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Learning disabilities and mental retardation: an investigation into the existence of a continuum or dichotomy

John Paul Pelej

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LEARNING DISABILITIES AND MENTAL RETARDATION
AN INVESTIGATION INTO THE
EXISTENCE OF A CONTINUUM OR DICHOTOMY

by

John Paul Pelej

A RESEARCH PAPER
SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS IN EDUCATION
(EDUCATION OF LEARNING DISABLED CHILDREN)
AT THE CARDINAL STRITCH COLLEGE

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This research paper has been
approved for the Graduate Committee
of the Cardinal Stritch College by

Sister Jonnet Marie Keeshan
(Advisor)

Date May 1, 1975

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PREFACE

Thus, the real test of a classification scheme must be based upon how well it serves the individual being classified. If it tends to merely label him or, even worse, to keep necessary services away from him, it must be considered a false scheme.¹

¹Henry Leland, "The Relationship Between Intelligence and Mental Retardation," American Journal of Mental Deficiency 73 (January 1973): 535.

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CHAPTER I

INTRODUCTION

Overview

The question whether education is a science or an art is of little significance in the application of its principles. Regardless of the arguments that accompany this academic controversy, the fact that the sub-discipline of specific learning disabilities is based on a foundation of science is imperative to the understanding and application of its principles.

The initial historical investigations of the population of children and adolescents that the discipline of learning disabilities now encompasses were conducted by physicians. The evolution of the discipline is marked by contributions from the medical sciences of ophthalmology, audiology and neurology, from the behavioral sciences of psychology and sociology, and from the other science-oriented exceptional educational disciplines of mental retardation, deaf, blind, orthopedically handicapped, speech, language, and behavioral disorders.

The elementary student of learning disabilities soon becomes cognizant of the sharing of terminology, technology, and methodology with the contributing sciences. The principal

axiom of the learning disabilities practitioner, which is shared with the medical practitioner, is one of etiological foundation; find the cause of the problem and prescribe therapy to remedy it. This axiom is further illustrated by Kirk and Bateman in their learning disabilities schematic.

1. Determine the existence of a disability
2. Specifically analyze the disability
3. Examine for possible physical or environmental correlates that may influence the disability and examine for psychological contingencies
4. Formulate a diagnostic opinion and prescriptions for remediation
5. Program for the application of the prescriptions

The more advanced student of learning disabilities finds that the discipline's theoretical roots are found within empirical research. The methodology of research within the learning disabilities discipline is as closely controlled and shares the same definity of tolerances as any discipline within the behavioral sciences paradigm.

The purpose of this preface is to assure the reader that the field of learning disabilities is truly a science in terminology, methodology, theory, and application.

Statement of Problem

Too great haste in defining is almost as much a fault as failure to define at all; and there is a peculiar fallacy which attempts to bar the way to all fruitful discussion by remarking that 'it is all a question of definition, and if the terms had been first defined, all this argument would be unnecessary.' The remark is perfectly true, but it overlooks the fact that any fully adequate definition is the product of thinking, not its point of departure.¹

Fruitful discussion concerning the most basic of learning disabilities definitions is often described as "a question of definition." Unfortunately, the question of definition must be answered before a homogeneous application of more involved principles can be made. This researcher does not postulate that the lack of an adequate definition was the result of haste or failure to adequately define operational terms; but the effect is the same.

Observation indicates that practitioners differ in their definition of learning disabilities. So basic and elementary is this presumption that initial reaction may be one of rejection, but close examination of various theoretical positions concerning the identification of learning disabled learners indicates that a wide variation exists in accepted definitions.

Theorists generally define the learning disabled youngsters according to discrepancies between achievement and

¹James E. Creighton, cited in Robert Plutchik, Foundations of Experimental Research (New York: Harper and Row, 1968), p. 35

potential and/or disorders of the basic psychological processes that manifest themselves in under achievement in areas of auditory reception and expression, visual reception and expression, and arithmetic. However, included in these definitions and the definition accepted by the National Committee on Handicapped Children is:

They do not include problems which are due primarily to visual, hearing, or motor handicaps, to mental retardation, emotional disturbance, or to environmental disadvantage.¹

A strong line of distinction is drawn between the child suffering from process disorders and the mentally retarded child. However, this line of distinction is somewhat slackened by its supporters who acknowledge that this distinction is not exclusive and that "overlaps" exist between these "learning disabled" youngsters, the retarded, and other disability populations.

Other more generic definitions are also accepted that do not make the distinction between intellectually normal and sub-normal populations.

Clearly the discrepancies of inclusion within the basic definitions of learning disabilities will and do cause controversy in application of theory. Today's educators find that the basis of these initial distinctions between learning disabilities and mental retardation may have been at fault. The concept that

¹National Advisory Committee on Handicapped Children, First Annual Report, Subcommittee on Education of the Committee on Labor and Public Welfare, U. S. Senate (Washington, D.C.: U.S. Government Printers Office, 1968), p. 14

the mentally retarded are incapable of learning academic and social skills has been proven to be false. Educators of the retarded have learned that the terminology, diagnostic techniques, and remedial methodology are successfully applicable to the retarded population. Although one may accept the postulation that we have no better means to classify, except on the basis of greatest homogeneity, it is questionable as to whether the definitions discriminating the child with normal intelligence from the retarded child truly differentiate on the basis of major handicap or merely on arbitrary criteria.

