)	.58 (62)	.51 (56)	.12 (39)	.24 (55)	.27 (48)	.61 (53)

^aF rank dichotomized between ranks one and two.

and also for their academic prowess, while girls were punished for both qualities and in each case more severely than the boys. Now it was also true that high school rank was only very weakly associated with the amount of time which non-freshman students spent studying (Table 126). Nevertheless, we find in Table 127 that "satisfaction" with friendship interaction,

TABLE 126.--Per cent studying more than thirty-two hours per week, by HSR, associations (Yule's Q) between time spent studying and HSR (Non-Freshmen)

HSR	Males		Females	
	Hi	Lo	Hi	Lo
Per cent studying more than thirty-two hours per week	36 (145)	31 (146)	44 (119)	44 (118)
Q =	.11		.01	

among the non-freshman girls, varied very closely with amount of time spent studying but only mildly with amount of time spent dating. Among the boys, however, the situation was exactly the reverse. It would appear, therefore, that the boys tended to be rewarded with friendship "satisfaction" more for their dating frequency than for their studying, while the opposite was true

TABLE 127.--Friendship "satisfaction": Associations (Yule's Q) between F rank^a and time spent with friends, by time spent studying and time spent dating (Non-Freshmen)

Hours Study- ing per week	Males				Females			
	> 32	≤ 32	> 32	≤ 32	> 32	≤ 32	> 32	≤ 32
Hours dating per week	> 8	≤ 8	> 8	≤ 8	> 8	≤ 8	> 8	≤ 8
	.68 (24)	.10 (61)	.50 (67)	.20 (32)	.57 (88)	.68 (104)	.04 (65)	.16 (67)

^aF rank dichotomized between ranks one and two.

for the girls.¹ Note, however, that boys who dated often do appear to have garnered more friendship "satisfaction" if they studied more than if they studied less, while boys who dated little and spent much time studying were rewarded least of all. Among the girls, the details of the picture are quite different. Here we find that the students who were most "satisfied" with their friendship interaction corresponded to the least "satisfied" boys, and the girls who were least "satisfied" corresponded to one of the two most "satisfied" types of boys.

When we try to bring together the findings of Table 125 with those of Table 127, what seems to emerge is the idea that girls may have been particularly jealous of a girl who could get good grades while dating often and not studying very hard. Such a student seems to have suffered heavy social penalties among her sex, while a similar boy was rewarded among his sex.

Let us now briefly review some of the different effects of faculty members' expectations on boys and girls.

¹We shall not pursue this point further here, but this appears to be evidence that friendship "satisfaction" tended to be awarded in the sphere of activity which was opposite to the one most "appropriate" to each sex. This lends support to our earlier speculation about a general cultural norm favoring "well-roundedness."

Faculty Members

It should first be noted that faculty members themselves admitted to different expectations of male and female students, such that boys were more often expected to want to excel in academic work, while girls were more often expected to want to date (Table 128).¹ Therefore, we must add faculty expect-

¹As an aside, it is interesting that although the differences between the emphases which faculty members and students placed on grades-evaluation and dating-evaluation were considerable, the sex differences in these regards among students were quite close to the faculty-preferred sex differences. Further, it may be of interest to note the differences in faculty members' expectations of students when such expectations are classified according to the academic field of the instructor. The following tabulation sug-

Faculty Mem- bers' Field	Nat. Sci.	Behav. and Soc. Sci.	Arts- Hum.- Lang.	Phys. Ed.	Nat. Sci.	Behav. and Soc. Sci.	Arts- Hum.- Lang.	Phys. Ed.
Sex of Student	Males				Females			
Per cent Faculty Members Giving High Rank to Student Values								
Values				a				a
A	56 (16)	56 (16)	78 (23)	(3)	40 (15)	31 (16)	58 (24)	(3)
X	27 (15)	20 (15)	14 (21)	(2)	21 (14)	14 (14)	20 (25)	(2)
D	31 (16)	40 (15)	18 (22)	(3)	40 (15)	64 (14)	33 (24)	(2)
F	80 (15)	88 (16)	91 (23)	(3)	93 (14)	87 (15)	88 (24)	(2)
Male-Minus-Female Differences								
A	+15	+25	+20					
X	+6	+6	-6					
D	-9	-24	-15					
F	-13	+1	+3					

^aFrequencies too small for percentaging.

gests, among other things, that instructors in the natural sciences were least likely to have different grades- and dating-evaluation preferences of male and female students, but most likely to have different friendship-evaluation preferences.

tations as one more source of downward pressure (relative to the pressure exerted on the boys) on the girls' grades-evaluation and upward pressure on their dating-evaluation.

TABLE 128.--Per cent of faculty giving high ranks to student values, by sex of the student; per cent of non-freshmen giving high ranks to values, by sex

Sex of Student	Faculty Members			Non-Freshmen		
	Male	Female	Male-Female Difference	Male	Female	Male-Female Difference
Value						
A	62 (58)	43 (58)	+19	42 (293)	27 (240)	+15
X	20 (54)	18 (55)	+2	36 (291)	27 (235)	+9
D	30 (56)	45 (55)	-15	41 (283)	56 (225)	-15
F	88 (57)	89 (55)	-1	80 (288)	89 (231)	-9

The fact that both freshman and non-freshman girls and boys responded with the expected differences to faculty influences upon grades-evaluation and graduate aspiration has already been shown in Tables 63 and 65, and 64 and 66. In addition, we have shown, in Table 79, that faculty influence over grade achievement was much stronger among non-freshman boys than girls.

But it will be remembered that we also noted an apparently anomalous finding toward the end of the previous chapter, to the effect that the grade achievements of non-freshman sorority members were positively influenced by admiration of faculty members, while the achievements of non-members were negatively influenced (Table 100). This finding was particularly striking in contrast with the reverse situation which seems to have prevailed among the non-freshman boys. The question to which we now address ourselves is how this might have come about.

At this point, let us bring back into our argument the second role bifurcation which seems to have occurred among the girls, and note again that the contradiction between dating and spending time with friends was most extreme among sorority members. Now if we look at Table 129 we see that the

TABLE 129.--Associations (Yule's Q) between number of faculty admired and time spent dating; and time spent with friends, by Greek-letter membership (Non-Freshmen)

Greek-letter Membership	Males		Females	
	Yes	No	Yes	No
Time Spent Dating	-.21 (224)	-.32 (67)	.04 (166)	-.24 (68)
Time Spent With Friends	-.02 (224)	-.05 (67)	-.37 (166)	.02 (68)

association between amount of dating interaction and number of faculty members admired was most positive among sorority members and that the association between amount of friendship interaction and number of faculty members admired was most negative among sorority members. It would therefore appear that sorority girls who dated frequently not only spent less time with their friends, but also admired more faculty members.

It seems to us that the most plausible causal interpretation of these relationships would be that because sorority girls dated frequently, they had little friendship interaction with peers of their own sex; and because they were thus deprived in the peer group, they turned to faculty members (who tended to approve of their dating popularity) as surrogates for the friendships they lacked among their peers. If this interpretation were true, then we could go on to note that when compared with students of either sex, faculty members strongly favored a high grades-evaluation (Table 61) and conclude that

this might explain the originally anomalous finding that faculty members had a positive influence on the GPA's of sorority girls.¹

The problem we face in putting this hypothesis to the most rigorous associational, if not causal, test stems from the facts that (1) we must control for academic aptitude-habit (i.e., HSR), and (2) we have a relatively small case-base to begin with. Consequently, we have to forego the fifth-order cross-tabulation which is indicated, but we can substitute the three fourth-order cross-tabulations shown in Tables 130, 131, and 132---all of which control for HSR. In the first of these tables we see that the most

TABLE 130.--Associations (Yule's Q) between time spent dating and time spent with friends, by HSR and Greek-letter membership (Non-Freshmen)

HSR	Males				Females			
	Hi		Lo		Hi		Lo	
Greek-letter Membership	Yes	No	Yes	No	Yes	No	Yes	No
Q(Hours Dating: Hours with friends)	.14 (98)	.04 (47)	.07 (98)	-.21 (48)	-.64 (63)	-.20 (56)	-.27 (77)	-.02 (41)

TABLE 131.--Associations (Yule's Q) between time spent dating and number of faculty admired, by HSR and Greek-letter membership (Non-Freshmen)

HSR	Males				Females			
	Hi		Lo		Hi		Lo	
Greek-letter Membership	Yes	No	Yes	No	Yes	No	Yes	No
Q (Hours Dating: Faculty Admired)	-.34 (98)	-.40 (28)	-.25 (98)	-.23 (25)	.36 (63)	.03 (35)	-.11 (77)	-.61 (23)

¹Although we have no way of testing it, our guess is that the boys with whom these girls had dates may also have served as substitute friends because they too probably approved of the girls' dating frequency (albeit from a point of view different from that of faculty members), and with similar effects because their grades-emphases also tended to be higher than the girls'.

TABLE 132.--Associations (Yule's Q) between time spent dating and grade-point average, by HSR and Greek-letter membership (Non-Freshmen)

HSR	Males				Females			
	Hi		Lo		Hi		Lo	
Greek-letter Membership	Yes	No	Yes	No	Yes	No	Yes	No
Q (Hours Dating: GPA)	.02 (98)	-.59 (47)	-.05 (98)	-.26 (48)	-.06 (63)	-.41 (56)	-.35 (77)	-.42 (41)

violent clash between dating and friendship interaction occurred, not only in the sororities, as we have already observed, but among high HSR girls in the sororities. This finding falls into line with the conclusions arrived at above, to the effect that girls (especially sorority girls) were penalized by being deprived of within-sex friendship interaction for their academic as well as romantic prowess. In the second table, the evidence continues consistent with previous findings insofar as frequent dating is shown to have been less negatively associated with admiration of instructors among sorority members than non-members, and, again, the high HSR sorority members had the strongest positive association between dating interaction and admiration of faculty members. The third table is merely a reproduction of Table 119, placed here for ease of reference. Here we find that the grade achievement of sorority girls in general, and high HSR sorority girls in particular, was less depressed by frequent dating than was that of any other category of girls.

If we now read, and causally interpret, the conclusions from these three tables in reverse order, we arrive at an empirically defensible re-statement of our initial hypothesis:

(1) Although frequent dating depressed the grade achievement of all non-freshman girls, the depression was slightest among sorority members in general and among high HSR sorors in particular. (2) This followed from

the fact that among these girls, frequent dating was likely to carry with it a positive orientation toward faculty members. (3) This, in turn, was true because sorority girls were more deprived of friendship interaction with their peers if they dated often and if they had high academic aptitude-habit. In compensation for this deprivation, such girls developed affiliation with faculty members, the only other major source of social support on campus. (4) The faculty members to whom these girls gave admiration then brought about improvement in the girls' academic performance for two reasons: (a) faculty members' heavier emphasis on students getting high grades, and (b) the congeniality, to the girls in question, of faculty members' approval of frequent dating by girls.

It would therefore appear that in demanding and achieving conformity to their norms of high dating-evaluation and frequent dating interaction, sororities generated over-conformists who were then subjected to social sanctions by ostracism from intimate friendship interaction. But there was present a more approving group (i.e., faculty members) to which such deviants could turn their allegiance. In orienting themselves to the alternative group, however, deviants found that a price was exacted for the social support they obtained--the price of conformity to other norms of the alternative group. In conforming to these new norms, deviants on the original dimension of dating compounded their deviance and may have brought upon their heads still further friendship penalties in the sororities. Thus, in a sense, because they over-conformed to the sororities' norms of socio-emotional behavior, these girls seem to have deviated also from the sororities task achievement norms.

From the sororities' point of view, the application of group sanctions to deviants originally in one dimension seems to have had dysfunctional

consequences, given the availability of an alternative and supporting reference group. From the point of view of the college's formal apparatus and its goal of high student academic achievement, although this devious road seems bound for Rome, one wonders whether it might not have led through territory less perilous with unresolved role-conflicts for women.

CHAPTER VII

INTERPERSONAL ENVIRONMENTS I

The Distribution of Recognition, and of Interaction Frequency and Attractiveness

We come now to the most unique feature of this research: The measurement of the influence of interpersonal environments, over time. At many points in the preceding analysis of survey data, we have inferred that the changes observed among freshmen during their first seven months in college were impelled by external social, rather than internal psychological, influences. After taking into account the freshmen's initial predispositions, we have often found over time changes which are not easily explainable by predisposition alone and which appeared to be related to the college experience itself. In this and the following chapter, we shall put this conclusion to our most stringent test by examining directly the impact of changing interpersonal environments upon changes in the freshmen's attitudes and aspirations.

The rationale underlying the following investigations presumes that each individual exists in a changing environment of informal social "pushes" and "pulls" which consist of the attitudes and behavior of the other individuals with whom he has contact. The manner of a subject's response to this environment is postulated as being determined not only by its strength and homogeneity, but by qualities of the subject, such as sex, which may be operationally considered to be intrinsic to the subject.

Since the influences of an interpersonal environment are presumed to

"emanate" via communications from other individuals, each subject can contribute to the environment of every other subject. In this way, members of a given social group are knit together by a series of overlapping spheres of interpersonal influence. But when we are concerned with one particular subject, measurements on his environment, separate and apart from others', are essential to an understanding of his behavior. In the following analysis we shall investigate whether any of the freshman changes in orientation which we have identified in previous chapters may have been influenced by the changing interpersonal environments in which freshmen began their college careers.

To describe the way we have operationalized the concept of interpersonal environments, it is necessary to say which components and dimensions of our respondents' interpersonal environments we are concerned with here, and which others we exclude from consideration. In this connection, there are three main specifications of our use of the term "interpersonal environment" in this study:

First, our sole interest here is in that part of a subject's interpersonal environment which is comprised of peers in the same "natural grouping," i.e., students who were attending the same college at the same time. Although this limitation leaves out faculty members, parents, friends and acquaintances who were not attending the college, college administrators, etc., it does seem reasonable to suppose that our delineation includes a very significant, and certainly the most proximal, part of the student's total interpersonal environment. It will be remembered, however, that we did give some attention to faculty members and parents as elements in students' inter-

personal environments. The distinction between those earlier analyses and the one to follow may well be worth making with some exactitude and detail.

In the case of parents, we have no information about their attitudes or behavior toward their sons and daughters, or toward college life. We were therefore forced to infer, from correlational findings, the kind of relationship which parents, as an undifferentiated category, bore to students and students' status ambitions. In the case of faculty members, we do have information about their attitudes toward students, and we have information about the number of faculty members each student admired. We do not know, however, which faculty members any student admired, nor do we know how much they were admired. With respect to student peers, our situation is quite different from both of these. Here our information is symmetrical. That is, we know what the responding student's attitudes and behaviors were (at the level of scope, detail and reliability collected by our questionnaires); we know the corresponding attitudes and behaviors of each of the other students with whom he said he had contact; and we know certain aspects of the social relationship between the student and each of his peers.

It is important to emphasize that although the analytical tools at our disposal require that individual freshmen be grouped together according to shared characteristics, the measurement of each freshman's interpersonal environment was performed separately from all others. As a consequence, we can treat a particular freshman's interpersonal environment as an attribute in the same way, logically speaking, that we treat his sex, or father's occupation, or year in college.

