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A Semantic Analysis of Over- and Underachievers

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A SEMANTIC ANALYSIS OF OVER- AND UNDERACHIEVERS

being

A thesis presented to the Graduate Faculty
of the Fort Hays Kansas State College in
partial fulfillment of the requirements for
the Degree of Master of Science

by

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ABSTRACT

An investigation was conducted to determine the relationship between contrasting levels of reading achievement and three psychodynamic factors, identification with parents, relationship with peers, and the value of reading and good grades.

Selection of the Ss was made by statistical methods utilizing data obtained from school records.

The device for testing the hypotheses was a form of the semantic differential administered to the Ss in their homes.

The findings indicate no relationship between levels of reading achievement and parental identification, relationship with peers, or reading and good grades except in one instance in which overachieving males valued reading significantly different than underachieving males.

Further research regarding identification, its nature, its measurement, and its relation to reading achievement is recommended.

CHAPTER I

INTRODUCTION

An analysis of literature concerning reading problems reveals three general approaches in investigating the causes of reading difficulties. The first approach views reading difficulties as caused by poor mechanics used in the actual reading process. The second approach views reading difficulties primarily as a result of maladjustment in the child; for example, if the child is unhappy in his school environment, he may have reading difficulties. The third view emphasizes psychodynamic factors underlying the child's behavior as basic causes of poor reading performance. Research in this area involves the use of clinical methods and techniques in the approach to the reading problems, emphasizing three major areas: parental relationships, peer relationships, and classroom values. In a review of available literature differences were noted between over- and underachievers in these three areas. These differences will be examined further.

REVIEW OF LITERATURE

Parental Relationships

The clinical observations of Jarvis (1953) led her to conclude that reading disability may represent a struggle against identification with the mother by the child. Jarvis (1958, p. 456) reported the following:

Perhaps early development for the future retarded reader is such that the ear is regarded as a passive organ which can be assailed by sounds during the primal scene for which the

listener cannot have the same feeling of responsibility as he would for looking with its active components. He can close his eyes by eye activity, i. e., dropping the lids or averting the glance. He cannot close his ear by ear activity. The ear might be thought of as feminine-passive; the eye as masculine-active. In the reading situation it is as though the reader actually has to rely on sound to further his efforts. With more skill and less fear, we see lip reading rather than an actual vocalization of every word. I have often heard teachers commenting on how remarkable it is that retarded readers can pick up so much information by ear. This may hark back to a time when the first reader was mother and the child listened to fairy tales which are highly symbolic representations of the age-old riddles of birth, sex, and death. Reading disability may therefore represent a struggle against identification with the mother-reader and an attempt to maintain an identification with himself as a child-listener.

McClelland (1953) reported that overachieving college males felt rejected by their fathers, but college males who were not achieving as highly felt that their fathers loved and accepted them. The overachievers rated their fathers as being severe and unfriendly. However, the opposite results were reported for high school overachievers who viewed their fathers as being friendly and acceptant. McClelland explained the discrepancy between the two groups on the basis of different terms used for the rating of father. The college group desired to be independent of the father, and consequently, perceived any help from him as dominating and unfriendly. However, the high school group, living at home, was satisfied to be dependent upon the father, and therefore, perceived him as being friendly.

Jarvis studied severely disturbed, disabled readers, and McClelland studied highly achieving high school and college males.

These groups are not typical of over- and underachievers in general. For example, the identification process of the early adolescent over- and underachiever cannot be predicted to be the same as that of the subjects of Jarvis and McClelland. The normal process of identification for adolescents is to identify with the like-sexed parent (Mowrer, 1950). Jarvis and McClelland's studies offer the possibility, but not the assurance, that a difference in parental identification will be found between over- and underachievers.

