

ARE HIGH SCHOOL LEADERS
EXTROVERT OR INTROVERT?

ARE HIGH SCHOOL LEADERS
EXTROVERT OR INTROVERT?

OKLAHOMA
AGRICULTURAL & MECHANICAL COLLEGE
LIBRARY
NOV 8 1938

by
Bruce Portwood Currie
Bachelor of Arts
Abilene Christian College
Abilene, Texas
1923

Submitted to the Department of Education
Oklahoma Agricultural and Mechanical College
In Partial Fulfillment of the Requirements
For the Degree of
MASTER OF SCIENCE
1938

A P P R O V E D

OKLAHOMA
AGRICULTURAL & MECHANICAL COLLEGE
LIBRARY
NOV 8 1938

A. L. Reed.
Thesis Adviser

M. Conger
Dean of the School of Education

D. C. W. Intosh
Dean of the Graduate School

ACKNOWLEDGMENT

The author gratefully acknowledges the helpful suggestions from Dr. E. L. Stromberg whose patience and untiring effort has been of great value. He also acknowledges the great amount of help and inspiration which he has received from Dr. S. L. Reed, and the kindly advice and inspiration of Dean N. Conger. He also gratefully acknowledges the helpful direction received from Dean D. C. McIntosh.

The author also wishes to thank those superintendents in Jackson, Greer, and Kiowa counties who so willingly allowed him to make their schools, temporarily, into a laboratory for the purposes of this study.

He wishes to express his lasting appreciation to his loyal wife and companion, Mrs. Jessica L. Currie, for her inspiration and help during the months of work spent on this investigation.

B. P. C.

July 10, 1938

DEDICATED TO
DANIEL KAY CURRIE

age 6

TABLE OF CONTENTS

Chapter I.....INTRODUCTION.....	1
1. Statement of the Problem.....	1
2. Definition of Leadership.....	1
3. Definitions of Extroversion, Intro- version, and Ambiversion.....	2
4. Methods of measurement.....	3
5. Sources of data.....	5
6. Method of procedure.....	5
Chapter II..RESULTS AND COMPARISONS.....	6
1. The total group versus the leaders..	6
2. Boy leaders versus girl leaders....	13
Chapter III..SUMMARY AND CONCLUSIONS.....	22
Bibliography.....	23
The Nebraska Personality Inventory.....	24

CHAPTER I
INTRODUCTION

Statement of the Problem:

The purpose of this investigation is to determine the prevalence of extroversion among high school leaders. Are they extroverts or do they merely have 'leanings' in that direction? Are there more leaders among the extroverts: do more leaders come from the ambivert or introvert group; or are they equally divided?

Definition of Leadership:

In defining leadership, the circumstances of a given situation must be considered. While this investigation deals with high school students, definitions of adult leadership should be equally appropriate. Folsom has said,¹

"A leader may be regarded as a man or woman who, because of innate ability, educational opportunities, personal initiative, personality or other contributory forces, has achieved a position which enables him to demand the attention, respect, and following of other members of society."

A somewhat different statement comes from the writings of Bogardus,²

"A person may become a leader through accident of social circumstances, through 'pull', or by hypocrisy, but if he lives in a democracy, he will not be able to maintain his leadership long unless he proves efficient. He who is truly efficient becomes thereby a leader and sooner or later is sought out and socially recognized."

¹ Joseph K. Folsom, Social Psychology, p. 595.

² E. S. Bogardus, Fundamentals of Social Psychology, p. 425.

Caldwell and Wellman, whose experiment deals with school children, give the following definition,³

"By leaders is meant here those pupils who were chosen by their classmates as representatives in the school activities."

For the purpose of this study, this latter definition will be adequate.

Definitions of Extroversion, Introversion, and Ambiversion:

Satisfactory definitions of these terms, found in Webster's New International Dictionary for 1934, are as follows:

"Extroversion - Interest directed outward; a propensity for finding one's satisfactions in external things. Opposed to introversion.

Introversion - Interest directed inward; a propensity for finding one's satisfactions in the inner life of thought and fancy. Opposed to extroversion.

Ambiversion - a term intermediate between extroversion and introversion."

These definitions are clear and easily understood. For various reasons, however, some qualifications must be made.

Since a test has been given measuring these several traits it becomes necessary to define them in terms of test scores. The range of the scores is from 255 (extroversion) to 444 (introversion). It is apparent that certain pupils ranging near the score 255 will be classed as extrovert. Also a number who scored in the neighborhood of 444 will

3

Otis W. Caldwell and Beth Wellman, "Characteristics of School Leaders," Journal of Educational Research, June, 1926, Vol. 14, p. 1-20.

be classed as introvert. For the sake of clarity, a line of demarcation is needed; therefore, the following divisions have been empirically set up.

Extrovert - Those in the first quartile. These will be called the true extroverts.

Introvert - Those in the last quartile. These will be called the true introverts.

Ambivert - Those in the second and third quartiles.⁴

Methods of Measurement:

Two kinds of measures were used in this study. First it was necessary to measure leadership; and, second, extroversion-introversion.

The first measure, for leadership, required self-evaluation on the following questionnaire:

LEADERSHIP TEST

Please answer all questions or your test will not be valid.

Name.....Date.....

School.....Age.....Sex.....

Positions of leadership which you have held. Have you been (check)

Freshman	Sophomore	Junior	Senior
Pres. _____	Pres. _____	Pres. _____	Pres. _____
Sect. _____	Sect. _____	Sect. _____	Sect. _____

All-round boy _____ All-round girl _____ Captain of
 Baseball _____
 Pres. of your social group _____ Basketball _____
 Sect. of your social group _____ Football _____
 Track _____

Student Association
 Pres. _____
 Sect. _____

⁴ Please refer to page 6 for the norms obtained.

Other positions of leadership which you have held _____

The answers to the above questions were scored arbitrarily, according to the following table of points:

All-round boy or girl.....	7
District 4-H Club president.....	7
District 4-H Club secretary.....	5
President of local 4-H Club.....	4
Sunday School teacher.....	3
President of Student Association.....	3
Secretary of Student Association.....	2
Class President.....	2
Captain of one of four major sports.....	2
Football Queen.....	2
President of Drum and Bugle Corps.....	2
Best citizen.....	2
Editor of school paper.....	2
Drum Major.....	2
Secretary of local 4-H Club.....	2
Class secretary.....	1
Sunday School secretary or president.....	1
Social group secretary or president.....	1
Song leader.....	1
Yell leader.....	1
President of Little Theatre.....	1

An arbitrary decision was made that not more than 20% of any group examined should be considered as leaders. Since only one-fifth of the students could be leaders, it was necessary to score as many as four points to be in this class. There was one exception.⁵

For the second measurement, of extroversion-introversion, The Nebraska Personality Inventory⁶ was used.

