

A STUDY OF GROUP RESPONSES ON THE  
BELL ADJUSTMENT INVENTORY FROM A  
NUMBER OF SECONDARY SCHOOL IN THE  
STATE OF OKLAHOMA

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STATE OF OKLAHOMA

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## I. The Problem:

The primary concern of this study was to make a comparison by school of the personality of children to determine: (1) If in the different areas of personality adjustment there were significant differences in the personality adjustment of the children between the schools as measured by the Bell Adjustment Inventory (Student Form). (2) If significant differences were discovered to attempt to assign reasons for these differences.

## II. The Method of Measurement:

### The Sample:

As an approach to this problem I conferred with Professor H. K. Brobst and Mr. G. T. Stubbs. In connection with their suggestions and recommendations, it was decided to confine this study to the boys and girls of the eleventh and twelfth grades of the following six schools; Miami, Okmulgee, Newkirk, Woodward, Perry and Stillwater. The six schools chosen were selected to give a cross sectional representation of schools in the following areas: (1) geographical representation (2) occupational representation and (3) educational representation. In the eleventh grade 85 males and 125 females were used as samples. In the twelfth grade 150 males and 150 females were used as samples.

### The Measuring Instrument:

The Testing Bureau here at Oklahoma A. & M. administered a battery of tests to the schools selected in connection with their state-wide high school testing program. The tests that were administered in this program were: The Differential Aptitude Battery, The Bell Adjustment Inventory, and the Kuder Preference Record. After careful consideration, it was decided to use from this battery of tests, the Bell Adjustment Inventory as the measuring instrument for this study. The Adjustment Inventory provides four separate measures of personal and social adjustment:

(a) Home Adjustment. Individuals scoring high tend to be unsatisfactorily

adjusted to their home surroundings. Low scores indicate satisfactory home adjustment.

(b) Health Adjustment. High scores indicate unsatisfactory health adjustment; low scores satisfactory adjustment.

(c) Social Adjustment. Individuals scoring high tend to be submissive and retiring in their social contacts. Individuals with low scores are aggressive in social contacts.

(d) Emotional Adjustment. Individuals with high scores tend to be unstable emotionally. Persons with low scores tend to be emotionally stable.<sup>1</sup>

The measurement of four types of adjustment permits location of specific adjustment difficulties. Hence, since the Bell Adjustment Inventory does measure various areas of personality adjustment, it was decided to use this inventory as our measuring instrument for this study.

### III. Treatment of the Data:

The following steps were taken to treat the test data: (1) Standard Deviations and Means were computed for each school for each area of the Bell Adjustment Inventory. This enables us to make comparison between schools for a given area of personality adjustment. For example: In the area of Emotional Adjustment for 12th Grade Males, Woodward had the high standard deviation of 6.9; while Perry had the low standard deviation of 4.8. Woodward had the high mean of 11.3; while Newkirk had the low mean of 8.7 for the Emotional Adjustment of 12th Grade Males. (See Tables I and II.) Another example: In the area of Home Adjustment for 12th Grade Males, Newkirk had the high standard deviation of 8.1; while Stillwater had the low standard deviation of 5.1. Okmulgee had the high mean of 12.9; while Woodward had the low mean of 7.9. In a like manner similar comparisons may be made. (2) Our next step was to determine if the mean scores

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<sup>1</sup> Hugh M. Bell, Manual for the Adjustment Inventory, (Student Form).

achieved under the different schools differed significantly. The object of our analysis was to get a breakdown of the total variance of the scores into two parts: (1) the variance attributable to individual differences, i.e., within the several groups, (2) the variance attributable to difference between the means of the schools studied. Tables III, IV, V, and VI show computation of the sums of squares upon which the analyses are based. Table VII lists the F Values from the analysis of variance between the schools. Since none of the F Values were significant it was not necessary to compute the t values between means of the variance on the Bell for each school.<sup>2</sup>

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<sup>2</sup> Henry E. Garret, Statistics in Psychology and Education, pp. 258-262.