Peer Relationships

In a study of retarded, average, and good readers Gann (1945) reports a difference between the retarded and good reader in their awareness of socially acceptable modes. Rorschach test results indicated a higher number of P responses for the overachievers than for the underachievers. Gann interpreted the results to mean that the overachiever was more aware of his social environment than the underachiever. Teachers' reports supported the Rorschach interpretation: they reported the overachieving readers as usually cooperative, helpful, and willing in class, but the underachieving child as usually withdrawn and passive. The underachieving child also seemed resistant and unwilling to participate in group activities. In accord with the teachers' reports is a study by Lewis (1940) who stated that the results of an inventory of personality traits indicate a significant difference between the retarded and the superior achieving group in that the inferior achieving group is less responsive to group situations

than the overachievers. According to Sperry (1936) in a study of children with reading difficulties, the retarded reader often has difficulty in making an adjustment in play or social activities. Regensburg (1931) reported that the successful reading group is outgoing, but the failing group is unsocial and withdrawn.

Classroom Values

According to Witty (1939) the retarded reader is ostracized by his classmates for being a reading failure, but reading brings recognition and satisfaction for those who do it well.

Witty (1939) also reports that grades are a symbol of success or failure: members of the class receiving poor grades are usually rejected, but those with good grades are recognized for their achievement. Since the retarded reader does not receive the symbol of success, he feels rejected and loses motivation for improving his reading.

PURPOSE

The literature cited above has indicated the presence of differences between over- and underachievers in the areas of parental relationships, peer relationships, and classroom values. The purpose of this thesis is to examine these indicated differences between over- and underachievers in an effort to determine the extent, nature, and significances of these differences in their relation to reading difficulties.

CHAPTER II

STATEMENT OF THE PROBLEM AND PROCEDURE

The literature cited above has indicated the presence of differences between over- and underachieving readers in three areas: parental relationships, peer relationships, and classroom values. In an attempt to validate and clarify these suggested differences, three psychodynamic phases will be investigated. They are: identification of the reader with his parent, the relationship between over- and underachievers and their peers, and the value of reading and good grades between over- and underachievers. The following specific hypotheses will be tested for significant differences: (1) Overachievers identify with the like-sexed parent; underachievers do not. (2) Overachievers relate closer to their peers than underachievers. (3) Overachievers value reading and good grades higher than underachievers do.

The purpose of this thesis is to clarify and validate the suggestion of a relationship between the three psychodynamic factors cited and reading achievement.

METHOD

Subjects

Twenty pupils, five male and five female overachievers, five male and five female underachievers, were selected from each of the 6th, 7th, and 8th grades, making a total of 60 Ss.

The selection of Ss was based upon two scores and the grade level listed in the school records. The I.Q. score and the average reading achievement score were used to determine over- and underachievement. The sex, I.Q. score, and achievement level for each overachiever is presented in Table 1; Table 2 presents the same information for underachievers.

Application of the following formula (Bond, 1957, p. 77), used to compute reading expectancy grade level, is the first step in the selection of pupils to be classified as over- and underachievers. The formula is: number of years in school multiplied by the I.Q. score, divided by 100, plus one. Over- and underachievers are defined as those pupils whose reading achievement level is one or more grades above or below their reading expectancy grade level. For example, a sixth grader with an I.Q. score of 100 would have a reading expectancy grade level of six ($5 \times \frac{100}{100} + 1 = 6$). If his reading achievement grade level is 7, then he is achieving one grade level above his expectancy level and would be classified as an overachiever. However, if his reading achievement grade level were five, and his reading expectancy grade level were six, he would be classified as an underachiever.

