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**EGO DEFENSIVE ASPECTS OF AGGRESSIVE BEHAVIOR IN LATENCY
AGED MALE DYSLEXICS**

City University of New York

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EGO DEFENSIVE ASPECTS OF AGGRESSIVE BEHAVIOR
IN LATENCY AGED MALE DYSLEXICS

By

Toni Jo Scott

A Dissertation Submitted to the Graduate
Faculty in Psychology in Partial Fulfillment
of the Requirements for the Degree of Doctor
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1982

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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DEDICATION

This thesis is dedicated to Mrs. Helen Banks Smith and Dr. Irving Handlesman, the two people in this world I love better than life itself. They have each taught me by their example to have faith in the divine. More importantly, they have demonstrated that one can trust in the kindness, strength and courage of humanity which are made uniquely precious by virtue of their existence amid the inherent frailty and anxieties of the human psyche.

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CHAPTER I: INTRODUCTION

The issues raised and the hypotheses that were generated and tested in this study represent an attempt at integration and experimental validation of the clinical observations made by the author in her work with children who manifest organically based developmental reading disorders.

According to DSM-III, developmental reading disorder, or developmental dyslexia is a syndrome which is characterized by "significant impairment in the development of reading skills not accounted for by chronological age, mental age, or inadequate schooling." Children with this disorder typically display a wide variety of characteristics which interfere with effective academic and social functioning. In addition to the various types of deficits in higher cortical functioning which have been observed, deficits in attention, affective lability, impulsivity and hyperkinesis are often a part of the clinical picture (Thompson, 1966; Critchley, 1970).

Several recent investigations in the field point to the presence of rather specific and characteristic emotional sequelae often associated with developmental disorders of reading. Kahn (1969) and Eisenberg (1957) have described the tendency toward severe diffusely patterned anxiety,

passivity, lethargy, dysphoric mood and aggressive behavior which quite often typifies the dyslexic child's functioning. Laretta Bender (1957) has made the following observations: "Children with severe reading disabilities show lags in neurological patterning ... encephalographic patterns are of the dysrhythmic, immature type ... and personalities are immature, impulse-ridden and dependent, so that they are often taken for post-encephalitic, retarded or schizophrenic children."

Explanations for the types of personality configurations and emotional traits exhibited by dyslexic children, as articulated by many investigators, stress the importance of neurophysiological factors in the determination of behavior. They view the affective lability, vulnerability to anxiety and impulsivity which these children frequently display as being, at least in part, attributable to dysfunctions in cortical-subcortical relations and damage to the inhibitory functions of the higher integrative centers of the brain (Kahn, 1969). Although there is general agreement that explanations for the behavior of dyslexic children must take into account the environment

in which the behavior occurs and the meaning of the disordered functioning and of the environment to the child, these crucial behavioral determinants have not been thoroughly explored.

In the present study, issues related to the psychological meaning of dyslexia to the dyslexic child were addressed. An attempt was made to show that certain characteristic behaviors associated with these children may be viewed as pathological compromise formations, which serve a defensive function in the warding off of painful affects, engendered by the child's failure to live up to internalized parental standards.

One commonly observed classroom behavior pattern exhibited by the dyslexic child was discussed from this perspective. An experiment was conducted in an effort to provide objectively verifiable data to support the view that aggressive behavior in dyslexic children may serve as a defense against feelings of worthlessness, helplessness and impotence, thereby protecting self esteem.

CHAPTER 2: THEORETICAL BACKGROUND AND SELECTED RESEARCH

In 1968 the Research Group on Developmental Dyslexia of the World Federation of Neurology agreed to the following definition in regard to specific developmental dyslexia:

"It is a disorder manifested by difficulty in learning to read, speak, spell and write, despite conventional instruction, adequate intelligence and socio-cultural opportunity. It is dependent upon fundamental cognitive disabilities which are frequently of constitutional origin."

Current studies have described a variety of deficits in higher cortical functioning which have come to be associated with the dyslexic child (Mattis et al, 1975; Birch, 1965; Black, 1973).

Deficits in language functioning, visuo-spatial ability, visual-motor integration, graphomotor abilities and visual memory have been isolated as specific causal defects resulting in the dyslexic child's learning difficulties (Silver, 1971; Gomez, 1972). In short, dyslexia is a disorder, which from the cognitive viewpoint, is characterized by deficits in storage, processing and retrieval of visual and auditory information.

Certain characteristic emotional traits and behavior patterns have also been reported in connection with the dyslexic child. In her study of 500 dyslexic children, Edith Klassen (1912) reported that 65% of the children showed symptoms of severe anxiety; 20.6% of the sample were described as withdrawn, passive, distant youngsters who

were unwilling to participate or voluntarily interact with staff members. Aggressive reactions were reported for 14.6% of the children. Their behavior was typified by marked forwardness, hostility, defiance, threatening acts and verbal abuse. Twelve percent of the children studied evidenced what Klassen referred to as "defensive reactions." These children were described as having low self concepts and behavior patterns which suggested extreme sensitivity to any mention of their deficits. Depressive affect was noted in 10.6% of the sample.

Burfield (1948) investigated 116 dyslexic students referred to her reading clinic and found that anxiety, fear and withdrawal reactions were the most frequently observed psychopathological syndromes.

