

THE REDUCTION OF CRIME THRU  
THE PREVENTION AND TREATMENT  
OF LEARNING DISABILITIES

A Report to the

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## THE REDUCTION OF CRIME THRU THE PREVENTION AND TREATMENT OF LEARNING DISABILITIES

### 1. Introduction

Federal, state and local governments have spent billions of dollars in the past in a desperate effort to reduce our nation's crime rate. Almost entirely, these efforts have been directed toward the environmental and the psychological aspects of the adult criminal. Usually, such efforts have tried to change the "System", rather than the offender. Almost without exception the efforts have been a dismal failure. Children under 15 committed 17,283 major crimes in America in 1970. Arrests of children under 15 for violent crimes increased 166.8% from 1960 to 1970. Children under 15 years of age commit more crimes against property than do adults 25 or older. And more than one out of five violent crimes is now committed by a juvenile under 18. Crime, especially among youth, is still escalating at a rate so alarming that unless something is done, it could lead to a national disaster.

An entirely different approach to reduction of crime is being dictated by recent studies showing the relationship of learning disabilities in children to juvenile delinquency. Other research has already shown the relationship of juvenile delinquency to the hardened criminal. The learning disabled child, like most delinquents, is shown to have--when tested properly--average or above average intelligence. Where once the anti-social behavior of a child was thought to be a product of his environment, new research is proving such behavior can be caused by biological malfunctioning resulting in learning disabilities. The learning disabled child of today is being recognized as the one, if adequate help and knowledgeable understanding is not provided in his formative years, most likely to become the juvenile delinquent and thence the criminal of tomorrow. If we can prevent and/or treat the learning disability, a fantastic possibility exists for the reduction of crime.

The term "learning disability" includes many problems, all of which involve some kind of cerebral dysfunction. The dysfunction can be as mild as color blindness, or as severe as an inability to read. Severe learning disabilities can cause psychological overlay of many other problems. If the child is constantly failing in competition with his peers, it is hardly surprising that he develops emotional problems as well. Prevention of such overlay may keep the child from becoming delinquent. But in addition, new medical research is indicating that even such problems as inability to think logically, inability to foresee the consequences of one's actions, temper tantrums and antagonistic, illogical behavior--all frequently associated with the L.D. child--can be caused by physiological, instead of the usually assumed psychological, factors. Obviously, these particular types of cerebral dysfunction are the ones most conducive to changing a learning disabled child into a delinquent. Yet, even without these specific problems, if the child cannot cope with

schooling and drops out of the educational system, he may well be on the road to delinquency.

In 1969 the National Institutes of Health published a lengthy report entitled "Central Processing Dysfunctions in Children: A Review of Research". Unfortunately, the Report had as one of its four guidelines:

"to exclude the large mass of research with respect to emotional disturbance and social maladjustment. While these behavioral deviations are most certainly relevant to education, they represent a large and distinct problem area which merits special study in its own right."

The Report did go on to say, however:

"Basic research is needed in neurology and biochemistry if we are to link specific behavioral symptoms or clusters of behaviors to neurological and physiological correlates....While some research has been done, there is need to improve our technology and attempt to increase our knowledge of neurophysiological behavior. Unless this happens, assessment and classification will continue to be substituted for differential diagnosis."

The Report concludes:

"There are a number of research areas which should be systematically explored. There is need, for example, to obtain a more thorough understanding of the intersensory and intrasensory processing systems which form the basis for processing multiple stimuli. There is need to do basic programmatic research in determining what these systems are, how they function, and how they develop. Also, it is necessary to identify the psychological, neurophysiological, and biochemical correlates which are related to these systems."

Multidisciplinary and interdisciplinary *research* needs desperately to be performed, including research on etiology as well as on what remedial therapy can be most productive in keeping the child from becoming delinquent. To be really effective the information learned from all this research must be disseminated in as efficient a way as possible to parents, educators, social workers, researchers, psychologists, psychiatrists, physicians, and those in the law enforcement and judicial systems.

*We believe a multimillion dollar research program in these directions can reduce the cost of crime by billions of dollars in the future of our nation, and prevent unwanted misery in millions of people. In this presentation we want to show you why we are so convinced that this is the proper approach, and how it can be accomplished.*

## II. The Relationship Between Learning Disabilities and Juvenile Delinquency

Learning disabilities and their relationship to juvenile delinquency have been researched repeatedly. Results consistently show a very high incidence of learning disabilities in the juvenile delinquent.