The Henmon-Nelson Test of Mental Ability was used by the school to measure the intelligence of all Ss used in this study. According to Buros (1945) reliability for the Henmon-Nelson Test ranges between .80 and .90 for elementary children. Correlations of the Henmon-Nelson Test with other widely used tests ranges from .54 to .90. All

TABLE 1

Description of Overachieving Ss in Regard to
Grade in School, Sex, I.Q. Score, and Achievement
Above Expected Level

Grade	Sex	I.Q.	Over- achievement	Sex	I.Q.	Over- achievement
	M	93	1.0	F	104	1.6
	M	133	1.1	F	107	1.5
8	M	146	1.4	F	107	2.3
	M	118	1.6	F	102	1.8
	M	101	2.5	F	122	1.9
	M	128	2.3	F	117	1.8
	M	128	1.1	F	107	1.1
7	M	119	2.6	F	119	1.7
	M	109	3.2	F	112	2.0
	M	131	2.3	F	142	1.5
	M	132	1.8	F	134	1.5
	M	117	1.2	F	127	1.3
6	M	108	1.3	F	133	1.6
	M	130	1.1	F	129	2.5
	M	130	1.6	F	128	1.1

TABLE 2

Description of Underachieving Ss in Regard to
Grade in School, Sex, I.Q. Score, and Achievement
Below Expected Level

Grade	Sex	I.Q.	Under- achievement	Sex	I.Q.	Under- achievement
	M	93	2.5	F	128	2.2
	M	122	2.5	F	114	1.4
8	M	117	2.0	F	109	1.0
	M	122	2.3	F	114	1.3
	M	133	3.9	F	90	1.5
	M	101	2.2	F	108	1.5
	M	95	2.9	F	117	1.5
7	M	124	2.7	F	135	2.0
	M	101	1.6	F	103	1.3
	M	111	1.7	F	97	1.8
	M	126	1.2	F	129	1.6
	M	119	3.0	F	131	1.7
6	M	108	1.1	F	96	1.6
	M	123	2.1	F	113	2.3
	M	124	1.0	F	97	3.6

Ss selected for this study had I.Q. scores of 90 or above. The range, median, and mean of I.Q. scores for each achieving group are presented in Table 3.

The reading score was obtained from the reading achievement section of the Stanford Achievement Test. The mean and median levels of achievement for both over- and underachievers are presented in Table 4.

Materials

A form of the semantic differential which measures connotated aspects of word meanings (Osgood, 1957) was used in this study for measuring differences between over- and underachievers. The theoretical basis of the semantic differential is the idea that a concept or word (stimulus) elicits a connotated, conditioned meaning (response) (Osgood, 1957).

Both the direction and intensity of meanings are measured by the semantic differential. Direction is measured by the polar adjectives of the scale (good--bad, weak--strong, etc.). A person marking the differential must first select the polar adjective that he feels is related to the word or concept being considered. The intensity of the meaning of a word is measured by the semantic space. Intensity ranges in value from very close relation (+2 or -2) to no relation (0) to the concept. The semantic spaces and polar adjectives compose a single scale. An example of the scale is given below.

Good : $\frac{+2}{1}$: $\frac{+1}{2}$: $\frac{0}{3}$: $\frac{-1}{4}$: $\frac{-2}{5}$: Bad

TABLE 3

The Range, Median, and Mean of I.Q. Scores for
Over- and Underachievers

	Range	Median	Mean
Overachievers	93 - 146	120.5	120.4
Underachievers	90 - 135	114	113.3

TABLE 4

The Range, Median, and Mean of Grade Levels of Achievement for Over- and Underachievers

	Range	Median	Mean
Overachievers	1.0 - 3.2	1.6	1.7
Underachievers	1.0 - 3.9	1.75	2.07

The semantic differential has been used to obtain difference (D) scores for comparing two groups for the purpose of testing for differences. For example, if one wanted to determine whether one group of individuals perceives themselves as being more like mother than another group, then one would compute a difference (D) score in order that a comparison between the two groups could be made (Osgood, 1957).

The following procedure for computing the D score is used (Osgood, 1957): (1) Assign the proper value (+2 to -2) to the semantic spaces marked on each scale under the two concepts (Me and Mother) being considered. (2) Determine the difference between the ratings of each paired scale of the two concepts for each individual. (3) Square each difference. (4) Sum the squared differences. (5) Find the square root of the summed and squared differences. This is the difference or D score.