The second limitation on our analysis of interpersonal environments is expressed by the fact that we are concerned with the influence exerted on a given student by the peers whom he named and not at all with the influence of peers who named him. We thus bypass the important problem of the relative

influence of mutual and one-way designations. The examination of this question, on a scale comparable to our own and in a field-setting, would seem to be a highly useful project which we forego for reasons of economy only, since we have the data which would make such an analysis possible.¹

Lastly, our measure of interpersonal environments does not take into account the fact that some individuals in a given environment may be in interaction with one another, while others may not. This is essentially the problem of clique delineation and it too is a matter which we set aside reluctantly. Consequently, we shall not be able to differentiate the extra influence which environing individuals seem likely to carry when they act in concert from their influence as single persons. Again, we forego this analysis for economic reasons only, since the data are available and electronic computer routines have been devised for delineating cliques within groups up to one hundred or larger in size.²

Given these limitations, we divide our analysis into two parts, the first of which pays attention to the quantitative side of the freshmen's interpersonal environments: i.e., their size, and the distribution of affect and frequency of interaction within them. In this first chapter, we seek to answer such questions as the following: Did sheer number of acquaintances

¹For theoretical discussions pertinent to this problem, see Theodore Newcomb, "An Approach to the Study of Communicative Acts," and Leon Festinger, "A Theory of Social Comparison Processes," both in Small Groups, eds. Paul Hare, Edgar F. Borgatta, and Robert F. Bales (New York: Knopf, 1955). For relevant empirical research, see Elihu Katz and Paul F. Lazarsfeld, Personal Influence (Glencoe: Free Press, 1955), pp. 137-62 and 219-384; and Peter M. Blau, Dynamics of Bureaucracy (Chicago: University of Chicago Press, 1955), pp. 117-31.

²See James S. Coleman and Duncan MacRae, Jr., "Electronic Processing of Sociometric Data for Groups Up to 1000 in Size," American Sociological Review, XXV (1960), 722-27; and Duncan MacRae, Jr., "Direct Factor Analysis of Sociometric Data," Sociometry, XXIII, 360-71.

have any effect on a freshman's attitudinal changes? Did it matter whether he liked or disliked, or spent more or less time with, students in his environment? Did it matter whether a freshman knew relatively more or fewer non-freshmen?

From the preceding analysis, however, it should be clear that we shall be doing more than analyzing just the effects of quantity. Since we have found distinct attitudinal and behavioral differences between freshmen and non-freshmen, between boys and girls, between Greeks and independents, etc., we have only to assume the null hypothesis that the non-freshmen, for example, in a given interpersonal environment are a random sample of all non-freshmen to infer the logical direction of their influence. Thus, if a freshman included more non-freshmen than freshmen in his interpersonal environment, we would expect the net environmental pressure on his grades-evaluation to be downward and we can test this expectation against the subject's actual grades-evaluation change. In the chapter following this, we shall try to look more closely at interpersonal environments by introducing controls for sex and college class differences in attitudes and behaviors. At that time we shall accept as given the fact that non-freshmen, for example, differed from freshmen and ask whether a freshman subject's choice among freshmen and among non-freshmen seems to have mattered.

Before coming to grips with the concrete questions of effect which we have outlined, let us indicate the quantitative dimensions of the problem with which we wish to deal. In Table 133, we find the total and mean numbers of students whose names were recognized by respondents to the November questionnaire and the distribution of affect, by sex and college class of the respondent. Although our research is restricted to an analysis of the freshmen's interpersonal environments, we show data on other classes in this

TABLE 133.--Total and mean number of recognitions, and distribution of affect, by sex and class of respondent (November Questionnaire)

Males						
Class of Respondent	Total Number Respondents	Total Number Recog's	Mean Number Recog's	Pct. Like	Pct. Neutral	Pct. Dislike
Freshmen	147	21,394	145.5	59	36	6
Sophomores	101	24,200	239.6	49	41	10
Juniors	108	31,266	289.5	46	42	12
Seniors	138	39,639	287.2	48	42	10
Females						
Freshmen	172	32,395	188.3	60	35	5
Sophomores	133	50,973	383.3	52	41	7
Juniors	77	28,287	367.4	50	42	8
Seniors	70	28,574	408.2	52	41	7
All Respondents	946	256,728	271.4	52	40	8

table for purposes of comparison. Bearing in mind that the student body numbered 1,005 undergraduates (plus forty-six special and graduate students who are not included here), it can readily be seen that the average student recognized the names of roughly 27 per cent of his peers and liked most of them. Note that the stronger socio-emotional orientation of the girls is reflected in the facts that they recognized more students, liked a larger proportion of them and disliked a smaller proportion of them than did boys in the same class. Note also that non-freshmen seem to have liked a smaller proportion of their interpersonal environments than did freshmen of the same sex. This may have been an expression of the freshmen's eagerness to be accepted in their new social environments and their resulting willingness to give friendliness in the hope that it would be returned.

Against this general background, let us now examine the distribution of the 53,789 recognitions which the freshmen reported in November, and after that, look into some of the environmental changes which took place among freshmen between November and April.

Total Size of Freshman Interpersonal Environments in November
and the Distribution of Recognition, Interaction Frequency
and Attraction in Them

We wish to do the following three things: (1) examine differences among the freshmen in the absolute size of their interpersonal environments (hereinafter referred to as IE's); (2) control for differences in absolute size of IE's and examine differences in the relative distributions of affect and interaction; and (3) maintain a case-base which will support certain cross-tabulations to be shown later. In order to accomplish the first of these objectives, we simply count the number of recognitions reported by each respondent, form a rank-order (within sex of the respondent) of these numbers and dichotomize at the median. To accomplish the second objective, we express the distributions of recognition, interaction frequency and attraction within a given freshman's IE as proportions of the total size of his IE. Thus we can find out what proportion of his recognitions were given to freshman males, or non-freshman females, etc.; what proportion of recognitions were given to peers who were liked, or disliked, or neither, and so on. As in the case of total IE size, we can then form rank-orders of these proportions within sex of the respondent and dichotomize at the medians. The third objective is maximized by our choice of the median, rather than the mean, as the cutting point.

Table 134 gives the ranges and medians for absolute size and twelve November IE proportions. Let us point out two relationships shown here which will bear upon the analysis, later in this chapter, of changes in IE propor-

tions between November and April. First, note that freshman boys tended to distribute their recognitions more equally between freshman and non-freshman girls than did freshman girls. We shall see later how these sex-linked differences in IE proportions changed between November and April.

TABLE 134.--Ranges and medians of total number of recognitions and selected proportions in freshman November IE's (Freshmen)

	Males		Females	
	Range	Median	Range	Median
Total Number of Recognitions	10- 357	137	27- 377	184
Proportions:				
Liked	.167- 1.000	.608	.178 .950	.607
Neutral	.000- .827	.345	.009- .802	.313
Disliked	.000- .327	.040	.000- .391	.034
Total more than six hours	.000- .892	.046	.000- .924	.043
Total Freshman Males	.000- .768	.379	.000- .302	.147
Total Freshman Females	.000- .700	.190	.291- .898	.456
Total Non-Freshman Males	.024- .559	.360	.008- .286	.107
Total Non-Freshman Females	.000- .500	.053	.082- .427	.281
Non-Freshman Males Liked	.000- .500	.220	.000- .148	.042
Non-Freshman Males more than six hours	.000- .380	a	.000- .089	a
Non-Freshman Females Liked	.000- .186	.029	.030- .415	.180
Non-Freshman Females more than six hours	.000- .080	a	.000- .280	a

^aMedian proportion was .000; classification of respondents was .000 versus greater than .000.

The first cross-tabulation involving measures presented in Table 134 is Table 135, where we find that the larger his November IE, the more a freshman's grades-evaluation declined from September to November. This should not be surprising, since a large IE implies less selectivity from a population which generally devalued, or was in the process of devaluing, grades. In accord with this and findings previously discussed, we also find that the student's desire to be accepted and liked by his fellow-students was positively related to November IE size. Yule's Q for this association among the freshman boys was .16; among the girls, it was .55. The associations with desire to find love and marriage in college were .19 and .20 for boys and girls respectively.

TABLE 135.--Per cent and per cent change high grades-evaluation, and per cent and per cent change having graduate aspirations, by total number recognized in November IE's (Freshmen)

	Males		Females	
	Hi	Lo	Hi	Lo
Total Number Recognized				
September High Grades	78 (73)	78 (70)	69 (86)	75 (84)
Nov. A Rank	42 (64)	56 (64)	28 (78)	43 (68)
	Change			
	-46	-28	-59	-43
Sept. Grad. Asp.	49 (73)	47 (70)	23 (86)	29 (83)
Nov. Grad. Asp.	73 (73)	68 (73)	29 (86)	44 (84)
	Change			
	+47	+40	+8	+21

Regarding the influence of the distribution of affect in the total IE, Table 136 shows that the stronger the positive or negative affect in a freshman's IE, the more rapidly his grades-evaluation declined and the more

TABLE 136.--Per cent and per cent change high grades-evaluation, and per cent and per cent change having graduate aspirations, by November IE proportion liked, neutral, disliked (Freshmen)

	Proportion Liked				Proportion Neutral				Proportion Disliked				
	Males		Females		Males		Females		Males		Females		
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	
November IE Proportion													
Sept. High Grades	83 (72)	73 (71)	73 (85)	71 (85)	72 (72)	85 (71)	69 (97)	75 (73)	81 (72)	76 (71)	72 (85)	72 (85)	
Nov. High A Rank	41 (63)	57 (65)	30 (69)	39 (77)	55 (67)	43 (61)	42 (89)	25 (57)	45 (64)	53 (64)	28 (71)	41 (75)	
	Change												
	-51	-22	-59	-45	-24	-49	-39	-67	-44	-30	-61	-43	
Sept. Grad. Aspirations	40 (72)	56 (71)	15 (84)	36 (85)	54 (72)	42 (71)	32 (97)	18 (72)	44 (72)	52 (71)	27 (84)	25 (85)	
Nov. Grad. Aspirations	69 (74)	72 (72)	35 (86)	38 (84)	70 (73)	71 (73)	36 (96)	36 (74)	69 (74)	72 (72)	44 (85)	29 (85)	
	Change												
	+48	+36	+24	+3	+35	+50	+6	+22	+45	+42	+23	+5	

neutral affect, the slower his grades-evaluation declined. It would therefore appear that a freshman who was affectively involved with other students--whether this involvement was one of attraction or repulsion--tended to conform to the generally prevailing attitudinal norms. The same conclusions may be drawn from the data on change in graduate aspirations. In line with this and findings pointed out earlier, the associations (Yule's Q) between desire to be accepted by one's fellow-students and IE effective neutrality were $-.30$ for the boys and $-.32$ for the girls. The associations with over-

achievement were .12 and .16 for boys and girls respectively. And as an interesting sidelight, our earlier conjectures about the sex-linkage of the task and socio-emotional paths to success seem borne out by the fact that although there was little to choose between the weak relationship of IE size to desired occupational mobility among boys and girls (the Q's are $-.08$ and $-.16$ respectively), there was a considerable sex difference in the allocation of affect: The association between desired mobility and IE affective neutrality was $.50$ among the boys but $-.31$ among the girls.

When we cross-tabulate the two IE measures shown so far (i.e., size and affectivity) against grades-evaluation, we find that freshmen were least likely to lower their grades-evaluations and least likely to raise their graduate aspirations between September and November if they had relatively small IE's and if they were also relatively uninvolved in them (Table 137). Inspection of mean differences between changes shown in this table suggests that affective neutrality was slightly more effective than a small IE in sustaining grades-evaluation. This table also indicates that affective neutrality was a more important factor in over-achievement if one's total IE was comparatively small, and that it was more important to the girls' over-achievement than to the boys'. Table 138 shows the relationship of affective neutrality alone to over-achievement, and again it may be seen that freshmen who were high on neutrality tended to over-achieve more often than did low neutrality freshmen; that neutrality had a stronger effect on the girls' over-achievement than on the boys', and a stronger effect when the total IE size was relatively small. In general, then, it would appear that an important contributor to high grades-evaluation, low graduate aspirations and academic over-achievement was affective neutrality toward one's peers.

At various points in the preceding analysis of survey data, we have

TABLE 137.--Per cent and per cent change high grades-evaluation, per cent and per cent change having graduate aspirations, and per cent over-achieving, by November IE number recognized and proportion neutral (Freshmen)

	Males				Females			
	Hi		Lo		Hi		Lo	
Total Number Recognized								
Total Proportion Neutral	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Sept. High Grades	70 (40)	88 (33)	75 (32)	82 (38)	64 (53)	76 (33)	75 (44)	75 (40)
Nov. High A Rank	43 (37)	41 (27)	70 (30)	44 (34)	33 (51)	18 (27)	53 (38)	30 (30)
Change	-39	-53	-7	-46	-46	-76	-29	-60
Sept. Grad. Aspirations	52 (40)	45 (33)	56 (32)	40 (38)	28 (53)	15 (33)	36 (44)	20 (39)
Nov. Grad. Aspirations	74 (39)	71 (34)	65 (34)	72 (39)	32 (53)	24 (33)	42 (43)	46 (41)
Change	+46	+47	+20	+53	+6	+11	+9	+32
Per cent Over-Achieving	54 (35)	52 (31)	45 (29)	37 (30)	48 (46)	43 (28)	51 (41)	41 (32)
Q	.05		.17		.10		.21	

TABLE 138.--Per cent over-achieving, by November IE affectivity (Freshmen)

	Males						Females					
	Like		Neutral		Dislike		Like		Neutral		Dislike	
IE Affectivity												
IE Proportion	Hi	Lo										
Per cent Over-Achieving	44 (61)	50 (64)	50 (64)	44 (61)	43 (60)	51 (65)	45 (71)	47 (76)	49 (87)	42 (60)	47 (73)	46 (74)

tentatively suggested that the freshman changes in grades-evaluation and graduate aspirations manifested a process of conforming to non-freshman standards. We can make an important further step toward confirming this hypothesis by examining Table 139. Here we can see that freshman males in the IE

TABLE 139.--Per cent and per cent change high grades-evaluation, and per cent and per cent change having graduate aspirations, by November IE proportions non-freshman and freshman males (Freshmen)

Proportion Non-Freshman Males	Males				Females			
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Proportion Freshman Males	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Sept. High Grades	72 (25)	82 (45)	81 (47)	73 (26)	67 (49)	61 (36)	81 (36)	78 (49)
Nov. High A Rank	54 (24)	33 (39)	62 (42)	48 (23)	27 (44)	34 (32)	46 (28)	36 (42)
	Change							
	-25	-60	-23	-34	-60	-44	-43	-54
Sept. Grad. Aspirations	36 (25)	38 (45)	66 (47)	46 (26)	16 (49)	26 (35)	33 (36)	31 (49)
Nov. Grad. Aspirations	62 (26)	79 (47)	79 (47)	48 (25)	26 (50)	33 (36)	49 (35)	41 (49)
	Change							
	+41	+66	+38	+4	+12	+9	+24	+14

tended to sustain grades-evaluation and depress graduate aspirations, while non-freshman males tended to have the opposite effect; exactly as we would expect. The result is that a freshman boy whose IE included a relatively large proportion of non-freshman males and a relatively small proportion of freshman males was very likely to lower his grades-evaluation and raise his graduate aspiration at the same time. In Table 140 we have similar

TABLE 140.--Per cent and per cent change high grades-evaluation, and per cent and per cent change having graduate aspirations, by November IE proportions non-freshman and freshman females (Freshmen)

	Males				Females			
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Proportion Non-Freshman Females								
Proportion Freshman Females	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Sept. High Grades	79 (42)	83 (29)	78 (32)	75 (40)	76 (25)	70 (60)	75 (61)	62 (24)
Nov. High A Rank	47 (38)	42 (21)	48 (27)	54 (35)	43 (23)	24 (54)	45 (49)	30 (20)
Change	-40	-49	-38	-28	-43	-66	-40	-52
Sept. Grad. Aspirations	48 (42)	45 (29)	50 (32)	50 (40)	24 (25)	25 (59)	31 (61)	17 (24)
Nov. Grad. Aspirations	68 (41)	69 (32)	66 (32)	78 (41)	36 (25)	31 (61)	43 (61)	35 (23)
Change	+38	+44	+20	+56	+16	+8	+17	+22

findings among the girls with respect to grades-evaluation change, but no clear conclusion may be reached concerning their graduate aspiration change, the over-all dimensions of which were smaller than the boys'.

