

COMPARATIVE SCHOLASTIC RATINGS OF FRATERNITY
AND NON-FRATERNITY STUDENTS

by

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INTRODUCTION

During the past few years there has been considerable speculation among students and faculty as to the comparative grades earned by college students who have become members of social fraternities and those who have not affiliated themselves with any such organizations.

Statements have been made that the study conditions in organized houses encourage improper study habits and in this way bring about a lower type of scholarship among students who have ability to do a higher type of work. This is even more extremely stated by some who say fraternity life causes students to forget the real purpose of college. In defense we have the following arguments. Fraternities realize there is a chance for this condition to exist, and guard against it by having special study hours. In the fraternity there is also the opportunity of helping the weaker student in his work, and in this way encourage a higher standard.

This study has been made in an effort to show statistically whether there is any valid difference in grades earned by the two groups.

In this study an attempt has been made to determine whether or not there exists within the fraternities influ-

ences which tend to raise or lower the scholastic ratings of their members as compared with ratings of those who are not members of any organized house.

REVIEW OF LITERATURE ON THE SUBJECT

Very little literature is available on this subject except studies similar to this one. The following studies here referred to have all been made in colleges and universities in the United States.

Murich, while a student in the University of Maine, reports no significant difference between grades earned by the two groups. His study grouped all fraternity people against all non-fraternity people. Grades were secured for each group in numerous courses as English, algebra, chemistry and so on. His data were gathered over an eleven year period.

Another study by Constance, of the University of Oregon, states, "Fraternity freshmen of the University of Oregon are about the same as non-fraternity freshmen on the basis of psychological test scores, are inferior to them in grades earned in high school, but on the average secure better grades in the University. Sororities show the same behavior except that their freshmen are better than the non-sorority freshmen women on the mental test basis." His conclusions

are to the effect that organized houses seem to encourage pupils of low ability to do better work, and that freshmen of fraternities of the University of Oregon secure higher grades--in proportion to their abilities--than do the non-fraternity freshmen. The intelligence test ratings were obtained from the American Council on Education Tests. High school grades were also obtained in order to determine previous achievements. Only freshmen were studied in this report.

The above two reports referred to were theses prepared for M. A. degree.

Johnson in a study at the University of Minnesota found that sorority pledges rank below the average woman in intelligence test rank and that fraternity pledges rank above the average man. In scholarship the sorority pledges did a little better than other women, while the fraternity pledges did distinctly worse than other men.

A. R. Barnock, Dean of men in the University of Illinois found in a study covering a period of five years that the average grade of fraternity men was lower than the average grade of all non-fraternity men. No test ranks were given in this report. Each year the results of this study were published. In the course of the five year period the

fraternities consistently raised their grade averages from year to year, but not enough to equal the grade average of the non-fraternity group.

In a study made by Miss Grey at the Kansas State Agricultural College for the Department of Agricultural Economics, all fraternity and non-fraternity students were studied for a period of one semester. Results of this study show the non-fraternity group excelling the fraternity group in every case except one. This one case was in the sophomore class of the Division of Veterinary Medicine. This study also shows the pledge group excelling in two cases, one being the junior class of the Division of Engineering, the other to senior class of the Division of General Science. Little significance, however, attaches to the superiority of pledges in this case because many pledges among the upperclassmen are "repeaters" and therefore are no doubt repeating many courses in which they have previously failed.

METHOD AND MATERIAL

In proceeding with this study, names were secured of all fraternity and sorority students attending Kansas State Agricultural College during the year 1927-28. The percentile rank of each was obtained from the freshmen intelligence

tests given each fall. Each fraternity member was matched with a non-fraternity student of the same intelligence test rank. Students of the same division, as well as the same class, were matched against each other. For example, there were fifty two boys in the Division of General Science who belonged to fraternities in 1927-28. Fifty-two non-fraternity boys of the Division of General Science and of the same test ranks were matched against them. Sophomores were matched against sophomores, juniors against juniors and so on. Special care was taken to secure an entirely representative sampling. For instance, when there was more than one choice of students who might be chosen to be matched against a certain fraternity member, the one whose name appeared closest in alphabetical order to the one it was being matched against was taken. This matching was all done before any of the grades were known to us.

