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A Study of the Influence of Boy Scout Experience on Educational Achievement

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A STUDY OF THE INFLUENCE OF BOY SCOUT EXPERIENCE
ON EDUCATIONAL ACHIEVEMENT

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
Robert Francis O'Bryan
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CHAPTER I

INTRODUCTION AND STATEMENT OF THE STUDY

I. INTRODUCTION

Boy Scouts of America is an organization chartered by the Congress of the United States for the stated purpose of making good citizens of growing boys. Those who administer the organization feel that this is an educative process. Specific goals are established and various procedures, some formal and others informal in nature, are devised to move the boy in the direction of becoming the final product described by these goals. How does the system work?

Structure of The Program

A hypothetical Boy Scout joins the Cub Scouts sometime after reaching the age of eight years. He first learns to recite and understand the meaning of the Cub Promise and the Law of the Pack and is then admitted into a den and pack as a Bobcat. During the year he strives to master a specified list of physical skills, craft projects and citizenship based learning tasks in order to become a Wolf. During succeeding years he works on similar but more advanced tasks in order to become a Bear, a Lion and finally a Webelos Cub. In addition to the specific tasks assigned for each step of his achievement there are additional

elective projects by which he may earn extra recognition in the form of arrowheads to be worn with each badge of rank he attains.

At the age of eleven, the boy becomes a Boy Scout. Learning to recite and understand a new, more sophisticated Oath and Law to guide his conduct, he again begins a climb through several grades of rank (Tenderfoot, Second Class, First Class, Star, Life and Eagle). Each rank is achieved by completing a specified list of tasks involving the learning of new skills or the accumulation of new knowledge. Again, not only does each rank have certain specific requirements that must be met for its achievement, but there is also an elective program through which the boy may receive extra credit and recognition in the form of merit badges.

Purpose of the Program

The skills which Scouting attempts to teach might be criticized as being superfluous or out of place in our modern society. What value is there, it might be asked, in the ability to trail and stalk an animal or to build a fire without matches? Is this not really an inefficient way of getting food or building a fire? When one considers the difficulty of the undertaking and the time consumed as well as many other drawbacks of these primitive methods, would it

not be much more practical to bring along a pound of hamburger and a box of waterproof matches purchased quite quickly and easily at the local supermarket? These might be valid arguments, but on the other hand, if one looked more deeply into the purpose behind each of these feats of skill it would be found that they might achieve definite learning outcomes. As most who have performed either of these tasks would testify, both require a high degree of self-reliance, patience and dedication. Are these not very desirable characteristics, helpful to anyone seeking success in any worthwhile endeavor, for example getting an education?

The scouting program is quite in keeping with many ideas about learning. Two of these often mentioned are definite goals and immediate reinforcement. The goals of Scouting are clearly spelled out for the boy who reads his handbooks and as he meets each of these goals he is promptly given reinforcement in the form of a rank or badge. These and others seem to indicate that Scouting should be a well founded educational program. It also seems possible that some of the learning achieved from Scouting might transfer to the formal school program and result in increased learning achievement there.

II. STATEMENT OF THE STUDY

The purpose of this study was to compare the academic achievement of boys involved in Scouting with that of boys who were non-scouts but who had equal aptitude for learning as measured by standardized intelligence tests. The null hypothesis, that there was no difference in achievement between scouts and non-scouts of equal basic ability, was tested.

III. DEFINITIONS OF TERMS USED

For the purpose of this study the following meanings were implied wherever the listed terms were used.

Scouting. Where used as a proper noun the term refers to the entire movement of Scouting, including its purposes, programs, leadership and membership.

Intelligence. The innate ability to learn as measured, however possible, by standardized intelligence tests. The instrument used for the determination of scores referred to in this study was the California Test of Mental Maturity: Short Form taken during the second grade by the boys studied.

Achievement. The amount of learning accumulated at a given point of time. The achievement scores utilized in

this study were revealed by the National Merit Scholarship Qualification Test administered during the eleventh grade.

IV. LIMITATIONS OF THE STUDY

The major limitation of this study was the lack of depth in the criteria used in matching the groups. The only measure of similarity employed was that of intelligence. No other factors, such as motivation or socio-economic background were considered.

The other important limitation was the size of the sample. In order to control as nearly as possible the variables in learning opportunity enjoyed by the boys studied the project was limited not only to a single graduating class, but also to those boys who had been in the same school system throughout the entire period of time ensuing between the intelligence test given in the second grade and the achievement test given in the eleventh grade. This resulted in the elimination of a large number of individuals from the group originally contemplated for the study and the sample became somewhat smaller than was hoped for.