Witty and Kopel (1936) estimated that about 1/2 of the severely retarded readers referred to them for psychological evaluation showed fear and anxiety to such a degree that psychotherapy was provided to relieve the anxiety and increase the self confidence of the children prior to the initiation of remedial services. Bell et al. (1972) found that dyslexic males adopted 1 of 3 adjustment patterns to their reading disability (aggressiveness, negativism or passivity).

Anderson (1957) has reported that retarded readers show significantly more hostility and aggressiveness toward others in addition to manifesting a decreased ability to acknowledge or accept blame. Anderson has described a "revenge" reaction consisting of aggressive, destructive behavior which he views as constituting a compensatory pattern of adjustment frequently used by poor readers. Spache (1957) found that retarded readers show significantly more hostility and overt aggressiveness toward others and less ability to acknowledge or accept blame. They also tended to exhibit passive-defensive attitudes toward authority figures.

Empirical studies involving comparisons between dyslexic children and normals have found that the former have lower self esteem or a more negative perception of themselves.

Larsen, Randall and Jorjorian (1973) found a greater discrepancy between self and ideal Q sorts for learning disabled than for non-learning disabled third and fourth graders. Similarly, Rosser (1974) concluded that language or learning disabled fourth graders possessed a lower self concept than nondisabled students based on comparisons of "real" and "ideal" Q sorts of target behavior by the children and their teachers.

Direct self report studies of self esteem have been done by Harway, Simmons and Halecho (1979). They found that learning disabled children in grades one to three had lower scores than controls in an adaptation of the Coopersmith Self Esteem Inventory.

Seaman (1973) reported a similar finding for first graders using the Children's Self Concept Index. Ribner (1978) compared three groups of children ages 8 to 16: normal readers, dyslexic children in a special class placement and dyslexic children who were eligible for but not yet placed in special classes. Two self concept factors were measured. The dyslexic children had a poorer self concept on school adequacy than did the normal readers. The dyslexic children in regular class settings obtained the lowest self concept ratings.

Black (1974) selected samples of normal and retarded readers from a population of children referred to a hospital clinic because of school difficulties. The mean self concept of the retarded readers was significantly lower than that of the normal readers on the Piers-Harris Children's Self-Concept Test.

While measures of self concept have been used to assess the dyslexic child's self attitudes, measures of locus of control have been used to assess the causal explanations

advanced by the child for his success or failure. The construct locus of control has been used to describe an individual's belief that success or failure is a consequence of his own actions or results from factors beyond the individual's personal control. A belief in "internal control" indicates that outcomes are perceived to be the result of one's own effort or ability; a belief in "external control" reflects the notion that outcomes are the result of luck, powerful others, task difficulty or other factors over which the individual has no influence (Rotter, 1966). Locus of control is a construct which indicates an individual's attitudes regarding his relative power or helplessness to effect changes in the environment. Several studies have shown that dyslexic children differ from normals in their locus of control.

Fincham and Barling (1978) found that 9 and 10 year old dyslexics in special classes had lower perceptions of internal control than did normal or gifted children on a measure of generalized locus of control.

Boersma and Chapman (1978) reported that dyslexic children had lower internal scores for success than did normal children on the Intellectual Achievement Responsibility scale (IAR). The dyslexic children were

more likely to attribute their success to external sources such as luck or other people, while the normal children were more likely to view success as a function of their own personal competency and/or effort. This study demonstrated that both dyslexic and normal youngsters tended to attribute failure to internal sources as they grew older. The normal children, therefore, became more "internal" for success and failure as chronological age increased. However, the dyslexic children tended only to internalize failure. Hallahan, Gahar, Cohen and Tarver (1978) investigated locus of control in junior high school aged children and found that dyslexic youngsters were more external than controls on both the Intellectual Achievement Responsibility scale and the Nowicki and Strickland measure of generalized locus of control. Pearl, Bryan and Donahue (1979) assessed the locus of control of dyslexic and normal achievers in grades 3 through 8. Their results were consonant with the findings of Boersma and Chapman, thereby extending the generalizability of the latter's findings to a more advanced developmental period.

The anomalies in self esteem and the attribution of success to external realistic or magical sources of power which the literature suggests is evidenced by dyslexic

children seem logical given the daily pattern of failure and frustration which they often face within the classroom. Current theories advanced by several experts suggest that the emotional sequelae, commonly associated with dyslexia, be viewed as secondary neurotic reactions engendered by the child's classroom failure experiences (Critchley, 1970; Rome, 1970). While it appears evident from the body of research generated in the past decade that neurotic conflicts are not the primary causal factors producing the reading and various other learning problems associated with dyslexia, the relegation of the dyslexic child's characteristic emotional difficulties to the realm of "neurotic reactions" may prove to be an oversimplification. The term neurotic reaction implies the mobilization of neurotic defense patterns in the face of stressful or frustrating environmental demands. Certainly, few would dispute the fact that dyslexic individuals in academic situations are often subjected to environmental demands which they cannot meet and may therefore develop neurotic coping mechanisms. However, for the dyslexic child the frustrating and stressful environmental demands of a normal academic setting may have a deeper significance. The child with dyslexia encounters stressful classroom

failure experiences at a period in his life which is coincident with the development of rather important functions of the psychic apparatus. Since most children from western cultures begin formal education at age 5, the failure experiences of the dyslexic child begin to occur at the height of the oedipal period and may, therefore, having some bearing upon superego formation.

According to Hartman and Lowenstein (1961) one of the factors influencing superego development is the degree of maturity which the child's ego has reached at the time his superego is formed. They state that the level of intellectual development and the development of language must be considered as significant factors.