Thus, in the case of both girls and boys, we have direct evidence that the decline in grades-evaluation was a manifestation of a tendency to conform to non-freshman attitudes, and that the mechanisms of social pressure which accomplished this conformity were contained in the freshmen's interpersonal environments.

The last observation which we pointed out in Table 140, however, raises the question of the source of influence upon the girls' graduate aspirations. It seems clear that freshman boys were influenced by non-freshman boys to change their graduate aspirations as well as their grades-

evaluations, but the corresponding conclusion cannot be drawn for the girls.

Tables 141 and 142 may offer some solution to this problem, since in the first

TABLE 141.--Per cent and per cent change having graduate aspirations, by November IE proportion non-freshman males and females liked (Freshman)

	Males		Females			Males		Females	
	Hi	Lo	Hi	Lo		Hi	Lo	Hi	Lo
Non-Freshman Males Liked					Non-Freshman Females Liked				
September	44 (71)	53 (72)	18 (84)	34 (85)	September	41 (71)	56 (72)	21 (84)	31 (85)
November	73 (73)	68 (73)	36 (85)	36 (85)	November	66 (73)	75 (73)	35 (85)	38 (85)
Change	+52	+32	+22	+3	Change	+42	+43	+18	+10

TABLE 142.--Per cent and per cent change having graduate aspirations, by November IE proportion non-freshman males (Freshmen)

Total Non-Freshman Males	Males		Females	
	Hi	Lo	Hi	Lo
September	37 (70)	59 (73)	20 (84)	32 (85)
November	73 (74)	68 (72)	29 (86)	44 (84)
Change	+57	+22	+11	+18

table it can be seen that the girls who liked relatively many non-freshman boys raised their graduate aspirations, while the degree to which they liked non-freshman girls seems to have had only a small effect. Table 142 shows that although the over-all proportion of non-freshman males, without regard to attraction, had a positive influence on the boys' change in graduate aspirations, no such influence may be observed among the girls. Thus, it would appear that (1) non-freshmen of the same sex were the primary sources of

downward social pressure on freshman grades-evaluations; (2) non-freshman males were the primary source of upward social pressure on freshman boys' graduate aspirations; and (3) non-freshman boys whom they liked were the primary source of upward pressure on the freshman girls' graduate aspirations.

The proportion of IE's with whom freshmen said they spent more than six hours per week also propelled the decline in grades-evaluation, as may be seen in Table 143 but had little effect on the change in graduate aspirations. (The association with desire for acceptance was .20 for boys and .30 for girls, and the association with over-achievement was -.18 for boys and -.01 for girls.) In Table 144 and 145, however, it can be seen that the

TABLE 143.--Per cent and per cent change high grades-evaluations, and per cent and per cent change having graduate aspirations, by November IE proportion frequent interaction (Freshmen)

	Males		Females	
	Hi	Lo	Hi	Lo
Total More Than Six Hours Per Week				
Sept. High Grades	82 (72)	75 (71)	78 (85)	66 (85)
Nov. A Rank	42 (64)	56 (64)	35 (74)	35 (72)
Change	-49	-25	-55	-47
Sept. Graduate Aspirations	42 (72)	55 (71)	21 (84)	27 (95)
Nov. Graduate Aspirations	66 (74)	75 (72)	35 (85)	38 (85)
Change	+41	+44	+18	+15

combination of liking relatively many non-freshmen of the same sex and spending more than six hours per week with a relatively small proportion of them

was most conducive to a large graduate aspiration increase, on the one hand, and to a small grades-evaluation decrease, on the other. It is as though attraction to non-freshmen from a distance (or what one might call "awe") was most apt to bring about confirmity to the academically "ideal" student--one who places a relatively strong emphasis on getting good grades and who also wants to attend graduate school after college.

TABLE 144.--Per cent and per cent change high grades evaluation, by November IE proportion non-freshmen liked and proportion frequent interaction (Freshmen)

	Males				Females			
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Non-Freshman Males More Than Six Hours								
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
September	80 (44)	86 (28)	81 (27)	70 (44)	78 (18)	a (8)	66 (67)	77 (77)
November	41 (39)	42 (26)	67 (24)	51 (39)	31 (16)	a (8)	32 (53)	41 (69)
Change	-49	-51	-17	-27	-60		-52	-47
Non-Freshman Females Liked								
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
September	94 (16)	a (5)	80 (58)	76 (67)	76 (41)	76 (25)	68 (44)	70 (60)
November	a (14)	a (5)	54 (50)	51 (59)	22 (36)	32 (22)	40 (38)	42 (50)
Change			-32	-33	-71	-58	-41	-40

^aFrequencies too small for percentaging.

A comparison of Table 144 with Table 6 shows that the November grades-evaluation levels of freshmen whose IE's contained relatively large proportions of liked and relatively small proportions of frequently seen non-freshmen were

TABLE 145.--Per cent and per cent change having graduate aspirations, by November IE proportion non-freshmen liked and proportion frequency of interaction (Freshmen)

	Males				Females			
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Non-Freshman Males More Than Six Hours								
Non-Freshman Males Liked	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
September	39 (44)	46 (28)	52 (27)	57 (44)	18 (17)	a (7)	18 (67)	34 (77)
November	67 (45)	66 (29)	82 (28)	70 (44)	33 (18)	a (8)	37 (67)	35 (77)
Change	+46	+37	+62	+30	+18		+23	+2
Non-Freshman Females Liked								
September	38 (16)	a (5)	42 (55)	55 (67)	17 (41)	28 (25)	26 (43)	32 (60)
November	75 (16)	a (5)	63 (57)	76 (68)	26 (42)	40 (25)	44 (43)	38 (61)
Change	+60		+36	+47	+11	+17	+24	+9

^aFrequencies too small for percentaging.

furthest above the level which prevailed among non-freshmen of their own sex. Similarly, a comparison of Table 145 with Table 15 indicates that the same freshmen had November aspiration levels which most closely approximated non-freshman levels. Clearly, these freshmen responded energetically to the high graduate aspiration climate, but reluctantly to the low grades-evaluation climate. Thus, they were most resistant to the prima facie contradiction between declining grades-evaluation and rising graduate aspirations which was developing among the freshmen as a whole. It is also noteworthy that these freshmen did not begin their college careers with vastly stronger orientations toward high college grades or toward graduate school than did

other freshmen. This seems to suggest that their special change tendencies were not due to an initially powerful predisposition, but rather to environmental factors encountered in college.

An intriguing finding of Table 145, one to which we shall refer later in this chapter, is that frequency of interaction (and possibly also liking) with non-freshman boys and with non-freshman girls seems to have operated in opposite directions among the boys, so that freshman boys whose IE's had higher proportions of frequently seen and liked non-freshman girls seem to have increased their graduate aspirations quite sharply. This is all the more noteworthy because of the low graduate aspirations of non-freshman girls, as compared to non-freshman boys.

November to April Changes in IE Size and Distribution of
Recognition, Interaction Frequency and Attraction

The surest evidence of causation which our research can offer reduces to concomitant variation over time. Although concomitant variation has been implicit in the foregoing examination of November IE's (assuming that freshmen had, in effect, no interpersonal environments in the student peer group when they entered college, and that the September-November changes in grades-evaluation and graduate aspirations occurred simultaneously with the growth of interpersonal environments reported in November), we can make a more explicit test for concomitance by examining the relationships between changes in IE's between November and April and changes in grades-evaluation and graduate aspirations over the same time period.

Certain relevant measures of IE change¹ with their ranges and medians,

¹Changes in each freshman's distributions of recognition, affect and interaction frequency were computed by (1) finding the relevant November IE proportion, where unity is the total number of November recognitions; (2) finding the corresponding April IE proportion, where unity is the total number of April recognitions; and (3) subtracting the November proportion from the April proportion. Since the November and April proportions are logically independent of one another, the difference between them is logically independent of each.

are shown in Table 146. Let us point out only a few items in this table.

First of all, it is an impressive fact that between November and April the

TABLE 146.--Ranges and medians of November to April changes in total number of recognitions and selected IE proportions (Freshmen)

	Males		Females	
	Range	Median	Range	Median
Total Number of Recognitions	-65 +594	+118	-9 +497	+166
Proportions:				
Liked	-.620 +.412	-.097	-.693 +.291	-.104
Neutral	-.382 +.615	+.092	-.259 +.682	+.121
Disliked	-.134 +.215	+.007	-.116 +.128	.000
More than six hours per week	-.842 +.132	-.017	-.853 +.144	-.020
Freshman males	-.366 +.468	-.047	-.200 +.112	+.004
Freshman females	-.511 +.390	+.020	-.604 +.039	-.111
Non-Freshman males	-.426 +.397	-.006	-.007 +.263	+.090
Non-Freshman females	-.059 +.155	+.036	-.114 +.360	+.017
Non-Freshman males more than six hrs.	-.297 +.071	a	-.082 +.021	a
Non-Freshman males liked	-.310 +.199	-.041	-.054 +.154	+.031
Non-Freshman females more than six hrs.	-.076 +.021	a	-.150 +.252	a
Non-Freshman females liked	-.052 +.080	+.013	-.218 +.368	-.026
Total No. of recognitions in April IE's	15- 777	259	45- 715	335

^aMedian proportion was .000; classification of respondents was .000 versus greater than .000.

boys' median total number of recognitions increased by some 89 per cent and the girls' went up 82 per cent. In all, the 279 freshmen respondents to the April questionnaire reported nearly eighty-seven thousand recognitions. Thus, by the end of their first year in college, the median freshman could recognize the names of a little less than one-third of all undergraduates and at least one boy and one girl could recognize about three-quarters of them. If we had added photographs and perhaps nicknames to our questionnaire roster, these figures would undoubtedly have been still larger. We underscore the bare facts of IE size and rapid growth over time in order to suggest the truly massive quality of interpersonal environments and influence which the usual "three best friends" question would have failed entirely to capture.

Second, Table 146 shows that a small but general decline took place in IE proportions liked and an increase occurred in IE proportions disliked among the boys. These changes seem to be in line with the freshman-non-freshman differences noted in Table 133 and perhaps signaled some reduction in acceptance anxiety and some increment in selectivity among the freshmen, such that their distribution of affect moved toward the distributions observed among non-freshmen.

Third, note that the November-April period seems to have been one in which across-sex acquaintances were developed more rapidly than within-sex ones. This seems to have been due largely to the fact that freshmen joined the Greek-letter societies during this period--a point to which we shall return in a moment.

Lastly, it is important to note that although there was a distinct change in the median size of freshman IE's, the median changes in the distribution of recognitions, affect and interaction frequency were comparatively small. No median change shown in Table 146 exceeded $-.10$. Thus, it would

seem that despite the considerable absolute size of the November-April changes, the median proportional distributions shown in Table 134 remained fairly constant over-all. It can also be observed, however, that the ranges of certain IE proportion differences were quite large.

Greek-Letter Membership

One of the most consistent findings from the analysis in preceding chapters has been the profound and pervasive effects of Greek-letter societies upon the student's attitudes and behavior. We have shown how, in large part, the fraternities and sororities must be considered a sub-culture within the student-body, one which was not an insulated enclave, but a radiator of influence throughout the student peer group. It is therefore to be expected that when a freshman joined a Greek-letter organization his interpersonal environment should undergo changes of some consequence to his college outlook and career. In Table 147 we show what some of these IE changes were.

First of all, it is obvious that freshman Greek-letter initiates increased the size of their IE's more than did freshman non-members, and secondly, it is equally clear that members changed the distribution of recognitions, affect and interaction frequency in distinctive ways. In general, what seems to have occurred was that Greek-letter initiates tended to increase their across-sex recognitions and decrease their total positive affect (this was true especially of fraternity members) more than freshmen who did not join Greek-letter societies.

Looking into further detail shown in this table, we find that the only relative increase in IE proportion liked which joining a fraternity brought about was that of non-freshman girls, and that only very slightly, when compared with the increases in positive affect shown among non-members. Among the girls, sorority memberships tended to induce a relative increase

in the IE proportions of liked freshman females and liked non-freshman boys.

TABLE 147.--Per cent above medians of November-April IE change, by Greek-letter membership of respondent (Freshmen)

Greek-letter Membership	Males		Females	
	Yes	No	Yes	No
Total Number of Recognitions	55	36	50	44
Total Liked	40	64	48	49
Total Neutral	54	38	48	47
Total Disliked	54	38	49	47
Total more than six hours	45	56	46	53
Freshman males	48	49	52	44
Freshman females	54	38	54	36
Non-Freshman males	42	60	51	42
Non-Freshman females	53	40	36	80
Freshman males liked	46	51	48	49
Freshman females liked	48	49	53	38
Non-Freshman males liked	41	60	53	38
Non-Freshman males more than six hours	48	69	86	93
Non-Freshman females liked	49	47	41	67
Non-Freshman females more than six hours	86	91	58	84
Base	100 (83)	100 (45)	100 (106)	100 (45)

But when we inquire about associations between changes in IE proportions, we find in Table 148 that the tendencies toward same-direction change in IE proportions of (1) male and female freshmen and (2) male and female non-freshmen were stronger among Greeks than independents. The associations between changes in other IE proportions, particularly among the boys, tended

TABLE 148.--Associations (Yule's Q) between changes in IE proportions recognized, by Greek-letter membership (Freshmen)

Males						
Greek-letter Membership	Yes			No		
	FM ^a	FF ^b	NFM ^c	FM	FF	NFM
FF	.22			-.58		
NFM	-.74	-.68		-.54	-.69	
NFF ^d	-.62	-.53	.04	-.56	.23	-.33
Females						
FF	-.19			-.22		
NFM	-.22	-.83		-.43	-.68	
NFF	-.51	-.62	.05	-.27	-.68	-.32

^aFM = Freshman males.^bFF = Freshman females^cNFM = Non-Freshman males.^dNFF = Non-Freshman females.

to be more negative if one belonged to a Greek-letter society than if one did not belong. Similarly, Table 149 shows that the tendency to change one's IE proportions of liked male and female freshmen in the same direction was considerably stronger among Greek-letter members than among non-Greeks. But in interesting contrast with Table 148, Table 149 shows that the tendency to change one's IE proportion of liked male and female non-freshmen in the same direction was weaker among Greeks than among non-Greeks.

These findings seem to suggest the following: (1) When freshmen joined fraternities or sororities, they were apt to choose between making new acquaintances among their fellow freshmen or among non-freshmen. Freshmen who did not join these organizations seem to have been freer to develop new acquaintances both among their own classmates and among members of higher

classes. (2) Greek-letter initiates were more likely to develop new friends, as distinct from acquaintances, among their own classmates and less likely to develop new friends among non-freshmen than were independent freshmen.

TABLE 149.--Associations (Yule's Q) between changes in IE proportions liked, by Greek-letter membership (Freshmen)

Males						
Greek-letter Membership	Yes			No		
	FM	FF	NFM	FM	FF	NFM
FF	.77			.13		
NFM	.42	.12		.54	.72	
NFF	.12	.26	.12	.22	.49	.43
Females						
FF	.50			-.06		
NFM	.44	.47		.48	.14	
NFF	.02	.26	.10	.26	-.16	.36

It would therefore appear that college seniority distinctions were more strictly observed inside the Greek-letter societies than outside, with the result that freshman members found themselves choosing between becoming more interested in non-freshmen or more interested in freshmen, but in either case, finding greater friendliness among their own classmates.

