AN ANALYSIS OF NYA VOCATIONAL STUDENTS OF OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE

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Chapter I

HISTORY OF STUDY

In June 1935 when President Roosevelt signed the bill creating the National Youth Administration, he said, "I am determined to do something for the nation's unemployed youth, because we can ill afford to lose the skill and energy of these young men and women". President Roosevelt recognized a crisis in the lives of American youth and in his characteristic way determined to do something about it. Perhaps he saw the situation described by Kingsley Davis who wrote in his article "Youth under All Flags", "We find that in countries where economic conditions have been the worst and where the outlook has been the blackest, the younger generation has taken the most active part in social and political struggles. This has been the story in China, in Russia, and in Germany. On the other hand, youth has not been so ready to revolt even in countries where its situation was bad, if the government lent a hand in helping youth to find better places in the nation's life. In such countries, young people have taken a conservative rather than a radical position".

On the other hand, the President may have agreed with Dr. Mark May, Professor of Educational Psychology at Yale, that the danger is not that these 5,000,000 unemployed youth will start a revolution, or even a new political party, but that they will stagnate emotionally and eventually become the wards of society.

Out of the recognition of this very real problem came the National Youth Administration, designed to give young people a chance either to continue their education or to work and supplement the family income. During the first two years of the program, there were two divisions in

the activities of the National Youth Administration. The strictly educational side of the work was found in the School Aid Division. Under this set-up, aid has been extended to both high school and college students who are in need of funds with which to continue their high school or college work. These young people work a specific number of hours to earn their maximum of six dollars per month if they are in high school or twenty dollars per month if they are in college.

During the year 1935-1936 there were in the United States 1850 institutions participating in the College Aid program with 130,000 students receiving an average of fifteen dollars per month to help them continue their education. In Oklahoma some 6000 high school and 3400 college students received aid during 1935-1936.

To the vast army of out-of-school youth it was equally or more important that some opportunity be extended. Consequently, the National Youth Administration established a second division of activities, a project program for these out-of-school youth. This project program was designed to furnish jobs by means of which youth from low-income families might supplement the family income. It was further planned that the work to which these young people were to be assigned would provide vocational training.

Now, after two and a half years, it seems that the philosophy of the project program has been reversed. The first idea was to give youth jobs in order that by those jobs they might receive money and be trained to some extent. Today the emphasis has been shifted definitely to the training, based on the idea that there are opportunities for the trained youth.

Mr. Houston A. Wright, Director of the National Youth Administration for Oklahoma, even before his appointment as director in 1935 had a vision

of youth work that pictured not a work program but an educational program for all youth of low-income families. In keeping with his long-range vision, Mr. Wright organized his entire state program around the five points of health, vocation, home, leisure activity, and citizenship.

Believing that the project work plan would evolve into a training program, Mr. Wright initiated an extensive building program. At various centers throughout Oklahoma the National Youth Administration in cooperation with local groups has erected Youth Center buildings, such as the ones at El Reno and Bristow which were dedicated by Mrs. Roosevelt during her visit to Oklahoma last spring. These Youth Centers have been constructed with the idea that some day the National Youth Administration would sponsor in those Centers training schools for youth. In these schools there would be, according to Mr. Wright's plan, ample opportunity to develop health, definite training for practical vocations, an intensive training in homemaking for girls, directed leisure time activities, and, running through the entire pattern, a constructive training in citizenship.

Thus it was no great surprise when in 1937 the National Youth Administration in Washington provided for the establishment of Resident Agricultural Schools. Under this new provision the National Youth Administration in Oklahoma now has schools in operation in these cities: Cordell, Wilburton, Lawton, Stillwater, Goodwell, Wetumka, and Langston.

The Resident Agricultural Project at Stillwater is typical of all the schools except that is is operated under college management. The girls are housed in Aggie Lodge, a former CCC Camp in the southwest section of Stillwater, while the boys are located in Aggie Halls, a former CCC Camp in the northwest section of the city.

The activities of the young people on the Stillwater project are centered around the five points which have formed the nucleus of the Oklahoma program since its beginning. The youth, who are all enrolled in college, have access to the college infirmary where their health problems are cared for by competent men and women. They have been given the physical and medical examinations required of regularly enrolled students.

These NYA Vocational students are receiving vocational training not only in their college courses, but also in the work which they do to earn their twenty-four dollars per month. The girls are receiving training for homemaking in the courses they take as well as in their cooperative housekeeping duties at Aggie Lodge.

In addition to the activities of the college in which the Vocational students participate, there is an adequate social program carried on at the Lodge in which the boys who wish may take part.

By learning to live together under the cooperative plan, by learning to adapt themselves to college life under difficult conditions, by profiting from the training offered them, it is hoped that these young people, in addition to becoming more satisfied with their own possibilities, will be much better citizens of the communities to which they will return.

In the minds of those who have watched the development of the National Youth Administration since its beginning in 1935 questions have arisen concerning this newest development in the training phase of the program. Are these young people college material as college material is judged today? Can they profit by being placed side by side with those financially more fortunate? Can they compete successfully with other college

students? Do their records show a justification of the expenditure of federal funds? Would another type of training perhaps be more adequate in making these young people economically and socially self-sufficient?

The answers to these questions are important from two standpoints. In the first place, it is important to know the abilities of these NYA Vocational students as compared with the abilities of regularly enrolled college groups in order to determine to some extent the fairness of putting them in a situation where they must compete on an equal scholastic and social basis with the college students. If there is a favorable comparison, then the federal government is justified in spending great sums of money in order to give the project youth their chance at a college education. If there is an unfavorable comparison, then it would be assumed, and justifiably so, that the federal government might better expend its funds to give these youth some kind of training other than that provided by our colleges.