The first hypotheses as stated in the problem is: overachievers will identify with the like-sexed parent; underachievers will not. The definition of identification used in this paper is similar to Lazowick's, who describes the identification process as being somewhat similar to the imitative learning of the child. In imitation the child copies the actions of a parent, and as a result both child and parent behave in a somewhat similar manner when confronted by a certain stimulus. In the identification process, the child becomes conditioned to the meanings held by a parent, and the child and the parent have correspondingly somewhat similar word meanings aroused when confronted with similar word stimuli.

Lazowick (1955) speaks of two methods of obtaining a measure of identification which he calls direct and indirect identification. Direct identification is obtained by comparing the rating of the parents on the concept, Me, to the rating of the concepts, Mother and Father, by the offspring. Indirect identification (Lazowick, 1955; Bieri, 1959) is obtained from the offspring's rating of the concepts, Mother, Father, and Me. It is this indirect identification that is measured to test the first hypothesis of the present study. It was not possible to test for direct identification as planned due to the fact that fifteen sets of parents refused to mark the semantic differential.

The following concepts were used in the present study to test the hypotheses: Mother, Me, Father, My Gang, Reading, and Good Grades. The polar adjectives of each concept are: dangerous--safe, smooth--rough, careless--careful, successful--unsuccessful, boring--interesting, dull--sharp, miserly--generous, insincere--sincere, strong--weak, and serious--humour. The rank order and the left-right positions of the polar adjectives were randomized for each concept to retard response set. A five point scale which has been most successful with children was used (Osgood, 1957).

Procedure

The semantic differential was administered in the homes of the Ss by two female, adult assistants who had received instructions on the procedure for administering the differential. The assistants, working

independently of each other, called at the homes of the subjects where it was explained to the Ss that the test was being made to collect information for a study. If the Ss were willing to take the test, the assistant entered the house and gave a copy of the instructions and the test to the Ss.

Inside the home the assistant read the instructions while the Ss looked at their copy of the instruction sheet. If the Ss asked any questions about the purpose of the test, the assistants were instructed to say that it was a study on how people judge words. If the Ss wanted further information, they were told that the assistants had no further information concerning it. The following is a copy of the instructions used:

The purpose of this study is to see how people judge words. The words to be judged are in capital letters and are called concepts. Concepts are judged by placing an X on one of the five blank spaces. Placing a mark on one of the outer spaces means that you feel the word beside your mark is closely associated or related to the concept.

BABY

Far: _____ : _____ : _____ : _____ : _____ : Near

A mark on one of the spaces next to the outside space means you feel that the word nearest your mark is slightly associated with or related to the concept.

BABY

Near : _____ : _____ : _____ : _____ : _____ : Far

Marking the middle space means you feel that neither word is associated with or related to the concept.

BABY

Far : _____ : _____ : X : _____ : _____ : Near

You are not to judge the concepts in the way you feel someone else would judge them. Judge the concepts the way you feel about them. Do not puzzle a long time before making a judgment. However, do not work so fast that you become careless. Mark down your first impression for each scale. Do you understand how to mark the test? ¹

¹The above instructions are derived from those described by Osgood (1957, pp. 82-84).

CHAPTER III

RESULTS

The first hypothesis, overachievers identify with the like-sexed parent; underachievers do not, was tested to determine whether or not the two achieving groups were significantly different.

A test for significance between over- and underachieving males was made, resulting in no significant difference ($\chi^2 = 0$). Also, a test for significant difference between over- and underachieving females resulted in no significant difference ($\chi^2 = 0$).

An analysis of the data grouped according to sex (males versus females) shows no significant difference between the sexes ($P = .50$). Appendix A presents the statistical data concerning identification with parents and achievement level for each S.

The second hypothesis, overachievers relate closer to their peers than underachievers, was tested to determine the presence of a significant difference between the two differently achieving groups. Chi square analysis of the data shows no significant difference between the groups ($P = .70$).

In testing for differences between over- and underachieving males, no significant difference was found ($\chi^2 = 0$). Also, no significant difference was found between over- and underachieving females ($P = .95$).