Limitations and Definitions

A case could be made either to support or refute the position that the other developmental disabilities of orthopedic involvement, visual impairment, auditory impairment, cerebral palsey, or behavioral disorders may share the same relationship with learning disabilities as does mental retardation. Others may question the significance in the relationship of cultural deprivation or the effects of poor teaching with learning disabilities. The contentions brought forward by these questions may be valid; however, the disciplines of learning disabilities and mental retardation are vastly heterogeneous. Comparison of these two populations is difficult at best because of their diversities. Inclusion of more "labeled" groups of children would complicate any meaningful comparison.

The goal of this research was to investigate the definitions of these two disciplines and to draw objective comparisons

in an attempt to comment upon the stated problem. Throughout this paper, this researcher refers to the categories of "mental retardation" and "learning disabilities." This reference was not intended to foreshadow the conclusions drawn from the investigation; rather, specific reference to the categories represents a following of the present trend of distinction found not only within the research literature but also within our educational system.

Purpose

The purpose of this paper was to examine research concerned with the definition, labeling, and learning characteristics of the learning disabled and the mentally retarded in order to determine if these disciplines represent a continuum of psychological processes disabilities based upon arbitrary criteria or whether the empirical data indicates that these areas are clearly distinguishable. Although emphasis was placed upon current research, thorough review of the initial research culminating in these various definitions was made.

In conjunction with the major goal of this paper, the following questions were investigated:

1. Do discrepant abilities (integrities and disabilities) exist in mentally retarded children
2. Do children with learning disabilities overlap as a group with children labeled "mentally retarded"

3. Can some children currently labeled "mentally retarded" be more accurately described as "learning disabled"
4. How is "potential" of a mentally retarded child adequately measured

Summary

This chapter emphasized the evolutionary progress and current application of the tenets within the learning disabilities discipline and expounded upon the close association between this discipline and other sciences. As a science, learning disabilities shares the same obligations towards adequate operational definitions. However, controversy exists concerning the most basic and elementary definitions of the learning disabilities field. Various theorists and researchers have failed to agree upon a definition of what a learning disabled child is. Differences that exist concern themselves primarily with the intellectual range which is acceptable within the definitions.

The purpose of the paper was to examine research data contributing to the various popular definitions of learning disabilities and current research that may indicate whether the paradigm of learning disabilities should or should not include those children presently labeled as "mentally retarded."

CHAPTER II

REVIEW OF RESEARCH

Introduction

Logic would dictate that an investigation into the literature relevant to the existence of discernible distinctions between the categories of learning disabilities and mental retardation would begin by a review of empirical research comparing various traits of children found within these categories. Comparative studies of this orientation are elusive if existent within the literature from 1956 to the present. The question may be raised as to how the theories which are being investigated are substantiated. The word "theories" foreshadows the answer to this query. If, in fact, comparative studies of this type do exist, they would be of little direct relevance in the investigation of the problem. Research articles of this type would presuppose to the existence of distinguishable differences between the categories of learning disabilities and mental retardation. The point that is made is that the categorical distinctions may be presupposed and based upon arbitrary criteria established by theorists in the field. Literature empirically substantiating the postulations of these theorists is also elusive.

An investigation into the existence of a continuum or differentiation between our described categories is destined to evaluate the theories, and the logic behind the theories, in view of current literature concerning the etiology, learning processes, and instructional needs of the children in question.

Overview of Learning Disabilities

Learning Disabilities

The history and development of the learning disabilities discipline is well documented and readily available to the reader. For this reason only pertinent highlights of this development will be mentioned here.

Learning disabilities as a comprehensive discipline began in this country in 1947 with the appearance of Psychotherapy and Education of the Brain Injured Child by Alfred A. Strauss and Laura E. Lehtinen. Strauss and Lehtinen define the "brain-injured" child as:

. . . the child who before, during or after birth has received an injury to or suffered an infection of the brain. As a result of such organic impairment, defects of the neuromotor system may be present or absent; however, such a child may show disturbances in perception, thinking, an emotional behavior, either separately or in combination. This disturbance can be demonstrated by specific tests. These disturbances prevent or impede a normal learning process. Special educational methods have been devised to remedy these specific handicaps¹

¹Alfred Strauss and Laura Lehtinen, Psychopathology and Education of the Brain-Injured Child (New York: Grune and Stratton, 1947), quoted in Janet Lerner, Children With Learning Disabilities: Theories, Diagnosis, and Teaching Strategies (Boston: Houghton Mifflin, 1971), p. 14

Strauss characterizes these children as being inflicted with exogenous impairments rather than endogenous impairments (impairments that are the result of heredity and/or genetic structure) thereby establishing a category of handicaps that excluded those children who had at that time been classified as mentally retarded. Strauss' exclusion of the retarded is of significance as is his identification of a population of children in need of special instruction, his claim that specific differential diagnoses of learning processes can be accomplished by the use of specific tests, and that the organic impairments can be remedied through use of varied educational approaches. These may well be described as the underlying tenets of the learning disabilities field of today.

Strauss' work had the further effect of initiating intensive investigation of this "newly identified" child which over the years has fostered the development of often contradictory nomenclature to describe this child.

McDonald investigated the discrepancies found in today's nomenclature and noted that:

. . . there were almost as many different populations of children as there are people working in the field.

