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for Feeble Minded

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CLASSIFICATION OF THE FEEBLE-MINDED BASED ON MENTAL AGE.

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All who for the first time give attention to the literature and treatment of mental defectives are puzzled and confused by the lack of uniformity observed by writers and experienced workers in this field, both in the nomenclature adopted and classifications followed. It is the purpose of this paper to call attention, (1st) to the present tendency of the authorities to approximate uniformity as to the fundamental conceptions involved; (2nd) the long recognized need for some means of comparing feeble-minded with normal children at various stages of development, and (3rd) recent contributions to child study that seem to furnish the foundation required for developing a very satisfactory psychologic classification of scientific value.

It is unnecessary to present in full the various schemes for classification that have been proposed,¹ and the writer will only refer to such features of a few that have gained substantial recognition and standing in the profession as may be necessary to make the situation clear.

We will consider first the fundamental conceptions concerning which there is a very general agreement. The *first* has reference to the general but constant characteristic of the ensemble of infirmities that we now speak of as feeble-mindedness, *viz.*, that it is *mental incapacity* from *arrested development* more or less complete, whether the cause is (1) lack of potency in the germ plasm from inheritance; (2) interruption of the biologic evolution in utero from (a) toxic interference or (b) deficient nutrition, or (3) an arrest of development, more or less extensive, in the cerebro-spinal axis after birth from (a) inflammatory processes; (b) toxic influence; or (c) deficient nutrition. The mental incapacity varies in different individuals from completeness so that the existence is vegetative only, to merely a lack of coördination between the affective intellectual and volitional faculties, so that the individual is disqualified for harmonious social relations.

The recognition of this constant characteristic is so universal that I shall not cite authorities, except to call attention to this illuminating statement of Dr. H. B. Wilbur, when discussing the possibilities of a pathologic classification.²

It should be borne in mind that the essential fact of idiocy is the mental deficiency. That the point of interest for us is the degree to which this condition can be obviated. Furthermore, it is dependent upon physical conditions, whether physiologic or pathologic, that are chronic or organic,—slowly produced structural changes, when pathologic,—and so, as a rule, beyond the reach of remedial means. The sphere of these, when used in the treatment, is almost exclusively confined to ameliorating the accessory maladies.

The actual work of obviating the condition of idiocy is an educational one, using the term in a broad sense; and if any favorable effect is produced upon abnormal organic states, it will ordinarily be through the reflex action of properly adjusted mental exercises.

This clearly separates this group of people from the insane—in whom the mental functions deviate from normal after the evolution of physical growth has been completed. The condition is thus recognized as a *defect*, not a disease.

The *second* conception of this condition is that the mental incapacity when profound co-exists with and depends upon an arrest of physical development—by which the motor and reflex activities are deficient or incoördinated—the processes of physiological evolution in childhood being retarded or entirely arrested. The recognition of the interdependence of the mental and physiological infirmities is important, not only for a sound basis for a rational comprehension of the general condition, but because the whole system of training of the feeble-minded is based upon it. The exposition of this fact and the enunciation of the educational principles deduced from it, constitute Seguin's great contribution to pedagogics, general³ as well as special. Seguin thus graphically depicts the analogy between the normal and the idiot infant.⁴

The majority of young idiots do not differ very sensibly from common babies; because the power of both may be expressed by the same verb, they cannot. But to-morrow the well infant will use his hands, the idiot will allow his to hang in half flexion; the first will move his head at will, the second will toss it about; the look of the former penetrates every day farther than the domain of the touch, that of the latter has no straight dart and wanders from the inner to the outer canthus; the one will sit erect on his spine, the

other shall remain recumbent where left; the first will laugh in your face with a contagious will, the second shall not be moved into an intellectual or social expression by any provocation whatever. And each day carves more deeply the differential characters of both; not by making the idiot worse, unless from bad habits gotten by neglect, but by the hourly progress of the other. Idiocy so viewed from its origin is a continuance of the isolation and helplessness of babyhood under ampler forms and obsolete proportions. Compared unavoidably with children of his age, the idiot seems to grow worse every day; his tardy improvement looking like backward steps. With his incapacity of action, of expression, of feeling, he makes a sickening sight indeed by the side of a bright child entering into the intricacies of life as on an open playground.

As a *third* conception, we should next note that there has been a gradual approach by writers toward a substantial agreement in the rough psycho-physiologic grading of mental deficient into three groups, and the use of terms by which these groups are known.

The term "idiots" is now universally applied to the individuals of the lowest group, who are entirely dependent. "Imbecility" applied by Seguin to acquired cases, where some mental development had preceded the final arrest, is now generally applied to the intermediate grade.

There is less general agreement as to the proper term by which the upper group shall be designated. In England the term "feeble-minded" is applied to the latter by the Report of the Royal Commission of 1904 when considering adults; and "mentally deficient children" when considering non-adults.

The terms Aments,⁵ Mental Defectives,⁶ Mentally Deficient Children⁷ and Feeble-minded,^{8,9} are variously used for the whole class. In the United States the three groups are generally recognized, the lower third as *idiots*, the intermediate grade as *imbeciles*, and the upper third as high grade *feeble-minded* (lately, *morons*), the term *feeble-minded* being applied generically to the whole class.