With the data divided between males and females, an analysis showed no significant difference. However, a tendency toward significance

was found ($P = .20$). Appendix B presents statistical data concerning relationship with peers and achievement level.

The third hypothesis, overachievers value reading and good grades higher than underachievers do, was tested to determine the presence of significant difference between the two differently achieving groups. The data on the concept, Reading, were analyzed with no significant difference present between the two groups ($P = .30$).

An analysis of the data between over- and underachieving males showed a statistically significant difference ($P = .01$). The difference between over- and underachieving females was not significant ($P = .30$).

Analysis of the data between all female and male Ss showed no significant difference ($P = .50$).

No significant difference was found between over- and underachievers in their rating of the concept, Good Grades ($P = .20$).

Also, no significant difference was found between over- and underachieving males ($P = .30$) or over- and underachieving females ($P = .80$).

With the two groups divided according to sex, an analysis was made that showed no significant difference between the two sexes ($\chi^2 = 0$). Appendix C presents the statistical data concerning reading, good grades, and achievement level.

CHAPTER IV

DISCUSSION

The purpose of this thesis was to clarify and validate the suggestion of a relationship between reading achievement and three psychodynamic factors, parental identification, peer relationship, and classroom values. In order to determine the presence of the suggested relationship, the following hypotheses were tested: (1) Overachievers identify with the like-sexed parent; underachievers do not. (2) Overachievers relate closer to their peers than underachievers. (3) Overachievers value reading and good grades higher than underachievers. No results were obtained to support the hypotheses with the exception of over- and underachieving males differing significantly in the rating of reading.

The failure to obtain significant differences between over- and underachievers may be due to the method of S selection. Although the use of group intelligence and achievement tests in schools is fairly common, the results are not always reliable. The administration of individual intelligence and reading achievement tests along with the observation of the Ss behavior and performance enables the examiner to evaluate the performance with greater accuracy. By such a method the determination of the Ss' reading achievement level and consequently his classification as an over- or underachiever would be more reliable than classifying the Ss according to the method described in the present study.

Although an interpretation of the results of this study is questionable due to this possibility of erroneous test scores in the tests administered by the public schools, a secondary finding is noteworthy.

According to Mowrer (1950) the adolescent identifies with the like-sexed parent. If this is so, then presumably the male and female Ss would differ in their identification with their parents, the males identifying with their fathers and females identifying with their mothers. However, the males and females tested did not differ significantly in parental identification in this study. It would seem that either early adolescents do not necessarily identify with the like-sexed parent or an unknown factor is involved; there is the possibility that the result is due to chance.

Another explanation of this may be that the form of semantic differential used in this study may not have accurately measured identification between child and parent. Further clarification of the nature of identification seems necessary before a conclusive evaluation of the use of the semantic differential as a reliable and valid device for measuring identification can be given.

A significant difference occurred between over- and underachieving males in their rating of reading. It is difficult to accurately evaluate this difference due to the possible unreliability of the method of S selection. However, assuming the presence of contrasting reading achievement levels between the two groups of males, Witty's (1939) observation of male underachievers not being able to understand the

advantages of reading, but good readers being able to, is a possible explanation for the difference between the two groups. The over-achieving males value reading more highly than underachieving males for the overachiever understands how to make use of reading materials.

Further research in regard to identification seems necessary before its relationship, if any, to reading achievement can be understood. The developmental process of sex role differentiation as related to reading achievement seems a likely starting point for further research.

CHAPTER V

SUMMARY AND CONCLUSIONS

A discussion of the relationship between reading achievement and three psychodynamic factors led to the development and testing of the following three hypotheses: (1) Overachievers identify with the like-sexed parent; underachievers do not. (2) Overachievers relate closer to their peers than underachievers. (3) Overachievers value reading and good grades higher than underachievers.

Sixty Ss were selected from the 6th, 7th, and 8th grades. A statistical computation involving reading achievement score, I. Q. score, and grade level was made to classify the Ss as over- or under-achieving readers. A form of the semantic differential was administered to the Ss in their homes to test the three hypotheses.