In the second place, the answers to the questions may indicate the possibilities of a vocational program for youth of low-income families. Perhaps, too, they can show facts that will be of value in planning the future vocational program of the National Youth Administration.

Chapter II

SUBJECTS OF STUDY

In order to answer the questions mentioned previously, a comprehensive analysis of the NYA Vocational student group at Stillwater has been made. This group has also been compared to a group of regularly enrolled college students.

In choosing the subjects for this study, every NYA Vocational student was used. At Aggie Lodge there were forty-six girls available for this study, while fifty NYA Vocational boys were available at Aggie Halls.

The members of the NYA group, who ranged from eighteen to twenty-six years of age, are members of a relief family. That is, each family must be registered on the rolls of some relief agency in the county in which it lives. The young people who come to Stillwater are required to be high school graduates. It may be assumed, therefore, that this group is a choice selection of the Oklahoma NYA rolls, inasmuch as they are here because they chose a college education rather than regular NYA work at home.

The courses which the Vocational students are permitted to take are limited to those dealing with vocational and related subject matter. The girls are enrolled in the school of Home Economics. With the exception of four, two of whom are sophomores, and two juniors, the NYA girls are freshmen. The average age for NYA Vocational girls is 19.98 years. Forty-two of the NYA Vocational boys are enrolled in Vocational Agriculture, while eight are enrolled in technical Engineering. Of the fifty, one is a sophomore, the others being freshmen. The average age

of the boys is 20.1 years.

In the selection of the control group of regularly enrolled (Non-NYA) students, a similarity of courses was used as a basis of selection. Consequently, in choosing the Non-NYA girls, a freshman class in Personal and Vocational Guidance in the school of Home Economics was chosen as containing a representative group of college girls regularly enrolled in the school of Home Economics. This group had thirty-one members, all of whom were freshmen except one who was a sophomore. Taking into consideration the fact that if the NYA Vocational girls were given a choice of courses, a sizable group would have chosen some course other than home economics, it was decided that the comparison would be more significant if in the group of Non-NYA girls, some students from other schools of the college were included. Therefore, a class in freshman psychology was chosen as a representative group. Only the girls in this group were used. In this class were sixteen girls enrolled in education, thirteen freshmen and three sophomores; two were enrolled as freshmen in science and literature; and one was a freshman in commerce. Thus the number of Non-NYA girls in this study is fifty. The average age of the Non-NYA girls is 18.1 years as compared to the 19.98 years of the NYA Vocational girls.

Since the NYA Vocational boys were allowed a choice in their course of study, the selection of the Non-NYA control group of boys required a more careful matching. Thus in the Non-NYA group there are forty-two enrolled in the school of Agriculture and eight in Engineering. A class in freshman agriculture was chosen as containing students representative of all the freshman agricultural students. Of the forty-two agriculture students, nine are sophomores, three juniors, one a special student, with

the other twenty-nine being freshmen.

The eight Engineers in the control group are freshmen. Every tenth boy on the roll of the freshman engineering lecture group was chosen until eight had been selected. The average age of the eight Engineers thus selected and the forty-two agricultural students is 20.34 years as compared with 20.1 years in the NYA boys' group.

Chapter III

FIELDS OF COMPARISON

To get a somewhat significant picture of the NYA Vocational students as compared with the Non-NYA students, four fields of comparison were chosen. Paterson, Schneidler and Williamson in their book "Student Guidance Techniques" say,

"Scholastic aptitude tests have met with considerable success in enabling school authorities to predict individual school failure. Previous scholarship is a still better index.

"The grades which a student makes in high school have usually yielded higher correlations with college scholarship than have entrance tests."

They also say that a combination of high school records and entrance test records is the best method of predicting college failure or success.

Based on this idea, the first step in this study was a comparison of the high school grades of the two groups. The information for this comparison was obtained from the transcripts on file in the Registrar's Office, Oklahoma Agricultural and Mechanical College in Stillwater. A uniform method of interpretation was used in evaluating the grades.* The second group of data desired was the aptitude for college achievement of the two groups as indicated by a standard psychological test. All new students entering Oklahoma Agricultural and Mechanical College in the years 1934 to 1937 took the Ohio State University Psychological Test, Form 17. The records of performance on this test were available through the office of Dean Schiller Scroggs.

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* See page 12

The Bell Adjustment Inventory was selected as providing a valid measure of the personal and social adjustment in four fields, home adjustment, health adjustment, social adjustment, and emotional adjustment.

According to Dr. Bell, author of the Adjustment Inventory, the reliability of the test was determined by correlating the odd items against the even items, and by applying the Spearman-Brown prophecy formula to correct for double length. The coefficients of reliability are as follows: Home Adjustment--.89, Health Adjustment--.80, Social Adjustment--.89, Emotional Adjustment--.85, and Total Adjustment--.93.

In order to validate the Inventory, the following methods were used:

First, the items for each of the sections in the Inventory were selected in terms of the degree to which they differentiated between the upper and lower fifteen per cent of the individuals in a distribution of scores. Only those items which clearly differentiated between these extreme groups are included in the present form of the Inventory.

Second, the results of the various sections of the Inventory were checked during the interviews with four hundred college students over a period of two years.

Third, the Social Adjustment section, the Emotional Adjustment section, and the total score of the Inventory were validated by correlating the Social Adjustment section with the Allport Ascendance-Submission test and the Bernreuter Personality Inventory, B4-D, and by correlating the Emotional Adjustment section and the total score similarly with the Thurstone Personality Schedule.

Fourth, the Inventory has also been validated through the selection of "very well" and "very poorly" adjusted groups of students by counselors and school administrators in California and in New Jersey and a determina-

tion of the degree to which the Inventory differentiates between them.

The fourth field of comparison was the first semester college grade point averages. The records were made available through the office of the Registrar.