CHAPTER II

REVIEW OF RELATED LITERATURE

Cronback, in discussing the responsibilities of teachers (schools) to children, stated,

The process of preparing people to live in a society is called socialization. Every group of people,... has some plan for changing the human raw material born to them into whatever special type of adult is needed to make their society run. (3:23)

Burton says of the learning process that it is "...experiencing, doing, reacting, undergoing. The actual pattern to be learned is the chief aim, but a multitude of varied learning activities and outcomes also occur." (2:18) He also says of it that "...it occurs through a wide variety of experiences and subject matters which are unified around a core of accepted purpose." (2:19)

The aims of the Boy Scouts of America and the methods which they employ seem to be in keeping with the statements of these two authorities in American education. In the charter of the Boy Scouts of America, granted by the Congress of the United States of America in June 1916, is the statement that the purpose of the organization is

...to promote, through organization, and cooperation with other agencies, the ability of boys to do things for themselves and others, to train them in Scoutcraft, and to teach them patriotism, courage, self-reliance, and kindred virtues... (6:1)

In the introduction of the Scout Executive's Manual,

discussing the purpose of Scouting, can be found the statement that "Scouting exists to train boys in character, citizenship, and fitness;..." (5:1)

Included in a discussion of the methods and programs of the movement is this statement:

Yet these procedures are only tools, not ends in themselves. What we are really concerned with is the impact of these experiences on the boy himself. (5:1)

In outlining the qualifications of good leaders this statement is made:

A man is a blind leader until he sees that the test of an activity is not how many boys participate or how often it is repeated, but how effective it is in producing the desired habits and attitudes. (5:3)

In the introduction of the Boy Scout Handbook the boys read,

Before long you will be an American man. It is important to America and to yourself that you become a citizen of fine character, physically strong, mentally awake and morally straight. (4:11)

They also find, "Scouting is far more than hiking and camping fun. Scouting is learning to grow into responsible manhood,..." (4:19)

These statements indicate the intent of the scouting movement to make a real contribution to the socialization of the boy. (3:23) The purpose of this study was to determine whether or not such a contribution is actually made, an indication of which might be the degree of their

achievement in school.

CHAPTER III

PROCEDURES USED AND RESULTS OBTAINED

The task was to divide the boys of a 1967 high school graduating class into two groups, scouts and non-scouts, match them as well as possible according to basic ability and then compare their achievement at the end of the high school phase of their education. In the beginning it was hoped that a vertical comparison of scouts by rank achieved could be made as well as a horizontal comparison of scouts against non-scouts, but due to the small number of individuals found in most ranks of the sample that was considered impractical and the idea was dropped. An alternative was to group the scouts in five broad categories and compare the achievement of each to the comparable non-scout group hoping to reveal a pattern of achievement which could be linked to the amount of time spent in Scouting.

I. FORMING THE GROUPS

A list of the boys in the class was taken to the local scout headquarters where a search of the records was made to determine which individuals had been involved in Scouting. Seventy-five members of the class were found to have had this experience to some degree, leaving one hundred sixty-eight boys who had not. (Table I)

TABLE I

NUMBERS OF SCOUTS (BY RANK) AND NON-SCOUTS
IN THE 1967 GRADUATING CLASS

	Entire Class	Final Sample
Scouts	75	31
Explorer	11	3
Eagle	3	2
Life	4	3
Star	8	3
First Class	9	1
Second Class	2	1
Tenderfoot	12	4
Webelos	1	0
Lion	3	3
Bear	9	4
Wolf	8	4
Bobcat	5	3
Non-Scouts	168	31
Class Total	243	62

Note: Several scouts had to be eliminated from the original list when their school records were found to contain insufficient data on intelligence or achievement scores. Several more were then dropped in a later move when no non-scouts with comparable intelligence scores could be found to pair with them. All of the non-scouts of the class who were not matched with scouts in the final sample were dropped from the study.

The next step was to match the groups. In order to establish the basic ability of the boys in the sample it was decided to utilize scores obtained from the California Test of Mental Maturity: Short Form administered at the second grade level. The school records of the boys were searched and those scores recorded for each boy who had taken the test. That step resulted in the elimination of several boys from each group who had failed to take the test. Since the scout group contained the smaller number of boys it was used as the reference group and each scout was paired with a partner having a similar intelligence score selected from the non-scout group. A tolerance of five points was allowed. Where one scout was paired with a non-scout having a higher score, another scout was paired with a non-scout having a lower score. The scouts whose scores could not be matched with those of non-scouts and all non-scouts not similarly matched were dropped from the study. Two groups, equal in size and having identical means (105) of their intelligence scores, were thus arrived at. (Appendix: Table IV)

II. COMPARING THE ACHIEVEMENT

An assesment of the achievement of each group was then made. The students had been given the National Merit Scholarship Qualification Test during the eleventh grade

and from that the total score was listed for each individual in each of the groups. That resulted in another decrease in the size of the groups as a few had missed taking the test, but a final sample containing thirty-one boys in each group remained. (Table I) The mean achievement score was then computed for each group and a t-Test was applied to test the significance of the difference between the two means.