The grades for each were obtained and grade averages for each person calculated. Numerical grade values were obtained for each student by assigning values to each letter grade in the following way:

- F - 1 point per semester hour.
- D - 2 points per semester hour.
- C - 3 points per semester hour.
- B - 4 points per semester hour.

A - 5 points per semester hour.

This changed the grades into units that could be more readily used in calculations. The grade average obtained from this was the ratio of the sum total of points to the total hours taken.

This procedure was followed for each division for the year 1927-28, and for the Divisions of Home Economics and Agriculture for 1928-29. These two divisions were studied for a two year period to see if results for one year checked with those of another year. Also these two divisions have fewer curricula and represent students who are taking more nearly the same courses than either the Divisions of General Science or Engineering. The Division of Veterinary Medicine was not included in this study. The enrollment in this division was so small it was impossible to get a large enough sampling to be of any value.

Freshmen pledges, as well as active members, were studied. Freshmen pledges were matched against non-fraternity freshmen. The same method of matching the pledges was followed as that followed in matching the active members. Here too all divisions were studied during the year 1927-28, and in addition the Divisions of Home Economics and Agriculture during the year 1928-29.

Every effort has been made to secure two groups as

nearly alike in every respect as possible, except for the fact that one group belonged to fraternities and the other group did not. Any difference in grades should be due, then, to differences in study habits and study conditions.

TABLE I. COMPARISON OF GRADES

From the data shown in Table I indicating grade averages and grade differences of fraternity and non-fraternity students we find that, in all cases but one, the non-fraternity group excelled the fraternity group. This table also shows differences as high as forty-four one-hundredths of a grade step in individual cases. In combining the results from all divisions for both the first and second semesters, boys and girls alike, we obtain a result which still is indicative of superiority in grades earned by non-fraternity students. It will also be noted in this table that grade averages for fraternity women are almost the same as those for non-fraternity men. Authorities generally recognize an appreciable difference between grades of men, and grades of women. These data show the non-fraternity men earning grades equal to fraternity women. The probable errors in all cases are large, however, they diminish with an increase in the number of cases represented.

The fact that the fraternity students in the division

of Agriculture seem to almost equal the non-fraternity students in grades, can be explained by the fact that there are two professional agricultural fraternities on the campus and these fraternities stress scholarship. These two fraternities made up perhaps seventy-five percent of the fraternity students in the Department of Agriculture. This result is certainly indicative of the value of fraternities encouraging students to do better school work.

Table II shows the grade averages and grade differences of pledge and non-pledge groups. Results in each case correspond fairly well with those shown in Table I. In the Division of Home Economics the pledge group excelled the non-pledge group two different semesters. Here, as in the Division of Agriculture, where the fraternity group about equalled the non-fraternity group, the grade differences were small. In no case did the fraternity or pledge group exceed the non-fraternity or non-pledge group more than six one-hundredths of a grade step. In combining boys' and girls' grades for all semesters the difference between the two groups in both the pledge group and the fraternity group was the same, i.e., twenty-four one-hundredths of a grade step.

Table III shows the correlations of grade averages and intelligence rank for each group of students, together

with the probable error of each correlation. This gave no results of value. High grades received by a student of low ability would have the same effect on a correlation as low grades received by one of high ability. I have, however, included this table as it shows those groups which are doing work that their ability indicates they are capable of doing. Tables IV, V and VI are self explanatory. They show correlations of freshman groups and combined correlations of those divisions which were studied for a two year period.

Table I.

Table Showing Grade Averages and Grade Average Differences of Fraternity
and Non-Fraternity Groups