To discover something of the background of the NYA Vocational student group, Sims Score Card for Socio-Economic Status was used. While there are various standardized socio-economic scales, many of those examined were either too long and too detailed for practical use in this study or involved personal visits to the homes. The Sims scale warranted neither of these objections and, therefore, was chosen. The NYA group scores have been compared to the provisional levels as given by Mr. Sims in his Manual of Directions. The percentile rank and the descriptive interpretation are based upon scores from a fairly unselected group of 686 sixth, seventh, and eighth grade children from the schools of New Haven, Connecticut. The average score of the NYA Vocational groups is also compared with the average of the test when it was given to the eighth and ninth grade pupils of Stillwater.

Chapter IV

RESULTS AND DISCUSSION

High School Grade Point Averages

There is no uniform method of reporting high school grades in Oklahoma. Consequently, it was necessary to establish a standard method of interpreting the various kinds of grades found on the high school transcripts. This was done by translating the recorded grades into semester grade points and taking the average. In order to make the interpretation as accurate as possible, A's were counted as four grade points, B's three, C's two, and D's one in schools where D is considered as passing. When C- is considered the passing grade, A- became B, B- became C, and C- became D in order to make the translation into grade points equivalent to the grades in the schools where D is the passing grade. In the event that numerical grades were given, the translation was made on the basis used by colleges and high schools in the North Central Association. Thus 94-100 was A, 84-93 was B, 74-83 was C, and 70-74 was D.

It was found that a number of records were not available, thus accounting for the variation in N in the data which follow. In this field of study, there were thirty-eight NYA Vocational girls, and forty-four NYA Vocational boys compared with forty-three Non-NYA girls and thirty-seven Non-NYA boys.

As seen in Table I, comparison of the high school grades of the NYA Vocational girls with those of the Non-NYA girls, the $\frac{D}{\sigma \text{diff}}$ * is 3.1625. Since it is customary to take a $\frac{D}{\sigma \text{diff}}$ of 3. as indicative of complete reliability, a $\frac{D}{\sigma \text{diff}}$ greater than three is taken as indicating just so

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*Garrett, H. E., Statistics in Psychology and Education. p. 132

much added reliability. This means that the chances are 99.9* out of a hundred that the true difference between the NYA Vocational girls as compared with Non-NYA girls will be greater than zero and in favor of the Non-NYA girls.

Table I

Table giving the high school grade point averages of two groups of NYA Vocational students and two groups of Non-NYA students as well as the significance of the differences between the means of these groups.

Group	N	Mean	Diff.	σ diff.	$\frac{D}{\sigma \text{ diff}}$
NYA Girls	38	2.4798	.4301	.1360	3.1625
Non-NYA Girls	43	2.9099			
NYA Boys	44	2.5455	.1463	.1221	1.1982
Non-NYA Boys	37	2.6918			
NYA Total	82	2.5153	.2660	.0927	2.8695
Non-NYA Total	80	2.7813			

As will be seen further by reference to Table I, the $\frac{D}{\sigma \text{ diff}}$ of 1.1982 for the NYA Vocational boys and the Non-NYA boys indicates that the chances are eighty-eight* out of a hundred that the true difference is greater than zero. Since a $\frac{D}{\sigma \text{ diff}}$ of 3. indicates almost complete reliability, then the $\frac{D}{\sigma \text{ diff}}$ of 1.1982 is about forty per cent of what it would have to be in order to insure the same difference in all cases.

A comparison of the total NYA Vocational group and the total Non-NYA

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*Garrett, H. E., Statistics in Psychology and Education. p. 132

*Ibid.

group as to high school grade point averages yields a $\frac{D}{\sigma diff}$ of 2.8695 which approaches complete reliability.

College Entrance Test

The study of college aptitude as indicated by scores made on the Ohio State University Psychological Test reveals much less difference between the NYA Vocational students and the Non-NYA groups than does the comparison of high school grade point averages.

In this case, due to the fact that a number of students did not have entrance examination grades on record, there is a variation in N. Thirty-eight NYA Vocational girls, fifty Non-NYA girls, forty-eight NYA Vocational boys, and forty-six Non-NYA boys make up the cases in this division of the study.

Table II

Table showing the averages of the NYA Vocational groups and the Non-NYA groups on the Ohio State University Psychological Test, Form 17 and the significance of the differences between the means of these groups.

Group	N	Mean	Diff.	σdiff.	$\frac{D}{\sigma diff}$
NYA Girls	38	74.3450	15.2500	8.0783	1.8877
Non-NYA Girls	50	89.6000			
NYA Boys	48	75.9375	.1495	6.8060	.0220
Non-NYA Boys	46	76.0870			
NYA Total	86	75.2325	9.1425	5.2640	1.7368
Non-NYA Total	96	84.3750			

As shown in Table II in the comparison of NYA Vocational girls with the Non-NYA girls, the $\frac{D}{\sigma diff}$ is 1.8877, indicating that in ninety-six chances out of a hundred there would be a difference greater than zero in favor of the Non-NYA girls.

In the case of the boys the difference is much less, the $\frac{D}{\sigma diff}$ being .0220. This $\frac{D}{\sigma diff}$ is so near chance that there can be no significance attached.

In the comparison of the entire group of NYA Vocational students with the entire Non-NYA group the $\frac{D}{\sigma diff}$ of 1.7368 indicates that in ninety-six chances out of a hundred, the difference in the two groups will be greater than zero and in the same direction, but it is only fifty-eight per cent of what it would have to be in order to be completely reliable.

Bell Adjustment Inventory

There is, in all probability, no more interesting field of comparison in this study than that of the adjustment, both personal and social, of the NYA Vocational groups and the Non-NYA groups. It may be assumed that the NYA Vocational group, due to probably economic pressure of the past few years, would be much less adjusted than the Non-NYA group. With this assumption in mind, the study of these points of adjustment as given in Table III is particularly enlightening.