The crucial relationship of optimally functioning language capabilities to superego development has also been addressed by Isakower (1939) who states the following:

Just as the nucleus of the ego is the body-ego, so the human auditory sphere as modified in the direction of a capacity for language is to be regarded as the nucleus of the superego ... The superego functions like a psychical organ of equilibrium and differentiation of speech is necessary for this. Speech is the means by which impressions of the world are comprehended and ordered. p. 22.

The focal problem for the dyslexic child is precisely his capacity to use words. As Lloyd Thompson (1973) has stated, "Difficulty with words and the letters therein, whether spoken, written or read is the essence of dyslexia." Therefore, the condition of dyslexia might be viewed as a factor which interferes with normal superego development and, therefore, normal development of the psychic apparatus.

Hartman and Lowenstein (1973) further contend that another essential factor in superego formation is the degree of objectivation achieved in inner and outer perception and in thinking. Disturbances in outer perception, faulty perception of figure and ground size distortions and spatial orientation difficulties have been consistently reported in the literature and comprise one of the major types of processing deficits which defines the dyslexic syndrome (Mattis, French, Rapin, 1975).

Superego development according to Freud's formulations occurs at the end of the phallic phase as a result of the solution of the oedipal object relationships. The superego comprises the child wish to be like the parents (ideal formation) and to comply with parental prohibitions and demands (Lampl-De Groot, 1961).

Studies concerning locus of control of dyslexic children compared with normals indicate that both groups tend to attribute failure to internal sources as age increases. These studies suggest that there may be no significant differences in the internalization of the self criticizing functions of the superego between normals and dyslexics. However, these same studies tended to show that dyslexic children failed to internalize notions regarding their personal competency and power. Success was attributed to external magical sources or powerful others. These notions regarding power and competency are similar to those of normal children at the oedipal phase and conform to ego ideal contents of this developmental period (Jacobson, 1954).

In normal development, the oedipal child's self esteem rests on the idealization of his parents. He attributes to them magical powers of omniscience and omnipotence in which he himself partakes. During this phase, the child identifies himself with the parent of the same sex in order to replace him or her with the other parent. At the end of the oedipal phase the child more or less accepts reality by recognizing his powerlessness and the impossibility of being the mother or father's lover. The attachment to the parents is desexualized and a similar change takes place in the ego ideal.

As Lampl-De Groot (1961) states: "The contents of the ego ideal are no longer exclusively: "I am as potent in sexual life and in other achievements as the parents." The ideals are partly transferred to attainable goals: learning, development of bodily and mental skills, understanding of life in general. Therefore, these "attainable" goals involving mastery of physical and cognitive skills become the yardstick by which the child measures his or her power. The child's ability to achieve these goals in reality becomes the well spring for his feelings of self esteem and gradually enables him to give up his magical omnipotent fantasies (Jacobson, 1954). For the dyslexic child, the neutralization of ego ideal content and internalization of ideal standards of academic competence and physical skill may not function primarily as conflict reducing internal structures. In fact, the stage may be set for further conflict. The condition of dyslexia may to a greater or lesser degree prevent the child from living up to internalized standards regarding academic competence and physical skill. The result would be intraphysic conflict and the possible development of neurotic symptomatology.

The rather common aggressive classroom behavior patterns exhibited by the dyslexic child might be viewed in this light. Clinical material elicited in the author's treatment of dyslexic children as well as data from classroom observations appear to lend support to the notion that the dyslexic's aggressive behavior may serve a defensive function, protecting the child from feelings of helplessness and worthlessness. In analyzing the aggressive behavior of dyslexic children referred for treatment and evaluation, the author has observed a pattern of seemingly purposeful hostile-destructive behavior similar to that reported by Anderson (1957). For example, during a reading lesson, one particular child observed, continually dropped objects onto the floor, then loudly announced this occurrence. This pattern was repeated until the teacher reprimanded the child. After being reprimanded the child refused to participate in the lesson. Another child observed, tore the ditto sheets that were given to him, then refused to attempt the classwork because the ditto sheet was torn. The complexity and purposefulness of the aggressive behavior does not appear to be explainable solely in terms of the frustration-aggression hypothesis proposed by Dollard, Miller, et al.

(1939). The dyslexic child's aggressive acts seem to serve more than a cathartic function. Although these acts may provide opportunities for pure impulse discharge of such intensity that the child may appear to be out of control, in many instances these acts are the means by which the child wins control of the behavior of teachers and peers. It would, therefore, appear that there may be a symbolic meaning or motive attached to these various acts of aggression which the frustration-aggression theory fails to take into account (Arlow, 1971).

The notion that aggressive behavior may serve a defensive function in the maintenance of self esteem has been addressed in the psychoanalytic literature as well as the literature of associated disciplines within the field of psychology. Howard Kaplan (1972), a social psychologist, states the following:

An individual's self attitude is a function of his ability to utilize controls and defenses which enhance his capacity to define an event filled with negative implications and consequences in such a way that it does not detract from his sense of worthiness, ability or power ... aggressive response patterns are more or less functional in reducing the severity of self-rejecting attitudes and the subjective distress associated with such attitudes. p. 7.

Boesel (1970) maintains that more aggressive Black youths tend to display a higher self esteem. Shippee-Blum (1959), in a study of high school students, found that the more aggressive students tended to score higher on an adjective checklist measuring self esteem. Poznanski et al. (1970) state that aggressive behavior can serve as a means of avoiding feelings of low self esteem. Anna Freud (1972) states that aggression may serve a variety of aims ranging from discharge to removal of upset or displeasure.

