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A STUDY OF THE EFFECT OF AFTERNOON HEBREW SCHOOL ON THE

ACHIEVEMENT OF 125 PUBLIC SCHOOL PUPILS

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Joseph Fledel Beck, M. A.

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in the

DEPARTMENT OF PSYCHOLOGY

of the

UNIVERSITY OF OMAHA

June, 1953

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CHAPTER I

INTRODUCTION AND HISTORY OF THE PROBLEM

In the beginning of our culture there was no separation of religious from other social functions. Tribal consciousness included tribal religion. Thus, religious ceremonies of early peoples were at the same time economic and political in character. Accordingly, education, which can be thought of as the process of transferring of the cultural achievements of a group to the young generation, had few problems on its hands in those days; the same educational process simply inducted the youth into both sacred and secular functions. The problem of differentiation in education first appeared when an old religion was breaking up or ensountered strong opposition, as was the case in periods of extremely rapid cultural progress. Examples of such periods can be found in Greece of Socrates' time; in the reformation in Europe; in the French Revolution; and in the American Revolution.

The problem then of two educations, secular and religious, is an old one. From Zeligs (13) and Margolis and Marx (8) it follows that in the case of the Jews it is several hundred years old, since it dates back to the period of the Jewish Renaissance in Europe (Germany, Russia) in the 18th Century. This Renaissance is known as the Haskala and was originated in Germany by Moses

Mendelsohn philosopher and grandfather of Felix Mendelsohn-Bartoldi, the composer.

In the United States this problem is also a very old one, even though week day religious school, as such, is only 40 years old. McKibben (9) states that religious weekday school was instigated by Dr. Wirt, Superintendent of schools in Gary. Indiana who conceived the idea of releasing pupils from public school activities on request of their parents in order to enable them to take music lessons, religious instructions, engage in reading or other constructive activities (2). As Coe (2) states further religious bodies took advantage of this opportunity and established religious classes in churches near the schools. The idea was appropriated by other religious communities and has consequently developed into what is known now as "released time". This problem of "released time" along with the problem of teaching religion in public school has been the topic for many vehement discussions ever since the Gary System Bogan. Most of the parties concerned however with this problem are debating "released time" in connection with the legal, constitutional and/or administrative aspect (6). In other words, these discussions revolve around questions like the following: Who are the parties concerned with "released time" instruction? What is school time? Is it compatible with the idea of separation of church and school? Need public policy take account of

tions clearly concern only "released time" religious education. They are hardly asked in connection with afternoon religious school, since these constitute a different type of religious school, which operates after public school hours. Also most of the research the author of this study has encountered in his investigation was done in the field of "released time" religious school. The writer was not able to find reports of any research concerning an afternoon religious school operating after public school hours.

CHAPTIK II

STATEMENT OF THE PROBLEM

The author first became interested in the possibility of a mutual effect between public school and above mentioned afternoon religious school when he noticed a difference between the behavior of some children on week days and their behavior on Sunday when they attended the "afternoon school" in the morning: On Sunday morning the children seemed more relaxed and their performance in class was slightly better. This gave rise to the question of whether lack of public school activities on Sunday might possibly account for that difference in the pupil's behavior. An experiment with Pintner-Durost I. Q. group tests was conducted by the author some time ago to determine the possibility of an effect of public school activities upon afternoon school activities. While there was not a sufficient degree of variation in the scures to establish any definite conclusion, there was an apparent tendency for pupils with an I. Q. of 120 and under to perform better in the morning; whereas the pupils showing an I. Q. of over 120 failed to attain the socres of the first test, which had been administered some two weeks prior."

^{*} This work was submitted as a mid-term assignment in the course of Advanced Educational Psychology at the University of Omaha.

The present study attempts to establish whether or not academic activities associated with attendance of afternoon religious school affects a pupil's work and his achievement in public school.

