

STRATHMORE PARCHMENT

100% RAO U.S.A.

A STUDY OF CERTAIN ASPECTS OF PERSONALITY AMONG  
HARD OF HEARING SCHOOL CHILDREN IN WOLF PUBLIC SCHOOLS  
IN SEMINOLE COUNTY, OKLAHOMA

PARCHMENT

U.S.A.

A STUDY OF CERTAIN ASPECTS OF PERSONALITY AMONG  
HARD OF HEARING SCHOOL CHILDREN IN WOLF PUBLIC SCHOOLS  
IN SEMINOLE COUNTY, OKLAHOMA,

By

J. HENRY BROWN

Bachelor of Science

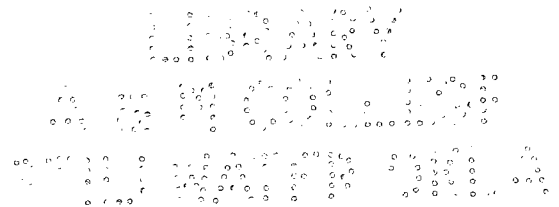
Northeastern State Teachers College

Tahlequah, Oklahoma

1928

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

1939



OCT 27 1939

APPROVED:

Melvin G. Riggs  
In Charge of Thesis

H. Conner  
Dean of the School of Education

D. C. M. Tuttle  
Dean of the Graduate School

## ACKNOWLEDGMENTS

The writer wishes to express his appreciation to Professor Guy A. Lackey for his helpful assistance in the use of the Western Electric 4-B Audiometer. He also wishes to express his thanks to Professor Melvin G. Rigg for his advice and constructive criticism in the study of the students of deficient hearing.

J. H. B.

## TABLE OF CONTENTS

CHAPTER		PAGE
I	INTRODUCTION . . . . .	1
II	METHOD OF PROCEDURE . . . . .	2
III	COMPILATION AND ANALYSIS OF DATA . . . . .	5
IV	COMPARISON OF DATA . . . . .	24
V	SUMMARY AND CONCLUSIONS . . . . .	31
	BIBLIOGRAPHY . . . . .	33



## LIST OF TABLES

TABLE		PAGE
I-III	RESULTS OF AUDIOMETRIC TESTING IN THE THREE SCHOOLS IN THE WOLF PUBLIC SCHOOLS	5-7
IV	COMPOSITE REPORT OF AUDIOMETRIC TESTING IN THE ENTIRE WOLF SCHOOL SYSTEM . . . . .	8
V	NUMBER OF PUPILS SELECTED FOR STUDY . . . . .	10
VI	COMPARATIVE RESULTS OF SCORES ON ASCENDANCE- SUBMISSION FOR GRADES 5-8, Inclusive . . . . .	12
VII	COMPARATIVE RESULTS OF SCORES ON EXTROVERSION-INTROVERSION FOR GRADES 5-8, INCLUSIVE . . . . .	14
VIII	COMPARATIVE RESULTS ON SCORES ON EMOTIONALITY FOR GRADES 5-8, INCLUSIVE . . . . .	16
IX	COMPARATIVE RESULTS OF SCORES ON ASCENDANCE-SUBMISSION FOR GRADES 9-12, INCLUSIVE . . . . .	18
X	COMPARATIVE RESULTS ON SCORES ON EXTROVERSION-INTROVERSION FOR GRADES 9-12, INCLUSIVE . . . . .	20
XI	COMPARATIVE RESULTS ON SCORES ON EMOTIONALITY FOR GRADES 9-12, INCLUSIVE . . . . .	22
XII	COMPARISON OF RESULTS ON ASCENDANCE- SUBMISSION FOR GRADES FIVE TO TWELVE INCLUSIVE . . . . .	25
XIII	COMPARISON OF RESULTS ON EXTROVERSION- INTROVERSION FOR GRADES FIVE TO TWELVE INCLUSIVE . . . . .	27
XIV	COMPARISON OF RESULTS ON EMOTIONALITY FOR GRADES FIVE TO TWELVE INCLUSIVE . . . . .	29

## CHAPTER I

## INTRODUCTION

According to a survey of the schools of Oklahoma the number of school children in this state with deficient hearing is about 10 per cent.<sup>1</sup> Since this group represents a large part of the total enrollment of our schools, it should be studied so as to discover the nature of such a handicap.