Not only was there a population problem, but there was also a semantic problem. Thus far thirty-five persons, who answered the questionnaire have given twenty-two terms which one or more of them use as an exact synonym for the title 'Children with Learning Disorders'¹

¹Charles W. McDonald, "Problems Concerning the Classification and Education of Children With Learning Disorders," ed. Jerome Hellmuth, Vo. 3 Learning Disorders (Seattle: Special Child Publications, 1968), p. 373

Cruickshank made a similar observation:

Let us take a look at the issue of terminology as applied to these children. In the literature more than 40 English terms have been used which essentially all apply to the same child. This issue of variance in nomenclature is in itself a significant barrier to the development of a coherent program.

The confusion surrounding the term 'learning disability' is nowhere more evident than in the definition of the problem. The definition of the Council for Exceptional Children, that used by the NIH Task Force, as well as those quoted in briefs prepared for legislative hearings all generally resort to statements of inclusion and exclusion while trying to define the problem. This is expected when such an all-encompassing term is utilized to describe children.¹

McDonald's review of literature and his research, which took the form of a questionnaire, support Cruickshank's claim that the existing definitions regarding learning disabilities are characterized by statements of inclusion or exclusion. McDonald considers the term "learning disorders" to be synonymous with the term "learning disabilities." He notes that the common denominator which was found in the definitions of most respondents was the term "underachievement." McDonald catalogues his respondents as using "learning disabilities" generically, generically with restrictions on its application to children with low average to superior ability, and to respondents who defined according to exclusion/inclusion criteria.

¹William M. Cruickshank, "Some Issues Facing the Field of Learning Disability," Journal of Learning Disabilities 5, No. 7 (August/September 1972): 382

Highlights of McDonald's generic responses include:

. . . this term refers to kids, regardless of etiology, who have specific or general difficulties in learning . . . and who fall further and further behind . . . I don't see it as a population of children or another discrete category of handicapped children. Rather it is a new way of looking at children who have difficulties in school . . . (Trippe)

Children with learning disorders are children, of any intelligence level, who have problems in one or more processes involved in sensory perception, cognition, and modes of performance leading to underachievement in educational performance as related to personal aptitude. (Kass)

Any child enrolled in a public school (including special rooms) who is six months below his age norm on a standardized reading test. (Smith)

Learning disabilities are the presumptive product of disturbances in the normal timetable of development . . . (Gateway School)

We use the term "learning disorders" to include all children whose academic learning is inadequate relative to chronological age regardless of the etiology. (Rabinovitch)

Learning disability cannot be viewed as a distinct clinical entity in itself, but must be approached as a symptom reflecting disorder in one or more of the many processes involved in academic learning. (Rabinovitch)

Children with "learning disorders" are those who - due to brain damage, sensory deprivation, congenital anomaly, mental retardation or psycho-emotional disorder - fail to respond appropriately or in the usual way to common environmental stimuli and reinforcers, or who possess any disruption in the ability to form percepts and concepts according to classical theory. (Trubey)¹

¹Trippe, Kass, Smith, Gateway School, Rabinovitch, Trubey, cited in, McDonald "Problems Concerning the Classification and Education of Children With Learning Disorders" ed. Hellmuth, 3 Learning Disorders, p. 374-376

McDonald's second group of respondents are catalogued as generic but restricted to low average to superior ability.

These theorists state:

. . . children (or adults) with average (or above) intelligence (IQ's approximately over 75).
(Bannatyne)

. . . they show potential for average or above achievement. (Rappaport)

Children are acceptable who demonstrate intellectual capacity and social competence in the range borderline to superior. (Brutten)¹

McDonald's third group of respondents, he claims, are " . . . very idiosyncratic and therefore very confusing" in their establishment of criteria. The respondents cut across established educational categories, and the question of who is excluded and who is included becomes important.

Thus children applicable to receive this label to indicate they are in need of remedial instruction: may also be applicable for other labels for other purposes i.e. emotional disturbed, mentally retarded, socially maladjusted, etc. (Dunn)

Mentally retarded children are included if, on the basis of performance in one of the developmental areas, there is evidence that they have the capacity to achieve in other areas. In general, any child who gives evidence that he is not performing at an expected level of development would be considered as having a 'learning disability'. (?)

. . . this point of view does not imply that a mentally retarded child, diagnosed as such by ordinary mental tests, cannot have a learning disability. If he has discrepancies among abilities, or if he has special abilities and marked disabilities, he could be classified as a child with a learning disability as well as overall mental retardation. (Kirk)

¹Bannatyne, Rappaport, Brutten, cited in, McDonald "Problems Concerning the Classification and Education of Children With Learning Disorders" ed. Hellmuth 3 Learning Disorders, p. 177

. . . The child in question is not mentally retarded according to individual psychological tests . . . (Simiches)

It is not the result of mental retardation . . . (McCarthy)

Children who have learning disorders are those who manifest an educationally significant discrepancy between their estimated intellectual potential and actual level of performance related to basic disorders in the learning processes, which may or may not be accompanied by demonstrable central nervous system dysfunction, and which are not secondary to generalized mental retardation . . . (Bateman) ¹

The evidence gathered by McDonald and Cruickshank support their observations that the field of learning disabilities is victimized by contradictory terminology and indecisive population identification. The concern of inclusion or exclusion of the mentally retarded from the definition of learning disabilities would be of little significance if subscription to the various theories was evenly disseminated or even if one of the more generic definitions was held in popular regard. However, the definition below, which excludes mental retardation, is of consequence since it represents the accepted legislative definition.