CHAPTER III

COLLECTION OF DATA

Permission to examine public school records of the children was obtained from the Omaha Board of Education. Permission was granted with the provision that consent of the parents concerned would be secured. Such consent of the parent was obtained by sending out 650 form letters expressing this request. The letters had a detachable portion which the parents were to sign and return. This is in accordance with the laws of the state of Nebraska, which required permission of the parents in any investigation of the children's records. Four hundred and eighty parents responded. In possession of the permission of the Omaha school authorities and the parents, the author proceeded to form an experimental group by recording the I. Q's and the grades in arithmetic, reading, science and spelling of 125 Dundee school pupils attending Hebrew school (any Hebrew school in town). A total of 153 children from Dundee school are attending Hebrew school. Only 125 of these could be matched with pupils not attending Hebrew school on the basis of three selected criteria. The criteria were as follows: public school grade, and sex. A "Control group" formed on the basis of the above criteria consisted of 125 Dundee school pupils, not attending religious school. Subsequently, 125 pairs of pupils were formed, each pair consisting of one pupil from the "Experimental group"

and one from the "Control group" both being of the same grade and sex and having the same or nearly the same I. Q. In only one instance was there an I. Q. difference within a pair as great as five points. In the majority of cases the I. Q's were the same. In a few instances there was a variation of one to four points.

The information needed for the formation of both the "Experimental" and the "Control" groups was obtained from the Permanent Registration Cards and the Cumulative Official School Records (10) of the Dundee school in Omaha. Nebraska. The I. Q. scores recorded on these cards were based on the Pintner-Cunningham Intelligence test given to the third grade and on the Kuhlman-Anderson Intelligence test administered to the remaining grades (4 to 8 inclusive). Table I on the following page lists the distribution of T. Q's for both the "Experimental" and "Control" groups. It is seen that these two groups closely approximate each other. Table I also lists the percentage distribution of I. Q's in the general population according to the composite L-M standardization group for the Revised Stanford-Binet Scales. It is seen that 90.4% of the general population fall between the I. Q's (80-139) while these I. Q. limits constitute the range of the groups considered in this study. It is also apparent that in the range of 100-119 the 41.6% of the general population is contrasted by 71.2% of the groups under investigation, while in the lower most and the upper

most ranges the general population figures slightly ex-

DISTRIBUTION AND RAWSE OF I. Q'S
FOR
EXPERIMENTAL AND COMMOL OROUPS

		GR OUP			
	zperi- mental	A of	Control	% of Total	Approximate % in Gen. Population
130-139	1	0.3		0.8	3.2
120-129	11	3.8	9	7.2	8.2
110-119	33	26 .l.	33	26.14	10.1
100-109	55	14	56	144.3	23.5
90- 99	23	10.4	26	20.8	23.0
80- 89	2	1.6	0		14.5
Total		100.00	125	TW.W	
Rango of 1	. Q's 87	-132	90-136	}	
Median I.	4	200	105		
$S.D = \Sigma X^2$		8.7	8.9		

^{*} Adapted from Cates, and others. Educational Paychol-DEJ. The MacMillan Company. New York. 1950, p 240.

A complete list of paired pupils, according to grades, is given in Appendix A. In this list the names of the pupils have been omitted and numbers used instead, as was stipulated by the school authorities.

Achievement of each pupil was represented by one of the grades on the following five point seale:

1--Exceptional

2--Distinct improvement

3--Usual for age and grade

4--Below expectation

5--Improvement needed

Mean Achievement Ratings of both "Experimental" and "Control" groups in the four subjects under consideration are shown in Table II.