Various colleges have purchased audiometers, which have been loaned to school administrators desiring to test the hearing acuity of the pupils in their schools. It was with one of these machines owned by the Oklahoma Agricultural and Mechanical College that the writer made the present study.

This study was in the form of a survey conducted in the Wolf Public Schools, having a main plant and two wing schools, with a district enrollment of 602. The study involved the following problems:

1. Are there group differences between hard of hearing children and those of normal hearing in terms of such measures of personality as ascendance-submission, extroversion-introversion, and emotionality?

2. If there is a difference in the personality of the two groups, does the difference tend to become greater as the child grows older?

---

1

Baker Bonnell, "Results of Audiometric Testing in Oklahoma Public Schools," State Department of Education.

## CHAPTER II

## METHOD OF PROCEDURE

To study the foregoing problems it was necessary to secure school children with deficient hearing to be used as an experimental group, and a like number of children with normal hearing to serve as a control group. The same personality tests were given both groups.

The Western Electric 4-B Audiometer was used to determine the pupils to be used in the experimental and the control groups. Thirty pupils were tested at one time. Papers were scored and those showing a deficiency of six decibels (sensation units) or more were given a retest. All students from the second grade to twelfth inclusive, that were in school during the three days of the testing program, were tested.

A total of 429 pupils were tested for this study. These were grouped into four class-groups with deficiencies as follows:

1. Nine decibels or worse in both ears.
2. Nine decibels or worse in one ear.
3. Six decibels or worse in both ears.
4. Six decibels or worse in one ear.

There were 68 who were included in the above groups. This experimental group consisted of 15.8 per cent of those tested.

With each hard of hearing child, a normal child of the same age, sex, grade and socio-economic status was



selected for the control group. The same personality tests were given to each of these groups.

"Aspects of Personality," a test by Dr. Rudolf Pintner of Columbia University was chosen as the measuring instrument for grades five to eight, inclusive, for the following reasons:

1. It was the only test worked out solely for these grades.
2. The test was so constructed that it was easy to score and to compile results.
3. It required little time for children to complete the test.
4. The items of the inventory represented the ordinary experiences of children of this age.
5. It measured three phases of personality.

The "Nebraska Personality Inventory" was selected as a measuring instrument for grades nine to twelve for the following reasons:

1. The test is adapted for high school students.
2. The items of this test are encountered with situations that students of this age encounter.
3. It requires only a short time, about thirty minutes, to take the test.
4. It measures three phases of personality comparable to those involved in the other test.
5. The test is rather easy to score.

In the "Aspects of Personality," the traits measured are Ascendance-Submission, Extroversion-Introversion, and Emotionality. A low score in the Ascendance-Submission test signifies that the individual is more submissive. A low score in the Extroversion-Introversion items means that the one taking the test is introverted while a high score shows extroversion. A low score on the Emotionality denotes the lack of emotional balance.

In the "Nebraska Personality Inventory" the Masculinity score compares with the Ascendance-Submission score of Pintner's "Aspects of Personality" tests. The high scores of this test in Masculinity denote introversion and submission while a high score denotes extroversion. In Pintner's "Aspects of Personality" high scores of the Extroversion-Introversion part denote extroversion while the low scores denote introversion. In the Emotionality score the high score shows a lack of emotional balance. In other words the questions of the Pintner's Test are stated positively and a high score on Extroversion-Introversion for example means that the pupil tends toward being extroverted while the Nebraska Test questions are so constructed that a high score on this part of the test would indicate that the pupil was introverted. This difference must be kept in mind by the reader.