Remembering the stronger emphasis which non-freshman Greeks gave to dating (Table 97), certain cells in Table 149 suggest a clue to the explanation of the freshman-non-freshman schism which we have just found among fraternity and sorority members. In that part of the table which refers to the IE's of freshman male fraternity members, we find that the weakest associations are across-sex (excluding the freshman male-female association), and

in the corresponding part for freshman female sorority members we find that two of the weakest associations are also across-sex (again excluding the freshman male-female association). The corresponding measures of association among non-Greek freshmen are all at least twice as strong as among fraternity and sorority members. Now if we look at Table 150, we find that

TABLE 150.--Associations (Yule's Q) between number of hours spent dating (April) and change in IE proportions (Freshmen)

IE Proportion	Males	Females
Total Freshman Males	.22	-.09
Total Freshman Females	.08	.06
Total Non-Freshman Males	-.34	.37
Total Non-Freshman Females	.00	-.51
Freshman Males Liked	.24	-.04
Freshman Females Liked	.00	.01
Non-Freshman Males Liked	-.18	.50
Non-Freshman Females Liked	.15	-.44

among the freshman boys, frequent dating as reported in April was associated with a decrease in the non-freshman male recognized and liked proportions and an increase in the corresponding freshman male IE proportions. Among the girls, a similar turning away from non-freshmen of the same sex is evident, along with a more pronounced tendency to turn toward non-freshmen of the opposite sex. The relationship of November dating frequency to November IE proportions is shown in Table 151 and it is noteworthy that positive associations prevailed at that time between the freshmen's dating frequency and all of the non-freshman IE proportions shown. The only negative associations appear within-class and across sex. This would seem to indicate that during the first months of their freshman year, our respondents found dating competition where later in the year they found cooperation (and vice-versa).

TABLE 151.--Associations (Yule's Q) between number of hours spent dating (November) and November IE proportions (Freshmen)

	Males	Females
Total Freshman Males	-.57	.34
Total Freshman Females	.32	-.57
Total Non-Freshman Males	.38	.51
Total Non-Freshman Females	.34	.14
Non-Freshman Males Liked	.40	.59
Non-Freshman Females Liked	.38	.19

If it can be assumed that freshmen tended to like other students who liked them and to dislike students who disliked them, then the girls' more emphatic withdrawal of liking from non-freshmen of their own sex, coupled with their much smaller increase in liking of girls in their own class, supports the conclusion put forward in Chapter VI, that dating broke up friendships among the girls.

Unfortunately, our case-base is too small to allow cross-tabulations with Greek-letter membership, but it can be seen in Table 152 that Greek-letter members dated more often than independents did, and we may then infer that the trends in freshman interpersonal environments associated with dating were probably especially clear-cut among freshman members of Greek-letter societies. Thus, the data we have shown so far seem to suggest that the freshman-non-freshman schism among Greek-letter members was probably related to competition for dates. Thus also, it seems that in meeting what appears to have been one of their members' expectations, namely, facilitating across-sex contacts, the Greek-letter societies tended to limit the extent to which they could meet what may have been another expectation, that of being fraternities and sororities in the literal sense of cohesive brotherhoods and sisterhoods which disregarded external status distinctions.

TABLE 152.--Per cent and change in per cent dating more than eight hours per week, by Greek-letter membership and year in college

Greek-letter Membership	Freshmen				Greek-letter Membership	Non-Freshmen			
	Males		Females			Males		Females	
	Yes	No	Yes	No		Yes	No	Yes	No
November	36 (86)	15 (61)	41 (110)	27 (63)	All-Non- Freshmen	50 (224)	32 (123)	48 (166)	38 (114)
April	35 (85)	23 (48)	56 (109)	30 (50)	Sophomores	33 (66)	23 (35)	51 (76)	47 (57)
Change	-3	+9	+25	+4	Juniors	51 (77)	42 (31)	49 (47)	23 (30)
					Seniors	62 (81)	33 (57)	40 (43)	33 (27)

Table 152 provides further insight into the dating process by showing that Greek-letter membership made little difference to the dating habits of freshman boys, but considerable difference in the dating habits of freshman girls; so much so that freshman sorority members seem to have had the highest dating frequencies of any girls in the college. Further, the dating frequency of the boys apparently rose year-by-year, while that of girls steadily declined. The result was that freshman sorority girls were most in demand, while senior fraternity members were most eligible.

If we put together all that we have found and guessed about which is relevant to the relationships between boys and girls, freshmen and non-freshmen, inside and outside the Greek-letter societies, we might make out the following hypothetical picture:

During the early college months, when the freshmen were only freshmen, their dating frequency seems to have been enhanced by contact with non-freshmen. But when freshmen became Greek-letter members and upper freshmen to boot, they entered the real dating arena as threatening competitors.

Their new statuses brought increased opportunity to make dates, but also sharper competition and heightened censure from non-freshmen of their own sex. As a consequence, freshman Greek-letter members seem to have turned toward each other for support and lost some of their liking for non-freshmen of the same sex.

If we suppose that dating patterns at this college, with respect to college class distinctions, paralleled the more general marriage patterns with respect to social class distinctions, then it seems logical that freshman girls and senior boys should spend the most time on dates, while freshman boys and senior girls spent the least time on dates. This is the phenomenon we have referred to when we mentioned the opposite dating statuses and behaviors of freshman and senior girls and boys. It does not seem far-fetched to assume that non-freshman girls would grow jealous of freshman girls' popularity and bring informal social constraints to bear in the situation in which they could most easily do so, i.e., in the sororities. Non-freshman boys might also be unwilling to share their own popularity, especially among freshman girls, with the newcomer freshman boys and would likewise exert pressure where they could best do so--in the fraternities. The result of these processes would be a division of freshmen (particularly fraternity freshmen) into two groups; those who persisted in dating, extended their interpersonal environments among their fellow freshmen and contracted them among non-freshmen, and those who did just the opposite.

Faculty Members

In Chapter VI, we suggested that faculty members may have served as sources of social support which were alternatives to those offered by the student peer group itself, and we also hypothesized that this may have been especially true for the girls. Now, in Table 153, we show the effects of

TABLE 153.--Per cent admiring more than two faculty members (April), by desire to be accepted and liked by fellow-students and proportion of November IE liked (Freshmen)

Desire to be Accepted	Males				Females			
	Hi	Mod	Lo		Hi	Mod	Lo	
November IE Proportion Liked	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Per cent Admiring more than two faculty members	64 (42)	46 (41)	42 (19)	61 (23)	63 (65)	72 (54)	62 (13)	68 (22)

liking a relatively large or small proportion of one's November IE on the number of faculty members who were admired in April, when initial desire for integration into the student peer group is held constant. Looking first at the data on the girls, we find the hypothesis borne out in the fact that the smaller the liked IE proportion in November, the more faculty members were admired in April. Further, since the association between initial desire for acceptance and November liked IE proportion was positive (Yule's Q was .29 for the girls), we may think of the desire to be accepted and liked as carrying with it a parallel desire to accept and like. Consequently, we may also regard those freshman girls who entered college strongly desirous of acceptance, but who two months later liked relatively few of the students they knew, as having been disappointed in their sociability expectations. The finding that freshman girls who fell in this category were most apt to admire faculty members is therefore our best confirmation of the alternative social support hypothesis. The boys, however, do not present a similar picture. Liking one's peers had no effect upon the boys' admiration of faculty members, and we are not so justified in interpreting sociability disappoint-

ment from the boys' data since the association between desire for acceptance and IE proportion liked was only half as strong among them as among the girls (Yule's Q was .14 for the boys). Thus, we find no evidence among freshman boys of faculty members serving as alternative sources of social support.

In this general connection, it may be seen from the marginals in Tables 63 and 65 that boys tended to admire fewer faculty members than did girls. Part of this sex-difference seems likely to have been due to childhood socialization differences in dependency upon authority-figures (note the girls' stronger desire to please their parents, shown in Table 70). But the findings of our research suggest that a supplementary explanation for the girls' greater attraction to faculty members may be the divisive social tendencies discussed in Chapter VI.

With this background of speculation and empirically supportable conclusions, we can now examine the effects of some of the freshman IE changes on grades-evaluation changes.

The first table to be shown in this connection (Table 154) falls in line with our findings regarding the effects of November IE size, affect and interaction frequency upon September-November grades-evaluation change. But when we come to Table 155, we encounter an intriguing reversal of earlier findings. Here it can be seen that among the boys, relative increases in non-freshman recognized and non-freshman liked IE proportions were accompanied by little loss in grades-evaluation, while increases in the corresponding freshman IE proportions were (with one minor exception) accompanied by greater loss in grades-evaluation. Among the girls, a similar set of relations is repeated, except that relative increases in liked non-freshman IE proportions were associated with greater declines in grades-evaluation.

Using the conclusions we have just reached concerning the role of dating in reorganizing freshman interpersonal environments, we might specu-

TABLE 154.--Per cent and per cent change high grades-evaluation, and per cent and per cent change having graduate aspirations, by November-April changes in IE size, interaction frequency and affectivity (Freshmen)

	Number of Recognitions				Six Hours Per Week			
	Male		Female		Male		Female	
IE Change	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)
Nov. High A	48 (56)	47 (55)	39 (62)	29 (68)	54 (54)	42 (57)	32 (62)	35 (68)
Apr. High A	35 (51)	36 (55)	20 (61)	27 (75)	36 (53)	36 (53)	23 (66)	24 (70)
Change	-27	-23	-49	-7	-33	-14	-28	-31
Nov. Grad. Aspirations	72 (61)	71 (66)	36 (72)	35 (78)	75 (61)	68 (66)	34 (73)	36 (77)
Apr. Grad. Aspirations	70 (60)	76 (66)	44 (73)	32 (78)	77 (61)	69 (65)	40 (73)	36 (78)
Change	-3	+17	+12	-9	+8	+3	+9	0

	Affectivity											
	Like				Neutral				Dislike			
	Males		Females		Males		Females		Males		Females	
IE Change	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)
Nov. High A	52 (54)	44 (57)	41 (58)	28 (72)	45 (53)	50 (58)	28 (67)	40 (63)	48 (56)	47 (55)	39 (62)	29 (68)
Apr. High A	38 (53)	34 (53)	26 (66)	21 (70)	37 (52)	35 (54)	21 (66)	26 (70)	35 (51)	36 (55)	20 (61)	27 (75)
Change	-27	-23	-37	-25	-18	-30	-25	-35	-27	-23	-49	-7
Nov. Grad. Aspirations	67 (61)	76 (66)	32 (73)	38 (77)	73 (62)	68 (65)	39 (71)	32 (79)	72 (61)	71 (66)	36 (72)	35 (78)
Apr. Grad. Aspirations	75 (60)	71 (66)	33 (73)	42 (78)	74 (62)	72 (64)	43 (72)	33 (79)	70 (60)	76 (66)	44 (73)	32 (78)
Change	+24	-7	+1	+6	+4	+12	+7	+1	-3	+17	+12	-9

late that the data shown in Table 155 reflects the developing schism between freshmen and non-freshmen of the same sex and its consequences for grades-evaluation. It would appear that as freshmen became more cohesive as a group

they tended to reinforce each other's downward grades-evaluation tendency in much the same way that they seem to have reinforced each other's dating patterns, without the cushioning effect of the presumably more stable non-freshmen influences. Thus, we found in Table 6 that by April, the freshman aggregate grades-evaluation levels had dropped below the non-freshman levels, and Table 36 showed that this finding was concentrated among freshmen who

TABLE 155.--Per cent change in grades-evaluation, by change in freshman and non-freshman, male and female, recognized and liked IE proportions (Freshmen)

IE Proportion \ IE Change	Males		Females	
	(+)	(-)	(+)	(-)
Total Freshman Males	-24	-26	-33	-26
Total Freshman Females	-50	-9	-34	-25
Total Non-Freshman Males	-4	-46	-22	-35
Total Non-Freshman Females	-11	-34	-26	-38
Freshman Males Liked	-29	-22	-19	-39
Freshman Females Liked	-27	-22	-37	-4
Non-Freshman Males Liked	-4	-40	-41	-22
Non-Freshman Females Liked	-18	-29	-38	-22

joined Greek-letter organizations, where we have inferred that the strongest inter-freshman cohesion occurred. The freshman girls' data in Table 154 are admittedly less clear than the boys', but it would nevertheless appear that an increase in liked freshman females IE proportion produced the sharpest loss of grades-evaluation among the girls, exactly as an increase in liked freshman males IE proportion brought about the sharpest loss among the boys.

IE Change and Graduate Aspirations Change

When we compare Table 156 with Table 155, we find that a turn toward

TABLE 156.--Per cent change in graduate aspirations, by change in freshman and non-freshman, male and female, recognized and liked IE proportions (Freshmen)

IE Proportion \ IE Change	Males		Females	
	(+)	(-)	(+)	(-)
Total Freshman Males	-9	+26	+3	+3
Total Freshman Females	-4	+21	+10	-5
Total Non-Freshman Males	+27	-7	-34	+26
Total Non-Freshman Females	+16	-6	+7	+3
Freshman Males Liked	0	+8	+5	+3
Freshman Females Liked	-3	+18	+6	+2
Non-Freshman Males Liked	+11	+26	+3	+4
Non-Freshman Females Liked	+39	0	+3	+3

fellow-freshmen not only brought about a greater decline in grades-evaluation than did a turn toward non-freshmen, but also a decline in graduate aspirations. Perhaps the most interesting relationship in this table, however, is expressed in the strong association of the boys' increasing graduate aspirations with increasing liked non-freshman female IE proportion. This finding is in accord with a similar relationship pointed out earlier, in connection with Table 145, and together they suggest that in addition to responding to the pressure of example set by non-freshman boys, freshman boys may have found the avowed desire to attend graduate or professional school of instrumental use in their social relations with non-freshman girls. One can imagine that such a desire could be of special use in making up for the boy's status disadvantage as a freshman looking up to a non-freshman girl and competing with boys from senior classes for her attentions.

In general then, this first phase of our analysis of interpersonal

environments and their influence on freshmen seems not only to corroborate inferences which we drew from the survey data, but to cast important new light on the manner in which entering freshmen became socialized to the ways of college life.

tively high or low grades-evaluation level?

A rough measure of IE bias on any variable is provided by the difference between the population (i.e., sex-by-class category) proportion having a given score on the variable and the exactly corresponding proportion in each IE. The algebraic sign of this difference will tell us whether a given IE was biased toward the "high" side or the "low" side of the population from which it was drawn, and we may then examine the likelihood of such bias having influenced the respondent's attitudes and behavior.¹

Table 157 recapitulates from previous chapters the relevant population proportions against which the corresponding proportion in each IE was compared, and Table 158 gives the high-low grades-evaluation distribution in various sex-by-class segments of freshman November IE's.

TABLE 157.--Population proportions positive on variables used in the analysis of interpersonal environments, by class

Class	Freshmen		Non-Freshmen	
	Male	Female	Male	Female
September High Grades-Evaluation ^a	.79	.73	--	--
November A Rank ^a	.50	.35	.42	.27
April A Rank ^a	.37	.26	--	--
November Graduate Aspirations ^b	.71	.37	.80	.50
April Graduate Aspirations ^b	.74	.39	--	--
Own Occupational Choice ^c	.72	.18	.71	.18

^aProportion high.

^bProportion yes.

^cProportion high of those having an occupational choice.

¹An IE proportion which was equal to, or greater than, the corresponding population proportion was considered to have a bias toward the "high" side.