ACHIEVEMENT RATINGS OF THE EXPERIMENTAL AND CONTROL GROUPS IN THE FORM OF GRADE POINT AVERAGES

	Mean	Grades	Mean Deviation
Sub ject	Exper. Group	Control Grou	p Md
Arithmetio	2.13	2.52	-0.39
Reading	2.08	2.16	-0.08
Science	2.27	2.81	-0.59
Spelling	1.87	2.18	-0.31
		ar if our membershelmingstar start and a s	

CHAPTER IV

TREATMENT OF THE DATA AND RESULTS

As soon as the 125 pairs were formed, the names of the pupils were replaced by numbers. Thus numbers 1, 3, 5, 7....249 (N-1) represent pupils of the "Experimental" group; the numbers 2, 4, 6, 8.... 150 (N) represent pupils of the "Control" group. "D" or the difference in the achievement grades of two members of a pair was arrived at by subtracting the mark of the "Experimental" pupil from the mark of the "Control" pupil in each of the four subjects. Thus a positive value of "D" indicates that the "Experimental" pupil had a higher mark in the given subject; a negative value of "D" indicates that the pupil of the "Control" group had a better mark in that given subject. The Mean deviation, MD, was positive, $\frac{\Sigma D}{N} > 0$. indicating a slight superiority in the marks of the "Experimental" group in all four subjects. The sum of these differences for these subjects is shown in Table III.

TABLE III

DIFFERENCES BETWEEN MEANS OF EXPERIMENTAL
AND CONTROL GROUPS
FOR WHICH SIGNIFICANCE HAS BEEN CALCULATED

		Valu	ies of t	Neces	sary fo)Į°
Achievement Ratings			Signif	'icanc	0	
Being Compared	ΣD	t	Level:	5%	2%	1%
Arithmetic	49	3.25			and the second seco	and the second second second second second
Reading	13	1.00		1.98	2.36	2.62
Science	18	1.55		-	_	
Spelling	34	2.45				

between the achievements of the "Experimental" group and those of the "Control" group is positive, indicating slightly higher average marks on the part of the "Experimental" group. This difference is real and significant at the one percent level (in 99 cases out of 100) in arithmetic, where "t" was found to be equal to 3.25 and at the two percent level (in 98 cases out of 100) in spelling where "t" is equal to 2.45. In a specimen of 125 cases the values of "t" necessary for significance at the 1% and 2% levels are 2.62 and 2.36 respectively. The difference in reading and in science, although positive, is not statistically significant: "t" for these subjects was found to be 1.00 and 1.55 respectively, which is below the 90% probability level for 126 cases.

Computational procedure necessary for determining the significance between means when the differences between scores are used, is shown in Appendix B.

Since the data were paired, the following formula was used to establish whether or not the difference is statistically significant:

$$\sum_{(\Sigma D)^2}$$

N represents the number of pairs

D is the difference between grades in each pair

CHAPTER V

SUMMARY, CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

Summery

In this study an attempt was made to establish the effect of afternoon Hebrew school attendance on the public school achievement of the pupil. For this purpose 125 public school pupils attending Hebrew school were matched with the same number of public school pupils not attending Hebrew school. Subsequently, the subjects were paired on the basis of I. Q., grade and sex, and their achievement grades in arithmetic, reading, science and spelling were compared. The "Experimental" group showed a slight superiority in all four subjects. The significance of these differences was calculated and "t" values of 3.25 in arithmetic and 2.45 in spelling were obtained. These were significant at the 1% and 2% levels respectively. The differences in reading and in science were not significant.

Conclusions

The following conclusions seem justified:

l. Attendance of afternoon religious school had no visible detrimental effect upon the achievement of the pupils of the "Experimental" group (those attending Hebrew school) in their public school work, since in the four subjects under consideration the "Experimental" group showed even slightly higher average grades than

the "Control" group.

2. The results of this investigation do not support the belief that afternoon religious school interferes with public school activity.

Suggestions for Further Research

The writer is fully aware of the fact that the results of this investigation do not constitute sufficient evidence to justify an opinion in favor of afternoon religious schooling. This study is merely a step in the direction of clearing up a long standing debate on the subject of relations between public and religious schools. More research and evidence is needed before there can be any settlement of this debate.

In this study pupils of one public school, as well as of one type of afternoon religious school, namely Hebrew school were used. This implies a more or less limited range of socio-economic background of the subjects used, if the latter factor is to be inferred on the basis of the location of residence. Investigations following a similar pattern, but conducted in different public schools in different parts of the city and or country and involving afternoon school of different types and or religious denominations might reveal more facts important in dealing with the over-all problem of public school - afternoon school relationship.