Children with special (specific) learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling, or arithmetic. They include

¹Dunn, (?), Kirk, Simiches, McCarthy, Bateman, cited in, McDonald "Problems Concerning the Classification and Education of Children With Learning Disorders" ed. Hellmuth 3 Learning Disorders, p. 379-380

conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include learning problems which are due primarily to visual, hearing, or motor handicaps, to mental retardation, emotional disturbance, or to environmental disadvantage.¹

The definition issued from the National Advisory Committee on Handicapped Children represents an attempt to homologize the various theories that were in high regard in 1968. Kirk characterizes the definitions that preceded this bill as falling into two broad and general categories:

(a) those definitions involving functions of the central nervous system as they relate to the learning disability, and

(b) those definitions placing an emphasis on the behavior or learning disorder without specific reference to the central nervous system etiology (cause).²

In addition to these statements, Kirk contributes:

All of the definitions have a common core even though the emphasis on the central nervous system may be different. The common areas of agreement among the different authors are:

1. The learning problem should be specific and not a correlate of such other primary handicapping

¹National Advisory Committee on Handicapped Children, First Annual Report, p. 14

²Samuel A. Kirk, Educating Exceptional Children, 2nd. ed. (Boston: Houghton Mifflin, 1972), p. 42

conditions as general mental retardation, sensory handicaps, emotional disturbance, and environmental disadvantage.

2. The children must have discrepancies in their own growth (intra-individual differences) with abilities as well as disabilities.

3. The deficits found in a child must be of a behavioral nature such as thinking, conceptualizing, memory, speech, language, perception, reading, writing, spelling, arithmetic, and related abilities.

4. The primary focus of identification should be psychoeducational.¹

Educational authorities support the continued de-emphasization of the involvement of the central nervous system and developmental disorders in the identification and remediation of children labeled as "learning disabled." In the past many authors placed great emphasis in the "minimal brain dysfunction" that they claimed was related to the dyslexias, dysphasias, and dysgraphias of learning disabled children. Although it has been demonstrated that medical evidence of these brain-injuries is difficult if possible to prove, the concern of researchers and parents has not been diminished in their support of the theory that there are etiological foundations to the behavior that the psychoeducational theorists are investigating and remediating.

Eric Denhoff utilizes what he describes as a "Bio-psycho-neurological-deficiency" model in describing the

¹Ibid., p. 44

learning disabled child. Denhoff states that the etiology of the learning disabilities syndrome can be pre-natal such as the result of genetic variables, paranatal such as anoxia, or postnatal such as postnatal infection. He catalogues possible causes of learning disabilities as being familial, fetal encephalitis, anoxia, trauma, metabolic disorders, and post infections. Denhoff excludes mental retardation from his definition of learning disabilities as he draws an example to explain why he feels that the incidence of learning disabilities is rising. He claims that medical technology is able to diminish or arrest the effects of various causes of learning disabilities. In the past, a severely premature baby may have been lost or retarded, whereas today's medicine is able not only to save the life of the baby but minimize the etiological involvement. Today the premature infant may only be learning disabled.¹

In summary, Denhoff describes the learning disabled child's dysfunctioning behavior as falling into the areas of:

1. Attention and concentration,
2. Academic achievement and adjustment,
3. Psychological tests,
4. Perceptual - Conceptual formulation,
5. Speech and communication,
6. Disabilities of thinking,
7. Characteristic physical, developmental, emotional, personality traits.²

Denhoff's emphasis upon medical etiology differs from those theorists that place emphasis upon behavior or learning

¹Eric Denhoff, "Presentation at Prairie School Symposium on Learning Disabilities" (Racine Kiwanis Club, Racine, Wis. April 7, 1975)

²Ibid.

disorders but his characterization of behavior is similar to those subscribing to the behavioral theories which state that behavioral disorders can be arbitrarily categorized as within

1. motor activity
2. emotionality
3. perception
4. symbolization
5. attention, and
6. memory

Overview of Mental Retardation

Retardation is a relevant term. Its prevalence within a society is dependent upon the technical and adaptive requirements it makes upon its population. A primitive society which hypothetically places little need upon technical or adaptive behavior would have a proportionately lower incidence of individuals who could not meet its requirements than a highly sophisticated society, and thereby, the primitive society would have fewer retarded individuals. In a society such as ours, the need for adaptability is great, and naturally a large segment of our population is unable to adapt satisfactorily.

The history of mental retardation research and education is quite extensive. As our Western society progressed, the awareness of individuals who could not cope independently became more pronounced as these individuals became more noticeable. However, the length of history has not precluded

two facts. First, the field of mental retardation has not developed to a point of solidity or stagnancy. Although great progress has been made in terms of etiology, prevention, and education of the retarded, the field is still dynamic. Few of the questions which concern the retarded have been answered irrefutably and those that have been answered have been replaced by new questions as our society has changed. Secondly, the identification criteria is general sub-normal performance. As a result, the criteria vary as society changes but at best the criteria continue to encompass a global and heterogeneous sub-population. Because of the vast heterogeneous nature of our mentally retarded population the nomenclature that accompanies it is quite vast, confusing, and even contradictory. Kirk lists some of this nomenclature:

feeble minded, mentally deficient, dementia, amentia, slow learner, mentally handicapped, mentally retarded, idiot, imbecile, moron, oligophrenia, exogenous, endogenous, educable, trainable, totally dependent, custodial¹

Definitions of mental retardation are concerned with specific identity of a group of individuals. However, they generally are characterized by their attempt to find the single strain of homogeneity within the vastly heterogeneous group.