Table III

Table showing a comparison of the NYA Vocational groups with the Non-NYA groups and giving the significance of the difference between the means of the groups.

Test Division	Group	N	Mean	Diff	σdiff	$\frac{D}{\sigma diff}$
Health	NYA Girls	46	10.4349	1.1349	1.0393	1.0920
	Non-NYA Girls	50	9.3000			
	NYA Boys	50	8.7600	1.1600	.3781	1.3210
	Non-NYA Boys	50	7.5000			
Home	NYA Girls	46	10.6956	4.5156	1.1769	3.8369
	Non-NYA Girls	50	6.1800			
	NYA Boys	50	7.7400	.3600	.7365	.4888
	Non-NYA Boys	50	8.1000			
Social	NYA Girls	46	18.0000	2.2200	.3908	5.6800
	Non-NYA Girls	50	15.7800			
	NYA Boys	50	13.2000	2.2200	1.3577	1.6351
	Non-NYA Boys	50	15.4200			
Emotional	NYA Girls	46	15.3261	.1461	1.2077	.1210
	Non-NYA Girls	50	15.1800			
	NYA Boys	50	11.3400	.1800	1.3401	.1343
	Non-NYA Boys	50	11.1600			
Total Score	NYA Girls	46	54.8915	8.1915	3.3076	2.4766
	Non-NYA Girls	50	46.7000			
	NYA Boys	50	40.6000	1.2000	3.2900	.3640
	Non-NYA Boys	50	41.8000			

In studying Table III, the score of both boys and girls will be considered in each of the four fields, Health Adjustment, Home Adjustment, Social Adjustment, and Emotional Adjustment. In addition, the total adjustment scores will be considered. It is not possible in this comparison of the Bell Adjustment scores to consider the total NYA Vocational group, both boys and girls, as compared to the total Non-NYA group, both boys and girls, due to the fact that the norms established for the college men are different from those set up for college women.

The fact that only forty-six NYA Vocational girls were available at the time the Bell Adjustment Inventory was given is responsible for the variation in N, as shown in Table III. It is to be remembered in studying the means of the groups that in the score for the Bell Adjustment Inventory, the lower the score the more adequate is the adjustment.

In the field of Health Adjustment, the $\frac{D}{\sigma diff}$ of 1.0920 for the NYA Vocational girls and the Non-NYA girls indicates that the chances are eighty-five out of a hundred that the difference will be greater than zero and in favor of the Non-NYA girls. However, the critical ratio is only thirty-six per cent of what it would have to be in order to be reliable. When compared to the norms established for college women, both groups rate as unsatisfactory in their adjustment.

For the NYA Vocational boys and the Non-NYA boys there is a $\frac{D}{\sigma diff}$ of 1.3210 in the field of Health Adjustment. While this critical ratio means that the chances are ninety out of a hundred that the difference between the true measures is greater than zero and in the same direction, it is less than fifty per cent of what it would have to be in order to be considered reliable. Since the average for college men lies between five and nineteen, the means of both NYA and Non-NYA boys fall within

the range of the average.

The scores in the field of Home Adjustment yield a $\frac{D}{\sigma diff}$ of 3.8369 for the NYA Vocational girls and the Non-NYA girls. Since a $\frac{D}{\sigma diff}$ of 3. is considered as indicative of complete reliability, the chances are 99.9 out of a hundred that the true difference between the NYA Vocational girls and the Non-NYA girls will be greater than zero and in favor of the Non-NYA group. Five to nine has been established as the range of average scores in Home Adjustment for college women. As seen in Table III, the NYA Vocational girls are unsatisfactory in this phase of their adjustment while the Non-NYA girls are average.

The NYA Vocational boys have a slight lead over the Non-NYA boys in Home Adjustment, for which the critical ratio is .4888. While according to the table in Garrett's "Statistics in Psychology and Education", a $\frac{D}{\sigma diff}$ of .4888 would indicate that the chances are sixty-seven out of a hundred that the true difference between the two groups will be greater than zero, the variation is so small that it can be of little actual significance. Both groups are average according to the norms for college men.

In the comparison of the NYA Vocational girls and the Non-NYA girls as to Social Adjustment, the largest critical ratio in the entire study is found. For these two groups the $\frac{D}{\sigma diff}$ of 5.6800 is almost twice as great as necessary to indicate complete reliability, giving a most significant difference. The norm score range for average in Social Adjustment for college women is nine to nineteen. Thus while there is a significant difference in the two groups, both fall within the average.

With the boys' groups, however, the critical ratio for the Social

Adjustment scores is only 1.6351, indicating that the chances are only ninety-four out of a hundred that the true difference will be greater than zero. In this case, the critical ratio is in favor of the NYA Vocational boys. Both groups are average as compared to the norms.

In the field of Emotional Adjustment the $\frac{D}{\sigma diff}$ of .1210 for the NYA Vocational girls and the Non-NYA girls, and of .1343 for the NYA Vocational boys and Non-NYA boys are so small that they are very little above the variation expected from chance. All four groups are average when compared with the norms.

The $\frac{D}{\sigma diff}$ of 2.4766 for the NYA Vocational girls and the Non-NYA girls on the total score on the Bell Adjustment Inventory indicates that the chances are 99.2 out of a hundred that there will be a difference greater than zero and in favor of the Non-NYA girls. In the total adjustment score, the average range is twenty-five to forty-seven, giving the NYA Vocational girls with a mean of 54.8915 a rating of unsatisfactory, while the Non-NYA girls are rated as average with a mean of 46.7.