⁵ In Altus schools it was necessary to include students who scored only three points, in order to have the agreed 20% as leaders.

⁶ J. P. Guilford, The Nebraska Personality Inventory, Lincoln, Nebraska, 1934.

A copy of this test will be found on pages 24 to 27. The range of scores for extroversion and introversion are given on page 6.

Sources of data:

Pupils in the eleventh and twelfth grades of the following schools were tested:

<u>School</u>	<u>County</u>	<u>Type</u>	<u>Number of pupils</u>
Altus	Jackson	Town	81
Blair	Jackson	Town	21
Duke	Jackson	Town	36
Elmer-Hess	Jackson	Country	46
Friendship	Jackson	Country	48
Mangum	Greer	Town	79
Olustee	Jackson	Town	35
Ozark	Jackson	Country	60
Snyder	Kiowa	Town	92
Warren	Jackson	Country	22

This includes samplings from small cities, towns, and country consolidated schools.

Method of procedure:

Permission was secured to mimeograph enough copies of The Nebraska Personality Inventory for this study. Arrangements were made for the superintendents of the above schools to conduct the tests in their classrooms. The test was given under normal school conditions. The pupils knew that the test had no bearing on their school marks.

CHAPTER II

RESULTS AND COMPARISONS

The Total Group versus the Leaders:

The total group consists of the 520 pupils tested. Of this group not more than 20% were to be considered as leaders. One-fifth of the total number in each school were to be leaders. Since there could be no fractions, each school fell slightly below 20% in most cases. Therefore, there were only 94 leaders out of the entire group, which is less than one-fifth. Tables and figures for each group illustrate the scores of the students.¹ (Table I, Figure I, Table II, Figure II, Table III, Figure III, Table IV, Figure IV.)

A graphic comparison (Figures I and II) of the total group and the student leaders indicates that leaders tend to be extroverts. If the leaders are 'located', the graph has more meaning. 45 leaders are extrovert, 45 are ambivert, and four are introvert. This shows that leaders come from the extrovert and ambivert pupils.

1

The norms obtained by Guilford, when he tested 600 college students with The Nebraska Personality Inventory are as follows:

Range of scores				
240	307	340	372	450
Extroversion	Q ₁	Q ₂	Q ₃	Introversion

The norms obtained in this study by administering the same test to 520 high school students were:

Range of scores				
255	317	345	368	444
Extroversion	Q ₁	Q ₂	Q ₃	Introversion

A further examination of the ambivert group reveals that 37 of the 45 leaders are on the extrovert side of the median, while only eight are on the introvert side. This means that a total of 82 student leaders are on the extrovert side of the median (and mean)² with only twelve leaders on the introvert side of the median. That is, 87.3% of the leaders had extrovert-ambivert characteristics, while 12.7% of the leaders had introvert-ambivert characteristics.

Another comparison has been made between the means of the two groups. Tables I and II indicate that the mean of the total group is 345 and that of the leader group 321.4. This is a variation of 23.6 points toward extroversion. This shows that the leader has more extrovert characteristics than the average student. The critical ratio shows that this variation is statistically significant.

Critical ratio of	number	mean	s.d.
leaders to	94	321.4	27.1
total group	520	345.0	35.6

$$\text{Critical ratio} = \frac{M_1 - M_2}{\sqrt{\sigma M_1^2 + \sigma M_2^2}}$$

$$\text{c.r.} = \frac{345 - 321.4}{\sqrt{7.812 + 2.437}} = 7.374$$

²

In this case the mean and median were exactly the same.

TABLE I

FREQUENCY TABLE - TOTAL GROUP - 520 students

Scores	f	cf	d	fd	fd ₂
435-444	5	520	9	45	405
425-434	5	515	8	40	320
415-424	6	510	7	42	294
405-414	12	504	6	72	432
395-404	15	492	5	75	375
385-394	30	477	4	120	480
375-384	27	447	3	81	243
365-374	40	420	2	80	160
355-364	61	380	1	<u>61</u>	61
345-354	62	319	0	<u>616</u>	
335-344	50	257	-1	-50	50
325-334	52	207	-2	-104	208
315-324	34	155	-3	-102	306
305-314	53	121	-4	-212	848
295-304	36	68	-5	-180	900
285-294	17	32	-6	-102	612
275-284	2	15	-7	-14	98
265-274	6	13	-8	-48	384
255-264	7	7	-9	<u>-63</u>	<u>567</u>
Total	<u>520</u>			<u>-857</u>	<u>6743</u>

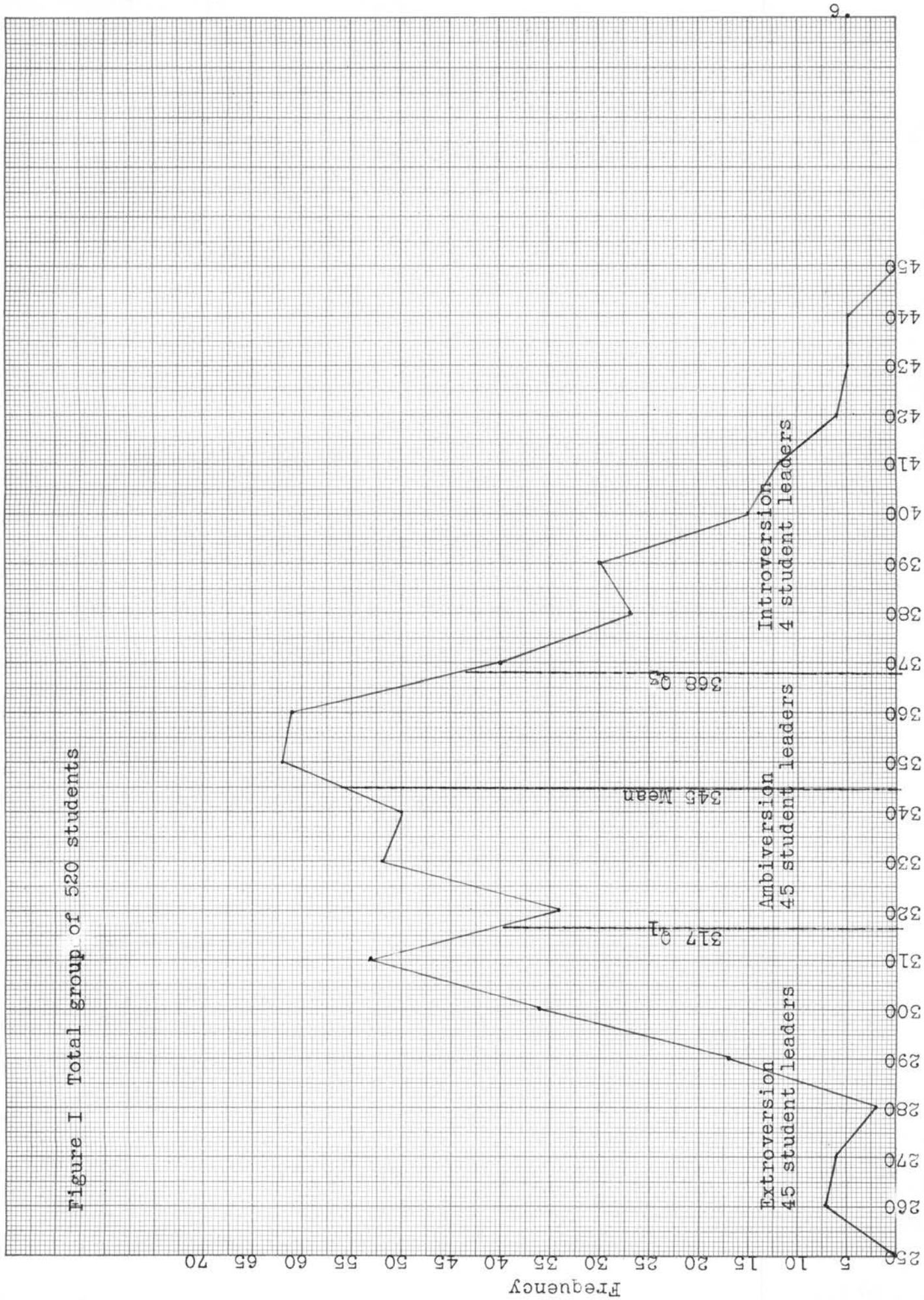
$$\text{Mean} = \text{A.R.} + \frac{\sum fd}{N} \times i.$$