In the present study a comparison was made between aggressive and nonaggressive dyslexic children with regard to scores on measures of self esteem and locus of control. It was hypothesized that the aggressive youngsters would score higher on both types of measures, thereby lending support to the notion that aggressive behavior patterns exhibited by dyslexic youngsters may serve a defensive function in terms of warding off feelings of powerlessness and may thereby serve to maintain more positive self attitudes.

CHAPTER 3: METHODS

This chapter presents the methods and procedures that were used in the study.

Statement of the Null Hypothesis

If the aggressive behavior manifested by some dyslexic children actually serves a defensive function in the maintenance of positive self attitudes, one would expect this to be reflected on measures of self esteem. Similarly, one would expect that this more positive self attitude might be reflected on locus of control measures, wherein attribution of success to internal sources of power would be consonant with a positive competent view of the self. One might, therefore, reasonably suggest that a comparison of aggressive and nonaggressive dyslexics on these two types of measures might provide pertinent data relative to the function of aggressive behavior in dyslexic children. The following are the null hypotheses which were posited for testing:

- H1. There will be no significant difference between aggressive and nonaggressive dyslexics on a measure of self esteem.

H2. There will be no significant difference between aggressive and nonaggressive dyslexics on a measure of locus of control.

Description of the Subjects

The subjects in this study were 41, 9, 10 and 11 year old white male dyslexics from middle class families who had been referred to the Child Development Center at Nassau County Medical Center because of academic failure and/or deportment problems. Children were typically referred to this multidisciplinary diagnostic center by school psychologists and pediatricians throughout Nassau County. Eight of the 41 were also participants in a study involving chemotherapy and reading achievement from the Long Island Research Institute at S.U.N.Y. Subjects were chosen from a pool of previously diagnosed cases that met the age, sex, and SES requirements set forth in the study. This particular age range was chosen because it represented the modal age range of all cases referred to this facility. Of 150 cases selected, 41 agreed to participate in the study. Though we did not systematically study why those who refused did so, several indicated the difficulty of transportation, baby-sitting costs and their dislike of the diagnosis of dyslexia.

Subjects were randomly chosen from a pool of previously diagnosed cases that met the age, sex and SES requirements set forth in the study. This particular age range was chosen because it represented the modal age range of all cases referred to this facility.

The diagnosis of dyslexia was made according to the criteria presented by Mattis et al. (1975) in their discussion of three dyslexic syndromes. Children who scored 2 years or more below grade level on the reading portions of the Peabody Individual Achievement Test or the Metropolitan Achievement Test and who met the diagnostic criteria for one of the syndromes outlined below were considered to be dyslexic.

Criteria For Each Dyslexic Syndrome

I. Language Disorder

- A) Anomia - 20 percent or greater proportion of errors on the Mattis Naming test and one of the following:
- B) Disorder of Comprehension - Performance on Token Test at least one standard deviation below the mean; or

- C) Disorder of Imitative Speech - Performance greater than one standard deviation below the mean on the Spreen Benton Sentence Repetition Test; or
- D) Disorder of Speech - Sound discrimination 10 percent or greater proportion of errors on discrimination of "e" rhyming letters.

II. Articulatory and Graphomotor Dysco-ordination

- A) Performance on the ITPA Sound Blending Subtest greater than one standard deviation below the mean; and
- B) Performance on graphomotor tests greater than one standard deviation below the mean; and
- C) Acousto-sensory and receptive language processes within normal limits.

III. Visuo-spatial Perceptual Disorder

- A) Verbal I.Q. more than 10 points above performance I.Q.; and
- B) Raven Coloured Progressive Matrices percentile less than equivalent performance I.Q.; and
- C) Benton Test of Visual Retention (10 second exposure immediate reproduction) score at or below the borderline level.

Of the 41 subjects tested, 30 met the criteria for the language disorder syndrome, 2 met the criteria for the articulatory-graphomotor syndrome and 4 met the criteria for the visuo-spatial perceptual disorder. Five of the children met the criteria for both the language disorder and visual-perceptual disorder.

Procedure for Group Assignment

The subjects were assigned to one of two experimental groups based on teacher reports of the subjects' characteristic mode of classroom behavior. The judges read teacher reports (see Appendix D) and rated each subject on the basis of a six point scale. They assigned the number 1 to subjects they viewed as exhibiting the healthiest modes of classroom behavior. A rank of 2 was assigned to those deemed moderately healthy and a rank of 3 was assigned to those deemed mildly healthy. Then ranks 4, 5 and 6 were assigned respectively to those subjects whose behavior was deemed to be mildly aggressive, moderately aggressive or severely aggressive. The following criteria were designed according to specifications suggested by Dr. Louis Gerstman.

Criteria for Rank Assignment

1. Subjects who were described in the teacher reports as characteristically engaging in the following behaviors were assigned a rank of 4, 5 or 6, based on the judges subjective evaluation of the severity of the behavior:
 - a) Fighting with peers or teachers
 - b) Arguing with peers or teachers
 - c) Interfering with the work of others
 - d) Passive aggressive behaviors such as dawdling, refusal to interact with peers or participate in classroom activities.