In the total score for the boys' groups on the Bell Adjustment Inventory, the NYA Vocational boys are again favored by a critical ratio of .3640. However, since this $\frac{D}{\sigma diff}$ of .3640 means that the chances are only sixty-four out of a hundred that the difference is greater than zero, it has but little significance. The NYA Vocational boys with a mean total score of 40.6 fall within the score range of twenty-three to forty-one which indicates an average score on the previously established norms. The Non-NYA boys fall below the average rating since their average total score is greater than forty-one.

College Grade Point Averages

The comparison of the college grade point averages of the NYA Vocational students with those of the Non-NYA control gruups reveals even more significant differences in the two groups than do the high school grades. Whether or not this is entirely due to the fact that most of the NYA Vocational group entered school in the fall from one to seven weeks late cannot be determined. However, a subsequent study of the second semester grades of this same group will be made and the findings may give an indication of the accuracy of the present results.

To get the averages the grades were translated into grade points and the averages computed. The system of grade points as initiated by the college this year was used. As it happens, this system of evaluation of grades in terms of grade points is the same as that employed in evaluating the high school grades in this study. Thus A was accorded four points; B, three; C, two; and D, one.

In the study of the college grade point average of the NYA Vocational girls and that of the Non-NYA girls, the $\frac{D}{\sigma \text{diff}}$ of 3.2909 is most significant, showing that in 99.9 chances out of a hundred there would be a difference greater than zero and that it would be in favor of the Non-NYA group.

Another interesting point even though it has not been treated statistically is the fact that there were four F's made by the NYA Vocational girls in high school and none by the Non-NYA girls. But, in the first semester college grades for the NYA girls, thirty-two F's were found as compared with seven in the grades of the Non-NYA girls.

Table IV

Table giving the college grade point averages of the two groups of NYA Vocational students as compared with those of the two Non-NYA groups and showing the significance of the differences between the means of the groups.

Group	N	Mean	Diff.	σdiff	$\frac{D}{\sigma diff}$
NYA Girls	40	1.7062	.4966	.1509	3.2909
Non-NYA Girls	45	2.2028			
NYA Boys	43	1.6192	.6228	.1889	3.2970
Non-NYA Boys	47	2.2420			
NYA Total	83	1.6612	.5616	.1158	4.8497
Non-NYA Total	92	2.2228			

The $\frac{D}{\sigma diff}$ of 3.2970 for the NYA Vocational boys and the Non-NYA boys indicates complete reliability.

The NYA boys have two F's on their high school records, while the Non-NYA boys have none. In the college grade records, however, for the first semester, the NYA boys have thirty-five F's as compared with twelve F's on the Non-NYA records.

Taking the groups as a whole, as seen in Table IV, there is between the total NYA Vocational group and the total Non-NYA group a critical ratio of 4.8497 in favor of the Non-NYA group.

Sims Score Card for Socio-Economics Status

The NYA girls have a mean of 9.44 on the Sims Score Card for Socio-Economic Status. Comparing this average with the provisional levels pro-

vided in the Manual of Directions by Mr. Sims, it is found that a score of 7.5 is medium low and a score of 10. is medium. Thus, the NYA Vocational girls with their mean of 9.44 fall very near the medium level.

However, a different picture is gained if the NYA score is measured by the average score made on the Score Card by 243 eighth and ninth grade pupils of Stillwater. This group averaged 18.5, making the NYA score of 9.44 fall far below the average of an Oklahoma group.

The NYA Vocational boys made an average score of 11.2333 on the Sims Score Card for Socio-Economic Status. According to the average set up according to the New Haven, Connecticut standards, this NYA group rates between medium and medium high. However, when compared to the average score of 18.5 made by the 243 Stillwater students, the score of 11.2333 is very low.

For the total NYA Vocational group, both boys and girls, the average score on the Sims Score Card is 10.1972, giving the group a score of only fifty-five per cent of what it would have to be to come up to the average score of Stillwater students.

Chapter V

CONCLUSIONS

To come to some conclusions as to the ability of NYA project youth to participate in the college program of today, and the advisability of the expenditure of federal funds for this purpose, a group of forty-six NYA Vocational girls and fifty NYA Vocational boys who attend Oklahoma Agricultural and Mechanical College at Stillwater were chosen for an analysis. They were compared with fifty boys and fifty girls regularly enrolled in the schools of Engineering, Agriculture, Home Economics, Education, Commerce, and Science and Literature on the same campus.

The comparison of the two groups was made in the following fields: first, high school grade point averages; second, test scores from the Ohio State University Psychological Test, Form 17; third, personality adjustment, as rated by the Bell Adjustment Inventory; and fourth, first semester college grades. The NYA students were also given the Sims Score Card for Socio-Economic Status.

The conclusions based on the results of this comparison are:

1. Since there is the reliable indication that the NYA Vocational girls are significantly lower than the Non-NYA girls in high school grade point averages, it seems unwise and impractical for these NYA girls to be placed in schools where they must compete with those who have a better foundation for college work. This difference is not found in the high school grade records for the NYA Vocational boys and the Non-NYA boys.

   However, it is interesting to note that the grade point average of the NYA Vocational girls is 2.4798 and that of the NYA

Vocational boys is 2.5455. Since a two-point average is C, it is evident that even though these groups are consistently and significantly lower in averages than the Non-NYA, they still fall within the average group. The reason for both of these groups averaging above 2.45 cannot be explained unless it is because of a natural selective process. However, despite the fact that the NYA group falls within the average rank, it appears that it might be to the advantage of the NYA girls to have provided for them some type of training other than college, since the lower half of the average group obviously would be handicapped in trying to obtain a college education.