¹ Kirk Educating Exceptional Children, 2nd. ed.
p. 161

Tredgold defines mental deficiency as:

A state of incomplete development of such a kind and degree that the individual is incapable of adapting himself to the normal environment of his fellows in such a way as to maintain existence independently of supervision, control, or external support¹

The American Association of Mental Deficiency defines mental retardation similarly.

Mental retardation refers to significantly sub-average intellectual functioning which manifests itself during the developmental period and is² characterized by inadequacy in adaptive behavior²

These definitions find homogeneity among the population in the traits of intellectual and adaptive subnormally which occurs during the developmental period. A great deal of research has gone into the investigation of the etiology of mental retardation which is effective during the developmental period. Over 200 causes of mental retardation have been isolated. However, in most cases the physician cannot identify the specific etiology. Researchers have catalogued the etiological factors of mental retardation as follows:

1. Genetic factors
2. Prenatal factors
3. Interpartum and Neonatal factors
4. Postnatal factors

¹A. F. Tredgold, A Textbook of Mental Deficiency, 6th, ed. (William Worden, 1937), cited in, Kirk Educating Exceptional Children 2nd. ed., p. 162

²J. W. Kidd, Mental Retardation 2 (August 1964): 209, cited in, Cathy Covert, Mental Retardation: A Handbook for the Primary Physician (Chicago, American Medical Association, 1963), p. 1

5. Metabolic factors
6. Chromosomal factors
7. Neurological factors
8. Environmental factors

As stated earlier, although progress has been made in identifying various causes of mental retardation, in over 90% of the cases it is impossible to identify the etiology as a result.

In clinical practice, a person is mentally retarded if he has the symptoms of mental retardation in much the same sense as a person is tubercular if he has the symptoms of active tuberculosis. Mental retardation is perceived as a characteristic of the individual which exists apart from its diagnosis. A person may be retarded even if he has not been diagnosed and no one in his social milieu is aware he has the symptoms. There is a tendency for most mental retardation to be perceived as a condition that is biologically determined, chronic, and essentially incurable¹

In the recent past many have associated the various supposed causes of mental retardation with the term itself. For example, a child may be said to be "mentally retarded," thereby implying that he is suffering from the handicapping condition of retardation. Goldstein explains that:

Mental deficiency is basically a physical or constitutional defect. Abnormal, incomplete, or arrested growth of certain cells results in the crippled arm, or the crippled leg. Similarly, although not always as outwardly apparent as in the instance of the crippled leg, deficiencies in brain structure or defects of somatic organization result in mental deficiency.

¹Jane R. Mercer, "The Meaning of Mental Retardation" eds. Richard Koch and James C. Dobson, The Mentally Retarded Child and His Family: A Multidisciplinary Handbook (New York, Brunner/Mazel, 1971), p. 27

Mental retardation is then a symptom of some constitutional disturbance or defect¹

A further postulation of mental retardation is that the retarded are of low overall intelligence and ability. Potter says:

The mentally retarded child . . . presents a low measured intellect and a flattened profile of general academic abilities, i.e., low in all areas of endeavor²

The Problem

The work of Strauss and Lehtinen has had a positive effect upon today's educational system. The development of differential diagnosis and individual remediation of specific deficits emphasizes what Seigel describes as learning disabilities:

Implication to positive action (i.e., What do you do for a child suffering from specific learning disabilities? Why, you teach him of course!)³

The question becomes, why have the theorists within the field of learning disabilities who have attempted to define

¹I. Goldstein, "Implication of Mental Deficiency," Occupational Education 5 (August 1948), cited in, Burton B. Blatt, "Some Persistently Recurring Assumptions Concerning the Mentally Subnormal," Training School Bulletin 57 (August 1960): 57

²Robert C. Potter and Donald C. Orlick, "Learning Disabilities of Pupils With Average Intelligence," Education 91 (September 1970): 92

³Ernest Seigel, "Learning Disabilities: Substance or Shadow," Exceptional Children 34 (February 1968): 433

learning disabilities in a nongeneric sense, chosen to exclude individuals of subaverage intellectual ability, while they include the rest of the intellectual ability spectrum? Rankin states that the "criteria for exclusion is not clear." He also questions why factors of social environment, poor schooling or even sensory impairment were not also excluded.¹

Of further confusion are the claims of the "exclusion" theorists that learning disabilities is not necessarily bounded by definite parameters. Kirk and Denhoff independently state that a retarded child can also suffer "learning disabilities."² Thompson agrees by stating:

A statement is in order, which calls attention to the fact that mentally retarded children are not immune to dyslexia (learning disability, reading disability, minimal brain dysfunction, etc. - call it what you may)³

Although these authors contend that the mentally retarded child can suffer a learning disability, none of them address

Rankin, "Learning Disabilities: What's in a Name,"
Journal of Reading 12 (December 1968): 215

Samuel A. Kirk Personal Correspondence, Interview with Eric Denhoff, Director Governor's Children Center, Providence Rhode Island, 15, April 1975

Lloyd J. Thompson, "Mental Retardation and Dyslexia,"
Academic Therapy (Fall 1971): 405

themselves to the question of whether or not a disabled child can suffer mental retardation.