One of the first researchers was Peyser, a member of the New York Governor's Committee on Juvenile Crime. In 1936 he examined young offenders at the New York City Reformatory and the House of Refuge on Randall's Island and was startled to find that between 84.4% and 92.8% of these offenders were well below average in the basic subjects. Only 29% of the children in the New York City's elementary schools were below average to a similar extent. School failure appeared to be more closely correlated with delinquency than were poverty, broken homes, physical and mental defects or psychopathic conditions.<sup>1</sup>

Fendrick and Bond confirmed Peyser's findings in a further examination of adolescents aged 16 to 19 years at the House of Refuge. Over 90% in their study were failures in school and the average reading age was 12 years, 3 mos. Among control groups, the reading level was 17 years, 11 mos.<sup>2</sup>

A survey in 1951 of a treatment clinic attached to a New York juvenile court revealed that 84% of the children were retarded in reading by at least two or more years.<sup>3</sup> And another test in 1955, also in New York, screened children passing thru a reception unit for delinquents and found 76% were over two years retarded on Gray's Oral Reading Test.<sup>4</sup>

Geiger in 1961 was one of the first to suggest that children with neurological damage are oftentimes erroneously seen as juvenile delinquents. She wrote:

"One sees children who are hyperactive, hyperirritable, and constantly annoying. Some destroy, strike, exhibit temper, or injure others, and in some this behavior carries over into adult life. Frequently in these individuals, an abnormal encephalogram is found--some indication of seizure activity, a localization of pathology, psycho-motor epilepsy, some with general disrhythmia, all of which indicate abnormal brain activity."<sup>5</sup>

In 1963 Dutcher related delinquent behavior to some degree of brain dysfunction.<sup>6</sup> In 1964 Critchley reported finding 75% of young offenders in France to have dyslexia, a form of learning disability.<sup>7</sup> Another linkage, a relationship of faulty visual perception and delinquency was reported in 1966 by Dzik.<sup>8</sup> Also in 1966 Rousey and Cozad, in studying delinquent children, found they had speech and hearing difficulties three times that found in the general population at the age level evaluated.<sup>9</sup> Tarnapol, in a 1969 text aimed at a comprehensive coverage of learning disabilities, pointed to the higher incidence of brain dysfunction among delinquent youth.<sup>10</sup>

Research in the '70's began when the "Children in Trouble" panel of the 1970 White House Conference on Children reported that "Most reform school inmates are one to five years behind their age group academically." In that same year a study conducted at the Robert F. Kennedy Youth Center, Morgantown, W.V., Duling, et al, concluded that 53% of the sample population had significant reading disabilities, compared to 2-15%

of the normal population.<sup>11</sup> And Rice in 1970 reported learning disability problems in a study of delinquent girls in a state institution in Tennessee.<sup>12</sup>

A follow-up study of hyperkinetic children by Mendelson, et al, reported in 1971 that as these children grew older they were more frequently involved in delinquent acts than children who had not had the problem of hyperactivity.<sup>13</sup>

Superior Court Judge A. O. Holte stated in 1972:

"As I thought back over the 700 or more cases I had heard in a ten-month period while serving as a Juvenile Court Judge, I had a gut reaction that made me almost physically ill. I can't remember them by name, but about 80 per cent of the boys and half that percentage of the girls were experiencing difficulties in school. There is such an obvious pattern once you are alerted and have some idea of what to look for, that I couldn't understand why people who have worked for years with disturbed youngsters haven't tried to do something about it."<sup>14</sup>

Judge Holte further reported that in a random sampling of 35 children in detention in Snohomish County, Washington, 80% were found to be from 2 to 7 years below expectancy of grade placement in reading and spelling.