2. Subjects who were described in the teacher reports as having good conduct or good teacher-peer relationship were assigned a rank of 1, 2, or 3 based on the judges' subjective evaluation of the degree of health indicated by the following behaviors:
 - a) Cooperating with teachers and peers
 - b) Participating in classroom activities
 - c) Observing class rules and regulations

Subjects with a rank assignment less than or equal to 3 were placed in the nonaggressive group. Those with rank

assignment greater than or equal to 4 were placed in the aggressive group.

The judges were two M.A. level educational diagnosticians who are staff members of the Child Development Center at Nassau County Medical Center. Each judge has had 12 or more years experience providing diagnostic services to school personnel regarding classroom management. Therefore, both judges had had a wealth of experience with the population that was studied and had made assessments of the effects of various student behavioral manifestations on the learning process as part of their daily professional activities. Their excellent ability to make accurate evaluations with respect to the independent variable was demonstrated by their actual performance. The judges were given a brief training period, with practice material devised for this purpose. However, it should be noted that both judges had worked together closely for a period of 8 years and shared similar viewpoints on the diagnostic implications of various types of manifest behavior. In no case was there ever a confusion between healthy and aggressive subjects. In 63% of the cases their judgments were the same. In 37% of the cases their evaluations were never off by more than plus or minus one. The reliability

coefficient for the judge's ratings ($r_s = .914^{***}$) was significant at the .001 level. A conference was held with the two judges in order to resolve their differences on the 18 cases in which their judgements were not concurrent. The resolutions yielded the following distribution of the 41 cases over the six steps. There were 4 cases in the very healthy category, 5 cases in the moderately healthy category, 7 cases in the slightly healthy category, 6 cases in the mildly aggressive category, 12 cases in the moderately aggressive category and 6 cases in the severely aggressive category. Table 1 presents this distribution.

Description of the Research Instrumentation

Each subject was given the Nowicki-Strickland Locus of Control Scale, the Piers-Harris Children's Self Concept Scale and the Jesness Manifest Aggression Scale. (See Appendix A)

The Nowicki-Strickland Locus of Control Scale is a paper and pencil measure consisting of 40 questions. Subjects were asked to answer either yes or no to each item by placing a mark next to the question. The children's form of the measure was constructed on the basis of Rotter's

TABLE 1Distribution of 'Judge's Ratings

COUNT	HEALTHY			AGGRESSIVE		
	Very	Moderately	Slightly	Mild	Moderate	Severe
	1.	2.	3.	4.	5.	6.
HEALTHY	1. Very	3	1	0	0	0
	2. Moderately	1	3	2	0	0
	3. Slightly	0	2	4	0	0
AGGRESSIVE	4. Mild	0	0	0	5	3
	5. Moderate	0	0	0	2	7
	6. Severe	0	0	0	0	2
Column Total	4	6	6	7	12	6

definition of the internal-external control of reinforcement dimension. According to Rotter (1966), "When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way by an individual, we have labelled this a belief in external control. If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, we have termed this a belief in internal control."

Items of this scale describe reinforcement situations across interpersonal and motivational areas such as affiliation, achievement and dependency. Estimates of internal consistency via the split half method, corrected by the Spearman Brown formula, as reported by Nowicki (1973) were: $r = .63$ (for Grades 3, 4, 5); $r = .68$ (for Grades 6, 7, 8). Test-retest reliabilities were .63 for Grade 3, .66 for Grade 7 and .71 for Grade 10. Bialer (1961) reported a significant correlation between the

Nowicki-Strickland Scale and the Bialer-Cromwell Scale of Locus of Control ($r = .41, p = .05$). The relation between the Rotter and the Nowicki-Strickland Adult Scales was also significant in two studies with college students ($N = 76, r = .61, p < .01$; $N = 46, r = .38, p < .01$). These relations suggest support for the construct validation of the Nowicki-Strickland Scale. This scale has been used in a number of studies across a wide range of subject populations. Nowicki (1971) and Nowicki and Roundtree (1971) found significant relationships between internal locus of control and higher grade point averages for twelfth graders and college students. Roberts (.971) found significant relationships between internal scores and self esteem as measured by the Coopersmith and Piers-Harris Scales for both males and females.

The Piers-Harris Children's Self Concept Scale consists of 80 first person declarative statements. The subject responds yes or no to each statement. Half of the items are worded to indicate a positive self concept. Slightly more than half are worded to indicate a negative self concept. The internal consistency ranges from .78 to .93 and test-retest reliability from .71 to .77 (Bentler, 1977). Correlations with similar instruments are in the

mid sixties and the scale possesses teacher and peer validity coefficients on the order of .40. Studies by Guardo (1969), Farls (1967) and Sisenwein (1970) have employed this scale to measure the self concept of children in elementary and secondary grades.

Subjects were also given 31 items from the Jesness Inventory. These items constitute the Manifest Aggression Scale of this inventory. The Manifest Aggression Scale consists of 31 true-false items suggesting feelings of anger and aggression. A high score on this measure indicates awareness and distress about feelings of anger and hostility. Items are worded in language designed to be comprehended by children as young as 8. Reliability has been only partially investigated. The test manual reports split-half reliabilities collected on a sample of 1862 delinquent and nondelinquent boys aged 10 to 18, ranging from .62 to .88.