The problem of investigating whether learning disabilities and mental retardation can best be considered as two distinct categories or as a continuum, is complicated by major obstacles. Of significant influence is the fact that both disciplines, as they are regarded at the present time, are dynamic fields with changing opinions and theories. Of equal significance is the fact that they are both plagued with controversies and discrepancies in terminology. The variances of intradisciplinary emphasis contributes to difficulty of comparison. Which of the variables of etiology, behavior, discrepancies of ability and performance, or variance between specific learning processes should receive greatest emphasis? Finally, can one compare two populations that are so heterogeneous within themselves?

Etiology is receiving less attention in both the fields of mental retardation and learning disabilities. However, cause-oriented authorities in both disciplines have composed nearly identical lists of etiological factors. Both fields list the pre-, para-, post-natal infections and traumas as possible causes. Both fields list genetics, neurological impairments, nutritional and chemical imbalances, experiential deficits, and sensory losses as causes of the handicapping conditions.

Wortis' statement that the chromosomal etiology of

mongolism affects every cell and every system in the child's body creates the postulation that the etiological differences between retarded children and learning disabled children may be more of degree than kind.¹ Research to support this postulation is not available but it seems logical. For example, Rubella contracted by a pregnant mother may have a varying degree of effect upon her unborn child. The degree of effect would be dependent upon when the mother contracted the disease, what her biological resistance and her infant's biological resistance was to the disease, when the disease was detected and medicated, therefore influencing the duration of her infection, and other variables. It is a medical fact that serious cases of Rubella can cause severe retardation. It is also known that under optimum conditions, contraction of this disease may have negligible effects. Logically, somewhere along the continuum, contraction of Rubella may result in what is identified as a "learning disabled" child. A similar cause/effect continuum is applicable to the other etiological factors.

One of the tenets of the exclusion theorists is the position that a discrepancy between a child's potential and performance is discernible. Often this tenet is rephrased to read "a discrepancy must be evident between the child's normal potential and below average performance." There is

¹Joseph Wortis, "Differential Diagnosis of Mental Retardation," Education Digest 24 (December 1958): 43

question concerning the validity of the position that available intelligence measures do in fact measure potential rather than the more acceptable concept of "capacity to learn" at the time of the test administration. There is further question concerning intelligence tests' ability to measure the capacity to learn of retarded individuals.

Critics of intelligence tests support the point of view that these tests are:

1. Given too high a value, and they enjoy a stature within the educational system that they do not deserve, and
2. They are all culturally biased against poor and/or minority youngsters

The second criticism is of significance in the application of these devices to the identification of retarded youngsters. Although retardation as a category of learning ability can be found in any segment of our society, statistics show that inappropriate numbers of these children come from minority populations. This fact may be interpreted as being the result of either an idiosyncrasy of minority populations or a culture bias within the tests. The former assumption of a population idiosyncrasy has been proven to be false; the latter assumption has been proven to be valid.

Other researchers have stated that the available measures of intelligence are not comprehensive enough to include all of

the holistic abilities of the retarded. Leland claims that:

. . . the IQ becomes merely a convenience handle on which to hang an individual already defined as maladaptive.¹

Mercer claims that both IQ as defined today, and adaptive behavior must be used together to define mental retardation.² Sellin has supported the fact that measured intelligence is not as valid a predictor of success among retarded youngsters on tasks of social behavior, self-care, communication, basic knowledge, practical skills, or body usage than the duration of school enrollment.³

Questions have been raised concerning the comprehensiveness of available measures of intelligence. Do they include all of the holistic abilities of the retarded and if they do does a one-trial assessment produce valid results? The answers to these questions are obviously false. Unfortunately those agents responsible for differentiating the retarded from the

¹Leland "The Relationship Between 'Intelligence' and Mental Retardation," :534

²Jane R. Mercer, "I.Q.: The Lethal Label," Psychology Today (September 1972): 44

³Donald F. Sellin, "T.M.R. Performance Profile for Severely and Moderately Retarded (TMRPP)," American Journal of Mental Deficiency 71 (January 1967): 562

learning disabled in our schools generally subscribe to the one-tryed approach to assessment of potential.

Examination of the exclusion theorists' discrepancy postulations shows that arbitrary parameters have been established upon the potential necessary for inclusion. A child's potential must then be within the range of normal intelligence.

Leland comments:

Thus today, school systems are concerned with the 80-95 IQ group because they cannot keep up with the increased educational pressures. As the cybernetec types of social organization begin to play a greater role in our life, higher and higher ranges of current IQ's will fall into the sub-average group.¹

Hypothetically, if the manufacturers of our standardized intelligence measures published new data that revised the distinction of low average intelligence thereby raising it from the 80 IQ level to the 100 IQ level, would that instantly redefine the present learning disabled youngsters falling within this twenty point spread as then being mentally retarded? Such a position adds credence to the observation that the field of learning disabilities attempts to fit the child into the system rather than have the system fit the child. Supporters of the exclusion theory might describe the possibility of a radical change in the statistical parameters of normal intelligence as being hardly probable. However, a similar arbitrary change in the intelligence criteria defining mental retardation was enacted by the American

¹Leland "The Relationship Between 'Intelligence' and Mental Retardation": 534

Association of Mental Deficiency in 1973. Blatt describes this change:

Now in 1973, the definition was changed. If people don't read this revision very, very carefully, they'll miss a very significant change that illustrates the essential metaphorical and political nature of this condition. Since 1959, until this past spring, subaverage intellectual functioning was defined as more than one standard deviation on the wrong side of the mean - that is, psychometric retardation was said to be less than an 85 IQ associated with this impaired adaptive behavior. The current definition says, no it isn't one standard deviation on the wrong side of the mean, it's two standard deviations. And so in one fell swoop of the chairman's pen, this committee has cured more mental retardation than all clinicians and scientists since the beginning of time!¹

The only means by which the discrepancy postulation can be effective is if one first accepts that adequate means of measuring potential are available and that the evident discrepancy must be in regard to performance measured below relative potential. The discrepancy theorists rely upon the identification of specific discrepancies within the holistic learning process. They attempt to identify individual assets and deficits among the recognized specific psycho-educational skills that comprise the total learning process. If a child is fortunate, the school psychologist would administer the WISC and if his abilities and deficits affected the proper ratio his total IQ (or at least his performance or verbal scale)

¹Burton B. Blatt, cited in, June B. Jordan, "On Educability of Intelligence and Related Issues - A Conversation with Burton Blatt," Education and Training of the Mentally Retarded 8 (December 1973): 223

would be within normal parameters and if specific disabilities were evident he would be labeled as "learning disabled." However, if his ratio of assets and deficits affected a different ratio then his IQ score may fall below the arbitrary parameters and he would then be labeled retarded even though his overall performance showed marked discrepancies between the various learning processes and his relative potential.

This position presupposes that those individuals currently labeled as retarded do, in fact, demonstrate learning process profiles indicating relative assets and deficits. Some theorists claim that the retarded do not exhibit variances in the profiles. However, the field of learning disabilities initiated the practice of differential diagnosis operationally less than ten years ago, and it is understandable that these scales have not been extensively applied to retarded populations.

Kirk and Kirk report on research of others upon the profiles of retarded youngsters on the Illinois Test of Psycholinguistic Abilities. Kirk explained that studies by McCarthy and Wiseman on the performance of retardates showed that:

. . . deficits in visual and auditory sequential abilities, are in consonance with other findings that the mentally retarded are deficient in short-term memory . . . 'The outstanding feature is a deficit in the entire automatic level as compared to the relative strength at the representational level'.¹

¹Samuel A. Kirk and Winifred D. Kirk, Psycholinguistic Learning Disabilities: Diagnosis and Remediation (Urbana: University of Illinois Press, 1971), p. 30

Kirk cautions the use of singular ITPA profiles to diagnose mental retardation since:

. . . other children with reading disabilities or articulation defects have similar deficiencies.¹

Bateman reports that:

Recent work with the ITPA, which yields a profile of nine separate language abilities, has demonstrated identifiable patterns of language strengths and weaknesses among certain groups of children, e.g. retarded, culturally deprived, athetoid, and spastic cerebral palsied, receptive and expressive aphasics, partially seeing, etc.²

These studies indicate that the various mentioned measures of learning processes do demonstrate profiles of relative assets and deficits for the retarded population. However, caution must be taken not to conclude that all retarded learners adhere to the same profile of strengths and weaknesses.

Bateman reports that:

We know that it is not likely but highly possible that two EMH children can have the same MA and IQ and yet have radically different cognitive strengths and weaknesses as revealed in testing. These kinds of differences in patterns of abilities and disabilities are also clearly revealed by the Illinois Test of Psycholinguistic Abilities (ITPA).³

¹Ibid., p. 31

²Barbara Bateman, "Learning Disabilities - Yesterday, Today and Tomorrow," Exceptional Children 31 (December 1964): 175

³Barbara Bateman, "Implications of a Learning Disability Approach For Teaching Educable Retardates," Mental Retardation 5, No. 3 (June 1967): 24

Darrow interprets Gellner's Theory as stating:

. . . children become retarded because they are unable to learn in a normal manner in contrast to the accepted idea that they fail to learn because they are retarded.¹

Gellner reports that almost all retarded children have deficits in either the visual or auditory systems of the brain.

Darrow states:

An impairment in any of these four systems results in learning difficulties which vary in degree according to the severity of the impairment. Disabilities may occur in one system only or in any combination of two or more systems. If the impairment is very slight the teacher is confronted with children who have learning problems but who are classified as having normal ability.²

Wortis claims that even the profoundly retarded are observed to have differential assets and deficits in areas of alertness, responsiveness, the ability to understand speech and the ability to express themselves verbally.³

Summary

This chapter concerned itself with the investigation of current literature dealing with the theories differentiating the categories of learning disabilities and mental retardation.

¹Helen Fisher Darrow, "A New Approach to Education of the Mentally Retarded and Slow Learner," Childhood Education 43 (November 1966): 182

²Ibid.

³Wortis "Differential Diagnosis of Mental Retardation":

An overview of the field of learning disabilities was presented that emphasized the historical precedents of current generic and non-generic definitions of learning disabilities. It was noted that the field of learning disabilities is characterized by contradictory and confusing nomenclature that causes difficulty in one's formulation of a comprehensive and valid definition. The present accepted legal definition was included which follows the paths of the non-generic theorists as it excludes the population currently identified as mentally retarded.

A similar review of the history, definitions, and nomenclature of the field of mental retardation was reviewed. As in the field of learning disabilities, the field of mental retardation is also characterized by contradictions and confusion.

The chapter then investigated the stated problem. The investigation took the form of a comparison of the learning disabilities exclusion theories and current research and data concerning the etiology, behavioral characteristics, applicability of standardized intelligence measures, variability of I.Q. statistics, and discrepancies in process evaluation as characterized by the retarded learner.