Walle, an audiologist, reported in 1972 in a study of 128 young male prisoners at Patuxent Institution, Jessup, Md., that 48.3% had severe difficulties in communication.<sup>15</sup> ExHA Commenting on this particular research, Dr. Chester Poremba, Chief Psychologist at Children's Hospital in Denver, has written:

"Of these 128 sociopathic criminals, 63, or 50 per cent, were found to have clinically diagnosed disorders of speech and communication. These 63 combined for a total of 105 separate communication problems, an indication that very frequently those people who do have problems have a number of them concurrently. This study seems important in that it points out that many inmates of our penal institutions have communicative problems which they have had from early life. Despite long histories of contact with courts and correctional institutions, their disorders were not in any way diagnosed or treated."<sup>16</sup>

In the same year, 1972, Camilla Anderson, who was for five years Chief Psychiatrist in the California Institute for Women, wrote of a research project there:

"Of the 700 women who were given EEG tests, 349, or 50 percent, were interpreted by the EEG laboratory as having abnormal tracings, meaning that there was some brain malfunctioning present in half the women checked. Another 81 cases, or 11.5 percent of the women tested, had equivocally or questionably normal tracings. This means that in over 61 percent of the 700 women tested, the EEGs could not be considered normal. Had there been repeat tests, even a higher percent of abnormal tracings would probably have been reported. Not until routine neurological tests are done on all felons, or on a scientific sampling basis representing all felons, preferably organized according to class

of felony, can we say for sure what role MBD (Minimal Brain Dysfunction) plays, but my initial impression regarding the greater prevalence of MBD among delinquents than among the general population was validated."

Anderson continues:

"Among those who land in trouble with the law, many perseverative patterns originate in childhood--running away, being incorrigible, setting fires, stealing, and skipping school are among the most common. During the five-year period of my work in the prison, every delinquent teen-ager who was transferred to the adult prison because of persistent incorrigibility within the juvenile institution had MBD. There were no exceptions. Paying no attention to authority, or defying authority, becomes a way of life. Temper flareups, with violence even to the point of homicide, are not rare among juveniles with MBD, nor have they been even prior to our current age of violence. Violence may occur even toward people for whom they care and is commonly an episode of the moment, if the individual feels frustrated or pushed or 'put down'.

It is common knowledge that trouble with the law is highly correlated with poor school achievement and reading failure. It has been customary to see delinquent behavior as a compensatory expression for feelings of inferiority or 'poor self-image'. The probability is that along with school failure and reading disability, more subtle handicaps are present that could be identified as MBD if one were familiar with the symptoms and signs. Any teacher of remedial reading has probably observed that youngsters who cannot read usually have many other handicaps that are not caused by the inability to read. All of these conditions taken together, rather than inferiority feelings alone, contribute to making the juvenile a delinquent."<sup>17</sup>

In a 5 year project in the Rhode Island Training Schools, Berman reports that 70% of the youngsters being imprisoned had measurable learning disabilities, with a visual disability being most frequently noted. The report on that project goes on to say:

"Once the cycle begins it is vicious and insidious. Once a child drops out of school prior to graduation the chances are estimated that one in three will appear in juvenile court. Some experts feel that the percentage is even higher. Once a child appears in court it has already been mentioned that 80% will be back. What hasn't been mentioned is that, when they return, it will usually be for continually increasing level of seriousness of offense. While the first offense may be for truancy or breaking and entering, later offenses usually involve assault or the use of dangerous weapons. And we also know that 75% of the inmates of most adult prisons began their careers as juvenile offenders. The record is discouraging. It is all the more frustrating since, at no point in this destructive cycle has the basic disability been addressed: not in school, not in the courts, not in rehabilitation institutions. Teachers, who should be the most logical personnel to discover learning problems, are hopelessly untrained to do so. Judges aren't expected to be able to diagnose disabilities, but even if they could, most correctional institutions wouldn't know what to do with them. The youngsters are treated either as criminals or as seriously psychopathological, with no attention directed toward the basic disability."<sup>18</sup> Ex. B

In another recent study Compton, under the auspices of the Division of Youth Services of the Colorado State Department of Institutions, evaluated 444 youths and found 90.4% to have clinically diagnosed learning disabilities.<sup>19ExhC</sup>

Mauser has compiled a list of similar characteristics between learning disabilities and juvenile delinquency:

1. Both learning disabled and juvenile delinquent populations evidence negative self-concept and low frustration tolerance (Miller and Windheuser-1971).
2. Both delinquency and learning disabilities have been problems primarily associated with the male species.
3. Directional orientation problems are common among both the delinquent and the learning disabled populations (Graubard-1967)
4. There is also evidence of a greater occurrence of minimal brain dysfunction among delinquent and learning disabled youth (Tarnapol-1970) Whether the dysfunction is related to actual injury or delayed maturation is to be questioned. Critchley (1968) appears to suggest 'immaturity' to account for the differences.
5. The intelligence level of the child with the specific learning disability according to Koppitz (1971) cites a mean IQ of 92 for the learning disabled group and notes that half of the learning disabled population will fall into the lower half of the average mental ability. These results are consistent with past research related to the intellectual level of juvenile delinquents.
6. Most delinquents and children with learning disabilities tend to have difficulties in school beginning with the primary grades.
7. Juvenile delinquency and learning disabilities appear to have no single cause and no single cure but are associated with a variety of etiological factors and a multitude of treatment strategies."<sup>20ExhD</sup>