	Sem.	No.	Fraternity			Non-Fraternity				
			P.E. Dist.	Gr.Av.	P.E.M. ₁	P.E. Dist.	Gr.Av.	P.E.M. ₂	M ₁ -M ₂	P.E.
Gen. So. Boys	1	52	1.6748	3.15	.2323	1.6602	3.49	.2302	-.34	.3247
	2	48	1.5516	3.28	.2239	1.6300	3.56	.2352	-.30	.3247
Gen. So. Girls	1	45	1.5723	3.48	.2818	1.5788	3.77	.2818	-.29	.3277
	2	40	1.5239	3.59	.2414	1.4850	3.87	.2345	-.28	.3365
Engr.	1	83	1.7278	2.88	.1897	1.6623	3.02	.1824	-.14	.2650
	2	70	1.9250	3.00	.2091	1.7234	3.13	.2059	-.13	.2934
Agr. '27-28	1	28	2.0650	3.25	.3902	1.9372	3.27	.3681	-.02	.5351
	2	25	1.7843	3.49	.3669	1.7347	3.48	.3463	.01	.4875
'28-29	1	50	1.8580	3.38	.2624	1.7769	3.49	.2518	-.11	.4386
	2	43	1.8798	3.46	.2866	1.8298	3.62	.2790	-.34	.3986
M.E. '27-28	1	30	1.6858	3.18	.3077	1.2504	3.80	.2586	-.44	.5876
	2	26	1.6940	3.29	.3322	1.7093	3.58	.3582	-.29	.4721
'28-29	1	40	1.5996	3.12	.2829	1.7341	3.81	.2741	-.19	.5729
	2	37	1.7920	3.47	.2966	1.7717	3.67	.2912	-.20	.4093

Table I Continued.

Fraternity			Non-Fraternity							
	Sem.	Nbr.	P.E. Dist.	Gr.AV.	P.E.M ₁	P.E. Dist.	Gr.AV.	P.E.M ₂	M ₁ -M ₂	P.E.
Girls	1	116	1.6606	3.27	.1642	1.6989	3.56	.1577	-.29	.2205
Boys	1	213	1.8203	3.08	.1247	1.8381	3.27	.1327	-.19	.1821
Both	1	329	1.7894	3.15	.0986	1.7782	3.35	.0980	-.20	.1590
Girls	2	103	1.7124	3.47	.1686	2.0396	3.73	.2009	-.26	.2822
Boys	2	186	1.7759	3.14	.1301	1.7897	3.45	.1312	-.31	.1850
Both	2	289	1.7791	3.25	.1047	1.7802	3.57	.1047	-.32	.1480
Girls	1&2	219	1.6870	3.37	.1140	1.7070	3.84	.1138	-.27	.1820
Boys	1&2	399	2.0394	3.12	.1006	1.7482	3.35	.0875	-.23	.1333
Both	1&2	618	1.7887	3.21	.0719	1.7347	3.45	.0713	-.24	.1012

Table II.

Table Showing Grade Averages and Grade Average Differences of Pledge
and Non-pledge Groups

Pledge (Freshmen)				Non-pledge (Freshmen)						
	Sem.	No.	P.H. Dist.	Gr.Av.	P.E.M ₁	P.E. Dist.	Gr.Av.	P.E.M ₂	M ₁ -M ₂	P.E.
Gen. Sc. Boys	1	40	1.7023	2.25	.2603	1.7354	2.71	.2744	-.40	.3848
	2	29	1.8145	2.76	.3312	1.8634	3.10	.3402	-.34	.4748
Gen. Sc. Girls	1	35	1.9457	3.11	.3391	1.9165	3.13	.3239	-.02	.4569
	2	53	2.0167	3.20	.3272	1.9631	3.55	.3185	-.35	.4563
Eng.	1	49	1.7923	2.73	.2591	1.8578	2.98	.2653	-.25	.5367
	2	43	1.8242	2.86	.2782	1.7593	3.17	.2652	-.51	.3844
Agr. '27-28	1	10	1.7923	2.82	.5636	1.8440	2.77	.4885	-.25	.7467
	2	10	1.0960	2.51	.3466	1.8440	3.24	.5832	-.67	.8031
	1	23	1.8975	2.50	.2914	1.6442	2.74	.3428	-.24	.4499
	2	16	1.0234	2.46	.2359	1.4743	2.97	.4634	-.51	.5294
H. E. '27-28	1	21	1.9397	3.27	.4211	2.0431	3.21	.4471	.06	.6142
	2	24	1.9837	3.19	.4053	1.9855	3.15	.4052	.04	.5731
	1	10	2.2053	3.21	.6974	2.2774	3.28	.7202	-.07	1.0030
	2	7	1.3696	3.14	.6176	1.6535	3.60	.7005	-.46	.8710

Table II Continued.