CHAPTER III  
 COMPILATION AND ANALYSIS OF DATA

TABLE I  
 REPORT OF AUDIOMETRIC TESTING IN WOLF WING ONE

Grade	Number Tested (A)	Needed Retest	O. K. by Retest	D. H.	% of (A)	Both Ears	One Ear Only
2	5	1	0	1	20	0	1
3	4	1	0	1	25	0	1
4	9	3	2	1	11.1	0	1
5	6	2	0	2	33.3	0	2
6	6	3	2	1	66.6	0	1
Total	30	10	4	6	20	0	6



TABLE II

## REPORT OF AUDIOMETRIC TESTING IN WOLF WING TWO

Grade	Number Tested (A)	Number Needed Retest	O. K. by Retest	D. H.	% of (A)	Both Ears	One Ear Only
2	29	17	10	7	24.1	1	6
3	12	5	2	3	25.	0	3
4	21	6	2	4	19.	1	3
5	26	13	4	9	26.9	0	9
6	18	11	5	6	33.3	2	4
7	12	7	3	4	33.3	2	2
Total	113	59	26	33	26.2	6	27



TABLE III

## REPORT OF AUDIOMETRIC TESTING IN WOLF MAIN PLANT

Grade	Number Tested (A)	Number Needed Retest	O. K. by Retest	D. H.	% of (A)	Both Ears	One Ear Only
2	26	6	4	2	7.7	0	2
3	14	1	0	1	7.1	0	1
4	13	2	2	0	0	0	0
5	27	10	3	7	25.9	1	6
6	19	4	1	3	15.7	0	3
7	28	3	2	1	3.6	0	1
8	32	5	4	1	3.1	1	0
9	41	15	10	5	12.2	0	5
10	34	9	4	5	14.7	1	4
11	28	8	6	2	10.7	0	2
12	19	3	1	2	10.5	1	1
Totals	281	66	37	29	10.3	4	25

TABLE IV  
 COMPOSITE REPORT OF AUDIOMETRIC TESTING IN  
 THE ENTIRE WOLF SCHOOL SYSTEM

Grade	Number Tested (A)	Number Needed Retest	O. K. by Retest	D. H.	% of (A)	Both Ears	One Ear Only
2	60	24	14	10	16.6	1	9
3	30	7	2	5	16.6	0	5
4	43	11	6	5	11.6	1	4
5	59	25	7	10	30.	1	17
6	43	18	8	10	23.2	2	8
7	40	10	5	5	12.5	2	3
8	32	5	4	1	3.1	1	0
9	41	15	10	5	12.2	0	5
10	34	9	4	5	15.	1	4
11	28	8	6	2	7.1	0	2
12	19	3	1	2	10.5	1	1
Total	429	135	68	68	15.8	10	58

Tables I - IV show the results of the audiometric testing in each of the three schools in the Wolf Public School System by grades and a summary report for the entire system from grades two to twelve inclusive. Each table gives: Number of pupils taking the test (A), number needing a retest (B), that is, pupils who showed a deficiency of six or more decibels in one or both ears on the first test; number who made satisfactory scores on the retest; number found to have a deficiency of six or more decibels in either or both ears on the retest (Deficient hearing shortened to D. H.); percentage that the number of deficient hearing is of the number tested; the number having a hearing deficiency in both ears; the number having a deficiency in one ear only.

It will be noted that in Wing One and Wing Two there was an unusually large number needing retests and a much larger percentage of deficient hearing. This may be accounted for due to the fact that these schools are located in the oil field. The engines from the pumping wells may have affected the hearing acuity of the students attending these schools or caused the tests to be less accurate. Wing One showed a hearing deficiency of 20 per cent while Wing Two showed a hearing deficiency of 26.2 per cent. Wing Two is located where the noise is more conspicuous. The deficiency of the Main Plant was 10.3 per cent. The entire school plant showed 15.8 per cent deficiency in hearing.



A copy of the results of this audiometer test was given to each teacher and the children with deficient hearing were favored in seating arrangement by placing them close to a point in the room where the teacher customarily gives oral instruction and conducts the daily classwork routine. Reports of these tests together with each individual child's score were sent to Professor Guy A. Lackey of Oklahoma Agricultural and Mechanical College at Stillwater, who in turn reported these to Mr. Baker Bonnell, Oklahoma City, Oklahoma, who is the State Supervisor of the Public School Program for Deficient Hearing.