$$\text{Mean} = 350 + \frac{616-857}{520} \times 10 = 345$$

$$\text{S. D.} = \sqrt{\frac{\sum fd^2}{N} - \left(\frac{\sum fd}{N}\right)^2} \times i.$$

$$\text{S. D.} = \sqrt{\frac{6743}{520} - \left(\frac{616-857}{520}\right)^2} \times 10 = 35.6$$

Figure I Total group of 520 students



Since the 94 leaders are in the total group of 520 students, it is important to figure the critical ratio between the leaders and non-leaders. This also shows the variation of the means to be statistically significant.

Critical ratio of	number	mean	s.d.
non-leaders to	426	350.42	35.2
leaders	94	321.4	27.1

$$\text{Critical ratio} = \frac{M_1 - M_2}{\sqrt{\sigma M_1^2 + \sigma M_2^2}}$$

$$\text{c. r.} = \frac{350.42 - 321.4}{\sqrt{7.812 + 3.648}} = 8.565$$

The degree of relationship between the two traits of personality, leadership and extroversion, is probably best indicated by finding the coefficient of correlation between the two variables. The coefficient of correlation, determined by the Pearson Product-Moment method is found to be .385. This is not as high as might have been expected by many who have written extensively lauding the virtues of the extrovert. Other comparisons of this study tend to confirm the above results.

Bellingrath, in his study, dealt with the problem of extroversion-introversion as related to leadership. His conclusions were,³

"1. Groups A (leaders) and B (non-leaders) do not differ in their responses to this scale of introversion-extroversion.

2. On special traits of introversion Group A responded more negatively than Group B."

³

Bellingrath, George Council. Qualities Associated with Leadership in the Extra-Curricular Activities, p. 41.

TABLE II

FREQUENCY TABLE OF 94 STUDENT LEADERS

Scores	f	cf	d	fd	fd ₂
435-444	0	94	12	-	-
425-434	0	94	11	-	-
415-424	0	94	10	-	-
405-414	2	94	9	18	162
395-404	0	92	8	-	-
385-394	0	92	7	-	-
375-384	2	92	6	12	72
365-374	2	90	5	10	50
355-364	2	88	4	8	32
345-354	4	86	3	12	36
335-344	9	82	2	18	36
325-334	15	73	1	$\frac{15}{93}$	15
315-324	17	58	0		
305-314	24	41	-1	-24	24
295-304	9	17	-2	-18	36
285-294	2	8	-3	-6	18
275-284	0	6	-4	-	-
265-274	4	6	-5	-20	100
255-264	$\frac{2}{94}$	2	-6	$\frac{-12}{-80}$	$\frac{72}{653}$
Total	$\frac{94}{94}$			$\frac{-80}{-80}$	$\frac{653}{653}$

$$\text{Mean} = \text{A.R.} + \frac{\sum fd}{N} \times i.$$

$$\text{Mean} = 320 + \frac{93-80}{94} \times 10 = 321.4$$

$$\text{S.D.} = \sqrt{\frac{\sum fd^2}{N} - \left(\frac{\sum fd}{N}\right)^2} \times i.$$

$$\text{S.D.} = \sqrt{\frac{653}{94} - \left(\frac{93-80}{94}\right)^2} \times 10 = 27.1$$