## STANDARD DEVIATIONS AND MEANS

	Miami		Okmulgee		Newkirk		Woodward		Perry		Stillwater	
	SD's	Means	SD's	Means	SD's	Means	SD's	Means	SD's	Means	SD's	Means
Males 12th Grade												
Home Adjustment	5.4	10.2	6.0	12.9	8.1	8.4	5.7	7.9	5.4	9.2	5.1	8.0
Health Adjustment	4.2	7.6	3.6	7.7	5.7	8.8	5.7	9.5	6.0	8.1	4.0	7.8
Social Adjustment	6.9	18.5	4.2	12.2	5.7	13.4	4.8	12.4	6.3	13.5	7.5	14.8
Emotional Adjustment	6.0	10.7	6.0	9.9	5.7	8.7	6.9	11.3	4.8	10.6	5.7	9.4

Males 11th Grade												
Home Adjustment	5.2	8.2	5.4	8.9	3.8	7.7	8.4	8.8	5.4	8.5		
Health Adjustment	3.8	7.7	4.8	7.8	4.8	7.6	3.8	7.4	4.0	7.1		
Social Adjustment	7.5	17.2	6.0	16.6	7.5	14.7	7.2	15.8	6.9	16.8		
Emotional Adjustment	6.3	11.0	5.4	9.3	6.3	12.8	6.3	10.5	6.0	11.7		

TABLE II

## STANDARD DEVIATIONS AND MEANS

	Miami		Okmulgee		Newkirk		Woodward		Perry		Stillwater	
	SD's	Means	SD's	Means	SD's	Means	SD's	Means	SD's	Means	SD's	Means
Females 12th Grade												
Home Adjustment	6.6	10.6	6.3	10.3	4.4	8.7	5.4	9.6	6.3	10.3	6.9	9.3
Health Adjustment	4.5	10.4	4.8	9.6	5.1	10.8	5.4	12.0	3.2	10.2	5.4	9.7
Social Adjustment	6.6	15.1	6.8	17.4	6.9	15.4	6.0	15.5	7.8	16.0	6.6	13.5
Emotional Adjustment	6.0	18.1	6.3	15.0	6.3	16.1	6.6	16.7	6.3	16.9	6.3	14.1

Females 11th Grade												
Home Adjustment	5.7	11.9	6.0	8.6	5.7	9.8	5.7	9.4	5.1	8.8		
Health Adjustment	5.0	11.7	5.1	9.5	5.6	10.5	5.1	10.8	4.0	9.7		
Social Adjustment	7.2	15.4	7.2	16.6	6.9	33.9	7.8	20.4	8.4	15.5		
Emotional Adjustment	7.8	16.1	7.5	15.2	8.1	18.1	6.9	16.9	5.7	16.1		

TABLE III

Home Adjustment 11th Grade Males			
Analysis of Variance			
Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	4	94.3	23.5
Within methods	<u>80</u>	<u>2268.5</u>	28.4
	84	2362.8	

$$F = \frac{23.5}{28.4} = .82$$

Health Adjustment 11th Grade Males			
Analysis of Variance			
Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	4	89.70	22.43
Within methods	<u>80</u>	<u>1648.35</u>	20.60
	84	<u>1738.05</u>	

$$F = \frac{22.43}{20.60} = 1.09$$

Social Adjustment 11th Grade Males			
Analysis of Variance			
Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	4	174.9	43.7
Within methods	<u>80</u>	<u>4116.2</u>	514.8
	84	4291.1	

$$F = \frac{43.7}{514.8} = .08$$

Emotional Adjustment 11th Grade Males			
Analysis of Variance			
Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	4	324.7	81.2
Within methods	<u>80</u>	<u>2811.6</u>	35.1
	84	3136.3	