TABLE 158.--Per cent having high and low grades--evaluation IE segments in November (Freshmen)

Sex of Respondent		Males		Females	
IE Segment	IE Grades-- Evaluation	Hi	Lo	Hi	Lo
Sex of IE Segment		Freshman Males			
Total		31	68	35	62
>6 hours, Like		33	52	9	17
>6 hours, Neutral		17	10	5	2
>6 hours, Dislike		14	8	--	--
≤6 hours, Like		--	1	--	--
≤6 hours, Neutral		48	49	36	57
≤6 hours, Dislike		34	38	31	32
		Freshman Females			
Total		39	60	42	58
>6 hours, Like		7	19	38	57
>6 hours, Neutral		1	3	10	10
>6 hours, Dislike		1	1	4	9
≤6 hours, Like		37	54	35	33
≤6 hours, Neutral		35	56	48	44
≤6 hours, Dislike		17	27	25	54
		Non-Freshman Males			
Total		31	69	29	71
>6 hours, Like		22	24	2	9
>6 hours, Neutral		8	4	1	--
>6 hours, Dislike		1	3	--	1
≤6 hours, Like		38	60	37	58
≤6 hours, Neutral		36	59	33	61
≤6 hours, Dislike		26	36	16	14

TABLE 158--Continued

Sex of respondent		Males		Females	
IE Segment	IE Grades-Evaluation	Hi	Lo	Hi	Lo
Sex of IE Segment		Non-Freshman Females			
Total		28	66	20	80
>6 hours, Like		1	11	13	24
>6 hours, Neutral		--	3	--	2
>6 hours, Dislike		--	--	--	1
≤6 hours, Like		33	50	24	76
≤6 hours, Neutral		28	48	33	64
≤6 hours, Dislike		8	10	18	38

Perhaps the most impressive finding which emerges from Table 158 is the strong tendency of low grades-evaluation students, both male and female, freshman and non-freshman, to be included in freshman IE's more often than their proportions in the total populations would warrant. The only instances of high grades-evaluation students being over-chosen occur, significantly enough, in the dislike and neutral affect IE segments. This latter observation appears to be the complement of a finding discussed in the previous chapter. There we showed that freshmen who maintained high grades-evaluations tended to have smaller interpersonal environments and to be more neutral in feeling toward them. Table 158 now suggests that non-freshmen as well as freshmen who had relatively high grades-evaluations tended to be less known to freshmen and to generate less positive affect from them. Although the one-way interpersonal environments which we are examining cannot tell us anything direct about recognition-or-affect-receiving, we can reasonably infer that students with high grades-evaluations were least involved and least positively involved, in the receiving as well as giving sense, with the student-body as a whole.

November Environmental Effects on
Grades-Evaluation Changes

The first question relating to our major dependent variables is whether the grades-evaluation biases of November IE sex-by-year segments, without controlling for interaction frequency or attractiveness, seem to have had any effects on freshman grades-evaluation changes between September and November. In Table 159 we find the relevant data and it is clear that interpersonal environments do seem to have had such an effect, not only on grades-evaluation, but on over-achievement as well.

TABLE 159.--Per cent change in high grades-evaluation, and per cent over-achieving, by November grades-evaluation IE segments (Freshmen)

	Freshman Male IE				Freshman Female IE			
	Males		Females		Males		Females	
IE Grades-Evaluation	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Grades-Evaluation Change	-32	-41	-52	-53	-27	-45	-33	-62
Per cent Over-Achieving	42 (41)	50 (84)	52 (52)	44 (94)	48 (51)	47 (74)	56 (61)	40 (88)
	Non-Freshman Male IE				Non-Freshman Female IE			
Grades-Evaluation Change	-29	-42	-42	-57	-26	-44	-20	-59
Per cent Over-Achieving	54 (37)	45 (87)	52 (42)	44 (107)	45 (33)	48 (83)	53 (32)	44 (117)

But underlying this interpretation of the data shown in Table 159 is the implication that the distributions of grades-evaluation in the respective IE segments remained constant between September and November. That is, freshman male environments which were high on grades-evaluation in November are implicitly assumed to have been high all along, from September

to November, even though their size or personnel may have changed. But we might well guess that such stability was sometimes not the case from knowing that the same freshmen appear twice in Table 159; once as "independent" IE personnel and once as respondents whose "dependent" attitudinal change is at the focus of interest. Thus, the latter attitudinal change must necessarily have been true for the former IE personnel, since they are the same individuals. Table 160 attempts to take this fact into account by dividing November IE's

TABLE 160.--Per cent change in high grades-evaluation, by September and November grades-evaluation levels in November freshman IE segments (Freshmen)

Freshman Male IE								
Males				Females				
IE Sept. Grades-Evaluation	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
IE Nov. Grades-Evaluation	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Grades-Evaluation Change	-34	-38	-22	-43	-58	-55	-48	-51
Freshman Female IE								
Grades-Evaluation Change	-31	-57	-22	-38	-21	-56	-50	-66

into four types: those high on grades-evaluation in September and high in November; high in September, but low in November; low in September, high in November; and low in September, low in November. Personnel in IE's of the first type may be considered as having had a relatively high, stable grades-evaluation level; those in the second type decreased their grades-evaluation; and so on.

Table 160 shows that, with the exception of the girls' female environments, an IE which increased its emphasis on grades had a more salutary

influence on the respondent's grades-evaluation change than did an IE which had a high stable emphasis, and an IE in which grades-evaluation declined depressed the respondent's grades-evaluation more than did one in which the level was low but stable. This seems to indicate that no just state, but change in freshman environments played a decisive role in determining the respondent's own change over the same time-period.

But what was the original impetus for the September-November changes in freshman IE's themselves? The answer to this question (indirect evidence of which has recurred throughout the analysis of survey data) is brought clearly and directly to light in the fact that non-freshmen had a more profound influence over freshmen than did their own classmates (Table 159). In this connection, we know from Table 134 that different freshmen had different kinds and degrees of contact with non-freshmen. Some freshmen seem to have had effectively no direct contact with them, while others were in contact with non-freshmen as well as freshmen. It seems very likely that these latter students were the main carriers of grades-evaluation influence from non-freshmen to freshmen, in those instances where non-freshmen did not exert their influence directly. Thus we might hypothesize the existence of "cosmopolitan" and "local" freshmen¹ and hypothetically differentiate their influence roles. If these hypotheses were true, then concealed within the overall non-freshman and freshman effects shown in Table 159 must be the different degrees of attitude-adaptation peculiar to differences in directness of contact with non-freshmen. We emphasize this point in order to suggest intricacies of the influence process which seem likely to have occurred during

¹See Alvin Gouldner, "Cosmopolitans and Locals: Toward an Analysis of Latent Social Roles - I, II," Administrative Science Quarterly, II (1957-58), 281-306 and 44-480.

the early days of the freshmen's college careers--intricacies which are not adequately represented by our data or analysis.

A further complexity, arising from the fact that almost all freshmen had male as well as female, freshman as well as non-freshmen IE segments can, however, be examined somewhat more explicitly than Table 159 allows. In Table 161 we show the effects of certain combinations of IE segments. In the first of these tables we can see that non-freshman male and female environments augmented each other's influence on freshman grades-evaluation change and over-achievement. This was less true among the freshman girls than among the boys, even though the influence among the latter of non-freshman girls was most evident only when the non-freshman male environment was high. The freshman girls, however, show small influence of non-freshman boys regardless of the inclination of their non-freshman female environments.

If we may also assume that the influence of the four IE segments was sometimes cumulative (as Table 161 suggests it was), the true interpersonal influence on the grades-evaluation and over-achievement of freshmen, all four of whose IE segments were biased in the same direction, must have been far greater than is indicated by our second-order cross-tabulations. In short, these data provide the most direct available confirmation of our central hypothesis that the peer group environments of freshmen importantly affected their academic attitudes and achievement, and seem to justify describing changes in the former as consequences of socialization into an established student culture.

Thus far, we have been examining November IE's without any control for the attractiveness which persons in them had for freshman respondents, and without controlling the amount of time the respondent said he inter-

TABLE 161.--Per cent change in high grades-evaluation, and per cent over-achieving, by November IE grades-evaluation biases (Freshmen)

	Males				Females			
Non-Freshman Males IE	Hi		Lo		Hi		Lo	
Non-Freshman Females IE	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Sept.-Nov. Grades-Evalua- tion Change	-15	-40	-33	-45	-17	-59	-22	-61
Per cent Over- Achieving	64 (11)	57 (21)	38 (21)	45 (62)	50 (18)	54 (24)	57 (14)	42 (93)
Freshman Males IE	Hi		Lo		Hi		Lo	
Freshman Females IE	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Sept.-Nov. Grades-Evalua- tion Change	-19	-43	-33	-45	-34	-64	-34	-64
Per cent Over- Achieving	41 (17)	42 (24)	50 (34)	50 (50)	65 (23)	41 (29)	51 (37)	39 (57)
Freshman Males IE	Hi		Lo		Hi		Lo	
Non-Freshman Males IE	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Sept.-Nov. Grades-Evalua- tion Change	-26	-38	-32	-44	-45	-54	-45	-55
Per cent Over- Achieving	41 (17)	42 (24)	65 (20)	46 (63)	56 (18)	50 (34)	52 (23)	41 (71)

TABLE 161--Continued

	Males				Females			
Freshman Females IE	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Non-Freshman Females IE	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Sept.-Nov. Grades-Evaluation Change	-20	-36	-30	-53	-19	-39	-20	-71
Per cent Over-Achieving	53 (15)	44 (32)	39 (18)	51 (51)	60 (20)	54 (41)	42 (12)	39 (76)
Freshman Females IE	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Non-Freshman Males IE	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Sept.-Nov. Grades-Evaluation Change	-16	-37	-46	-46	-30	-36	-51	-67
Per cent Over-Achieving	56 (23)	39 (28)	50 (14)	47 (59)	62 (21)	52 (40)	43 (21)	39 (67)
Freshman Males IE	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Non-Freshman Females IE	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Sept.-Nov. Grades-Evaluation Change	-39	-34	-21	-49	-36	-58	-53	-62
Per cent Over-Achieving	^a (9)	48 (25)	50 (24)	48 (58)	59 (17)	49 (35)	50 (14)	42 (80)

^aFrequency too small for percentaging.

acted with them.¹ Our original expectation was that influence would vary positively with both frequency and attractiveness of interaction, except

¹Although the questionnaire does not so indicate, a special instruction to all respondents asked them to include all time spent in a given student's company, whether in classes, at the snack shop, in the library, or wherever.

that negative attractive would carry negative influence. But in Table 162, we find that (girls in freshman female environments excepted) frequent interaction with liked students--even those of relatively high grades-evaluation--seems to have brought about as much or more of a decline in freshman grades-evaluation as did less frequent interaction with students of lower grades-evaluations. It would therefore appear that the simple fact of spending considerable time in the company of liked students, no matter what their grades-evaluations, had a deleterious effect on grades-evaluations. (This finding was foreshadowed by the inverse relationship between grades-evaluation and amount of time spent with friends shown in Table 27.) What seems to be suggested by these findings is a differentiation between the kind of value change which attends a change in activity and the same value change which results from social pressure. Moreover, had we asked the respondents for their "three best friends" as well as their interpersonal environments, these data suggest that the influence results might not have been as clear as the IE results shown in Table 161. Other data in Table 162, however, do indicate the stronger influence of liking as opposed to affective neutrality, while the negative influence of dislike emerges only sporadically.

November to April Changes

In April, the freshmen were asked to specify their interpersonal environments again. Since the non-freshmen who were named in these April IE's were not asked to give us information about their grades-evaluations and graduate aspirations at that time, we must assume that the distributions of these variables among them remained stable between November and April. Although this assumption obviously would not hold if applied to the freshmen, it does not seem unreasonable with respect to non-freshmen--all of whom had already spent a minimum of one year at college and had completed at least

the basic stages of socialization into the student culture.

TABLE 162.--September to November grades-evaluation change and per cent freshmen over-achieving, by IE segment^a

IE Segment		FM > 6L		FM ≤ 6N		FM ≤ 6D			
		Hi	Lo	Hi	Lo	Hi	Lo		
Freshman Respondents									
Males									
Grades-Evaluation Change		-41	-45	-36	-39	-53	-40		
Females									
Grades-Evaluation Change		-75	-66	-53	-48	-62	-55		
IE Segment		FF > 6L		FF ≤ 6L		FF ≤ 6N		FF ≤ 6D	
		Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Freshman Respondents									
Males									
Grades-Evaluation Change	b	-44	-38	-43	-52	-29	-26	-56	
Females									
Grades-Evaluation Change		-22	-72	-28	-59	-63	-46	-43	-59
IE Segment		NFM > 6L		NFM ≤ 6L		NFM ≤ 6N		NFM ≤ 6D	
		Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Freshman Respondents									
Males									
Grades-Evaluation Change		-49	-47	-26	-49	-33	-45	-48	-50
Females									
Grades-Evaluation Change	b	-81	-42	-58	-53	-51	-59	-50	

TABLE 162--Continued

Freshman Respondents	IE Segment	NFF	6L	NFF	6L	NFF	6N	NFF	6D
		Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
Males									
Grades-Evaluation Change		b	-67	-22	-53	-42	-42	-62	-37
Females									
Grades-Evaluation Change		-66	-59	-19	-63	-51	-51	-52	-68

^aSymbols: 6 = more than six hours; 6 = up to six hours;
L = Like; N = Neutral; D = Dislike

^bFrequencies too small for percentaging.

In Table 163, we present measures of association (Yule's Q) between pairs of the four main segments of November and April interpersonal environments. In this table, a positive Q indicates that if a freshman had a high

TABLE 163.--Associations (Yule's Q) between total November and April grades-evaluation IE segments (Freshmen)

Nov. IE	Males			Females		
	FFT	NFMT	NFFT ^d	FFT	NFMT	NFFT
FMT ^a	.09	.39	-.06	.04	.22	.41
FFT ^b		.55	.00		.18	.50
NFMT ^c			.34			.66
Apr. IE	FFT	NFMT	NFFT	FFT	NFMT	NFFT
FMT	.13	-.14	.00	.61	.50	.50
FFT		.36	.19		.77	.71
NFMT			.56			.80

^aFreshman males, total.

^bFreshman females, total.

^cNon-Freshman males, total.

^dNon-Freshman females, total.

grades-evaluation in the column IE segment, he was also apt to have a high grades-evaluation in the row IE segment. The main thing we wish to point out in this table is the sex difference between changes in segment associations from November to April. All of the freshman girls' Q's are larger and more positive in April than they were in November, while the changes in the boys' Q's are much more irregular and smaller in magnitude. This would seem to suggest that the girls' environments became more homogeneous over time than did the boys'. It would therefore appear that by April, an important social division had occurred among the girls, such that all four IE segments tended to be either high or low on grades-evaluation. As one might expect, this change seems to have been related to the girls' Greek-letter membership. Table 164 shows that when a freshman girl joined a sorority, the likelihood

TABLE 164.--Associations (Yule's Q) between Greek-letter membership and changes in IE grades-evaluation biases from November to April (Freshmen)

Sex of Respondent	Males				Females				
	IE Segment	Freshman Males	Freshman Females	Non-Freshman Males	Non-Freshman Females	Freshman Males	Freshman Females	Non-Freshman Males	Non-Freshman Females
Greek-letter:									
IE Bias decrease		.03	.43	.57	.02	.34	.52	.68	.52
Greek-letter:									
IE Bias increase		.08	-.43	-.84	-.55	-.34	-.56	-.77	-.85

of a decline in the grades-evaluation climate in all four of her IE segments was greater than freshman boys who joined fraternities. The differences were particularly great in the freshman male and non-freshman female segments, probably reflecting differential change in dating and friendship patterns. According to this evidence, sorority membership seems to have entailed quite

distinctive changes in male and female, freshman and non-freshman interpersonal environments, and the homogeneity of the girls' grades-evaluation IE segments observed in Table 163 seems likely to have been a low one inside the sororities and a high one outside them. That the girls responded to this environmental schism with parallel changes in their own grades-evaluations has already been shown in Table 34, where we found that the declining grades-evaluation of freshman girls who joined sororities outstripped that of freshman fraternity boys, and that non-Greek girls were more likely to raise their grades-evaluations than were non-Greek boys.