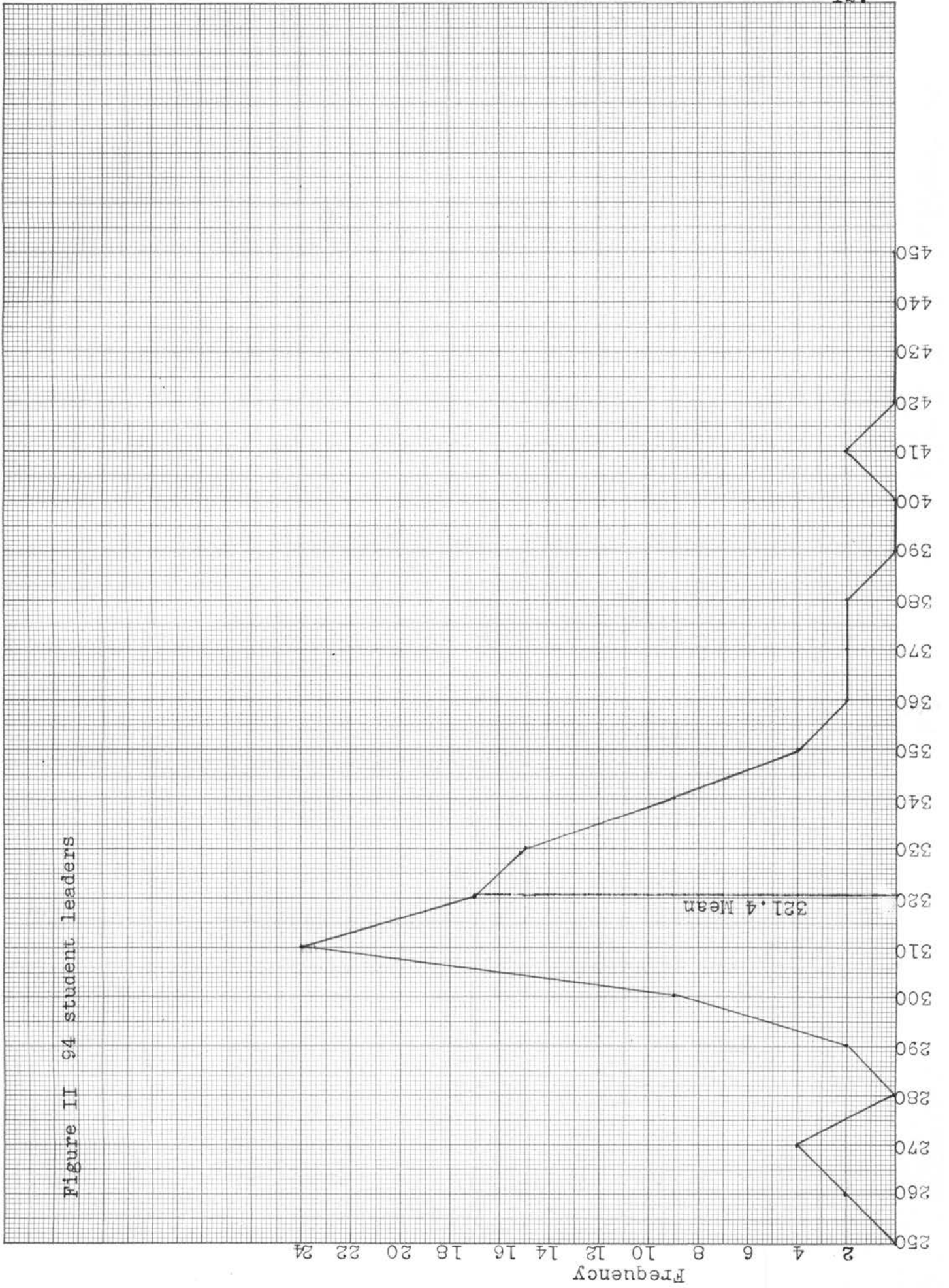


Figure II 94 student leaders

The second part of this conclusion leaves the idea that the leaders did respond negatively to introvert traits. Bellingrath used Edna Heidbreder's test, with variations, on introversion-extroversion. The test was composed of 63 questions, not weighted. He does not say what variations were made in the test.

Boy Leaders versus Girl Leaders:

A brief chart showing the number and percentage of boy leaders and girl leaders in the total group will make the subsequent discussion clearer.

GIRL LEADERS versus BOY LEADERS

	total number	percent of total	leaders	%	percent of own group
girls	286	55.2	56	59.5	19.5
boys	234	44.8	38	40.5	16.2

This table shows that there are more girl leaders than boy leaders. Since 286 girls are in the total group and only 234 boys, it is necessary to find the percentage in order to show which group exceeded the other in leadership. The findings indicate that there are more girls in positions of leadership. No attempt was made to account for this, although several theories might be advanced. Caldwell and Wellman,⁴ for example, found that, in elementary school groups, boys tended to vote for boys when leaders were being selected, and girls for girls. If this tendency should carry over into high school, it partially explains the larger number of girl leaders. Other theories may be advanced but they

⁴

Op. cit. p. 11.

TABLE III
FREQUENCY TABLE OF NON-LEADERS

Scores	f	cf	d	fd	fd ₂
435-444	5	426	9	45	405
425-434	5	421	8	40	320
415-424	6	416	7	42	294
405-414	10	410	6	60	360
395-404	15	400	5	75	375
385-394	31	385	4	124	496
375-384	25	354	3	75	225
365-374	37	329	2	74	148
355-364	60	292	1	<u>60</u>	60
345-354	59	232	0	<u>595</u>	
335-344	40	173	-1	-40	40
325-334	35	133	-2	-70	140
315-324	18	98	-3	-54	162
305-314	30	80	-4	-120	480
295-304	28	50	-5	-140	700
285-294	13	22	-6	-78	468
275-284	2	9	-7	-14	98
265-274	2	7	-8	-16	128
255-264	5	5	-9	<u>-45</u>	<u>405</u>
Total	<u>426</u>			<u>-577</u>	<u>5304</u>