An attempt was also made to group the scouts in five ranked categories for comparison with their opposite numbers in the other group hoping to reveal some pattern of achievement related to time spent in Scouting.

III. RESULTS

As shown in the data summary (Table II) the mean achievement scores of the two groups (97 for scouts and 92.5 for non-scouts) indicated that the scout group did somewhat better than the non-scout group. The difference was not great, however, and, as revealed by the t-Test, not statistically significant. The results of the study, then, supported the original hypothesis that there was no statistically significant difference in achievement between scouts and non-scouts.

The attempted comparison of ranked categories of scouts with their opposite numbers (Table III) did not

TABLE II

ACHIEVEMENT DATA ON SCOUT AND NON-SCOUT GROUPS

Statistic	Scouts	Non-Scouts	t
N	31	31	
$\sum X$	3,006	2,867	
$\sum X^2$	314,682	280,459	
\bar{X}	97	92.5	* .667

*Formula Number 12.8 (1:348)

Not significant (.05t (df = 60) = 2.00) Table VI (1:516)

Note: Individual Scores from which this summation was derived can be found in Appendix, Table V.

TABLE III

COMPARISON OF MEAN ACHIEVEMENT SCORES OF RANKED CATEGORIES OF
SCOUTS WITH THOSE OF COMPARABLE GROUPS OF NON-SCOUTS

Scout Category	Mean Achievement Score			
	N	Scouts	Non-Scouts	*Difference
Explorer and Eagle	5	111.8	82.6	29.2
Life and Star	6	95.2	120.3	-25.1
First Class, Second Class and Tenderfoot	7	78.9	89.7	-10.8
Lion and Bear	7	101.7	92.3	9.4
Wolf and Bobcat	6	102.0	76.3	25.7

*Positive difference indicates superiority of scouts over non-scouts.

reveal a consistent pattern.

CHAPTER IV

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The researcher, a former scout and a scout leader himself, has often wondered about the worth of Scouting for boys. Although this worth, if it did exist, might be evident in a number of ways it seemed that one possible value might be a transfer of learning from Scouting to academic learning in the schools. It seemed likely that if such transfer should occur then boys who had been scouts should achieve more in school than those who had not. The purpose of this study was to determine whether or not that was so. For ease of handling it was hypothesized that there would be no difference in achievement resulting from Scouting.

I. SUMMARY

The boys of the 1967 graduating class of Kent-Meridian High School were divided into two groups, one of scouts and one of non-scouts. The two groups were then matched on a basis of intelligence scores determined during the second grade. The achievement of the two groups was then assessed from scores made during the eleventh grade. Finally, the difference between the mean achievement scores of the two groups was evaluated by applying a t-Test.

The scouts were also grouped in five ranked

categories and compared with their opposite numbers to see if there was any discernable pattern of achievement related to time spent in Scouting.

II. CONCLUSION

There was no statistically significant difference between the achievement of the two groups. There was also no consistent pattern observed when comparing the five ranked categories with their matched groups.

III. RECOMMENDATIONS

The limitations of this study indicate a need for additional research in greater depth. While the results of the study indicated a slight superiority for the scout group the small size of the sample ruled out any statistically significant conclusion to that effect. It might be possible that a future study based on a larger sample would turn up similar but more significant results.

It might also be advisable to consider greater depth in the criteria used to match the two groups. Such variables as socio-economic backgrounds, parental pressures, peer group values or other motivational factors, none of which were included in this study, might very possibly have caused an entirely different outcome.

Finally, the results of this study should not be

viewed as establishing any lack in the overall worth of the whole program of Scouting. Its contributions to citizenship and emotional and physical well-being may very well be quite real and worthwhile and have not been included in any way in this evaluation.

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APPENDIX

TABLE IV

INDIVIDUAL INTELLIGENCE SCORES OF BOYS IN STUDY

Scouts	Non-Scouts
84	84
86	86
89	91
90	90
92	93
92	92
94	94
94	94
95	95
98	98
101	99
101	100
102	98
103	103
103	106
104	104
104	108
105	110
107	107
109	109
110	110
111	111
113	113
114	112
114	113
114	112
118	118
119	119
125	127
129	128
134	130

TABLE V

INDIVIDUAL ACHIEVEMENT SCORES OF BOYS IN STUDY

Scouts	Non-Scouts
64	86
73	85
98	76
62	64
76	94
57	82
125	68
124	71
90	126
117	96
117	86
52	136
108	92
68	71
117	118
86	83
70	104
86	95
115	86
74	69
121	80
82	69
122	52
125	113
148	97
147	127
99	70
73	102
144	106
73	123
93	140