On the whole, however, the extent of environmental change between November and April was of moderate dimensions, as may be seen from Table 165. The majority of environments at all levels frequent and attractiveness, sex and college class remained the same with respect to grades-evaluation. (But of the changes which did occur, it is noteworthy that high grades-evaluating students tended to be still more often disliked in April than they were in November.) What appears to have been an over-all IE stability places emphasis upon the first two months of college experience as having been dense with long-term implications for the student's attitudes, behavior and achievement. This will help to account for the fact that we were able to demonstrate a considerable impact of IE's generated by the third month of college upon academic over-achievement as measured over the entire first year of college.

Now if we look at the influence of November-April IE change upon freshman grades-evaluation change over the same period, we find a complicated picture. In Table 166 it appears that the influences of changes in the freshman IE segments were just the reverse of the September-November effects of November IE's which we saw in Table 159. Freshman male environmental change seems to have had a negative effect on the boys' grades-evaluation change,

TABLE 165.--Per cent changing IE grades-evaluation bias between November and April by IE segment (Freshmen)

IE Segment	Males				Females			
	FM	FF	NFM	NFF	FM	FF	NFM	NFF
Per cent Changing IE Bias	37 (128)	34 (126)	22 (126)	32 (119)	41 (149)	41 (154)	25 (154)	17 (154)
Per cent Changes Decreasing IE Bias	57 (47)	74 (42)	57 (28)	45 (38)	70 (61)	70 (63)	58 (38)	38 (26)

IE Segment	FM > 6L	FM ≤ 6N	FM ≤ 6D	FF ≤ 6N	FM ≤ 6N	FM ≤ 6D	FF > 6L	FF ≤ 6N	FF ≤ 6D
Per cent Changing IE Bias	33 (93)	43 (118)	47 (85)	46 (107)	43 (141)	36 (69)	39 (120)	47 (137)	40 (102)
Per cent Changes Decreasing IE Bias	61 (31)	67 (51)	67 (40)	53 (49)	72 (61)	60 (25)	60 (47)	58 (64)	39 (41)

IE Segment	NFM ≤ 6L	NFM ≤ 6N	NFM ≤ 6D	NFF ≤ 6L	NFF ≤ 6N	NFM ≤ 6L	NFM ≤ 6N	NFM ≤ 6D	NFF ≤ 6L	NFF ≤ 6N	NFF ≤ 6D
Per cent Changing IE Bias	29 (125)	32 (118)	37 (68)	30 (103)	43 (43)	27 (146)	34 (147)	29 (42)	22 (154)	39 (149)	37 (73)
Per cent Changes Decreasing IE Bias	61 (36)	60 (38)	72 (25)	70 (30)	42 (40)	75 (40)	54 (50)	50 (12)	53 (34)	47 (58)	59 (27)

but possibly a positive effect on the girls'. On the other hand, freshman female environmental change seems to have had a negative effect on the girls, but a positive effect on the boys. The across-sex effect may have been a consequence of dating behavior, in both senses of selection and genuine influence, but the within-sex effect is more difficult to understand. Part of it may be the result of the freshman-non-freshman schism which we pointed out in the preceding chapter and which seems to be reflected again in the change from a positive November to a negative April association between high freshman

TABLE 166.--Per cent change in high-grades-evaluation, by change in IE grades-evaluation bias between November and April (Freshmen)

Freshman Male IE Segment								
Males					Females			
Nov.-Apr. IE Grades-Eval. Bias Change	High Stable	De- crease	In- crease	Low Stable	High Stable	De- crease	In- crease	Low Stable
Own Nov.-Apr. Grades-Eval. Change	-40	-29	-71	-6	a	-27	+5	-29
Freshman Female IE Segment								
Own Nov.-Apr. Grades-Eval. Change	-30	-11	-10	-38	-66	-30	-38	+2
Non-Freshman Male IE Segment								
Own Nov.-Apr. Grades-Eval. Change	-11	-11	+37	-51	-34	+4	-34	-34
Non-Freshman Female IE Segment								
Own Nov.-Apr. Grades-Eval. Change	-35	+6	+10	-50	-13	a	-50	-29

^aAt least one frequency too small for percentaging.

and non-freshman male environments among the boys (Table 163). This would mean that boys whose freshman male environments declined were responding positively to the high non-freshman male environments which they were also likely to have. The girls, for their part, do not appear to have changed their grades-evaluations in any way discernibly related to changes in either of their non-freshman environments, which may again reflect the freshman-non-freshman schism despite the homogeneity of the girls' April IE segments. But the picture is still somewhat unclear and must remain so in this research, since our cases will not sustain further exploratory cross-tabula-

tions. Controlling for Greek-letter membership might be especially informative, in view of the fact that Greek-letter membership made so much difference in freshman female and non-freshman male environmental changes (Table 164).

IE Effects on Graduate Aspiration Changes

In order to explicate environmental impact upon freshman graduate aspirations change between November and April, we must juxtapose the effects of November IE segments (measured on graduate aspirations) on freshman graduate aspirations change between September and November with similar effects of April environments on November-April change (Table 167). The striking

TABLE 167.--Per cent change in graduate aspirations, by levels of graduate aspirations in November and April IE segments (Freshman)

Level of graduate aspirations in IE segment	November IE's				April IE's			
	Males		Females		Males		Females	
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
IE Segment	Sept.-Nov. Changes				Nov.-Apr. Changes			
FMT	+38	+48	+12	+16	+8	+6	0	+5
FFT	+57	+37	+11	+17	+7	+10	+8	0
NFMT	+48	+26	+30	+4	+14	+15	+3	+7
NFFT	+46	+38	+14	+13	+28	+29	+9	+3

thing about this contrast is that the environmental effects observed in the September-November changes seem all to have disappeared from the November-April changes. But our suggestion that environing occupational aspirations, rather than graduate aspirations, influenced the second phase of freshman

graduate aspirations change¹ bears fruit in this regard, as may be seen in Table 168. Here we find the situation reversed from that of Table 167. The

TABLE 168.--Per cent change in graduate aspirations, by levels of occupational choice in November and April IE segments (Freshmen)

Level of occupational choice in IE segments	November IE's				April IE's			
	Males		Females		Males		Females	
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
IE Segment	Sept.-Nov. Changes				Nov.-Apr. Changes			
FMT	+35	+46	+7	+16	-4	+18	+3	+5
FFT	+42	+42	+11	+18	+47	+13	+2	+11
NFMT	+20	+51	+13	+14	+25	+4	+8	+3
NFFT	+39	+48	+20	+11	+11	0	+7	0

strong effects of occupational choice levels in April environments upon November-April graduate aspirations change contrast with the generally weaker (and sometimes negative) effects of such levels in November IE's. It would therefore appear that interpersonal influence over graduate aspirations developed in two phases: in the earlier phase, freshmen were influenced directly by the climates of graduate aspirations which surrounded them. But after making this first normative adjustment, the freshmen appear to have come under the influence of the climates of higher occupational aspirations which prevailed among their seniors in the peer group. Because high occupations increasingly require graduate degrees, the influence of high occupational choice environments was felt in rising levels of graduate aspirations.

At least one other relationship shown in Tables 167 and 168 deserves mention. Note (in Table 167) that the boys' September-November changes were

¹See chap. iv.

more positively affected by their freshman female graduate aspiration IE's than by similar freshman male IE's, and that the boys were more influenced by their non-freshman female environments than were the girls' by theirs. The girls seem to have been influenced, in this early stage, solely by non-freshman males. In Table 168 we find the continuation of this picture, but with environing occupational choice levels as the determining factor. That is, the boys continue to show the strong positive influence of freshman and non-freshman females, while the girls seem to have come a little more under the positive influence of non-freshmen of their own sex. All of this would seem to buttress our speculation concerning the role of graduate aspirations in across-sex relationships. Indeed, one might imagine here some beginnings of the "man" and "woman behind the man" roles which seem part of the technique of successful mobility, or alternatively, some manifestations of sexual competition in the broader social arena of task achievement.

As a final point, it will be remembered that freshmen who joined Greek-letter societies tended to lower their graduate aspirations level between November and April, while non-joiners raised theirs (Table 21). We now find an explanation for this in Table 169, where it can be seen that the latter students tended to change their IE's between November and April in such a way that the levels of occupational aspirations within them either was raised or did not decline as much as did those of Greeks.

In conclusion, it may not be amiss to underscore the significance of our findings which relate to the impact of interpersonal environments in the student peer group. These findings stand mainly as confirmations of inferences based on the analysis of survey data--inferences which were presented in the first six chapters of this report. As a result, the findings of this research, taken as an integrated whole, can be invested with a greater degree of confidence than is usually the case in survey analyses.

TABLE 169.--Per cent change in high occupational choice IE segments by sex and Greek-letter membership of respondent

		Males		Females	
IE Segment	Greek	Yes	No	Yes	No
		Freshman Males	-29	-13	-7
Freshman Females	0	+24	+34	-1	
Non-Freshman Males	-38	-6	-27	+14	
Non-Freshman Females	+20	+32	+22	+70	

CHAPTER IX

SUMMARY AND DISCUSSION

In this final chapter, we wish briefly to set forth the most general findings of our study and to discuss some of its indications for future research along the same lines.

Major Findings

(1) The relative importance which students assigned to getting high grades was a factor, over and above high school rank and college entrance examination score, in determining college grade-point average.

(2) High importance assigned to getting high grades was associated with spending more time studying, less time on dates and less time with friends.

(3) The first seven months of college experience witnessed a reorganization of academically-relevant values and aspirations among freshmen, such that the importance of getting high grades declined, while the desire to attend graduate school increased. This attitude reorganization was a consequence of freshman socialization into a powerful normative system centering around the Greek-letter organizations and the faculty, two social structures which were in some ways opposed to each other. Positive pre-dispositions toward, and actual integration into the student peer-group (especially Greek-letter membership which could be attained toward the end of the first freshman semester), entailed a loss in the evaluation of high grades, while positive orientation toward faculty members sustained or raised such evaluation.

(4) Although Greek-letter membership produced a considerable loss of grades-evaluation, this does not mean that grade achievement was depressed uniformly. It appears that students who had high academic ability tended to achieve higher grades if they belonged to Greek-letter societies than if they did not, while low ability students achieved lower grades if they were Greek-letter members than if they were not. One way of accounting for these findings is explored in the study, without encountering contradictions: In their competition for superior organizational prestige in various spheres (e.g., intra-mural sports, student politics, social affairs, academic achievement, etc.), Greek-letter organizations may develop a division of labor among their members which encourages those who are best qualified in a given competitive arena to champion the organization there. In this way, Greeks of high academic ability may be urged toward high academic achievement not only by their inner motivations, but by peer-group prestige and integration rewards which are not available to such students if they do not belong to fraternities or sororities. Faculty members, by contrast, seem to have affected student academic achievement only via direct influence on their individual grades-evaluations and without bringing about peer-group formation or peer rewards for such achievement.

(5) Frequent dating tended to decrease a student's grade achievement, but this negative effect was minimized precisely in that group of students who dated most: i.e., among fraternity and sorority members. Our speculative interpretation is that Greek-letter organizations may have simplified the problems and reduced anxieties attending the process of date-making by allocating much of this process to impersonal committees which arranged dances, teas, "exchanges," etc., and which implicitly certified the mutual eligibility of partners in any further dates which might develop out of such

social affairs. In this way, although Greeks spent more time on dates than did non-Greeks, the costs to the former in time and energy spent solving the problems of "where to go," "what to do," "is he (or she) the kind of person I could take home to my parents," etc., might well have been less.

(6) At all observation dates, the freshman girls were more strongly oriented toward the socio-emotional side of college life (i.e., friendships and dates) than were the boys. Girls tended to have larger interpersonal environments than boys, and to invest them with more positive affect. The sex difference in orientation toward high grades, however, was initially slight. In time, the latter difference widened, so that by April, the difference between the boys' and girls' orientation to high grades was about three times what it had been in September, while the sex difference in friendship and dating orientations remained substantially the same. Further, although an apparent convergence between the evaluation of high grades and dating occurred among the freshman boys (with the former retaining primary importance throughout), a divergence occurred among the girls (with the evaluation of dating coming into primary importance sometime during the first two months of college). These changes seem to signify a more exclusive choice by the girls than by the boys between orientations to high grades on the one hand, and dating and friendships on the other. Once in the sororities, girls found environments which even more widely separated the importance of dating and high grades. Thus, it seems that as the girls became integrated into the peer-group, they were disabused of their initial expectation that high academic success and high dating success would be compatible.

(7) In addition, it appears that an acute conflict between having dates and having friends (presumably of their own sex), developed among the girls. Freshman girls, for example, who increased their dating between

November and April were more likely to decrease the proportion of liked own-sex non-freshman peers in the environments than were similar freshman boys. This suggests that not only did the girls tend to choose between an orientation to the task side of college versus an orientation toward its socio-emotional side, but they were also forced to choose between dating frequently and having friends. The first choice would seem to be enforced by those general cultural norms governing sex-role differentiation which in some measure deny legitimacy to girls competing with boys in task achievement, while the second choice (though clearly dependent on the first) seems likely to have been a function of the resulting intense competition among girls for across-sex socio-emotional achievement. The latter may be thought of as an example of behavior in a zero-sum game, where the number of desirable male dates is limited for any given girl and when a date with a given boy normally monopolizes his time and attention for the duration of the date. Consequently, a girl who was highly successful in getting dates appears to have been penalized by other girls for limiting their own chances for success in this respect. By contrast, the nature of grades competition permits many students to have the same cumulative grade-point average at the same time.

An additional element accounting for friendship penalties against girls who dated often may be the fact that the college years are peak years for girls' physical abilities to attract members of the opposite sex, and they are also years during which girls are expected to make maximum progress toward marriage. Boys, on the other hand, are likely to look forward to several additional years of training and up-grading (either in graduate school or on-the-job) before reaching peak occupational competence and achievement. For this reason, it appears that college girls are likely to compete more seriously in their culturally assigned competitive arena than are boys in theirs.

(8) The analysis of freshmen's sociometric-type data on peer environments support conclusions drawn from the analysis of their survey data concerning the process of socialization, and demonstrate the research utility of the interpersonal environment technique. Differences among freshman boys and girls in grades-evaluation and graduate aspirations changes were related to differences in the net grades-evaluation and graduate aspirations influence in peer environments and by changes in these net influences over time. Moreover, the influence of non-freshmen in a freshman's environment was clearly greater than that of freshmen along all dimensions of peer environments which we examined.

The absolute size of a freshman's peer environment, and the relative amounts of positive or negative affect which a freshman felt for his environment, were positively related to decrease in the freshman's grades-evaluation, to increase in his graduate aspirations and to "under-achievement." This means that involvement per se in the peer-group, whether manifested in attraction to it or repulsion from it, induced greater conformity to its norms than did affectional neutrality or non-involvement. In this connection, we also noted that academically oriented students were under-chosen by freshmen, which adds to the observation that such students were less aware of their peer environment (as measured by the number of their recognitions and by the distribution of affect among them) the complementary fact that their environment was less aware of them.

(9) With respect to environmental influences on graduate aspirations, we found that although at first (between September and November) the distribution of graduate aspirations in a student's environment directly affected the change in his own graduate aspirations, later on the environment seems to have lost this direct influence and developed an indirect influence instead.