TABLE V  
NUMBER OF PUPILS SELECTED FOR STUDY

Grade	5	6	7	8	9	10	11	12	Total
Wolf Main Plant	7	3	1	1	5	5	2	2	26
Wolf Wing One	2	1	-	-	-	-	-	-	3
Wolf Wing Two	7	6	3	-	-	-	-	-	16
Total	16	10	4	1	5	5	2	2	45
Total Boys	10	2	2	1	3	4	2	2	26
Total Girls	6	8	2	-	2	1	-	-	19



Table V shows the number of hard of hearing pupils chosen for this study. At least one pupil was selected from each grade taught in each of the respective schools in the Wolf Public School System. There were 26 pupils used from the Main Plant where the grades 1-12, inclusive, were taught. At Wing One where grades 1-6, inclusive, were taught, three pupils were used. Sixteen pupils were selected from Wing Two where grades 1-7, inclusive, were taught.

It will be noted that 15 boys and 16 girls were selected from the grades 5-8, inclusive, to take the Pintner's "Aspects of Personality" tests. In high school there were 11 boys and 3 girls selected to take the Nebraska Test.

TABLE VI  
 COMPARATIVE RESULTS OF SCORES ON ASCENDANCE-SUBMISSION  
 FOR GRADES 5-8, INCLUSIVE

Grade	Class- Group	Experimental Group				Control Group			
		Boys		Girls		Boys		Girls	
		Mean	N	Mean	N	Mean	N	Mean	N
5	1	13	1	-	-	9	1	-	-
5	2	13.5	2	11.5	4	17.5	2	13.5	4
5	4	14.9	7	12	2	13.7	7	15	2
5 Average		14.4	10	11.6	6	14.5	10	14	6
6	2	-	-	11.3	3	-	-	10.6	3
6	3	-	-	11.3	-	-	-	10.6	-
6	4	11.5	2	16.6	5	16.5	2	12.2	5
6 Average		11.5	2	15.7	8	16.5	2	11.6	8
7	1	-	-	11	1	-	-	13	1
7	2	-	-	11	1	-	-	10	1
7	3	13	2	-	-	10	2	-	-
7 Average		13	2	11	2	10	2	11.5	2
8	2	11	1	-	-	16	1	-	-
Average for All Groups in Grades 5-8		13.6	15	13.7	16	14.5	15	12.5	16

Table VI shows comparative results of the experimental and control groups on tests for Ascendance-Submission for grades 5-8, inclusive. The mean scores (Mean) and the number of pupils (N) are given for the various class-groups (1, 2, 3, 4) of deficient hearing pupils and also the average of each grade.

It will be noted in general that the scores of the control group are higher than those of the experimental group for the boys but the control group for the girls are lower. Thus it can be seen that there is no great difference in the mean scores for both boys and girls in Ascendance-Submission for grades 5-8, inclusive, according to the results obtained by giving the Pintner's "Aspects of Personality" tests.

TABLE VII  
COMPARATIVE RESULTS OF SCORES ON EXTROVERSION-  
INTROVERSION FOR GRADES 5 to 8 INCLUSIVE

Grade	Class- Groups	Experimental Group				Control Group			
		Boys		Girls		Boys		Girls	
		Mean	N	Mean	N	Mean	N	Mean	N
5	1	18	1	-	-	16	1	-	-
5	2	22	2	18	4	18.5	2	16	4
5	4	20.6	7	20	2	21.3	7	21	2
5 Average		20.6	10	18.6	6	20.5	10	18	6
6	2	-	-	21.3	3	-	-	20	3
6	3	-	-	21.3	-	-	-	20	-
6	4	22	2	20.4	5	24.5	2	18.5	5
6 Average		22	2	21.1	8	24.5	2	19.2	8
7	1	-	-	25	1	-	-	18	1
7	2	-	-	17	1	-	-	19	1
7	3	21	2	-	-	23	2	-	-
7 Average		21	2	21	2	23	2	18.5	2
8	2	16	1	-	-	24	1	-	-
Average of All Groups Grades 5-8		20.5	15	24.4	15	21.3	15	18.6	16



Table VII shows comparative results of the experimental and control groups for grades 5-8, inclusive, on the tests for Extroversion-Introversion. On this test the average scores of the experimental group for the boys are lower than those of the control group except in the fifth grade in which they were about the same. The scores of the experimental group for the girls are higher than those of the control group.