Jordan reports that in a project funded by the Oklahoma Crime Commission the Cleveland County Youth Bureau screened adolescents sent there, found 81% exhibited learning disability symptoms.<sup>21ExhE</sup>

A Chief Probation Officer in California, Mulligan, has written:

"We are finding, in preliminary screening, a significantly large number of children who may have learning disabilities in our case loads. This is especially true of children referred for delinquent tendencies--specifically truancy, runaway, or acting-out behavior in the classroom or at home."<sup>22ExhF</sup>

In his book published in 1974 Weber includes a chapter written by Dr. Frank Jacobson citing the strong relationship between learning disabilities and delinquency.<sup>23</sup>

In a research paper not yet published, Hogenson reports a significant correlational relationship between reading underachievement and aggression in two groups of widely separated delinquent adolescent boys in Minnesota.<sup>24ExhG</sup>

In another paper, also forthcoming, Elliot and Voss report in a multi-factor study of delinquency that early school failure is the single most statistically significant variable predictive of later delinquency.<sup>25</sup>

Reitan, professor of Neurological Surgery and Psychology at the University of Washington, writes:

"Many of these children have a problem in simple, logical thinking. Our measurements, in fact, show this quite clearly to be the case. However, there are two more ingredients that go into the production of juvenile delinquency: one (has to do with) effectiveness in motor and physical manipulatory behavior and the other is a relative deficiency of Verbal intelligence. When this particular combination of test results appears, we can make a prediction with confidence that the child is headed toward delinquent behavior which will be found to be socially unacceptable."<sup>26</sup>

In a pre-publication copy of a paper prepared under a grant by the National Institute of Neurological Diseases, Reitan adds:

"Difficulties in reasoning and in abstract thinking can interfere with the appreciation of the concepts of right and wrong....The conceptual deficits that led to learning disorders also contributed to socially unacceptable behavior, which at first glance seemed to be solely a function of psychogenic factors."<sup>27</sup>

With such research as this--and we have not endeavored to list nearly all of it--*the question can no longer be* "Is there a relationship between cerebral dysfunction and juvenile delinquency?", but, rather, "How can this disability be treated, and, ultimately, prevented to help our troubled youth and reduce crime?"

### III. Etiology of Cerebral Dysfunction

(This part, in process of being written, will, as in Part II, be a compilation of research showing the basic causes of the cerebral dysfunction that causes a learning disability. Prenatal, perinatal and early childhood trauma are noted as causative factors, and considerable research will be provided showing genetic causation. Recent studies on biochemical imbalance will be included.)

### IV. Prevention and Treatment

(This part, in process of preparation, will endeavor to document, as in Part II, research data showing the "status of the art", and the possibilities involved in prevention and in therapies involving educational, biomedical, sensory motor control and psychological aspects of cerebral dysfunction.)

### V. The Proposed Research Program

(This part, in process of preparation, will propose a Program with seven elements:

1. Basic biomedical research, including close cooperation with each Phase Director in preparation, supervision and evaluation of testing procedures in all phases of the entire Program.
2. A pilot "Diagnostic Evaluation Center" to work with the community, including its educational, law enforcement and judicial systems.
3. A pilot "Alternative School", featuring individualized, prescriptive therapy for each child.
4. A research project in a residential institution for delinquent youth.
5. A research project involving reformatory inmates.
6. A public awareness and teacher, diagnostician and probation officer training program. This Phase would also handle publication of all developed data of all the phases in the Program. Videotape presentations and symposiums would be part of the overall effort.
7. Centralized monitoring, including coordination of follow-up studies, for all phases of the Program, to insure use of common methods of research, diagnosis, therapy and evaluation for greatest effect with respect to the educational, biomedical, sensory motor control and psychological aspects of the problem. This Phase would handle centralized accounting and would keep each phase in the Program appraised of the work of all the other phases to obtain a truly interdisciplinary approach.)

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