That is, in this second phase (between November and April) the distribution of high occupational ambitions in a freshman's environment appears to have exerted influence on his own occupational ambitions and only then on his graduate aspirations. This shift may be interpreted as reflecting an initial conformity to a superficial group norm, followed by an emerging rationality in determining the relationship between adherence to this norm and adherence to the logically supporting norm regarding personal life ambitions. In this connection, although we have no information on the potentially critical question of selective drop-outs from college or from fraternities, a synthetic cohort analysis suggests that fraternity membership brought about an elevation--over the full college experience--in boys' mobility aspirations, whereas non membership left such ambitions slightly higher but substantially unaffected over-time. Thus, while the difference in graduate aspiration levels between freshmen fraternity members and freshman independents was marked and favored the latter, among non-freshman boys the level of graduate aspiration was as high among fraternity members as among independents.

(10) The freshmen girls were influenced in their graduate aspirations changes almost exclusively by non-freshman boys whom they liked, and not at all by the non-freshman girls in their environments. The graduate aspirations of freshmen boys, on the other hand, were influenced only slightly by non-freshmen girls but strongly by non-freshmen boys. The suggestion here is that wanting to go to graduate or professional school was associated with aspirations for task achievement and the chief carriers of influence on such desires were male. The girls seem to have conformed to these male aspirations to the extent that such conformity was instrumental for socio-emotional achievement with males.

Indications for Further Research

In our opinion, the study deserves improved replication, with extension into areas where this research has generated new hypotheses. Replications are necessary before we can claim that our findings are anything more than suggestive with respect to student behavior in American colleges at large. Comparative studies should be especially instructive in this regard, since the college we have examined has characteristics which set it apart from other types of colleges. At an all-boys' or all-girls' college, for example, the reduction of across-sex contacts might well affect the operation of not only dating behavior and evaluation, but many other variables we have explored.

Our study emphasizes the unique advantages of panel design and highlights certain features which a replication should have in this regard. For example, we stress the critical importance of obtaining data on freshmen before as well as after they become involved in college life. But if it were also possible to follow an entering freshman class throughout its college career, we might be able to assess the influence of our independent variables on students who transfer to other colleges or drop out of college altogether, as well as assess the role of such selection in coloring those findings presented in our study which are based on synthetic cohort analysis.

Our finding that role specialization probably occurred within the Greek-letter societies and had various consequences for academic achievement highlights the effects of social structure on the formal goals of education. But since we did not measure our respondents' standings in any student hierarchy other than the purely academic one, we cannot test this hypothesis fully. We would expect future research to show, for example, that students who were outstanding in student politics at high school would be leaders in college

student politics more often if they belonged to competitive student groups like fraternities or sororities than if they did not belong. We would expect the same to be true in intramural athletics, but the situation might be somewhat different in intercollegiate athletics and intercollegiate politics, since in these arenas the champions carry the banners of the entire college, rather than any one segment of it, into competition with champions of other entire colleges.

It should also be enlightening to compare cases where faculty members maintain separate relationships to many individual students with cases where faculty members are the centers of informal student discussion or study groups. We would expect faculty influence to be much greater in the latter than in the former case.

With respect to the measurement of interpersonal environments, the evidence of this research clearly supports the usefulness and practicality of this technique. The following are certain extensions of its use which could lead to a more precise evaluation as well as amplification of its power.

(1) For reasons beyond our control, we were unable to secure the same symmetry and detail in measuring faculty members in student interpersonal environments as we did in measuring students in these environments. Such data, however, would obviously strengthen the analysis of faculty influence on students.

(2) In addition to measuring interpersonal environments as we have done here, a question asking respondents to identify their "three best friends" would make possible a direct comparison of the research utilities of interpersonal environment measures and this more usual measure. It would also be interesting to compare the respondents' estimates of his own and others' environmental size, affectivity and influence with the objective estimates

employed in our study.

(3) Although we collected data which would allow us to explore the differential effects of sociometric choices made, received, reciprocated and unreciprocated, such an analysis was too costly. We are confident, however, that these dimensions of interpersonal environments are no less relevant than affectivity and frequency of interaction in choices made. Further, the data necessary for measurement of interpersonal environments is also capable of serving in an analysis of clique structure at many different levels of affect and interaction frequency which could yield a "topographical" picture of great detail. Such an analysis would bring out differences which seem likely to exist between the attitudinal and behavioral changes occurring, say, among students who are closely integrated into a clique and students who are not so integrated, given that both sets of students make or receive the same number and kind of recognitions.

APPENDIX A

FRESHMAN SEPTEMBER QUESTIONNAIRE

	Highly important	Moderately important	Not important
Pleasing my parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Learning as much as possible in college	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Living up to my religious or philosophical ideals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being accepted and liked by other students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Having a good time socially	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintaining a good reputation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Falling in love and getting married	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Getting a diploma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Getting the highest grades that I possibly can	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify and check the appropriate category) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. What occupation do you think you will enter?

- I have not decided yet, but I am considering the following occupations: (a) _____ (b) _____
- I have decided and the occupation is _____

4. IF YOU HAVE DECIDED, when did you decide on this occupation?

- Before high school
- During high school

5. IF YOU HAVE DECIDED ON AN OCCUPATION, are there other occupations which you would rather enter, if you could choose freely?

- Yes: _____
Name of the occupation(s) you prefer
- No

6. Where do you expect to settle down after you finish all of your education?

- In my home town
- Not in my home town, but in _____
Name of place
- Undecided, but I am considering _____
Name of place(s)

7. If your highest aspirations should be realized, what kind of position would you like to hold at the peak of your career? _____

8. Would you like to go to graduate or professional school after college?

- Yes, I would like to go to _____ graduate school, to study _____
Name
Subject
- Yes, I would like to go to _____ professional school, to study _____
Name
Subject

No

Undecided

9. Do you feel sure that you actually will go to graduate or professional school after college?

Yes

No, because _____

10. IF YOU ANSWERED "NO" TO QUESTION 9, what do you think you will do after college? _____

11. Here are some statements which may describe your expectations about your future experiences at College. Please indicate how much you agree with each statement by checking the appropriate category.

	Agree Strongly	Agree Somewhat	Disagree
I expect to develop my moral capacities, ethical standards and values.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I expect to make my parents proud of me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I expect to be equipped to help alleviate social injustice and suffering.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I expect to become less religious.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I expect to gain an appreciation of ideas, expand my interests and enrich my intellectual life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I expect to enjoy the good times I will have with college friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I expect to make progress toward acquiring a skill and a degree which will enable me to enter a high income and high prestige occupation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I expect to become more religious.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I expect to make good contacts which will help me later in life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I expect to impress my instructors very favorably.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I expect that my fellow students will look up to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify and check the appropriate category.) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. How much time, on the average, did you spend studying outside of class while you were in high school? (Please check only one.)

Less than 1 hour a day

About 5 hours a day

About 1 hour a day

About 6 hours a day

About 2 hours a day

About 7 hours a day

About 3 hours a day

About 8 hours a day

About 4 hours a day

More than 8 hours a day

13. Did you ever study outside of class with other students?

No, never. Yes, sometimes. Yes, very often.

14. How many times did you use "crib notes," or copy, in an examination while in high school?

Once More than three times

Two or three times Never

15. Here are some things you might have had in mind when you weighed the advantages of different colleges. Please check the category which shows how important each thing was to you, at the time you made your choice of college.

	Highly important	Moderately important	Not important
Size of the college	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
General reputation of the college	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of getting a degree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opportunities for financial aid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attractiveness of the curriculum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attractiveness of the extra-curricular activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friends or relatives were attending the college at the time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friends or relatives had attended the college in the past	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geographical location of the college	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My parents' desires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tuition costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify and check the appropriate category.) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. Which of the following colleges would you rather attend, if you could choose now, with perfect freedom?

One of the "Big Ten"

An Ivy League college

_____ College

A specialized school in technology, or the arts, etc.

A small, independent, liberal arts college, other than _____ College

A teachers' college

Other (Please specify) _____

17. Write, in your own words, a sentence or two which represents your own strongest reactions to college so far.
-
-

18. Here are some goals which you may think the ideal college should have. Please indicate how important you think each goal should be to a college.

	Highly important	Moderately important	Not important
Provide vocational training; develop skills and techniques which are directly applicable to the student's vocational career.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide a haven where students can enjoy themselves without the worries that will come later in life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Help develop the student's values and moral standards.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Develop the student's knowledge and interest in community, national and world problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide extra-curricular social, athletic and fellowship activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide a basic general education and appreciation of ideas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. Here are some statements of opinion. Please write a sentence or two summarizing your own opinion on each statement.

Our high divorce rate is a sign that we should return to the values which our grandparents held. _____

One trouble with Jewish businessmen is that they stick together and prevent other people from having a fair chance in competition. _____

The best assurance for peace is for the United States to have the strongest army, navy and air force, and the most hydrogen bombs. _____

Miracles have always taken place whenever the need for them has been great enough. _____

20. How important do you think the following items should be in making a student popular among his fellow students?

	Highly important	Moderately important	Not important
Coming from a certain family background.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Belonging to a certain religion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Belonging to a certain race.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Having a certain national origin.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My wife (or husband).	<input type="checkbox"/>						
My fiancée (or fiancé).	<input type="checkbox"/>						
My girlfriend (or boyfriend).	<input type="checkbox"/>						
Other persons (Please specify and check the appropriate category.)							
_____	<input type="checkbox"/>						
_____	<input type="checkbox"/>						

25. How often did you feel uncomfortably "different" in the presence of your high school friends because of your views on the following things?

	Frequently	Sometimes	Never
Religion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Politics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aesthetic tastes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Concerns about solving social problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Money	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My interest in a specialized field which they did not share	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My life ambitions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify and check the appropriate category.)			
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. Did you date in high school?

<input type="checkbox"/> No	<input type="checkbox"/> Yes, about twice a week
<input type="checkbox"/> Yes, less than once a month	<input type="checkbox"/> Yes, about three times a week
<input type="checkbox"/> Yes, about once a month	<input type="checkbox"/> Yes, about four times a week
<input type="checkbox"/> Yes, about once every two or three weeks	<input type="checkbox"/> Yes, about five times a week
<input type="checkbox"/> Yes, about once a week	<input type="checkbox"/> Yes, more than five times a week

27. Do you expect to date while you are at _____? Yes No

28. Are you: Going steady Engaged Married None of the foregoing

29. When do you expect to go into the armed forces?

<input type="checkbox"/> Not applicable, since I have already served.	<input type="checkbox"/> Other (Please specify) _____
<input type="checkbox"/> Never, since I have a disability	
<input type="checkbox"/> Never, since I am a woman	<input type="checkbox"/> I expect to go into the armed forces in _____

30. What is your religion:

- Protestant Catholic Jewish Other (please specify) _____
 None

31. How often do you usually attend a place of worship?

- Every week One to three times a month Less than once a month
 Never

32. What is your race? White Negro Other (please specify) _____

33. How is your college education paid for? (Please check all items that apply.)

- Parents pay all expenses Parents pay some expenses
 Scholarship Work during the school year
 Other (Please specify) _____

34. Which of the following best describes the situation in your family when you were in high school?

- It was "naturally assumed" that I would go to college.
 I was encouraged to go to college, but it wasn't assumed that I would go.
 I was neither encouraged nor discouraged from going to college.
 I was discouraged from going to college.
 Other (Please specify) _____

35. Are both of your parents alive and living together?

- Yes
 No: Mother died when I was _____ years old.
 Father died when I was _____ years old.
 My parents are living, but divorced or separated when I was _____ years old.

36. Does your mother now have a job outside the home?

- Yes, full-time Yes, part-time No

37. How much formal education did your father have? (Please check one.)

- Some grade school Finished college
 Finished grade school Some graduate or professional school
 Some high school Finished graduate school (with M.A. or Ph.D., or equivalent degree), or professional school
 Finished high school
 Some college Don't know

38. How much formal education did your mother have? (Please check one.)

- Some grade school Finished college
 Finished grade school Some graduate or professional school
 Some high school Finished graduate school (with M.A. or Ph.D., or equivalent degree), or professional school
 Finished high school
 Some college Don't know

39. How long have members of your family been citizens of the United States?
(Please check one.)

- I am a foreign student, my family members are citizens of another country.
- I am the first of my family to seek citizenship here.
- My parents were the first U.S. citizens in my family.
- The first U.S. citizens in my family were my grandparents.
- The first U.S. citizens in my family were my great-grandparents.
- The first U.S. citizens in my family were my great-great grandparents.
- Members of my family have been U.S. citizens for more than five generations.

40. From what country or countries did your family come, originally?

41. What do you think your major subject will be at _____ College?

42. How well, comparatively speaking, do you expect to do in college as far as grades are concerned?

- Upper 10% of my class Lower 25% of my class
- Upper 25% of my class Lower 10% of my class
- Upper 50% of my class

43. Do you own a car?

- Yes, and I do plan to use it on campus.
- No do not

44. If you were to register in the next presidential election, how would you vote?

- Republican Independent
- Democrat I wouldn't vote
- Another party

45. How do you think your parents would vote?

- | | |
|---|--|
| FATHER | MOTHER |
| <input type="checkbox"/> Republican | <input type="checkbox"/> Republican |
| <input type="checkbox"/> Democrat | <input type="checkbox"/> Democrat |
| <input type="checkbox"/> Another party | <input type="checkbox"/> Another party |
| <input type="checkbox"/> Independent | <input type="checkbox"/> Independent |
| <input type="checkbox"/> He wouldn't vote | <input type="checkbox"/> She wouldn't vote |

46. If you have any other comments about your college experiences so far, or about your past experiences in high school, please write them in the space below.

47. If you have any comments about this questionnaire, please write them in the space below.

Thank you very much for your patience and help. The best of luck in your studies!
Please hand in your questionnaire.

APPENDIX B

ALL STUDENTS NOVEMBER QUESTIONNAIRE AND
FRESHMAN APRIL QUESTIONNAIRE

- Hours in classes
 Hours studying, outside of classes
 Hours working, for pay
 Hours on dates, on- or off-campus
 Hours with friends (not dates) in leisure-time activities not directly connected with an extra-curricular club, fraternity, sorority or team
 Hours in leisure-time activities by myself
 Hours participating in extra-curricular athletic team activities (including practice)
 Hours participating in non-athletic club, fraternity or sorority activities
 Hours in a place of worship, or reading religious works
 Hours visiting my parents, telephoning them, or writing to them
15. How many friends do you have who are NOT students at _____ College, but whom you see at least twice a month during the school year? _____
16. What occupation do you expect to enter? (Be as specific as you can.)
 Name of occupation: _____
- I don't know yet.
17. When did you decide on this occupation?
- Not applicable, since I have not decided yet.
 Before entering high school.
 During high school.
 During the first year of college
 During the second year of college
 During the third year of college
 During the fourth year of college
 Other (Please specify) _____
18. Are you personally happy with this choice of occupation?
- Not applicable, since I have not decided yet.
 Yes, very happy
 Yes, moderately happy
 Neither happy nor unhappy
 No, not happy
19. If nothing stood in your way, would you LIKE to go to graduate or professional school after college?
- Yes, I would like to go to graduate school.
 Yes, I would like to go to professional school.
 No I am undecided.

Do you feel sure that you ACTUALLY WILL go to graduate or professional school after college?

- Yes, graduate school
 Yes, professional school
 No

20. IF YOU ANSWERED "NO" TO THE LAST QUESTION, what do you think you will do after college? _____

21. What is your religion?

- Protestant Catholic Jewish
 Other (Please specify) _____ None

What is your race?