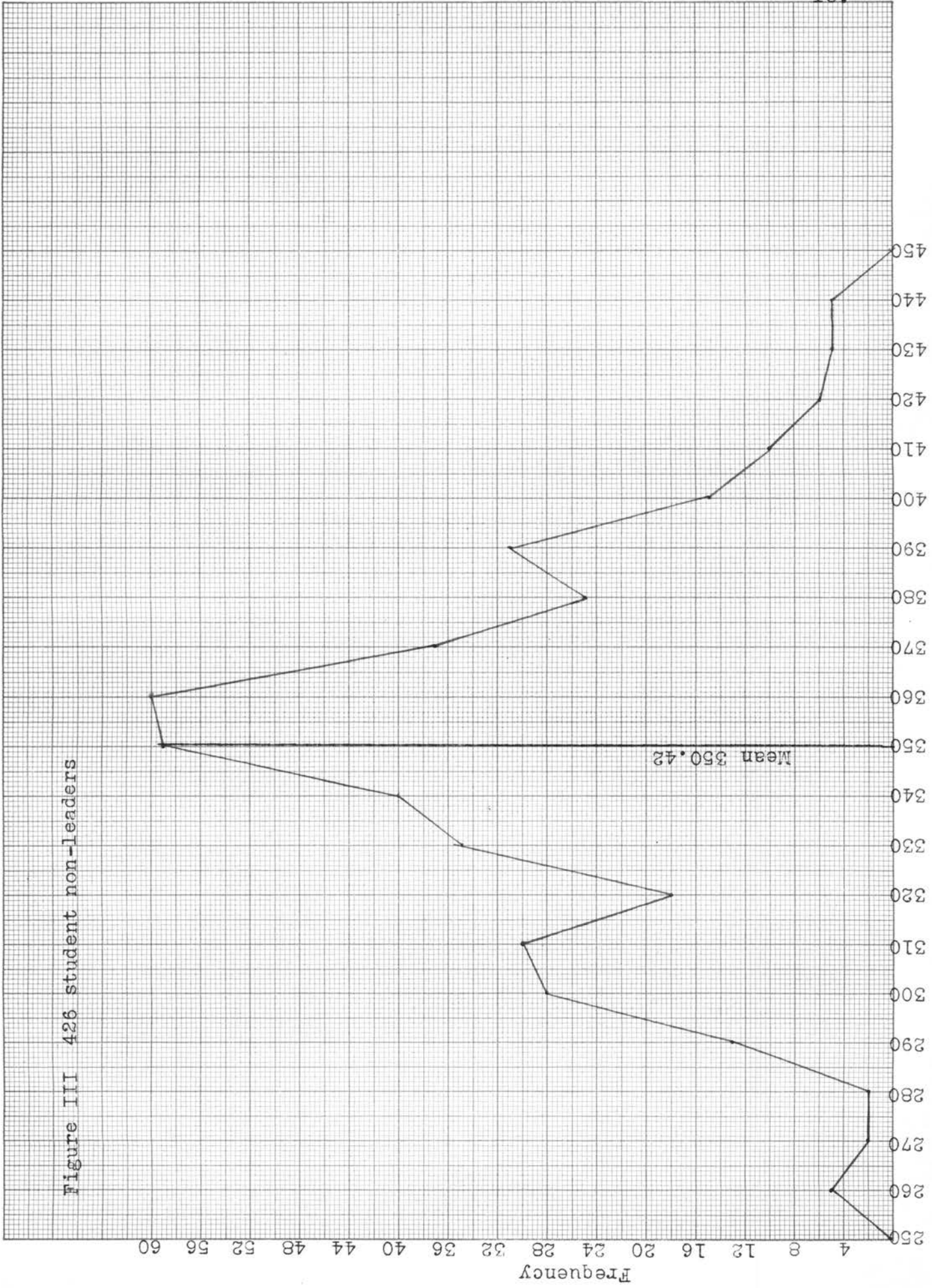
$$\text{Mean} = \text{A.R.} + \frac{\sum fd}{N} \times i.$$

$$\text{Mean} = 350 + \frac{595 - 577}{426} \times 10 = 350.42$$

$$\text{S.D.} = \sqrt{\frac{\sum fd^2}{N} - \left(\frac{\sum fd}{N}\right)^2} \times i.$$

$$\text{S.D.} = \sqrt{\frac{5304}{426} - \left(\frac{595-577}{426}\right)^2} \times 10 = 35.2$$

Figure III 426 student non-leaders



add little to this investigation. In the schools studied girls were more often elected to positions of leadership than boys.

The fact that the girls are more extrovertive than boys may account for their greater percentage of leadership. The fact that girl leaders are more extrovertive than boy leaders (Tables IV and V) is substantiated by Caldwell and Wellman's⁵ similar results.

Further study of the graph shows that the mean for girl leaders is 314.8 and the mean for boy leaders is 330.0. This is a difference of 15.2 points for the girls toward extroversion. In fact, the girl leaders all fall into the extrovert or ambivert class, ranging only up to 374 score points, but some of the boy leaders fell into the introvert group, their scores ranging up to 411.

The critical ratio also shows that the difference between the two means is statistically significant.

Critical ratio of	<u>number</u>	<u>mean</u>	<u>s.d.</u>	<u>m</u>
girl leaders to	56	314.8	23.6	3.14
boy leaders	38	330.0	28.6	4.64

$$\text{Critical ratio} = \frac{M_1 - M_2}{\sqrt{\sigma M_1^2 + \sigma M_2^2}}$$

$$\text{c. r.} = \frac{330.0 - 314.8}{\sqrt{3.14 + 4.64}} = 5.46$$

Critical ratio of	<u>number</u>	<u>mean</u>	<u>s.d.</u>
non-leaders to	426	350.42	35.2
girl leaders	56	314.8	23.6

$$\text{Critical ratio} = \frac{M_1 - M_2}{\sqrt{\sigma M_1^2 + \sigma M_2^2}}$$

$$\text{c.r.} = \frac{350.42 - 314.8}{\sqrt{9.86 + 3.648}} = 9.709$$

⁵ Op. cit. p. 13.

TABLE IV
FREQUENCY TABLE OF 38 BOY LEADERS

Scores	f	cf	d	fd	fd ₂
435-444	0	38	12	-	-
425-434	0	38	11	-	-
415-424	0	38	10	-	-
405-414	2	38	9	18	162
395-404	0	36	8	-	-
385-394	0	36	7	-	-
375-384	2	36	6	12	72
365-374	1	34	5	5	25
355-364	2	33	4	8	32
345-354	1	31	3	3	9
335-344	3	30	2	6	12
325-334	5	27	1	5	5
315-324	10	22	0	57	
305-314	8	12	-1	-8	8
295-304	2	4	-2	-4	8
285-294	2	2	-3	-6	18
275-284	0	0	-4	-	-
265-274	0	0	-5	-	-
255-264	0	0	-6	-	-
Total	38			-18	351

$$\text{Mean} = \text{A.R.} + \frac{\sum fd}{N} \times i.$$

$$\text{Mean} = 320 + \frac{39}{38} \times 10 = 330$$

$$\text{S.D.} = \sqrt{\frac{\sum fd^2}{N} - \left(\frac{\sum fd}{N}\right)^2} \times i.$$

$$\text{S.D.} = \sqrt{\frac{351}{38} - \left(\frac{57-18}{38}\right)^2} \times 10 = 28.6$$