The results failed to substantiate the hypotheses. However, a significant difference occurred between over- and underachieving males' rating of reading. The difference may be attributable to the over-achiever's knowledge of the advantages of reading as opposed to lack of such knowledge by the underachiever. There is also the possibility that the two male groups may be different due to an uncontrolled variable influencing test responses.

The contrast between over- and underachievers is questionable due to possible unreliability of the test scores, the basis of S selection, and as a result, the findings of this study are not conclusive.

A further study based on individual intelligence and reading achievement scores as well as a more adequate measurement of identification, is recommended as a means of validating or repudiating the results of the present study.

APPENDIXES

APPENDIX A

STATISTICAL DATA CONCERNING IDENTIFICATION
 WITH PARENTS AND ACHIEVEMENT LEVEL FOR EACH S

Overachievers: Sixth Grade

Me-Father	Me-Mother	Sign	Sex	I. Q.	Achievement
7.211	3.000	+	M	132	1.8
1.732	2.236	-	M	130	1.6
4.359	4.472	-	M	130	1.1
3.742	3.606	+	M	117	1.2
2.449	4.000	-	M	108	1.3
8.062	8.544	-	F	134	1.5
5.916	3.162	+	F	133	1.6
4.243	4.899	-	F	129	2.5
2.449	2.236	+	F	128	1.1
4.123	4.472	-	F	127	1.3

Overachievers: Seventh Grade

Me-Father	Me-Mother	Sign	Sex	I. Q.	Achievement
5.568	5.831	-	M	131	2.3
6.708	4.243	+	M	128	2.3
3.164	4.583	-	M	123	1.1
3.162	3.606	-	M	119	2.6
2.449	2.646	-	M	109	3.2
8.716	8.246	+	F	142	1.5
5.292	3.873	+	F	119	1.7
4.000	0.000	+	F	117	1.8
2.000	2.000	0	F	112	2.0
2.646	3.000	-	F	107	1.1

Overachievers: Eighth Grade

Me-Father	Me-Mother	Sign	Sex	I. Q.	Achievement
4.472	3.317	+	M	146	1.4
2.000	1.732	+	M	133	1.1
4.099	4.690	+	M	116	1.6
3.000	2.449	+	M	101	2.5
3.673	3.606	+	M	93	1.0
2.000	2.000	0	F	127	1.9
3.162	3.317	-	F	122	2.3
2.828	4.796	-	F	107	1.4
1.414	1.414	0	F	104	1.6
2.830	4.796	-	F	102	1.8

Underachievers: Sixth Grade

Me-Father	Me-Mother	Sign	Sex	I. Q.	Achievement
3.162	3.606	-	M	126	1.2
3.464	3.000	+	M	124	1.0
3.000	2.828	+	M	123	2.1
3.000	3.873	-	M	119	3.0
4.583	4.472	+	M	108	1.1
4.000	6.633	-	F	131	1.7
2.828	5.477	-	F	129	1.6
4.472	2.236	+	F	113	2.3
2.646	1.414	+	F	97	3.6
4.899	5.657	-	F	96	1.6

Underachievers: Eighth Grade

Me-Father	Me-Mother	Sign	Sex	I. Q.	Achievement
1.000	3.742	-	M	133	3.9
5.657	5.292	-	M	122	2.5
5.657	5.292	+	M	122	2.3
2.236	2.000	+	M	117	2.0
0.000	2.000	-	M	93	2.5
2.646	3.317	-	F	128	2.2
3.000	3.162	-	F	114	1.4
4.583	3.606	+	F	114	1.3
5.385	3.742	+	F	109	1.0
4.000	2.828	+	F	90	1.5