TABLE VIII  
COMPARATIVE RESULTS OF SCORES ON EMOTIONALITY  
FOR GRADES 5-8 INCLUSIVE

Grade	Class- Group	Experimental Group				Control Group			
		Boys		Girls		Boys		Girls	
		Mean	N	Mean	N	Mean	N	Mean	N
5	1	23	1	-	-	20	1	-	-
5	2	28.5	2	29.7	4	24	2	21.2	4
5	4	20.6	7	27.5	2	25.2	7	26.5	2
Average		22.4	10	29	6	24.5	10	23	6
6	2	-	-	22.3	3	-	-	27.6	3
6	3	-	-	22.3	-	-	-	27.6	-
6	4	25	2	22.6	5	21	2	28.2	5
Average		25	2	22.5	8	21	2	28.1	8
7	1	-	-	34	1	-	-	28	1
7	2	-	-	20	1	-	-	28	1
7	3	30	2	-	-	24.5	2	-	-
Average		30	2	27	2	24.5	2	28	2
8	2	17	1	-	-	31	1	-	-
Average for All Groups		24	15	25.5	16	24.5	15	26.2	16

Table VIII shows comparative results of scores on emotionality for the experimental and control groups for both boys and girls from grades 5 to 8, inclusive. Mean scores of both boys and girls of the experimental group are slightly lower than those of the control group denoting a slight lack of emotional balance in the experimental group.

TABLE IX  
 COMPARATIVE RESULTS OF SCORES ON ASCENDANCE-  
 SUBMISSION (M SCORE\*) FOR GRADES NINE TO TWELVE  
 INCLUSIVE

Grade	Class- Group	Experimental Group				Control Group			
		Boys		Girls		Boys		Girls	
		Mean	N	Mean	N	Mean	N	Mean	N
9	2	412	2	231	1	263	2	246	1
9	4	249	1	251	1	263	1	281	1
10	2	293	2	-	-	237	2	-	-
10	3	231	-	-	-	230	-	-	-
10	4	243	2	225	1	257	2	256	1
11	2	265	2	-	-	252	2	-	-
12	2	356	1	-	1	237	1	-	-
12	3	356	-	-	-	237	-	-	-
12	4	259	1	-	-	259	1	-	-
Average		295	11	236	3	249	11	261	3

\*The M Score on the Nebraska Personality Inventory  
 Measures in substance the same things as the ascendance  
 score in the Pintner's Aspects of Personality.



Table IX shows comparative results of the experimental and control groups on Ascendance-Submission (M Score) of the grades 9 to 12, inclusive. The experimental group for the boys has a much higher score than the control group, denoting that the hard of hearing boys in high school are more submissive than those of normal hearing. The control group for the girls has a higher score than that of the experimental group.

TABLE X  
 COMPARATIVE RESULTS OF SCORES ON EXTROVERSION-  
 INTROVERSION FOR GRADES NINE TO TWELVE INCLUSIVE

Grade	Class- Group	Experimental Group				Control Group			
		Boys		Girls		Boys		Girls	
		Mean	N	Mean	N	Mean	N	Mean	N
9	2	382	2	350	1	361	2	373	1
9	4	341	1	365	1	323	1	342	1
10	2	250	2	-	-	333	2	-	-
10	3	387	-	-	-	323	-	-	-
10	4	327	2	440	1	351	2	332	1
11	2	337	2	-	-	310	2	-	-
12	2	255	1	-	-	310	1	-	-
12	3	255	-	-	-	310	-	-	-
12	4	365	1	-	-	287	1	-	-
Average for All Groups in High School		311	11	385	3	334	11	349	3

Table X shows comparative results of the experimental and control groups on the test on Extroversion-Introversion for grades nine to twelve, inclusive. It will be noted that the experimental group of boys shows a low score which denotes introversion, and the experimental group of girls shows a high score which denotes a tendency towards extroversion.