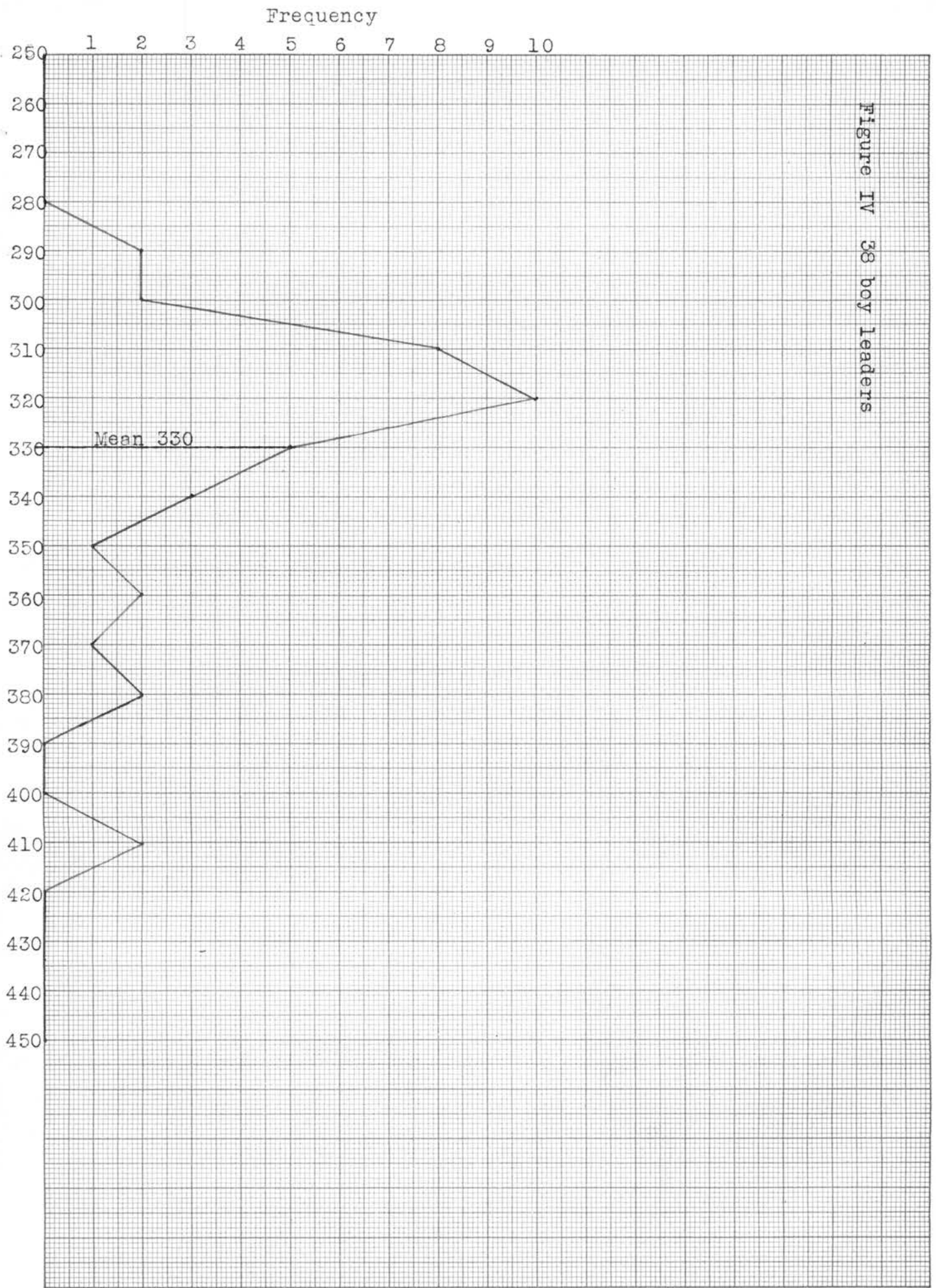


Figure IV 38 boy leaders

	<u>number</u>	<u>mean</u>	<u>s.d.</u>
Critical ratio of non-leaders to	426	350.42	35.2
boy leaders	38	330.00	28.6

$$\text{Critical ratio} = \frac{M_1 - M_2}{\sqrt{\sigma M_1^2 + \sigma M_2^2}}$$

$$\text{c.r.} = \frac{350.42 - 330.0}{\sqrt{21.44 + 3.65}} = 4.07$$

TABLE V
FREQUENCY TABLE OF 56 GIRL LEADERS

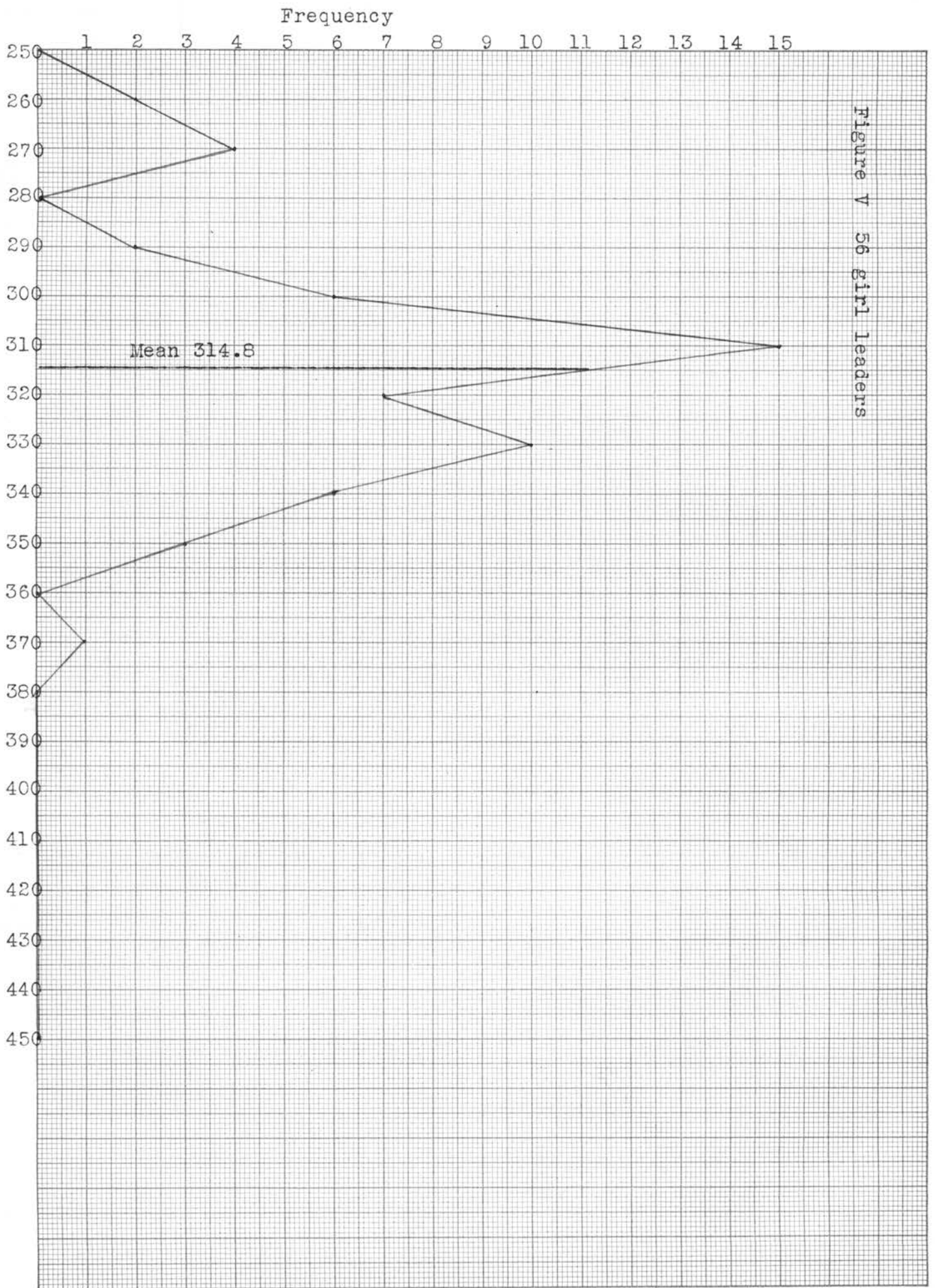
Scores	f	cf	d	fd	fd ₂
435-444	0	56	12	-	-
425-434	0	56	11	-	-
415-424	0	56	10	-	-
405-414	0	56	9	-	-
395-404	0	56	8	-	-
385-394	0	56	7	-	-
375-384	0	56	6	-	-
365-374	1	56	5	5	25
355-364	0	55	4	-	-
345-354	3	55	3	9	27
335-344	6	52	2	12	24
325-334	10	46	1	$\frac{10}{36}$	10
315-324	7	36	0		
305-314	15	29	-1	-15	15
295-304	6	14	-2	-12	24
285-294	2	8	-3	-6	18
275-284	0	6	-4	-	-
265-274	4	6	-5	-20	100
255-264	2	2	-6	-12	72
Total	$\frac{56}{56}$			$\frac{-65}{-65}$	$\frac{315}{315}$