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 on file at the office of the principal of the
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 Modern Times, New York, Bloch Publishing Company,

 1950, Pages 151-176.



APPENDIX A

A COMPLETE LIST OF PAIRED PUPILS ACCORDING TO GRADES

		GRADE 3	SUBJECT	MARKS	
PUPILS NO.	I. Q.	ARITHMETIC	HEADIN	SCIENCE	SPELLING
2	101 101	5	2 1	3	3 2
3	95 96	<u>-2</u>	2 2 0	3	- <u>1</u>
5	110 108	3	3 52 2	3 0	2
8	95 95	1	- <u>1</u>	1 0	- 1
10	110 110	3	3	3 3	3
11 12	102 102	3	4	3	<u>2</u>
13 11,	108 107	<u></u>	3 3	3	33
15 16	111	3 1 2	3 1 -2	3 -2	3 -2
17	97 97		3 1 -2	3 1 -2	3 1 -2
19 20	132 132	<u>2</u>	$\frac{1}{0}$	2 2	1
		GRADE 4			
21 21	103 106	<u> </u>	3	2	3 -2

GRADE 4 (Continued)

PUPILS NO.	I. Q.	ARITHMETIC	READING	SCIMPOR	SPELLING
23 21 ₊	105 105	3	10	3	3
2 5 26	109 109	3	- <u>1</u> -	3	1
27 28	121 121	$\frac{1}{0}$	-1	- <u>1</u> 5	2
30 30	113 113	1 2	$-\frac{1}{0}$	$\frac{1}{1}$	$\frac{1}{0}$
31 32	87 93	4	3	3 2 -1	4
33	108 107	- 3	$\frac{1}{0}$	3 3	1 2
35 36	96 99	1 2	1 3 2	1	1 3
37 38	97 98	$\frac{\frac{1}{2}}{1}$	4	1	3
46	113	1 3		1 3	1 -}
112	117 115	-2	1	3	$\frac{1}{0}$
<u> </u>	10½ 105	$\frac{1}{2}$	1	2	$\frac{1}{0}$
45	109	<u>.</u>	- 1	3	1 0

GRADE 4 (Continued)

PUPILS NO.	1. 9.	ARITHMETIC	READING	SCIENCE	SPELLING
43	94 94	4	3	3	5 -3
49 50	107 108	$\frac{1}{2}$	1 2 1	3	3
51 52	102	3	$\frac{1}{\frac{3}{2}}$	3	- 1
53 54	100 99	3	3 3	3 0	5 5
55 56	103 103	3 3	3	3 0	4
57 58	95 95	55	3 0	3	$\frac{3}{3}$
59 60	106 106	$\frac{1}{2}$	4 -3	3 2	3
61 62	108 108	$\frac{1}{0}$	1	3	1 0
		GRADE 5			
63 64	113 111	1 3	3	3	3
65 66	100 100	<u>.</u>	3 -1	3	2
6 7 68	103 102	1	2 2	3	3
69 70	111 108		<u>-1</u>	3	-1

GRADE 5 (Continued)

STIBALIOT MARKS

PUPILS NO.		ARITHMETIC	READING	SCIENCE	SPELLIM
72	107	3	5	<u></u>	3
73	97 97	3	3 -	3 3	3
75 76	105 105	3	3	3	3
77 78	100 100	- <u>-</u>	3	3	3
79 80	101 102	<u> </u>	3	3	3
81 82	101	1 	3	3	3
83 84	97 97	3	3	4	3
8 5 86	106 107		3	3	3
87 88	111	<u> </u>	3	1	1
89 90	98 9 8	3	3		3
91 92	113	3	1	3	1
93 94	105 106	40000	3	2	

GRADE 5 (Continued)