TABLE XI  
COMPARATIVE RESULTS OF SCORES ON EMOTIONALITY  
FOR GRADES NINE TO TWELVE INCLUSIVE

Grade	Class- Group	Experimental Group				Control Group			
		Boys		Girls		Boys		Girls	
		Mean	N	Mean	N	Mean	N	Mean	N
9	2	347	2	342	1	368	2	245	1
9	4	355	1	353	1	318	1	390	1
10	2	353	2	-	-	366	2	-	-
10	3	365	-	-	-	365	-	-	-
10	4	364	2	309	1	375	2	346	1
11	2	359	2	-	-	333	2	-	-
12	2	359	1	-	-	314	1	-	-
12	3	359	-	-	-	314	-	-	-
12	4	381	1	-	-	339	1	-	-
Average for All Groups in High School		360	11	334	3	354	11	309	3



Table XI shows comparative results of the experimental and control groups on the test on Emotionality for grades 9 to 12, inclusive. Both the boys and girls of the experimental group show a higher score which denotes a lack of emotional balance.

## CHAPTER IV

## COMPARISON OF DATA

The purpose of this chapter is to make a comparison of the data presented in the preceding chapter. Norms for each class-group (1, 2, 3, 4) are listed for grade boys, grade girls, high school boys and high school girls.

The three tables in this chapter, together with the explanation and interpretation following each, will indicate what differences, if any, are to be found between the hard of hearing and normal children.

Differences between mean scores of the experimental and control groups are listed as positive difference (Mean score of the control group showing better personality aspects than the mean score of the experimental group) and negative difference (Mean score of the experimental group showing better personality aspects than that of the control group). Our primary concern in this chapter is the study of these differences.

TABLE XII  
 COMPARISON OF RESULTS ON ASCENDANCE-SUBMISSION  
 FROM GRADES FIVE TO TWELVE INCLUSIVE

Class- Group	Mean	N	Mean	N	Positive Difference	Negative Difference
	Experimental Group		Control Group			
Boys 5-8						
1	13	1	9.	2	-	5.
2	12.3	3	17.0	3	4.7	-
3	13	2	10	2	-	2.0
4	13.2	9	14.3	9	1.1	-
Girls 5-8						
1	11	1	13	1	2.0	-
2	11.4	8	10.7	8	-	.7
3	11.3	-	10.6	-	-	.7
4	15.2	7	14.4	7	-	.8
Boys 9-12						
2	378	7	251	7	127	-
3	328.5	-	238.5	-	100	-
4	251	4	260	1	-	11.
Girls 9-12						
2	231	1	246	1	-	15.
4	238	2	268.5	2	-	30.5

Table XII gives a comparison of results of the experimental and control groups on Ascendance-Submission, showing the number tested (N), mean scores and the positive or negative difference.

We are concerned with the differences as found in the last two columns of each table.

It will be observed that the experimental and control groups of the grades show very little difference in mean scores but the slight difference bears out the opinion that the hard of hearing children are more submissive than normal hearing children.

It will be noted that the difference between the hard of hearing pupils and the normal pupils is more pronounced in the high school boys in grouping 2 and 3 indicating that as the pupils grow older they become more submissive.

The differences in the norms of the high school girls do not indicate that slight deficiencies in hearing affect the Ascendance and Submission; if any difference is noted the deficient hearing girls have more ascendance.