Procedures

In order to obtain permission to conduct this study employing subjects from the Child Development Center at Nassau County Medical Center, 25 copies of the proposal, research instrumentation and consent slips were submitted

to the NCMC Grants and Research Committee for their approval. Once obtained, the subjects were contacted by phone and scheduled for a small group administration of the research instruments. Subjects were tested in groups of 3. A large group testing session of 8 subjects was tried initially. However, this approach was abandoned because of scheduling difficulties and the need of this population of children for structuring and guidance during test administration. Parental consent forms were distributed and collected at the time of testing. The subjects were told they were participating in research to determine the attitudes of school age boys. Subjects were advised that they would receive a gift at the conclusion of the testing period as a token of gratitude for their participation in the study.

Testing took place in an office setting. Subjects were cautioned to direct all questions to the examiner. They were told that the right answer to each item would be whatever opinion they held about the particular topic presented. Answer sheets and pencils were distributed to each subject. They were instructed to listen carefully to each statement made by the examiner. Subjects were asked to circle the "Y" next to items they wished to answer

affirmatively and "N" next to items they wished to answer negatively. Several practice examples were given. The examiner then proceeded with the testing proper. Items of the Piers-Harris Scale, Nowicki-Strickland Scale and Jesness were read aloud to the subjects.

At the conclusion of testing, papers were collected and the gifts were distributed. The subjects were thanked for their participation in the study and escorted to a room where their parents were waiting.

CHAPTER 4: RESULTS

An analysis of mean differences between the two groups was performed which include their performance on the research instruments and relevant demographic variables. "T" tests were used for interval scale variables and the Mann-Whitney "U" test was used for ordinal scale variables. Results of this analysis are presented in Tables 2 and 3. No significant differences were found between the non-aggressive and aggressive groups.

TABLE 2Distribution of Parental Variables for Two Groups:

Father's Age, Mother's Age; Father's Occupation,
 Mother's Occupation

	Healthy Group N = 16	Aggressive Group N = 25	Contrasts
Father's Age			
\bar{x}	39.31	38.16	t = 0.72
SD	5.26	4.83	
Mother's Age			
\bar{x}	37.38	36.28	t = 0.73
SD	5.28	4.27	
Father's Occupation			
Blue Collar	3	3	$z_u^a = 1.92$
White Collar	12	12	
Entrepreneurial	0	7	
Manager	1	3	
Mother's Occupation			
Housewife	12	14	$z_u = 1.48$
Blue Collar	2	1	
White Collar	2	10	

^aMann-Whitney U-Tests corrected for ties and expressed as normal deviates.

TABLE 3Distribution of Child Variables for Two Groups

	Healthy Group N = 16	Aggressive Group N = 25	Contrasts
Diagnosis			
Language Disorder (LD)	12	18	
Visual-Spatial (VS)	2	2	
Articulatory			
Graphomotor (AG)	0	2	
LD + VS	1	3	
LD + AG	1	0	
Age in Months			
\bar{x}	121.06	118.32	t = 1.03
SD	8.74	8.06	
Reading Months			
\bar{x}	29.25	26.68	t = 0.20
SD	10.92	7.78	
*Raven A			
\bar{x}	9.19	9.48	t = 0.58
SD	2.04	1.19	
*Raven AB			
\bar{x}	7.44	7.96	t = 0.76
SD	2.28	2.07	
*Raven B			
\bar{x}	6.62	6.88	t = 0.26
SD	2.36	2.70	

* Raven A measures visual perception

* Raven AB measures ability to see part-whole relationships

* Raven B measures nonverbal abstract reasoning.

TABLE 3 (Con't)Distribution of Child Variables for Two Groups

(Piers-Harris & Jesness)

	Healthy Group N = 16	Aggressive Group N = 25	Contrasts
Raven Percentile			
\bar{x}	48.56	51.08	t = 0.26
SD	3.53	4.18	
Nowicki-Strickland			
\bar{x}	17.94	16.52	t = 1.12
SD	3.53	4.18	
Piers-Harris			
\bar{x}	55.81	56.56	t = 0.22
SD	10.16	11.20	
Jesness			
\bar{x}	15.31	17.28	t = 1.06
SD	6.31	5.44	

However, when aggression was treated as a 6 point scale going from mildly nonaggressive to severely aggressive and correlated via the rank difference method with the relevant parental and child variables, there were two significant correlations. Aggression was positively correlated with father's occupation and negatively correlated with the Nowicki-Strickland score. It is of interest to note that there was no correlation between classroom aggression and the Jesness score. Table 4 presents the relevant correlations.

TABLE 4

Rank Difference Correlations of Parent and Child
Variables with Scaled Aggression

Father's Age	-.085
Mother's Age	-.169
Father's Occupation	.269*
Mother's Occupation	.045
Diagnosis	
LD or not	-.024
VS or not	-.136
AG or not	.142
Age in Months	.040
Reading Months	.083
Raven A	.140
Raven AB	.230
Raven B	.166
Raven Percentile	.100
Nowicki-Strickland	-.315*
Piers-Harris	.085
Jesness	.132