Ireland, who put especial stress on the value of a pathological classification. says: "Mental Deficiency is the most serious of the symptoms or consequences of the diseased conditions. It is of great importance that the degree of mental feebleness should be defined. Hence, the necessity of psychic definitions like

and produce the "flow of speech," limited only by their individual ranges of knowledge.

We will now consider the *comparison of feeble-mindedness with normal mindedness* in children.

The writer was impressed, while still young in the work for the feeble-minded, with the desirability of having prepared a scheme showing the natural evolution of the mental faculties of normal children with reference to their chronologic age as a guide to the grading or the retardation of the feeble-minded. In view of the work of modern psychologists along this line and its application to the study of the feeble-minded, to be referred to more specifically later—it is of special interest to note the following statements, by writers on this subject.

Speaking of the high grade, Down says:¹⁴

The test which I have found most useful is one suggested in the first instance by Dr. Charles West. In any given case we have to ask ourselves, can we in imagination put back the age two or more years and arrive thus at a time perfectly consistent with the mental condition of our patient? If he be a backward child, we shall have no difficulty in saying what period of life would be in harmony with his state. If, however, he be an idiot, there is no amount of imaginary antedated age to which the present condition of the child corresponds.

Shuttleworth says:¹⁵

The best estimate will be obtained by comparing the patient with a normal child of similar age. Thus tested, a boy of ten will sometimes be found on an intellectual level with the ordinary child of five.

Duncan and Millard state:¹⁶

"It is a very striking method of showing the mental deficiency of a member of any one of these classes to compare its mental gifts with those of children of perfect mind at younger ages. Thus a boy of the fourth class,¹⁷ aged eighteen, may not have greater mental power than a perfect child of four years; he is to all intents and purposes four years old, and dull for his age. An idiot of the second class, of eight years of age, may not be more than eighteen months old; when compared with normal children, while the gaiety and spontaneousness are wanting."

We will now consider the recent contribution of psychology to the problem of classifying the feeble-minded.

The recent advances in child study by which the stages of intellectual development during normal childhood are expressed

in terms of mental capability, determined by simple laboratory tests, have made it possible, by means of the same tests, to determine approximately the mental capacity of feeble-minded persons and thus express it in terms of mental age of normal children. I refer especially to the tests devised by Binet and Simon of Paris and first suggested to the American Association for the Study of the Feeble-minded by Dr. H. H. Goddard in June, 1908.¹⁸ The Association in the following year, as the result of the report of a committee¹⁹ on the subject, adopted a tentative classification based upon the use of these tests and suggested the term "moron" for the highest group. The whole subject was then left open for further investigation and discussion.

The scheme was as follows:

CLASSIFICATION OF FEEBLE-MINDED TENTATIVELY ADOPTED BY THE AMERICAN ASSOCIATION FOR THE STUDY OF THE FEEBLE-MINDED.

| Descriptive terms. | | On scale of 10. | Mental age as determined by Binet tests. |
|--------------------|---------------------|-----------------|--|
| A. NORMAL: | | 10 | 13 |
| B. FEEBLE-MINDED: | | | |
| Morons | { High grade..... | 9 | 8-12 |
| | { Middle grade..... | 8 | |
| | { Low grade..... | 7 | |
| Imbeciles | { High grade..... | 6 | 3-7 |
| | { Middle grade..... | 5 | |
| | { Low grade..... | 4 | |
| Idiots | { High grade..... | 3 | 0-2 |
| | { Middle grade..... | 2 | |
| | { Low grade..... | 1 | |

As the system of tests—these or their equivalents—is fundamental to a practical application of the classification in detail, the first thing to scrutinize is their reliability. For our purposes there are two phases to this question of reliability; *first*, do they afford a correct means of determining the intellectual levels of normal children at all annual stages of growth from *one* to *thirteen*

years; and *second*, is this age scale practicable for registering the mental capacities of the feeble-minded?

As to the first point, it is a problem for the psychologists and the very extensive discussion which they have carried on during the last two years is witness that they are not neglecting their duty in this regard. The writer has followed enough of this discussion to note that while some of the details of the Binet-Simon tests are not considered perfectly adapted to the specific years for which they are intended, the most severe critics do not invalidate the system and at most only suggest certain improvements or modifications in the minor details. As to the practicability of the mental age scale for classifying feeble-minded, any *readily applied* scale of intelligence that could be used for *all* feeble-minded has been a long felt want and one that enables the examiner to compare feeble-minded with normal children, has a supreme value in that the mental status is *at once* comprehended by *every one*, and a *universal standard* is thereby established. The writer has already referred to the expressed desire for something of this kind by several workers with this class.