CHAPTER III

CONCLUSION

Formulation of Conclusions

Although the field of learning disabilities is plagued by conflicts in emphasis and terminology, it has produced an educational schematic that is of benefit to all children.

It fosters the concept that:

We must find ways to teach differentially as a necessary consequence of the fact that children learn differently. Not only do they learn new material differently, but they come to use with different kinds and amounts of stored knowledge.¹

We have seen that a number of theorists in the field of learning disabilities support a generic representation of their discipline. These individuals have enjoyed less support than the nongeneric theorists who have arbitrarily excluded the retarded from their definitions. The possibility exists that these theorists were looking through their windows of specialization and were not cognizant of the learning abilities of the retarded. Clearly, some of the statements concerning the general uneducability of the retarded indicate that ignorance concerning how the retarded learn is widespread. Surely, this is an area where more research is required, but indices are available from the limited research literature at hand. These indices show that IQ scores for IQ

¹Bateman "Implications of a Learning Disability Approach For Teaching Educable Retardates": 24

sake are of little consequence. The arbitrary establishment of IQ parameters works against the very principles of intra-individual differences that the discipline of learning disabilities fosters.

Wortis explains that mental retardation is not a medical nor a psychological entity.¹ Learning disabilities, in this researcher's estimation, is also not a medical nor a psychological entity. What, in fact, exists are categories that initially appeared to be necessary and important, but as the categorizations formalized, so did the tendency to make children conform to the labels. Unfortunately, the educational system in this country fosters such an approach by requiring categorization for funding purposes.

The evidence indicates that mental retardation and learning disabilities truly represent a continuum of learning that continues on through the population of students that we have labeled as normal as well as extending into the population of children that we have labeled gifted. We have seen that the current population identified as retarded fits the criteria of learning disabled once the arbitrary and non-significant normal IQ factor is eliminated.

¹Wortis "Differential Diagnosis of Mental Retardation":

Wortis claims that the retarded child:

. . . does not need a label or an IQ number pinned to him. What he needs, if we are to do right by him in terms of rehabilitation or special education, is a complete diagnostic evaluation.¹

Such an evaluation would not be concerned with diagnosis for the sake of labeling but rather diagnosis for the sake of discovering the intraindividual needs of the child so that a positive remedial approach can be incorporated. Gallagher states that the special educators have:

. . . brought forth the fact that there were many meaningful differences between children fitting into the broad category . . . the special educator has made us increasingly aware of the importance of differences in the level of developmental skills within the individual child. Sometimes these differences are more important for educational planning than perceived differences between children.²

Bateman comments that the future may demonstrate that:

. . . this proliferation of programs will perhaps reverse itself and be replaced by an integrating and unifying application of certain aspects which are not being₃ explored and applied in learning disabilities.³

These aspects include:

1. The early identification of children experiencing educational difficulty

Ibid.

James J. Gallagher, "Learning Disabilities: An Introduction to Selected Papers," Exceptional Children 31 (December 1964): 165

Bateman "Learning Disabilities - Yesterday, Today, and Tomorrow": 174

2. An analysis and evaluation of each child's cognitive patterns
3. The recognition by educators of the individual differences in children
4. The design of education programs that will promote achievement.
5. The promotion of the policy that the educator will "meet the child where he is"
6. Educators will have a thorough knowledge of learning principles¹

Quay notices that:

What is needed to produce a truly effective special education program is the development of a conceptual framework which permits the assessment of exceptional children on educationally relevant variables, their grouping according to similarities of dysfunction on these variables, and the development of a classroom teaching technology aimed at the correction of these deficiencies.²

Bateman has developed a scenerio for learning disabilities which is similar to the following statement made by Blackman and Heintz concerning the education of the retarded:

Theoretically, therefore, knowledge of the psychoeducational abilities and disabilities of mentally retarded individuals coupled with an analytical understanding of the psychoeducational demands of specific school tasks, stated in comparable terms, should lead to maximally efficient matching of learners and materials in terms of whether the former possess the necessary prerequisites for the latter. If not, depending upon

¹ Ibid., p. 175

² Herbert C. Quay, "The Facets of Educational Exceptionality: A Conceptual Framework for Assessment, Grouping, and Instruction," Exceptional Children 35 (September 1968): 25

relative feasibility, either the learner can be remodeled to meet the specifications of the task or vice versa. If the learner and the task are well matched, then the application of instructional systems designed with a full awareness of the parameters imposed by the specific characteristics of both learner and task should 'with predictable efficiency' move the learner from a state of ignorance to a state of knowledge.¹

It is this researcher's contention that this scenario is applicable to the entire continuum of learning children.

Summary

Conclusions were drawn regarding the lack of significant distinctions between the fields of mental retardation and learning disabilities. It was concluded that the categorization of some learners, according to the labels of "mentally retarded" or "learning disabled" was arbitrary, based upon false premises, and contrary to the contributions that the field of special education has made towards educators' looking upon learners as individuals possessing specific strengths, weaknesses, and educational needs. Although no specific reorganization of special education categorization procedures was reviewed, it was indicated that a reorganization to meet the individual needs of "exceptional" children is necessary.

¹Leonard S. Blackman and Paul Heintz, "The Mentally Retarded - Chapter I," Review of Educational Research 36 (February 1966): 29

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