2. The significant difference found in favor of the Non-NYA girls over the NYA Vocational girls in the comparison of Home and Social Adjustment together with the extremely low score made by the NYA girls on the Sims Socio-Economic Scale indicates that in addition to the usual orientation difficulties of college students, these NYA Vocational girls will have an even greater adjustment to make. One might conclude that considering the scholastic and social background as well as the adjustment records, it is unfair to expect these NYA groups as a whole to compete with other college students.

3. The Non-NYA groups are significantly favored in their comparison with the NYA Vocational groups as to first semester college grades. As has been pointed out, the NYA Vocational students entered school from one to seven weeks after the first semester was started. Unless by subsequent studies, the record on grades is found to be improved, it seems that the federal government is not justified in a continued expenditure of funds that provide college training for NYA project youth.

4. While not statistically reliable in every case, there is a consistent difference in favor of the Non-NYA groups in seventeen of the twenty comparisons in this study. In the three comparisons, Home, Social and Total Adjustment in which the NYA Vocational boys are favored over the Non-NYA boys, the difference is so slight that it can be considered as little above that attributed to chance.

5. While much more testing and research are necessary before venturing a decision as to the value of formal college training for NYA youth, it seems advisable, in view of the consistently inferior records of the NYA Vocational students, to provide for economic and social self-sufficiency a more adequate preparation, which would involve a type of training different from that given by the college to the NYA project youth.

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Table I

NYA VOCATIONAL GIRLS

	High School Grade Ave.	O.S.U.Psy. Raw Score	Bell Adjustment					First Semester College Ave.	Courses Failed in High School	Courses Failed in College	Present Age
			Home	Health	Social	Emotional	Total				
1.	2.00	62	17	19	28	20	84	1.20	0	1	25
2.	2.93	129	16	6	20	10	52	2.30	0	0	18
3.	1.62	47	19	15	16	19	69	.80	0	2	19
4.	--	40	5	6	7	13	31	--	0	0	22
5.	2.60	83	2	7	9	5	23	2.11	0	1	19
6.	3.52	95	2	8	3	3	16	3.00	0	0	18
7.	1.62		4	4	20	10	38	1.50	0	1	19
8.	2.31	142	13	6	11	21	51	2.89	0	0	21
9.	2.00	57	27	5	24	15	71	--	3	0	19
10.	2.21	77	6	12	12	16	46	1.50	0	1	18
11.	1.97	53	18	22	22	17	79	.63	0	2	18
12.	--	54	15	19	17	19	70	--	0	0	22
13.	2.90		10	5	20	17	52	--	0	2	18
14.	2.13	55	11	4	7	15	37	--	0	0	19
15.	2.06	48	10	8	15	16	49	1.75	0	0	20
16.	--		6	14	28	29	77	1.11	0	1	22
17.	3.50		14	18	29	29	90	1.67	0	1	20
18.	--	63	4	5	27	15	51	2.00	0	0	20
19.	--	91	14	7	12	8	41	2.00	0	0	20
20.	2.48	59	8	13	22	10	53	.88	0	2	21
21.	1.70	37	13	20	16	20	69	.90	0	2	18
22.	3.22	81	12	14	19	20	65	.89	0	0	20
23.	3.37	71	4	15	22	14	55	2.60	0	0	21
24.	2.25	68	4	8	16	19	47	2.29	1	1	20
25.	2.45	46	4	13	20	19	56	.57	0	3	21
26.	2.33	32	18	13	27	23	79	.88	0	3	18
27.	2.80	114	9	10	31	13	63	1.60	0	1	23
28.	2.71	131	17	28	14	16	75	2.67	0	0	23
29.	2.93	119	2	5	17	8	32	2.83	0	0	18
30.	1.65	32	14	21	26	23	84	.90	0	3	21
31.	--	106	21	3	7	16	47	1.80	0	0	19
32.	2.53	98	10	6	24	22	62	2.64	0	0	18
33.	--	54	3	5	13	12	33	1.00	0	2	26
34.	3.91	120	10	7	22	17	56	1.92	0	0	19

Table I (continued)

NYA VOCATIONAL GIRLS

	High School Grade Ave.	O.S.U.Psy. Raw Score	Bell Adjustment					First Semester College Ave.	Courses Failed in High School	Courses Failed in College	Present Age
			Home	Health	Social	Emotional	Total				
35.	3.27	108	22	4	2	6	34	2.20	0	0	18
36.	2.78	56	7	5	14	13	39	2.00	0	0	20
37.	2.93	105	15	16	8	19	58	2.78	0	0	22
38.	2.21	91	6	6	23	13	48	1.43	0	0	23
39.	2.10	64	4	9	12	11	36	--	0	0	21
40.	2.00	53	20	8	15	15	59	1.14	0	0	21
41.	2.00	68	21	11	28	15	75	1.00	0	0	19
42.	2.62	64	5	10	28	10	53	1.45	0	1	19
43.	1.49		13	19	22	19	73	1.22	0	1	19
44.	2.23		7	5	20	16	48	2.11	0	1	18
45.			9	8	21	9	47	1.67	0	1	19
46.	2.66		10	9	15	16	50	1.40	0	0	19