*p < .05, one-tailed

CHAPTER 5: DISCUSSION

The original hypotheses posited in this study were that there would be significant differences between aggressive and nonaggressive dyslexic males on measures of locus of control and self esteem. Moreover, it was expected that aggressive dyslexics would score higher on a measure of self esteem and be more internal in terms of locus of control than the nonaggressive dyslexic. It was further suggested that if results of this kind were obtained, they would lend support to the notion that aggressive behavior patterns exhibited by dyslexic youngsters may serve a defensive function in terms of warding off feelings of powerlessness. In short, an attempt was made to provide objectively verifiable data to support the existence of a defense mechanism which was clinically observed. Although no significant differences were manifested in the analysis of group means on the relevant test variables, significant findings were obtained when aggression was considered as a six point scale and rank difference correlations were computed. The significant negative correlation that was obtained between the Nowicki-Strickland and scaled aggression indicates that aggressive classroom behavior is associated with notions of personal competency. Conversely, non-aggressive classroom behavior is associated with magical notions regarding success or failure. These findings are

consonant with the view that aggressive classroom behavior may serve an ego defensive function as regards the dyslexic youngster and may be regarded as a means by which the dyslexic youngster affirms his sense of personal competency and power. Sandler (1981) states "... The individual is constantly obtaining a special form of gratification through his interaction with the environment and with his own self, constantly providing himself with ... something which in the object relationship we can refer to as 'affirmation.' Through his interaction with different aspects of his world, in particular his objects he gains a variety of reassuring feelings." Sandler (1981) further contends that "the need for this 'nourishment' for affirmation and reassurance, has to be satisfied constantly in order to yield a background of safety." Thus by engaging in aggressive behavior the dyslexic youngster may secure feelings of gratification by taking an alternative route as regards achievement in the classroom and become adept at disrupting the educational process when his deficits prevent him from acquiring the usual more constructive academic skills. This behavior may not only provide the child with reassurance of personal competency but may also be viewed as constituting a nonverbal dialogue between the dyslexic child and the people who are part of his current classroom environment. By interfering with the classwork of others

and engaging in other disruptive activities, the dyslexic child conveys his own sense of frustration, confusion and anger at being unable to learn to those around him. By evoking complementary feelings in teachers and peers, he achieves reassurance, if only in a negative sense that his plight has been understood. Aggressive classroom behavior might also be viewed as an attention getting device, by means of which the child secures the reassuring feeling that he is being watched by the teacher. Certainly aggressive classroom behavior alerts the teacher as well as other adults concerned with the child's development to the presence of some difficulty. The child may then be referred for various professional services designed to pinpoint and alleviate whatever difficulty might exist.

There were no significant correlations between scaled aggression and the measure of self esteem which is a finding that appears to contradict those reported in the literature. However, the rating scale that was devised turned out to be one that denoted "healthy" classroom behavior on one end of the scale. There is, therefore, no reason to expect healthy behavior to be more or less correlated with self esteem than aggressive behavior. In retrospect, more useful comparisons from the point of view of testing the original hypotheses might have been made from looking at

the relevant differences that might exist among the children that comprised the three steps at the aggressive end of the scale.

In addition, there was a confounding variable in regard to the particular group of children being studied which might account for the striking similarity between healthy and aggressive dyslexics in terms of mean scores on the relevant tests. Despite the fact that the impression of similarity is enhanced by the reporting of group means, which tend to mask the variability between groups, one third of the children comprising the aggressive group were involved in a special tutoring program designed to rapidly increase reading competency. Given the notion that the healthy dyslexic youngster is one who manages to maintain a sense of his own competence and value in addition to a realistic appreciation of his deficits, one might logically view the "eight" aggressive dyslexic children involved in the reading project as being in the process of acquiring new competency as well as a more realistic appreciation of their deficits. This factor may represent the real underlying identity between groups which in conjunction with the small sample size may have blurred the differences between them when only group means were

considered.

There is a dearth in the current body of literature as to the effect of successful remediation, on the dyslexic child's overall mental health. This is an area which warrants further exploration. Kahn (1969) states that the treatment of choice as regards the emotional concomitants of an organically based learning disorder is to successfully remediate in the area of the disability. However, the mechanism by which symptom formation might be reduced is not specified. Clearly there is a need to investigate the ways in which the classroom experiences of the dyslexic youngster, impinge upon the developing intrapsychic system and possibly determine the course of that development.

Additional Findings

Father's occupation attained a positive significant correlation with scaled classroom aggressive behavior. This finding is in contradiction to findings in the literature which report negative correlations between aggressive behavior and socioeconomic status (Roff, 1972). One implication of the present finding is that the classroom adjustment of dyslexic males may be influenced by identificatory processes with important male figures, especially

the father. It is possible that male dyslexics whose fathers' occupations demand competencies other than reading ability or academic success may experience less subjective distress relative to their reading problems and, therefore, manifest healthier classroom behavior by dint of their identification with father. Certainly a father who is able to support his family by means of an occupation which does not necessitate reading ability would by his very existence reassure his dyslexic son as regards the son's future ability to assume adult responsibilities. Conversely, dyslexic males whose fathers' occupations demand a high degree of academic success may identify with their high achieving fathers but be prevented from attaining academic success because of their learning deficits. These youngsters may then achieve feelings of competency via aggressive behavior. These notions regarding identificatory processes are of course purely speculative but would be useful to explore in future research.

One negative finding that may be helpful to report for the benefit of future investigations is the lack of correlation of the Jesness with scaled classroom aggressive behavior. The Jesness appears to measure that which it

purports to measure, that is conscious distress or recognition of aggressive ideaiton.

The Jesness was selected for use in this study because of its format (true-false) and because an objective measure of aggression other than teacher reports was deemed necessary in terms of the design. The Jesness was given to measure the child's level of aggressivity at the point in time when the other research measures were administered. The teacher reports were viewed as past measures of aggressivity. What seems apparent from the findings in this study is that the Jesness may be a better measure of aggression as related to delinquent behavior, but does not clearly discriminate between groups or individual subjects in terms of aggressive classroom behavior. A more appropriate classroom aggressive scale should be considered for future research in this area.