$$F = \frac{81.2}{35.1} = 2.34$$

TABLE IV

Home Adjustment 12th Grade Males

Analysis of Variance

Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	5	106.7	21.3
Within methods	<u>144</u>	<u>4526.0</u>	21.4
	149	4622.7	

$$F = \frac{21.3}{21.4} = .99$$

Health Adjustment 12th Grade Males

Analysis of Variance

Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	5	93.1	18.6
Within methods	<u>144</u>	<u>2908.3</u>	20.2
	149	3001.4	

$$F = \frac{18.6}{20.2} = .92$$

Social Adjustment 12th Grade Males

Analysis of Variance

Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	5	187.2	37.5
Within methods	<u>144</u>	<u>4373.7</u>	30.4
	149	4560.9	

$$F = \frac{37.5}{30.4} = 1.23$$

Emotional Adjustment 12th Grade Males

Analysis of Variance

Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	5	204.7	40.9
Within methods	<u>144</u>	<u>4701.4</u>	32.6
	149	4906.1	

$$F = \frac{40.9}{32.6} = 1.25$$

TABLE V

## Home Adjustment 11th Grade Females

## Analysis of Variance

Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	4	83.8	21.0
Within methods	<u>120</u>	<u>4563.0</u>	38.0
	124	4646.8	

$$F = \frac{21.0}{38.0} = .05$$

## Health Adjustment 11th Grade Females

## Analysis of Variance

Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	4	21.8	5.5
Within methods	<u>120</u>	<u>3243.2</u>	27.0
	124	3265.0	

$$F = \frac{5.5}{27.0} = .20$$

## Social Adjustment 11th Grade Females

## Analysis of Variance

Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	4	100.6	25.2
Within methods	<u>120</u>	<u>6651.0</u>	55.4
	124	6751.6	

$$F = \frac{25.2}{55.4} = .45$$

## Emotional Adjustment 11th Grade Females

## Analysis of Variance

Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	4	25.8	6.7
Within methods	<u>120</u>	<u>6258.0</u>	52.2
	124	6283.8	

$$F = \frac{6.7}{52.2} = .12$$

TABLE VI

Home Adjustment 12th Grade Females			
Analysis of Variance			
Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	5	275.7	55.1
Within methods	<u>144</u>	<u>6046.8</u>	52.0
	149	6322.5	

$$F = \frac{55.1}{52.0} = 1.05$$

Health Adjustment 12th Grade Females			
Analysis of Variance			
Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	5	111.5	22.3
Within methods	<u>144</u>	<u>4542.8</u>	31.5
	149	4654.3	

$$F = \frac{22.3}{31.5} = .70$$

Social Adjustment 12th Grade Females			
Analysis of Variance			
Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	5	55.1	11.0
Within methods	<u>144</u>	<u>8891.4</u>	61.7
	149	8946.5	

$$F = \frac{11.0}{61.7} = .16$$

Emotional Adjustment 12th Grade Females			
Analysis of Variance			
Source	df	Sum of Squares	Mean Square (Variance)
Among means of methods	5	96.5	19.3
Within methods	<u>144</u>	<u>8313.3</u>	57.7
	149	8409.8	

$$F = \frac{19.3}{57.7} = .33$$

TABLE VII

Table of F Values on the Bell Adjustment Inventory:\*

11th Grade-----Males	F Values
Home Adjustment	.82
Health Adjustment	1.09
Social Adjustment	.08
Emotional Adjustment	2.34
12th Grade-----Males	F Values
Home Adjustment	.99
Health Adjustment	.92
Social Adjustment	1.23
Emotional Adjustment	1.25
11th Grade-----Females	F Values
Home Adjustment	.05
Health Adjustment	.20
Social Adjustment	.45
Emotional Adjustment	.12
12th Grade-----Females	F Values
Home Adjustment	1.05
Health Adjustment	.70
Social Adjustment	.16
Emotional Adjustment	.33

\*None of these Values were significant at the 5 percent level.

Typist Mrs. O. L. Donaldson