APPENDIX B
 STATISTICAL DATA CONCERNING RELATIONSHIP
 WITH PEERS AND ACHIEVEMENT LEVEL

Underachievers

Grade	Male	Female
	0.000	2.236
	3.000	3.000
6	4.000	3.164
	5.292	3.606
	7.616	5.385
	3.606	2.419
	5.657	3.606
7	5.657	4.172
	7.550	5.715
	11.000	6.101
	1.732	1.732
	2.000	2.000
6	3.317	2.824
	3.873	3.712
	4.272	4.000

Overachievers

Grade	Male	Female
	1.732	2.000
	2.236	2.000
8	3.606	3.162
	4.000	3.162
	5.745	4.472
	1.414	2.000
	3.162	2.236
7	4.000	3.000
	4.899	3.162
	5.916	4.359
	1.411	1.411
	4.243	3.317
6	4.796	3.317
	5.916	6.708
	9.110	8.062

APPENDIX C

F
FORT HAYY
E COLLEGE

STATISTICAL DATA CONCERNING READING AND

GOOD GRADES AND ACHIEVEMENT LEVEL

Reading

Grade	Overachievers		Underachievers	
	Male	Female	Male	Female
8	24	22	25	22
	21	25	24	22
	18	19	28	25
	26	17	30	16
	23	23	26	15
7	16	27	33	20
	21	23	20	20
	20	24	10	23
	25	28	30	11
	28	10	35	46
6	12	14	26	26
	12	28	24	15
	15	16	27	18
	22	26	25	26
	20	30	27	16

Good Grades

Grade	Overachievers		Underachievers	
	Male	Female	Male	Female
	12	18	10	22
	12	27	28	28
8	14	24	26	19
	27	14	31	18
	20	26	22	26
	20	28	27	16
	19	8	18	20
7	16	29	21	17
	23	18	30	42
	11	16	18	25
	26	14	27	30
	12	18	18	23
6	22	25	11	17
	24	24	26	25
	18	18	17	18

REFERENCES

- Bieri, J., Lobeck, R., and Galinsky, M.D. A comparison of direct, indirect, and fantasy measures of identification. J. abnorm. soc. Psychol., 1959, 58, 253-258.
- Gann, Edith. Reading Difficulty and Personality Organization. New York: King's Crown Press, 1945, p. 19.
- Gates, A. J. Failure in reading and social maladjustment. J. Natl. Educ. Ass., 25, N. 7 (1936), 205-6.
- Jarvis, Vivian. Clinical observations on the visual problems in reading disability. In Ruth S. Eissler (Ed.), The Psycho-analytic Study of the Child. 13, New York: International Universities Press, Inc., 1958, 451-470.
- Lazowick, L. M. On the nature of identification. J. abnorm. soc. Psychol., 1955, 50, 175-183.
- Lewis, D. W. A comparative study of the personalities, interests and home background of gifted children of superior and inferior achievement. Psychol. Bull., 37, 1940, p. 525.
- McClelland, D. C. et al. The Achievement Motive. New York: Appleton-Century Crofts, Inc., 1953.
- McNemar, Q. Psychological Statistics. (2nd ed.) New York: John Wiley and Sons, 1955.
- Mowrer, O. H. Learning Theory and Personality Dynamics. New York: Ronald Press Co., 1950.

- Osgood, C. E., Suci, G. J., and Tannenbaum, P. H. The Measurement of Meaning. Urbana, Illinois: University of Illinois Press, 1957.
- Regensburg, J. Educational success and failure in supernormal children. Arch. Psychol., N. Y., 1931, No. 129, Cited by Edith Gann.
- Reading Difficulty and Personality. New York: King's Crown Press, 1945, p. 32.
- Sperry, M. E. A comparison of typical cases and evaluation of treatment of problem children with reading disability. Smith College Studies Social Work. 1936, 6, 289-290. (Abstract of Thesis).
- Witty, P. A., and Kopel, D. Educational diagnosis and remedial instruction. In P. A. Witty and E. E. Skinner (Eds.), Mental Hygiene in Modern Education. New York: Farrar and Rinehart, Inc., 1939, 297-322.