$$\text{Mean} = \text{A.R.} + \frac{\sum fd}{N} \times i.$$

$$\text{Mean} = 320 + \frac{36-65}{56} \times 10 = 314.8$$

$$\text{S.D.} = \sqrt{\frac{\sum fd^2}{N} - \left(\frac{\sum fd}{N}\right)^2} \times i.$$

$$\text{S.D.} = \sqrt{\frac{315}{56} - \left(\frac{36-65}{56}\right)^2} \times 10 = 23.6$$



CHAPTER III

SUMMARY AND CONCLUSION

520 eleventh and twelfth grade students from some of the schools of Jackson, Greer, and Kiowa counties, in Oklahoma, were given The Nebraska Personality Inventory, which is a measure of introversion-extroversion. These students were also rated on a point scale for the determination of leadership. On the basis of this leadership scale the upper 20% of the students in each school were considered as leaders.

1. 82 out of 94 leaders are extroverts as compared to the total group which is normally divided between introversion and extroversion. The difference between the two means is statistically significant. The coefficient of correlation between leadership and extroversion is .385.

2. The 94 leaders are more extrovertive than the 426 non-leaders. The difference between the means is statistically significant.

3. 56 girl leaders are more extrovertive than 38 boy leaders, therefore, there are more girl leaders. The difference between the means is statistically significant.

All of these results show that extroversion is a characteristic of the high school leader. The correlation is not high but it is high enough to be of interest and possible value to the student and educator. A more extensive study might be both informative and desirable.

NOV 8 1938

BIBLIOGRAPHY

1. Adams, James Truslow. "What are the Qualities of a Genuine Leader?" Readers Digest, August, 1933.
2. Allport, F. H. Social Psychology. Houghton Mifflin Company, 1924.
3. Allport, Gordon W. Personality, A Psychological Interpretation. Henry Holt and Company, 1937.
4. Bellingrath, George Council. Qualities Associated With Leadership in Extra-Curricular Activities. Teachers College, Columbia University, 1930.
5. Bogardus, E. S. Fundamentals of Social Psychology. Houghton Mifflin Company, 1931.
6. Conklin, Edmund S. "The Determination of Normal Extrovert-Introvert Differences." Pedagogical Seminar, Vol. 34, 1937.
7. Eichler, George Augustus. Studies in Student Leadership. Pennsylvania State College, 1934.
8. Etchison, Vesta Francis. A Study of Leadership among Oklahoma Women. Oklahoma A. and M. College, 1934.
9. Folsom, Joseph K. Social Psychology. The Macmillan Company, 1930.
10. Laird, Donald A. Why We Don't Like People. A. L. Glaser and Company, 1933.
11. Link, Henry D. The Return to Religion. The Macmillan Company, 1936.
12. Rogers, Carl, R. Measuring Personality Adjustment in Children. Teachers College, Columbia University, 1931.
13. Symonds, P. M. Diagnosing Personality. The Century Company, 1931.

LIBRARY
AGRICULTURAL & MECHANICAL COLLEGE
MUNICIPALITY OF OKLAHOMA

THE NEBRASKA PERSONALITY INVENTORY

Name..... Date.....

INSTRUCTIONS: Below you will find some questions which are to be answered by encircling either 'Yes,' '?,' or 'No.' Read each question in turn, think what your behavior has usually been, and draw a circle around the answer which describes your behavior best. Encircle the '?' only when you are unable to decide between the 'Yes' and 'No.' BE SURE TO ANSWER EVERY QUESTION. There is no implication of right or wrong in any of these questions.

1. Do you express yourself more easily in speech than in writing?.....Yes ? No ___
2. Are you inclined to limit your acquaintances to a select few?.....Yes ? No ___
3. Do you generally prefer to take the lead in group activities?.....Yes ? No ___
4. Do you prefer to read about a thing rather than to experience it?.....Yes ? No ___
5. Do you like work which requires considerable attention to details?.....Yes ? No ___
6. Do you hesitate to lend your personal property even to close friends?.....Yes ? No ___
7. Are you inclined to be considerate of other people's feelings?.....Yes ? No ___
8. Are you inclined to act on the spur of the moment without thinking things over?.....Yes ? No ___
9. Have you ever kept a personal diary of your own accord?.....Yes ? No ___
10. Do you work much better when you are praised?.....Yes ? No ___
11. Do you like to change from one type of work to another frequently?.....Yes ? No ___
12. Are you inclined to study the motives of others?.....Yes ? No ___
13. Do you day-dream frequently?.....Yes ? No ___
14. Do you prefer to work with others rather than alone?.....Yes ? No ___
15. Are you inclined to worry over possible misfortunes?.....Yes ? No ___
16. Are you frequently somewhat absent-minded?.....Yes ? No ___
17. Do you like to persuade others to your point of view?.....Yes ? No ___
18. Are you inclined to keep in the background on social occasions?.....Yes ? No ___
19. Are you more interested in athletics than in intellectual things?.....Yes ? No ___
20. Do you usually dislike to change opinions you have already formed?.....Yes ? No ___