TABLE XIII  
COMPARISON OF RESULTS ON EXTROVERSION-INTROVERSION  
FOR GRADES FIVE TO TWELVE INCLUSIVE

Class- Group	Mean	N	Mean	N	Positive Difference	Negative Difference
	Experimental Group		Control Group			
	Boys 5-8					
1	18	1	16	1	-	2
2	20	3	20.5	3	.5	-
3	21	2	23	2	2.0	-
4	21	9	22	9	1.0	-
	Girls 5-8					
1	25	1	18	1	-	7.
2	19	8	18	8	-	1.
3	21.3	-	20	-	-	1.3
4	20.3	7	19.1	7	-	1.2
	Boys 9-12					
2	321.1	7	304	7	17.1	-
3	266	-	316	-	-	50.
4	339.5	4	328	4	11.5	-
	Girls 9-12					
2	350	1	373	1	-	23.
4	397.5	2	337	2	60.5	-



Table XIII gives a comparison of results for the experimental and control groups on tests for Extroversion-Introversion, showing the number (N), mean scores, difference in the means of the groupings of the classes of deficient hearing (1, 2, 3, 4) expressed in positive and negative differences.

The results of this table show that boys in both grade and high school with deficient hearing are more introverted than the boys in the control groups. The table indicates that the girls of deficient hearing in the grades are more extroverted than the control group but they become more introverted as they grow older.

TABLE XIV  
 COMPARISON OF RESULTS ON EMOTIONALITY  
 FOR GRADES FIVE TO TWELVE INCLUSIVE

Class- Group	Mean	N	Mean	N	Positive Difference	Negative Difference
	Experimental Group		Control Group			
	Boys 5-8					
1	23	1	20	1	-	2.
2	22	3	26.3	3	4.3	-
3	30	2	24.5	2	-	5.5
4	21.6	9	24.2	9	2.6	-
	Girls 5-8					
1	34	1	28	1	-	6
2	25.7	8	24.5	8	-	1.2
3	22.3	-	27.6	-	5.6	-
4	23.7	7	27.7	7	-	4
	Boys 9-12					
2	354	7	354	7	0	0
3	362	-	339.5	-	22.5	0
4	366	4	351.7	4	14.6	-
	Girls 9-12					
2	342	1	245	1	97.	-
4	346.5	2	368	2	-	21.5

Table XIV gives a comparison of results for the experimental and control groups on the tests for Emotionality, showing the number tested (N), mean scores, and positive and negative differences, of the class-groups (1, 2, 3, 4) of deficient hearing.

The tables indicate that there is no appreciable difference between the experimental and control groups, but the slight difference indicates that both boys and girls with deficient hearing lose some of their emotional balance as they grow older.

## CHAPTER V

## SUMMARY AND CONCLUSIONS

The conclusions of this study cannot be considered final. There are many factors which influence a study of this kind. First, the accuracy of audiometer testing is rather difficult to secure in some communities. Then, the measurement of personality is rather difficult due to lack of standardization. Furthermore, it is difficult to secure an adequate number of cases of deficient hearing children.

Since the number of cases of hard of hearing children was so small, and the averages were so close together, the differences are not significant.

This study does not indicate that children with slight deficiencies in hearing are any more apt to have personality defects than children with normal hearing.

Such slight differences as were found may be summarized as follows:

1. The boys with deficient hearing are slightly more submissive than boys of normal hearing.
  2. The boys with deficient hearing are slightly more introverted than boys of normal hearing.
- The girls that are hard of hearing become more introverted as they become older.

3. Both boys and girls, in the grades, with deficient hearing show very little difference in emotionality compared with pupils of normal hearing. There is a tendency toward loss in emotional balance as they grow older.
4. There is a tendency for all hard of hearing children to be weak in one or more personality traits.



## BIBLIOGRAPHY

- Baker, H. J. and Traphagen V. The Diagnosis and Treatment of Behavior-Problem Children. Macmillan Company, New York: 1935
- Bonnell, Baker. Public School Program for Deficient Hearing. A Bulletin of the Oklahoma State Board of Education.
- Guilford, J. P. The Nebraska Personality Inventory. University of Nebraska, Lincoln, Nebraska.
- Pintner, Rudolf. Aspects of Personality. World Book Company, New York.
- Shaffer, L. F. The Psychology of Adjustment. Houghton-Mifflin Company, Boston: 1936.

Typist:

Florence Lackey

Stillwater, Oklahoma