Pledge (Freshmen)				Non-pledge (Freshmen)						
	Sem.	No.	P.E. Dist.	Gr.Av.	P.E.H.	P.E. Dist.	Gr.Av.	P.E.M ₂	M ₁ -M ₂	P.E.
Girls	1	66	1.9695	3.18	.2424	2.0611	3.17	.2525	+.01	.3500
Boys	1	122	1.8549	2.52	.1752	2.0284	2.84	.1836	-.82	.2533
Both	1	188	1.9794	2.75	.1444	2.0124	2.99	.1468	-.24	.2030
Girls	2	69	1.9979	3.19	.2406	1.3393	3.41	.1492	-.22	.2830
Boys	2	93	2.0529	2.82	.2374	2.0225	3.13	.2043	-.51	.2911
Both	2	167	2.0546	2.98	.1574	2.0216	3.24	.1564	-.26	.2219
Girls	1&2	135	2.0271	3.18	.1745	2.0346	3.25	.1751	-.07	.2472
Boys	1&2	220	1.9530	2.65	.1344	2.0053	2.96	.1853	-.51	.1907
Both	1&2	353	2.0107	2.85	.1067	2.0232	3.09	.1074	-.24	.1511

Table III.

Table Showing Correlation of Grade Averages and Intelligence
Test Scores of Fraternity and Non-fraternity Groups

	Sen.	Frat	P.E.	Non-frat	P.E.
Agr. '27-28	1	.2487	.1161	.3203	.0845
	2	.2730	.1262	.4399	.1064
	1	.3001	.0968	.4031	.0801
	2	.2074	.0965	.0619	.1002
Gen. Sc. Girls	1	.3983	.0845	.3342	.0889
	2	.4395	.0960	.3920	.0896
Gen. Sc. Boys	1	.4574	.0752	.4418	.0767
	2	.1811	.0923	.3931	.0901
H. E.	1	.2994	.1121	.2314	.1135
	2	.5514	.0923	.2290	.1128
Engr.	1	.1521	.0713	.2379	.0689
	2	.3845	.0690	.4024	.0677

Table IV.

Table Showing Correlation of Grade Averages and Intelligence
Test Scores of Freshmen Pledge and Non-pledge Groups

	sem.	Pledge	P. E.	Non-pledge	P. E.
Gen.Sc.Girls	1	.3251	.1106	.5327	.0308
	2	.5384	.0732	.5436	.0755
Gen.Sc.Boys	1	.4381	.0841	.6230	.0657
	2	.6070	.0788	.4990	.0724
Engr.	1	.6086	.0610	.5450	.0676
	2	.5854	.0667	.5273	.0734

Table V.

Combining Results of 1927-28 and 1928-29 for
Agriculture Students

sem.	Pledge	P. E.	Non-pledge	P. E.
1	.2624	.0703	.3539	.0677
2	.2484	.0760	.2269	.0767

Table VI.

Freshmen Pledges and Non-pledges

sem.	Pledge	P. E.	Non-pledge	P. E.
1	.3886	.0975	.5711	.0783
2	.3621	.1154	.6390	.0796

CONCLUSIONS

It is evident from this study that in the Kansas State Agricultural College there does exist some difference in grades earned by students in fraternities and those students who do not belong to fraternities. The difference is not amazingly large but still large enough to be of some significance. One might conclude this difference indicates better study conditions in the unorganized houses. Again one might point to the fact that there may be a factor which would tend to make fraternity life more attractive to those students who are naturally inclined to be less studious. This would eliminate the more studious, and select a type of student for fraternity membership who perhaps considered social achievements more valuable than scholastic achievement.

It was found in connection with this study that pledges and non-pledges rank about the same in intelligence test scores. The fact that this study and Miss Grey's, each being carried out by a different method, obtained practically the same results makes each of the studies appear more valid.

It has been pointed out that the Division of Agriculture has two professional fraternities, each of which stresses scholarship. Since the fraternity students of that

division show the result of the extra effort in the fact of having higher grade averages than any other group of men, possibly all fraternities could accomplish the same result if some desirable study plan would be made to function effectively within each house.

No doubt if studies of this kind were made yearly and their findings published, fraternity students would become aware of the difference that exists in their grade averages and an attempt would be made to bring their grade averages up to the grade average of the non-fraternity group.

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