PUPILS NO.	I. Q.	ARITHMETIC	READING	SCIENCE	SPALATING
95 96	11/4	de de la companya de	2 1 -1	3	
97 98	117	2	1	3	2
99 100	114	1	1	2	1
101 102	98 99		$\frac{\frac{3}{2}}{-1}$	3	- 1 -3
103 104	100 100	3 1	3	-3 -3	3
105 106	10ଞ 1 0 ଞ	2	3	3	2
107 108	96 97		2	3	3
109 110	104 104	3	4	4. 3. 4.	3
112	87 90	3	2	3 3	2
113 114	112 107	3	3	1	-
115 116	97 99	2	3	3	3
117	122 119	3	3	3	$\frac{1}{0}$

GRADE 5 (Continued)

			and the second second	ALL A LANGE	
PUPILS NO.	22.2.	ARITHMETIC	KEADINO	COLEMOR	SPRINING
120 120	99 99		32	and the same	name of the second of the seco
		GRADE 6			
155 151	107 107	1 0	1 3 2	3	1
123 124	111 109	<u>.</u>	1 -3	3	1 - <u>3</u> -
125 126	104 104	3	- 1	<u>2</u> 2	$\frac{1}{1}$
127 128	101 101	2	- <u>1</u>	2	1 2 1
129 130	102	3	<u>_3</u> _	2	1
131 132	94 90		3	3	3 -3
133 134	95 96	3	2	1 2	3
135 136	113 115	- 1	$\frac{1}{0}$	3	$\frac{1}{0}$
137 138	104 106	<u> </u>	3	C. Z.	2
139 14 0	111	2	3 -2	3	3
7,1 1,1	103 103	3	3	3	3

GRADS 6 (Continued)

PUPILS NO.	<u> I. Q.</u>	ARTTHEETIC	READING	SCIENCE	SPELLIM
143 144	106 107	\frac{1}{5}	3	1 2	$\frac{\frac{1}{1}}{0}$
Tig S	101	<u> </u>	3 1 -2	<u>-</u>	<u> </u>
11 ;3	114	4	\frac{1}{5}	2 2	4
149 150	104 104	2 5 3	3	3	‡
		GRADE 7			
151 152	106 106	<u>2</u> -2	-1	3 2 -1	-1
153 154	125 125	1	1	<u>1</u>	1 2
155 156	117 117	1 1	$\frac{1}{0}$	3	$\frac{1}{0}$
157 158	121	- 1 -	_ _ _ _ _	- 1	
159 160	107 103	5 -2	3 -1	3	3 -2
161 162	113		2	3 -2	3
163 164	110	<u>2</u>	3	<u>-2</u> 5	=1 = 5
165 166	10 <u>i.</u> 105	2	1	<u>.</u>	3

GRADE 7 (Continued)

PUPILS NO.		ARITHMATIC	READIM	SCIENCE	SPELLING
167 168	110	3	-1 -	3	1 0
169 170	106 106	1 	- <u>3</u>	-2	<u>-</u> 2
171 172	91 91	Ž	4	<u> </u>	4
173	108 111	3	3 -2	2	1
175 176	9 7 97	3	4	20	- <u>3</u>
177 178	113	$\frac{1}{\frac{3}{2}}$	3	2 2	$\frac{1}{2}$
179 180	123	$\frac{1}{0}$	3	2 -1	$\frac{1}{0}$
182 181	150 150	-	-	-1	1 1 0
183 184	122	2	$\frac{1}{0}$	2	1
185 186	116	31_		<u> </u>	1
187 188	118 118	2	- 1	<u>.</u>	$\frac{1}{3}$
189 190	117 119	2	2	5 5	1

GRADE 7 (Continued)