Table II

NON-NYA GIRLS

	High School Grade Ave.	O.S.U. Psy. Raw Score	Bell Adjustment					First Semester College Ave.	Courses Failed in High School	Courses Failed in College	Present Age
			Home	Health	Social	Emotional	Total				
1.	2.28	155	12	12	25	30	79	1.18	0	0	18
2.	2.15	27	1	8	16	18	53	.90	0	2	18
3.	2.46	74	3	9	30	20	62	1.45	0	0	18
4.	2.09	41	5	11	29	22	66	1.54	0	1	18
5.	3.84	151	1	6	11	15	33	3.00	0	0	18
6.	--	83	6	6	30	19	61	1.75	0	0	23
7.	2.62	46	1	11	17	12	41	2.07	0	0	19
8.	2.79	38	13	8	16	22	59	1.07	0	1	19
9.	--	64	3	5	14	17	39	1.92	0	0	19
10.	2.62	64	8	23	15	22	68	2.06	0	0	18
11.	3.59	35	4	6	7	8	25	1.41	0	0	19
12.	3.06	131	10	10	10	5	35	2.11	0	0	18
13.	1.40	38	3	7	21	20	51	--	0	0	19
14.	2.29	93	20	6	19	7	52	--	0	0	18
15.	3.17	113	0	3	21	25	49	2.31	0	0	18
16.	3.09	46	24	9	23	18	74	2.06	0	0	20
17.	--	75	8	7	14	20	49	2.38	0	0	18
18.	2.81	119	5	10	12	14	41	2.80	0	0	18
19.	1.84	56	7	15	19	23	64	1.50	0	0	18
20.	3.08	58	3	15	22	16	56	2.40	0	0	18
21.	2.96	60	1	13	30	21	65	2.00	0	0	18
22.	3.37	81	6	16	5	4	31	1.63	0	0	18
23.	3.94	93	3	12	11	14	40	3.53	0	0	17
24.	1.76	61	17	13	15	18	63	3.18	0	0	16
25.	2.70	141	9	10	16	12	47	--	0	0	17
26.	3.31	182	2	7	10	5	24	2.88	0	0	18
27.	2.88	120	9	6	23	14	52	2.85	0	0	18
28.	3.40	118	5	1	13	10	29	2.06	0	0	17
29.	--	118	8	13	24	17	62	2.07	0	0	19
30.	2.06	41	13	12	15	10	50	.93	0	3	18
31.	3.63	172	9	12	11	18	50	--	0	0	17
32.	2.43	39	13	16	19	17	65	1.60	0	0	19
33.	--	73	8	3	4	16	31	1.69	0	0	17
34.	3.50	195	8	6	18	8	40	3.47	0	0	17

Table II (continued)

NON-NYA GIRLS

	High School Grade Ave.	O.S.U. Psy. Raw Score	Bell Adjustment					First Semester College Ave.	Courses Failed in High School	Courses Failed in College	Present Age
			Home	Health	Social	Emotional	Total				
35.	3.15	127	10	4	14	10	38	1.54	0	0	18
36.	1.71	57	6	8	12	13	39	2.00	0	0	17
37.	3.19	110	4	9	13	8	34	3.06	0	0	17
38.	--	146	4	5	9	17	35	3.36	0	0	18
39.	3.25	185	4	9	8	10	31	3.12	0	0	18
40.	--	88	4	17	29	31	81	3.50	0	0	24
41.	2.63	52	1	9	19	11	40	1.93	0	0	20
42.	3.09	84	2	10	16	20	48	2.38	0	0	18
43.	3.44	97	4	2	17	6	29	2.13	0	0	17
44.	3.68	138	7	6	9	3	25	--	0	0	16
45.	3.90	65	2	13	6	13	34	2.37	0	0	16
46.	3.15	99	1	6	6	9	22	2.31	0	0	18
47.	3.60	66	3	11	9	15	38	2.43	0	0	18
48.	3.51	123	5	14	19	20	58	2.19	0	0	17
49.	2.72	66	4	12	9	11	36	1.79	0	0	18
50.	2.50	41	7	5	12	13	37	2.08	0	0	17

Table III

NYA VOCATIONAL BOYS

	High School Grade Ave.	O.S.U. Psy. Raw Score	Bell Adjustment					First Semester College Ave.	Courses Failed in High School	Courses Failed in College	Present Age
			Home	Health	Social	Emotional	Total				
1.	—	106	14	3	9	11	37	1.	0	2	24
2.	2.46	103	1	5	4	2	12	1.13	0	1	20
3.	1.96	31	7	5	16	7	35	2.14	0	0	24
4.	—	106	4	4	9	5	22	3.14	0	0	18
5.	2.75	—	6	3	9	3	21	1.44	0	0	22
6.	2.97	59	7	13	9	2	31	2.00	0	0	22
7.	3.00	108	20	14	20	22	76	—	0	0	18
8.	2.24	57	11	5	6	8	30	1.33	0	1	20
9.	3.23	95	1	3	5	4	13	.78	0	1	18
10.	1.74	49	12	11	21	19	63	.10	0	3	20
11.	2.41	54	11	13	5	26	55	2.56	0	0	19
12.	3.03	120	2	7	16	14	39	2.78	0	0	19
13.	2.56	38	6	10	25	21	62	2.42	0	0	22
14.	2.50	71	11	18	15	20	64	1.67	0	1	20
15.	2.25	58	11	18	12	11	52	2.30	0	0	22
16.	—	24	6	3	7	2	18	—	0	1	25
17.	2.25	83	6	15	7	14	42	1.33	0	2	18
18.	2.37	103	7	5	3	5	20	—	0	0	19
19.	2.43	52	3	5	12	6	26	1.75	0	0	19
20.	2.75	83	7	12	24	16	59	—	0	3	20
21.	3.57	68	6	6	14	15	41	1.33	0	1	25
22.	3.09	105	6	7	23	7	43	1.75	0	1	21
23.	3.71	169	13	5	21	21	59	2.75	0	0	19
24.	2.25	56	7	12	10	7	36	.27	0	2	18
25.	1.94	66	6	9	9	6	30	2.00	0	0	20
26.	—	84	9	12	8	10	39	.25	0	3	18
27.	2.67	56	3	4	32	16	55	.82	0	1	20
28.	2.78	88	14	2	3	6	25	1.43	0	1	21
29.	—	42	16	23	16	26	81	—	0	1	20
30.	2.79	99	4	12	6	9	31	1.36	0	1	20
31.	2.65	84	6	3	18	10	37	1.71	0	0	20
32.	1.96	68	6	6	18	16	46	.71	0	1	18
33.	2.35	134	18	8	31	31	88	1.85	1	0	18
34.	2.18	127	6	5	11	15	37	3.67	0	0	20