After an experience with the Binet-Simon tests of over one year, during which time they have been used in the careful mental examination of 1300 cases of all grades in the Minnesota School for Feeble-minded and Colony for Epileptics by a trained psychologist of sane judgment, judicial temperament and high professional standing, Dr. Fred Kuhlmann, the writer feels that Faribault can add its testimony to that of Vineland, where Goddard made the first institution survey—400 cases—²⁰, and Lincoln (Illinois) where Huey followed in testing “most of the brightest children”²¹ in an institution population of 1300, that this scheme of testing and classifying is a positive step forward in a rational classification of the feeble-minded, and its aid is a comfort to the expert in making plain to the parents and friends what he recognizes without it. The grouping by mental ages, as shown by the above table, into the general triunal mental classification tends to clarify rather than to add confusion to the previously developed scheme, by standardizing the lines of separation, and what is of most importance, affords a ready means of making a

quick diagnosis. From this sort of examination, the medical examination and the field survey of heredity and social environment from which the child is received, one is able to secure the most complete data possible for determining the prognosis, and the intelligent planning of training and treatment.

The writer has avoided so far the entire subject of pathology, not because of any disposition to ignore its value, but because it has seemed of most importance that the new mental classification be first made clear. To it the other data can be affixed with a clearer idea of its relative value, both as to prognosis and the relative number of persons involved.

In the matter of numbers, for instance, one would suppose from the prominence given by most writers to certain pathologic types, such as Cretins, Mongolians, Microcephalics and Hydrocephalics, that they represented the great majority of feeble-minded children, while, as a matter of fact, they constitute but a very small percentage of them. In the institution of which the writer has charge, out of a population of about 1400 (including epileptics) there are only about 3 per cent. all told of the four types above enumerated.

On the other hand, a knowledge of the type is exceedingly important. All the data concerning the pathology and the etiology is valuable, and the skill of the physician, psychologist and teacher must be joined in order to realize the best training results. For instance, as a rule, the congenital case is more susceptible of improvement under training than the inflammatory or sclerotic type of acquired defectiveness. The Mongolian's possibilities are quite well defined and his low life expectancy long recognized. Not only is the physiologic and pathologic data of great importance, but it must be borne in mind that the danger that it will now be overlooked is imminent and must be guarded against. In the new classification, however, there is a place for all this data.

Note the complete picture presented by the statement, “John is a fifteen-year old Mongolian imbecile—mental age 6”; or “Mary is a thirty-year old Microcephalic idiot—mental age 2;” or “William is a moron, a delinquent, eighteen years old—mental age 11—has right hemiplegia from infancy.”

The question may properly be asked, does this system of mental tests in itself determine the "defective delinquent," or, in other words, can all who pass the tests for normal intelligence be depended upon to make good citizens in good average environment?²²

The reactions to the Binet tests or their equivalent are only significant of *intellectual* levels.²³ While their value is unquestioned in the field of juvenile delinquency, for quickly detecting the large number that present these low levels, the borderland cases present a more complicated problem that so far has not yielded to any laboratory analysis. Heredity, early environment and their known reaction to social conventions, as of old, are the best factors yet available from which the expert must judge of their future.

REFERENCES.

- ¹ Barr, "Mental Defectives," Philadelphia, 1904, p. 78-89, gives a full discussion of the older classifications.
- ² *Proc. Assoc. Med. Offs. Am. Inst. for Id. and F. M. Pers*, Vol. I, pp. 33-34.
- ³ An Italian teacher, Montessori, has recently shown how Seguin's principles of sense training should be applied in the education of all children.
- ⁴ *Idiocy: And its Treatment*. Teachers College Edition, Columbia University, N. Y., 1907, p. 40.
- ⁵ Tredgold. ⁶ La Page. ⁷ Shuttleworth and Potts.
- ⁸ The Royal Commission in its own title. ⁹ Sherlock.
- ¹⁰ Ireland, "Mental Affections of Children," p. 39.
- ¹¹ "Textbook of Psychiatry (McDonald translation)," N. Y., 1906, p. 430.
- ¹² "Mental Defectives," p. 90. ¹³ "Mental Deficiency," New York, 1908, p. 75.
- ¹⁴ "Mental Affections of Childhood and Youth," Down, London, 1887, p. 120.
- ¹⁵ "Mentally Deficient Children," Shuttleworth and Potts, p. 113.
- ¹⁶ "A manual, etc., of the Feeble-Minded, Imbecile, and Idiotic," Duncan and Millard, London, 1866. pp. 1, 3-14.
- ¹⁷ Duncan and Millard made 8 rather arbitrary classes.
- ¹⁸ *Journal of Psycho-Asthenics*, Vol. XIV, 1909, p. 48.
- ¹⁹ The committee consisted of Fernald, Goddard, Wyhe, Bullard and Murdock. For a fuller discussion of this subject, see *Journal of Psycho-Asthenics*, Vol. XV, Nos. 1 and 2, 1910.
- ²⁰ Reported, *Journal of Psycho-Asthenics*, Vol. XV, 1910, p. 17. ²¹ *Ibid.*, p. 31.
- ²² A very interesting study of laboratory methods as an auxiliary to sociologic data, with Juvenile Court cases, has been in progress for over two years in Chicago, under the direction of Dr. Wm. Healy, Director of the Psychopathic Institute. This is a work that gives promise of rich fruitage.
- ²³ For an analysis of results with Binet tests with high grade morons, see Huey's "Backward and Feeble-minded Children," Baltimore, 1912.