PUPILS NO.	I.Q.	ARITHMETIC	READING	SCIENCE	SPELLING
191 192	109 109	4	2 2 0	2 2	$\frac{1}{3}$
193 194	113 113	1	$\frac{1}{0}$	$\frac{1}{0}$	1
195 196	125 127	$\frac{1}{0}$	$\frac{1}{0}$	2 1 1	1 0
		GRADE 8			
197 198	109 108	2 2	$\frac{\frac{2}{2}}{0}$	<u>2</u>	3
199 200	103 104	14 14	3	3	5 3 -2
20 1 20 2	105 104	4	3 3 0	<u>-1</u>	2 -2
50/† 503	112	3 3	1 2 1	$\frac{\frac{1}{2}}{1}$	3 1 -2
206 205	97 95	4	3	3	14
207 208	104 104	4	$\frac{\frac{3}{2}}{-1}$	3 3	4
210 209	100 100	3	$\frac{\frac{3}{2}}{-1}$	3	1. -3
5 15 511	109 108	3 -1	3 -1	3 1	2 -1
213 214	111	3 3	<u>2</u>	3 3 0	3

GRADE 8 (Continued)

PUPILS NO.	The second second second	ARTERISTIC	READING		SPELLIN
215 216	114	2	2	entre generates	1
217 218	110	3	3		1 2 1
550 518	93 93	2	3	3	14 22
555 551	120 119	1 - 0	2	$\frac{\frac{1}{2}}{1}$	3
55] [†] 553	109 107	4	3	2 14	1/3
225 226	105 105	3	2 2	32	1 0
227 228	90 90	3	3	3	3
530 558	96 95	3	3	3	1 3
231 232	100 100	3	2 2	3	3 3
53 7 53 3	116 116	3	5	3	3
235 236	128 126	3	- 2	3	2
237 238	118 119	1 0	- 1 -	1	1

GRADE 8 (Continued)

- P				College Annual Carlement as a resemble	
PUPILS NO.	I.Q.	ARITHMETIO	READING	SCIENCE	SPELLIM
5710 538	101		2 2	3 -1	2 2
21.1 21.2	101	-1	3	4	- <u>\$</u>
5)†† 5 †3	91 ₄ 95	-2-	-2 -2	3	1
245 245	115		-1		
24.7	108 108			-}-	3
520 Spid	129 127	<u>.</u>	<u>.</u>	- 1	1

COMPUTATIONAL PROCEDURE HECESSARY FOR DETERMINING THE SIGNIFICANCE BETWEEN MEANS WHEN THE DIFFERENCES BETWEEN SCORES ARE USED

		ARITHMETI	C READING	SCIENCE	SPELLING
	ΣD	49	13	18	34
	(Σ D)	0.39	0.10	0.1)4	0.27
	(ED)5	2)401	169	32H	1156
	(D)2 N	19.2	1.3	2.6	9.2
	∑D2	259	187	154	228
V	ΣD ²	0.14	0.12	0.11	0.13
	$\Sigma D_{5} - \frac{N}{(\Sigma D)_{5}}$	239.8	185.7	151.4	218.8
	(N-1) = d. f	124	124	124	124
	N (N-1)	15,500	15,500	15,500	15,500
	1	3.25	1.00	1.55	2.45
	Significant at the level of:	(1%) 0.01	NOT SIGN	IFICANT	(2%) 0.02
	Probability t	0.01 (1%)	0.02 (2%) 2.36	0.05 (5%) 1.98	0.10 (10%) 1.66

APPENDIX O

COTT OF THE INTERNATIONAL PRINTS SON ON PARTIES.

James 20, 1943

DOWN Parents:

I have a request to make, and I hope you will be good exemple to give a curereble answer.

One of the teachers in our values forth. He domine to beek, to survive on a respect to beek and the day of the front is about to the front is about the first teacher.

er delived plan is to insortigate the public school schierement of delived actuading supplementary afternoon schools (like relead rank) and sempering it with the schievement of children on attacking a supplementary afternoon school.

It is energed that an identification of any kind meatower of any individual child will be used in the abudy, and thus all oraputations will be previly in a statistical hade. We assume addresses, or any other possible identification will be used.

ir interprise in the study and has skiped public schools, is interprised in the study and has skiped pictures permised on the study and has skiped pictures on be executed by the problem of the control of the control

I will therefore to tak your company for your child's public action from the reserve to be seen by Mr. Book. Flagge eigh and company form below to the discount from Retail 3 Symposium, 40th and Person Etrocky (Jeste) Fabrociae.

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