- White Negro Other (Please specify)

22. How is your college education paid for? (Check all items that apply.)

- Parents pay all expenses Scholarship
 Parents pay some expenses I work during the school year
 I work during the summer Other (Please specify) _____

23. How much formal education did your father have? (Check the highest level reached)

- Some grade school Finished college
 Finished grade school Some graduate or professional school
 Some high school Finished graduate school (with M.A. or Ph.D. or equivalent degree), or professional school
 Finished high school
 Some college I don't know

24. How much formal education did your mother have? (Check the highest level reached)

- Some grade school Finished college
 Finished grade school Some graduate or professional school
 Some high school Finished graduate school (with M.A. or Ph.D. or equivalent degree), or professional school
 Finished high school
 Some college I don't know

25. Who were the first members of your family to become citizens of the United States?

- I am a foreign student.
 I am the first of my family to seek citizenship here.
 My parents were the first U.S. citizens in my family.
 The first U.S. citizens in my family were my grandparents.
 The first U.S. citizens in my family were my great-grandparents.
 The first U.S. citizens in my family were my great-great-grandparents.
 Members of my family have been U.S. citizens for more than five generations.

26. From what country or countries did your family come, originally?

27. What is your father's occupation? (If he is dead, say what his occupation was.)

28. In general, which party do you favor?

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> Republican | <input type="checkbox"/> Another party |
| <input type="checkbox"/> Democrat | <input type="checkbox"/> Independent |

Which party do you think your parents favor?

- | | |
|--|--|
| <u>FATHER</u> | <u>MOTHER</u> |
| <input type="checkbox"/> Republican | <input type="checkbox"/> Republican |
| <input type="checkbox"/> Democrat | <input type="checkbox"/> Democrat |
| <input type="checkbox"/> Another party | <input type="checkbox"/> Another party |
| <input type="checkbox"/> Independent | <input type="checkbox"/> Independent |

Are you:

- | | |
|---------------------------------------|--|
| <input type="checkbox"/> Married | <input type="checkbox"/> Engaged |
| <input type="checkbox"/> Going steady | <input type="checkbox"/> None of the foregoing |

In the following questions, you will find a series of choices which a college student must sometimes make. Put yourself in such a student's place and check the boxes which come closest to describing what your own choices would be.

Please be sure to indicate your choice in every case, no matter how difficult it may be, and no matter how unrealistic some of the alternatives given may seem to you.

Choose between the item in Column (1) and each of the bracketed items in Column (2). Indicate your choices by checking boxes in Column (3) as you go from item to item in Column (2).

Column (1)	Column (2)	Column (3)	
IF I HAD TO CHOOSE BETWEEN THIS	AND THIS	I WOULD:	
↓	↓	Choose the thing in Col. (1)	Choose the thing in Col. (2)
	My activity in extra-curricular clubs, teams, fraternities (or sororities), etc.	<input type="checkbox"/>	<input type="checkbox"/>
	Having dates more than once a month.	<input type="checkbox"/>	<input type="checkbox"/>
	Being widely known and very popular on campus.	<input type="checkbox"/>	<input type="checkbox"/>
	Having close friends on campus and spending time with them.	<input type="checkbox"/>	<input type="checkbox"/>
	My religious activities (outside of required chapel attendance).	<input type="checkbox"/>	<input type="checkbox"/>

Column (1)

IF I HAD TO CHOOSE
BETWEEN THIS



Making at least an
"A-minus" average

Column (2)

AND THIS



Column (3)

I WOULD:

Choose
the
thing
in Col.
(1)

Choose
the
thing
in Col.
(2)

Participating in
extra-curricular
clubs, teams, fratern-
ities (or sororiti-
ties), etc. as much as
I would like to.

Having as many dates
as I want, with whom-
ever I want.

My religious, philosophical, or
moral ideals.

Living up to my parents' standards
of college behavior.

Expressing my true feelings, ideas,
or knowledge even when they con-
flict with my instructors'.

Having dates more than once a month.

Maintaining an average of "B" or better.

Having close friends on campus and
spending time with them.

My religious activities (outside of
required chapel attendances).

My religious, philosophical, or
moral ideals.

Living up to my parents' standards
of college behavior.

Expressing my true feelings, ideas, or
knowledge even when they conflict with
those of other members of the clubs,
teams, etc.

Spending enough time on my studies to
maintain a "C" average (1.0 to 1.5
grade points).

Being popular among students of my
own sex.

Having close friends on campus and
spending time with them.

My religious, philosophical, or moral
ideals.

Living up to my parents' standards of
college behavior.

Expressing my true feelings, ideas,
or knowledge even when they conflict
with my dates'.

Maintaining an average of "B" or better.

Spending enough time on my studies to
maintain a "C" average (1.0 to 1.5
grade points).

Column (1)
IF I HAD TO CHOOSE
BETWEEN THIS

Column (2)
AND THIS

Column (3)
I WOULD:

Choose the thing in Col. (1) Choose the thing in Col. (2)

Being widely known and very popular on campus.

- My religious, philosophical, or moral ideals.
- My religious activities (except required chapel attendances).
- My parents standards of college behavior.
- Expressing my true feelings, ideas, or knowledge even when they conflict with those of the majority of students.
- Maintaining an average of "B" or better.
- Having close friends on campus and spending time with them.
- Participating in organizations which have low campus prestige, but which interest me very much.
- Spending enough time on my studies to maintain a "C" average 1.0 to 1.5 grade points).

<input type="checkbox"/>	<input type="checkbox"/>

Making and keeping even a few close friends on campus.

- My religious, philosophical, or moral ideals.
- My religious activities (outside of required chapel attendances).
- Living up to my parents' standards of college behavior.
- Expressing my true feelings, ideas, or knowledge even when they conflict with my friends'.
- Maintaining an average of "B" or better.
- Being widely known and very popular on campus.
- Spending enough time on my studies to maintain a "C" average (1.0 to 1.5 grade points).

<input type="checkbox"/>	<input type="checkbox"/>

THE FOLLOWING SECTION IS AN ESPECIALLY IMPORTANT PART OF THE STUDY. YOUR ANSWERS WILL BE HELD IN STRICTEST CONFIDENCE AND NO ONE EXCEPT THE RESEARCH DIRECTORS AT THE UNIVERSITY OF CHICAGO WILL EVER SEE THEM.

Below, you will find a complete list of all students now enrolled in _____ College. Go through this list carefully.

When you come to a name that you recognize, place a check in the left-hand box (headed RECOGNIZE) next to his or her name. Then write the average number of hours per week that you spend in this student's company in the middle box (headed HOURS PER WEEK). In the right-hand box (headed LIKE-DISLIKE), write the one symbol which best describes how much you like or dislike this student's company, according to the following scale:

L+ = Like Strongly
 L = Like Moderately
 N = Neutral; neither like or dislike
 D = Dislike Moderately
 D+ = Dislike Strongly

Please be sure to fill out all three boxes for every name that you recognize, whether you know the student personally or not.

(If there are any names which you cannot find in this list, please print them in the spaces provided at the end of each class, and fill out the boxes for them.)

[A complete list of all registered students followed, e.g.,

Recog- nize	Hours Per Week	Like Dis- Like	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0001 Doe, John]

APPENDIX C

ALL STUDENTS APRIL QUESTIONNAIRE

BETWEEN THIS CHARACTERISTIC		AND THIS CHARACTERISTIC	MY PREFERENCE IS:	
(A)		(B)	(A)	(B)
Is relatively aloof in his attitude toward students outside the classroom.		Sometimes invites students to his home.	<input type="checkbox"/>	<input type="checkbox"/>
Sometimes invites students to his home.		Sometimes has refreshments with students in the Student Union.	<input type="checkbox"/>	<input type="checkbox"/>
Sometimes has refreshments with students in the Student Union.		Is relatively aloof in his attitude toward students outside the classroom.	<input type="checkbox"/>	<input type="checkbox"/>
Is not at all interested in student extra-curricular clubs, teams, etc.		Is very interested in student extra-curricular clubs, teams, etc.	<input type="checkbox"/>	<input type="checkbox"/>

2. How many _____ College faculty members do you know from taking their courses or from contact with them outside of classes?

3. Of the faculty members that you know (i.e., the number you wrote in Question #2), how many have the following characteristics? Include any given faculty member in as many categories as you think necessary.

CHARACTERISTIC	NUMBER
Gives highly informative, clear, but humorless lectures.	<input type="checkbox"/>
Gives lectures which are relaxed, humorous, but not informative.	<input type="checkbox"/>
Expects students to learn on their own, without much lecture help.	<input type="checkbox"/>
Lectures from the textbook and reading assignments.	<input type="checkbox"/>
Lectures from related material not in the textbook or reading assignments.	<input type="checkbox"/>
Conducts his classes as discussion groups.	<input type="checkbox"/>
Conducts his classes as discussion groups.	<input type="checkbox"/>
Always gives very few "A's".	<input type="checkbox"/>
Always gives many "A's".	<input type="checkbox"/>
Marks "on a curve."	<input type="checkbox"/>
Gives much individual help to students.	<input type="checkbox"/>
Expects students to learn on their own, without much individual help.	<input type="checkbox"/>
Is relatively aloof in his attitude toward students outside the classroom.	<input type="checkbox"/>
Sometimes invites students to his home.	<input type="checkbox"/>
Sometimes has refreshments with students in the Student Union.	<input type="checkbox"/>
Is not at all interested in student extra-curricular clubs, teams, etc.	<input type="checkbox"/>
Is very interested in student extra-curricular clubs, teams, etc.	<input type="checkbox"/>

4. Of the faculty members that you, how many of them do you especially admire or would like to be like later in your life?

Now think of the first faculty member that you especially admire. What do you admire most in him or her? Check all items which apply.

- He has a brilliant mind.
- He is enthusiastic about his field.
- He has a good sense of humor.
- He is fair in giving marks.
- He is good-looking.
- He is sympathetic about students' problems.
- Other (Please specify) _____

Now think of the second faculty member that you especially admire. What do you admire most in him or her? Check all items which apply.

- He has a brilliant mind.
- He is enthusiastic about his field.
- He has a good sense of humor.
- He is fair in giving marks.
- He is good-looking.
- He is sympathetic about students' problems.
- Other (Please specify) _____

Now think of the third faculty member that you especially admire. What do you admire most in him or her? Check all items which apply.

- He has a brilliant mind.
- He is enthusiastic about his field.
- He has a good sense of humor.
- He is fair in giving marks.
- He is good-looking.
- He is sympathetic about students' problems.
- Other (Please specify) _____

5. (a) What is the name of your father's field, type of business, or type of employer? Be specific. For example:

"State Government," NOT "Government."

"Wholesale electrical appliance firm," NOT "Electrical appliances."

"Retail clothing store," NOT "Clothing business."

"Private medical practice," NOT "Medicine."

If your father is dead, or retired, say what his field, business, or employer was.

Answer: _____

(b) Is (or was) your father salaried or self-employed? Check one.

Salaried

Self-employed

(c) What is (or was) the exact title of your father's job? _____

(d) As far as you know, what are (or were) his job duties? _____

6. In the section which follows, place a check in the box next to each campus extra-curricular organization to which you belong. If you belong to campus organizations which are not on this list, write them on the lines provided under the appropriate headings.

[A complete list of all extra-curricular campus organizations followed, e.g.,

Intercollegiate Athletic Teams

Baseball

Basketball]

APPENDIX D

FACULTY APRIL QUESTIONNAIRE

Column (1)
IF I HAD TO CHOOSE
BETWEEN THIS STUDENT
CHARACTERISTIC

Column (2)
AND THIS ONE

Column (3)
I WOULD:
Choose Choose
the one the one
in Col. in Col.
(1) (2)

↓
Must achieve at least
an "A-minus" average
to be satisfied.

↓
Has close friends on campus and
spends time with them.
Adheres firmly to his religious
philosophical, or moral ideals.

Participates in religious activities
(outside of required chapel attendance)
very often.

Tries to live up to his parents' standards
of college behavior.

Expresses his true feelings, ideas, or
knowledge even when they conflict with
his instructors'.

Is very active in
extra-curricular
clubs, teams, fra-
ternities, etc.

Has dates more than once a month.

Must achieve at least a "B" average to
be satisfied.

Has close friends on campus and spends
time with them.

Participates in religious activities (out-
side of required chapel attendance) very
often.

Adheres firmly to his religious, philoso-
phical, or moral ideals.

Tries to live up to his parents' standards
of college behavior.

Expresses his true feelings, ideas or
knowledge even when they conflict with
those of other members of the clubs, teams,
fraternities, etc.

Is satisfied with a "C" average.

Has dates more than
once a month.

Is widely known and very popular among
male students.

Has close friends on campus and spends
time with them.

Adheres firmly to his religious, philo-
sophical, or moral ideals.

Participates in religious activities (out-
side of required chapel attendance) very
often.

Tries to live up to his parents' standards
of college behavior.

Expresses his true feelings, ideas, or
knowledge even when they conflict with
his dates'.

Must achieve at least a "B" average to
be satisfied.

Is satisfied with a "C" average.

Column (1)
IF I HAD TO CHOOSE
BETWEEN THIS STUDENT
CHARACTERISTIC

Column (2)
AND THIS ONE

I WOULD:
Choose the one
in Col. (1) Choose the one
in Col. (2)

Is widely known and
very popular on
campus.

Adheres firmly to his religious,
philosophical, or moral ideals.
Participates in religious activities
(outside of required chapel attend-
ance) very often.
Tries to live up to his parents'
standards of college behavior.
Expresses his true feelings, ideas
or knowledge even when they conflict
with those of the majority of stu-
dents.
Must achieve at least a "B" average
to be satisfied.
Has close friends on campus and
spends time with them.
Is very active in extra-curricular
clubs, teams, fraternities, etc.
Is satisfied with a "C" average.

<input type="checkbox"/>	<input type="checkbox"/>

Has close friends on
campus and spends time
with them.

Adheres firmly to his religious,
philosophical, or moral ideals.
Participates in religious activities
(outside of required chapel attend-
ance) very often).
Tries to live up to his parents'
standards of college behavior.
Expresses his true feelings, ideas
or knowledge even when they conflict
with his friends'.
Must achieve at least a "B" average
to be satisfied.
Is widely known and very popular
on campus.
Is satisfied with a "C" average.

<input type="checkbox"/>	<input type="checkbox"/>

In the following section, you will find some personal characteristics of college students in general. Please check the boxes which come closest to describing the characteristics which you prefer to see in FEMALE students.

Please indicate your preference in every case, no matter how unrealis-
tic some of the alternatives or pairings may seem to be.

Choose between the characteristic in Column (1) and each of the bracketed characteristics in Column (2). Indicate your preferences by check-
ing boxes in Column (3), as you go from item to item in Column (2).

Column (1)
IF I HAD TO CHOOSE
BETWEEN THIS STUDENT
CHARACTERISTIC

Column (2)
AND THIS ONE

Column (3)
I WOULD:
Choose the one in Col. (1) Choose the one in Col. (2)

Is widely known and very popular on campus.

Expresses her true feelings, ideas, or knowledge even when they conflict with her dates.
Must achieve at least a "B" average to be satisfied.
Is satisfied with a "C" average.

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Has close friends on campus and spends time with them.

Adheres firmly to her religious, philosophical, or moral ideals.
Participates in religious activities (outside of required chapel attendance) very often.
Tries to live up to her parents' standards of college behavior.
Expresses her true feelings, ideas or knowledge even when they conflict with those of the majority of students.
Must achieve at least a "B" average to be satisfied.
Has close friends on campus and spends time with them.
Is very active in extra-curricular clubs, teams, sororities, etc.

<input type="checkbox"/>	<input type="checkbox"/>

Adheres firmly to her religious, philosophical, or moral ideals.
Participates in religious activities (outside of required chapel attendance) very often.
Tries to live up to her parents' standards of college behavior.
Expresses her true feelings, ideas, or knowledge even when they conflict with her friends'.
Must achieve at least a "B" average to be satisfied.
Is widely known and very popular on campus.
Is satisfied with a "C" average.

<input type="checkbox"/>	<input type="checkbox"/>

Thank you very much for your help!