Table III (continued)

NYA VOCATIONAL GIRLS

	High School Grade Ave.	C.S.U. Psy. Raw Score	Bell Adjustment					First Semester College Ave.	Courses Failed in High School	Courses Failed in College	Present Age
			Home	Health	Social	Emotional	Total				
35.	2.06	85	2	5	8	1	16	2.36	0	0	20
36.	2.81	56	4	10	7	2	23	2.30	0	0	19
37.	2.56	82	5	17	30	23	75	1.75	0	0	21
38.	2.45	39	5	6	15	7	33	—	0	0	22
39.	—	65	15	7	6	9	37	1.83	0	0	23
40.	2.59	35	5	6	17	16	44	.33	0	4	19
41.	3.29	87	7	5	17	17	46	2.15	0	0	18
42.	2.63	49	6	4	8	3	21	—	0	0	19
43.	2.12	49	14	15	16	16	61	1.78	0	0	18
44.	2.57	—	8	7	21	15	51	1.00	0	0	22
45.	2.46	70	6	16	15	15	52	—	0	3	24
46.	3.00	67	17	5	7	3	32	.83	0	2	18
47.	1.74	81	4	16	12	2	34	1.27	0	1	19
48.	1.62	38	12	10	9	13	44	—	0	0	18
49.	3.65	72	3	9	11	6	29	2.92	0	0	19
50.	1.12	59	1	11	5	6	23	1.40	0	1	19

Table IV

NON-NYA BOYS

	High School Grade Ave.	O.S.U. Psy. Raw Score	Bell Adjustment					First Semester College Ave.	Courses Failed in High School	Courses Failed in College	Present Age
			Home	Health	Social	Emotional	Total				
1.	--	43	6	18	16	9	39	1.92	0	1	20
2.	--	59	8	12	23	8	51	2.33	0	1	19
3.	2.33	41	8	7	14	8	37	1.00	0	2	20
4.	2.35	54	2	5	8	3	18	1.6	0	0	23
5.	1.81	72	6	7	16	16	45	2.63	0	0	23
6.	2.75	53	14	11	20	10	55	2.27	0	0	17
7.	3.50	115	4	2	17	10	33	3.71	0	0	16
8.	2.07	76	8	8	16	23	55	2.8	0	0	17
9.	2.67	80	9	9	15	15	48	3.13	0	0	20
10.	--	24	0	8	17	3	28	.4	0	1	25
11.	2.71	67	8	4	23	10	45	2.07	0	0	18
12.	2.50	42	15	10	26	17	68	2.0	0	0	19
13.	--	40	16	9	26	25	76	.50	0	3	19
14.	--	100	19	10	13	11	53	--	0	0	23
15.	2.56	76	5	4	20	9	38	1.67	0	0	18
16.	--	71	11	7	21	17	56	2.07	0	0	22
17.	2.03	16	10	10	11	13	44	.92	0	2	29
18.	1.66	53	9	12	8	16	45	1.62	0	0	19
19.	3.03	41	3	6	14	6	29	2.2	0	0	19
20.	2.77	72	8	2	6	13	29	2.2	0	0	17
21.	2.23	115	12	6	29	19	66	1.94	0	0	19
22.	2.94	42	3	3	8	5	19	1.93	0	0	19
23.	--	77	11	2	11	11	35	1.79	0	0	22
24.	2.86	127	15	15	15	16	61	3.06	0	0	17
25.	3.80	111	5	10	27	14	56	3.8	0	0	23
26.	2.13	70	8	1	11	10	30	1.69	0	0	18
27.	2.13	43	12	10	20	17	59	1.75	0	0	18
28.	--	137	4	5	16	5	30	3.0	0	0	21
29.	2.16	122	2	3	8	3	16	2.56	0	0	18
30.	--		8	13	17	18	56	--	0	0	20
31.	2.09	32	8	4	22	13	47	1.5	0	0	22
32.	2.69	99	21	11	16	25	73	2.44	0	0	19
33.	3.19	79	7	3	18	15	43	2.31	0	0	18
34.	3.29	143	9	8	22	15	54	2.6	0	0	18

Table IV (continued)

NON-NYA BOYS

	High School Grade Ave.	O.S.U. Psy. Raw Score	Bell Adjustment					First Semester College Ave.	Courses Failed in High School	Courses Failed in College	Present Age
			Home	Health	Social	Emotional	Total				
35.	--		5	4	4	4	17	--	0	0	27
36.	3.08	170	7	6	3	9	25	3.78	0	0	19
37.	3.07	175	4	8	14	10	36	4.00	0	0	--
38.	2.84	61	7	8	12	7	34	1.88	0	1	18
39.	2.26	48	12	6	13	7	38	1.85	0	0	19
40.	--	70	4	15	14	5	38	2.81	0	0	35
41.	3.27	118	3	4	14	10	31	3.00	0	0	20
42.	3.47	101	11	12	5	16	44	3.13	0	0	19
43.	--	41	5	11	20	11	47	1.5	0	1	20
44.	2.09	60	6	9	12	3	30	1.86	0	1	19
45.	2.39	55	11	10	12	12	45	2.0	0	0	22
46.	1.79	95	3	5	.8	2	18	2.88	0	0	19
47.	3.47	64	0	8	11	23	42	2.13	0	0	18
48.	2.13		6	3	6	8	23	2.72	0	0	27
49.	2.33		1	7	20	4	32	1.45	0	0	18
50.	--	58	18	5	16	3	42	1.73	0	0	21

Typist .....Lucy W. Victor