- 21. Do you like to speak in public?.....Yes ? No ___
- 22. Do you prefer to work things out in your own way rather than to accept suggestions from others?.....Yes ? No ___
- 23. Do you have frequent ups and downs in mood, either with or without apparent cause?....Yes ? No ___
- 24. Are you inclined to be slow and deliberate in movement?.....Yes ? No ___
- 25. Are your feelings rather easily hurt?.....Yes ? No ___
- 26. Do you enjoy getting acquainted with most people?.....Yes ? No ___
- 27. Are you inclined to keep quiet when out in a social group?.....Yes ? No ___
- 28. Do you adapt yourself easily to new conditions, places, surroundings, etc.?.....Yes ? No ___
- 29. Do you like to confide in others?.....Yes ? No ___
- 30. Do you express such emotions as delight, sorrow, anger, and the like readily?.....Yes ? No ___
- 31. Are you inclined to think about yourself much of the time?.....Yes ? No ___
- 32. Do you like to have people watch you when you are working?.....Yes ? No ___
- 33. Do you frequently rewrite social letters before mailing them?.....Yes ? No ___
- 34. Do you like to sell things?.....Yes ? No ___
- 35. Do you 'get rattled' easily in exciting situations, or at critical moments?.....Yes ? No ___
- 36. Do you find it easy, as a rule, to make new acquaintances?.....Yes ? No ___
- 37. Are you inclined to be indifferent to praise?.....Yes ? No ___
- 38. Do you usually prefer to work alone rather than with others?.....Yes ? No ___
- 39. Do you shrink from speaking in public?....Yes ? No ___
- 40. Are you inclined to stop and think things over first before acting?.....Yes ? No ___
- 41. Do you dislike to form new acquaintances?..Yes ? No ___
- 42. Were you ever 'the life of the party'?....Yes ? No ___
- 43. Do you usually find it hard to adjust yourself to new conditions of living?....Yes ? No ___
- 44. Does it bother you to have other people watch you at your work?.....Yes ? No ___
- 45. Are you usually 'calm and collected' in exciting situations?.....Yes ? No ___
- 46. Do you often hurt people's feelings without meaning to do it?.....Yes ? No ___
- 47. Are your day-dreams frequently about things that can never come true?.....Yes ? No ___
- 48. Do you enjoy taking part in an argument merely for the sake of arguing?.....Yes ? No ___
- 49. Do you prefer not to speak in public if you can avoid doing so?.....Yes ? No ___
- 50. Are you inclined to rush from one activity to another without pausing for rest?.....Yes ? No ___

51. Can you think quickly in a situation that demands prompt action?.....Yes ? No ___
52. Would you rather be a scientist than an aviator?.....Yes ? No ___
53. Are you inclined to take life too seriously?.....Yes ? No ___
54. Do you ever feel 'just miserable' for no reason at all?.....Yes ? No ___
55. When slighted or insulted by another person, are you inclined to conceal your hurt?.....Yes ? No ___
56. Do you often have a longing for old familiar places, faces, or scenes?.....Yes ? No ___
57. Are you much depressed by the criticisms of others?.....Yes ? No ___
58. Are you worried about being shy?.....Yes ? No ___
59. Would you rather spend an evening reading at home than to attend a large party?.....Yes ? No ___
60. Do you worry over humiliating experiences more than the average person?.....Yes ? No ___
61. Would you like a position in which you changed from one kind of task to another frequently during the day?.....Yes ? No ___
62. Do you often find that you have made up your mind too late?.....Yes ? No ___
63. Do you dislike being told how to do things even when your work could be improved?....Yes ? No ___
64. Does your mind tend to wander while you are trying to concentrate?.....Yes ? No ___
65. Do you usually have a 'ready answer' or quick repartee for remarks directed to you?.....Yes ? No ___
66. Are you inclined to 'jump at conclusions'?.....Yes ? No ___
67. Do you usually prefer to let some one else take the lead on social occasions?.....Yes ? No ___
68. Do you ever day-dream?.....Yes ? No ___
69. Do you ever change from happiness to despair, or vice versa, without good reasons?.....Yes ? No ___
70. Do you usually derive pleasure from being 'in the limelight' on social occasions?...Yes ? No ___
71. Is it difficult to hurt your feelings, even when the joke is on you?.....Yes ? No ___
72. Do you hesitate to confide in others, even in close friends?.....Yes ? No ___
73. Would you (or do you) like to be a salesman of any kind?.....Yes ? No ___
74. Do you avoid working alone whenever possible?.....Yes ? No ___
75. Do you generally feel uncomfortable when you are the center of attention on a social occasion?.....Yes ? No ___
76. Do you consider yourself less emotional than the average person, that is, less easily upset?.....Yes ? No ___

77. After a critical moment is over, do you usually think of something you should have done but failed to do?.....Yes ? No ___
78. Would you rather be a political organizer than an artist?.....Yes ? No ___
79. Do you enjoy 'just puttering around?'.....Yes ? No ___
80. Can you usually receive well-meant criticism without feeling hurt?.....Yes ? No ___
81. Do you blush more easily than the average person?.....Yes ? No ___
82. Would you rather write a play than be the leading actor in it?.....Yes ? No ___
83. Are you inclined to 'carry a grouch?'.....Yes ? No ___
84. Do you often feel that people are observing you on the street?.....Yes ? No ___
85. Do you often feel lonesome even when with other people?.....Yes ? No ___
86. Are you troubled with feelings of inferiority?.....Yes ? No ___
87. In an intimate group discussion, do you frequently fail to listen to the conversation?.....Yes ? No ___
88. Do you dislike very much to be interrupted at your work?.....Yes ? No ___
89. Do you often wish that you could make decisions more promptly?.....Yes ? No ___
90. In social conversations are you usually a listener rather than a talker?.....Yes ? No ___
91. Do you frequently feel that people around you are secretly talking about you?.....Yes ? No ___
92. Do you pride yourself upon being able to control your emotions?.....Yes ? No ___
93. Do you find it difficult to go to sleep at night because experiences of the day keep 'running through your head?'.....Yes ? No ___
94. Are you inclined to avoid meeting certain people on the street (bill collectors and the like not included)?.....Yes ? No ___
95. Are you inclined to dodge personal responsibilities that you know should be met?...Yes ? No ___
96. Do you often feel that you could do things better than the leader of your group?.....Yes ? No ___
97. Are you inclined to be quick and sure in your actions?.....Yes ? No ___
98. Are you troubled about being self-conscious?.....Yes ? No ___
99. Are there times when you seek to be alone and you cannot bear the company of anyone?.....Yes ? No ___
100. Do you believe that people often misunderstand what you say?.....Yes ? No ___
 Are you a male?.....Yes No ___

Typist:
Iris Koch
723 College Avenue
Stillwater, Oklahoma