CHAPTER 6 DISCUSSION OF THE PROBLEMS AND LIMITATIONS

One of the problems encountered in this study was availability of subjects who met the criteria proposed for inclusion in the sample. In future studies these criteria should be changed in order to facilitate data collection on a larger sample.

In future studies a wider age range might be used. Also, it might have been useful to include subjects in kindergarten through second grade. The definition of dyslexia might have been changed to include all those children who scored at least 6 months below grade level expectancies on standardized achievement batteries.

The purpose of this study was to provide objectively verifiable data to substantiate the existence of a defense mechanism that had been observed clinically. Although significant results were obtained of a correlational nature, the study could have been improved by focusing on dyslexic youngsters who evidence varying degrees of aggressive classroom behavior and by substituting projective measures for the paper and pencil measure of aggression.

However, substitutions of projective measures may not solve the essential difficulty in studying this population, which is in fact a problem in measurement. The deficits which these children present in terms of visual perception, and language functioning impede their performance on all types of tests standardized on normal populations, including projective measures. Therefore, even tests like the WISC-R fail to accurately measure the capabilities and or deficits of these children who present such a variability in type and

degree of processing problems. It is for this reason that the diagnosis of dyslexia is made only after a battery of tests on objective measures, has been given since no one measure accurately delineates the dyslexic's functional capacity. Perhaps an alternative approach to this problem of measurement might be to employ only human instruments to assess the subjects on the relevant variables. This would entail enlisting the support of professionals who possess the ability to make the type of clinical assessments required and would probably involve some type of observation or interview with each subject. This approach is obviously beyond the scope of what might be practically attempted in dissertation research efforts because of the time and money that would be involved. However, it is one which might be considered as regards subsidized research.

A significant problem encountered in using paper and pencil tests with this subject population was that presented by the deficits typically observed in these children. Their graphomotor difficulties and sequencing problems necessitate almost one-to-one administration of any measure which requires them to make a written response. Therefore, large group administrations of research instruments should be avoided.

Discussion of the Practical Implications

There were several findings derived from this study which may have practical implications for those providing psychological or educational services to dyslexic children. Scores on the Nowicki-Strickland Locus of Control Scale were used as a screening device to identify children who might be in need of psychoeducational follow-up by Child Development Center Staff. Since there was a significant negative correlation between scores on the Nowicki-Strickland and classroom aggression, parents of children with the lowest scores on this measure were contacted in order to obtain information concerning the child's current classroom functioning. The Nowicki-Strickland might, therefore, be used by educators, researchers and clinicians in terms of its utility as a screening device where there is a need to identify potential problematic classroom behavior for large groups of children. Similarly, a knowledge of father's occupation as regards male dyslexic's might be employed as a technique for balancing rosters in learning disability classes where there is no other information available to indicate the child's history of classroom deportment. Lastly, it is

hoped that the findings in this study may be used in future research efforts to expand the current body of knowledge pertaining to the dyslexic child.

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These consist of pages:

Nowicki-Strickland Locus of Control Scale (Appendix A pgs. 47-50)

Piers-Harris Children's Self Concept Scale (Pages 51-54)

Jesness Manifest Aggression Scale (Pages 55-56)

Nowicki-Strickland Answer Sheet (Appendix B page 57)

Piers-Harris Answer Sheet (Page 58)

Jesness Answer Sheet (Page 59)

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APPENDIX C

CHILD DEVELOPMENT CENTER
NASSAU COUNTY MEDICAL CENTER
2201 Hempstead Turnpike
East Meadow, N.Y. 11554

PARENTAL CONSENT FORM

I hereby give my consent for my child to participate in a research study concerning attitudes of primary school aged boys. I understand that my child will be given a series of paper and pencil tasks to measure these attitudes and consent to their administration. I understand that my child's anonymity will be protected in any publication of the data resulting from this study.

Child's Name _____

Parent's Signature _____

Witness _____

Date _____

APPENDIX D

TEACHER REPORT FORM

CHILD DEVELOPMENT CENTER
NASSAU COUNTY MEDICAL CENTER
2201 Hempstead Turnpike
East Meadow, N.Y. 11554

TO: The Classroom Teacher

School: _____

Grade: _____

RE: Name of Child: _____

Birth Date: _____

The above-named child was evaluated at our Center on
_____. As part of our on-going follow-up
procedures, we are requesting a current school report.

We would appreciate it if you would complete the
attached form to assist us in working with this child.
Samples of the child's work and current achievement data
would be helpful.

We thank you for your cooperation.

Questionnaire

1. Describe the child's problem(s) and how it interferes in the classroom.

2. How long have you noted this problem?

3. What techniques or methods have been used to handle this problem? Please describe in detail, stating length of time alternative techniques have been explored.

4. Have these techniques been successful, partly successful, not at all successful? Please state your opinions for success or failure.

5. Please describe the current classroom environment --
i.e.: structured, unstructured; graded versus non-graded;
individualized versus group teaching; basic curriculum
versus individualized curriculum, etc.

6. Current Achievement Data:

7. Please list curriculum series and grade level in mathematics, reading, spelling, etc.

8. Have you had contact with the parents? In your opinion how does the family view this problem and how are they handling it.

9. In your opinion, what would be the best plan for this child now.

10. Could you please make any additional comments about the child that you think would be helpful to us in our work. (Your feelings about him; his feelings about himself; relationship to classmates, adults, etc.)

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