

CRIME FROM A MEDICAL STANDPOINT.

ment of criminals as well as the causes and prophylaxis of crime are problems to be solved by the united efforts of the psychologist, the sociologist and the physiologist.

I wish to give the result of a survey, made by myself to determine the percentage of inmates confined at the state reformatory who were mentally undeveloped or subnormal. In the examinations, all foreigners and negroes were excluded. The tests used were the Binet scale for measuring intelligence (Goddard's revision), supplemented in some cases by tests devised by Dr. William Healy, of Chicago, and used by him in the juvenile court of that city. "

Mentally average or a b o v e	288
Mentally below average	256

Total number examined 544

It must be remembered that these test's are applied only to determine a lack of mental development; that is, it shows that the mentally subnormal individual has suffered a premature stoppage in intellectual development. The mental ages in those found to be below average ranged from five to twelve years, the greater number being Morons.

I am convinced that criminals showing gross mental deficiency should be cared for at a separate institution especially equipped for the custody and proper training of the defective delinquent,. Owing to their lack of intelligence they are little benefited, if at all, by the reformatory regimen, and their presence is detrimental to men of higher intelligence. The period of detention at such an institution as suggested, should be absolutely indeterminate, since the mental condition existing in such cases is incurable. Such a system of handling the defective delinquent has much in its favor from any standpoint, and absolutely nothing based on fact can be argued in opposition to such a plan.

From a medical standpoint, then, I will say that criminals should be treated as individuals suffering with disease; that is to say, the proper diagnosis, etiology and treatments should be instituted just the same as in any case of physical disability. The fact that the commission of crime presents rather an abstruse problem is no reason at all for presuming it is something outside of the field of nature and its laws. Our inability to cope with it is simply to express our ignorance on the subject.

TWO HUNDRED AND FIFTY STATE PUBLIC SCHOOL CHILDREN
MEASURED BY THE BINET-SIMON SCALE OF
•INTELLIGENCE.

Miss Maud A. Merrill, State Public School.

It seemed desirable, in view of the work which is being done with the Binet-Simon tests, to try their accuracy upon children who have not had the average normal environment. Tests depending as these do upon intelligence rather than training should show approximately the same results under different conditions of environment for normal children. Our

purpose has been to find how nearly according to the Binet scale children from adverse surroundings would approximate the average mental age.

The group tested consists of children from homes where, through poverty, desertion, neglect or unfitness, such social conditions existed as to make necessary the removal of children. The term of residence at the institution varies from a few days to years, in some instances, according to the fitness of the individual child for the homes available. The average time that a child remains in the institution is about six months. Any tests including only the children who are in the institution at a given time would include many who are misfits; that is, children who for any reason have not done well in the homes in which they have been placed and have been returned to the school, older children, fourteen, fifteen, sixteen, who are not yet fitted to take care of themselves and do not adapt themselves to conditions in the homes, and also children who have been sent to the institution "to give them a chance," hoping that their lack of development may be due to neglect, and who must later be transferred to the school for the feeble-minded. An adequate idea of the mental average of the children can thus be obtained only by testing all children as they are received at the institution for a period covering more time than we have used the tests. The tests were begun in March, and the report includes two hundred fifty children of the two hundred eighty in the institution at the present time.

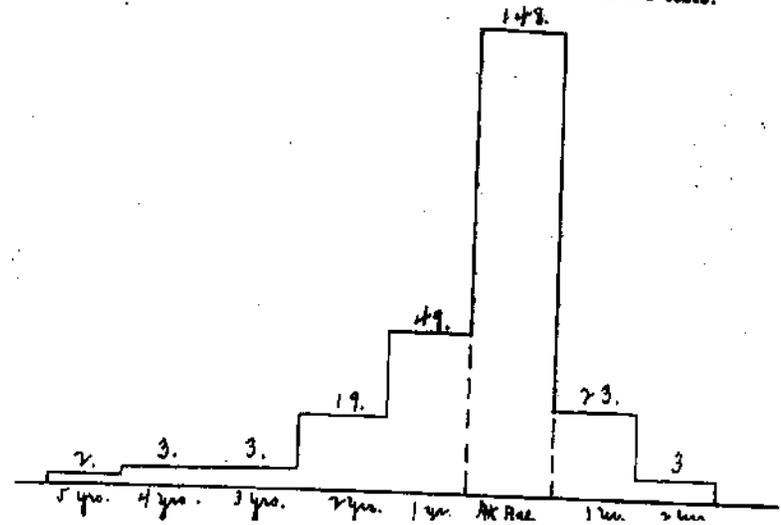
Dr. Kuhlmann's revision of the Binet-Simon scale is used. The tests have all been made by one person and were carried on in connection with the school work when school was in session. The testing was done in an unused school room or in a room in a cottage or hospital where there was nothing to distract the attention of the child. The work began with the kindergarten and lowest grade to obviate any danger of telling each other the answers to the questions. I have found very little evidence of coaching, however. The child was in every case encouraged to do his best; no criticism was made of his answers and no indication given as to whether they were correct. In the majority of cases the children were both eager and interested.

There are five tests in each age group, and the examiner began usually with the age group just below the child's chronological age, though his appearance, size, and behavior, sometimes lead to a lower estimate of his intelligence and a change in the order of questions. "The child is given the mental age of the group just below the one in which he begins to fail in one or more tests, plus one year for every five tests in which he passes in all following age groups."

The results of the test indicate a remarkable correlation between mental and chronological age irrespective of training and home conditions.

BINET-SIMON SCALE OF INTELLIGENCE.

The following distribution curve shows the results of the tests:



One hundred forty-eight children tested "at age," 23 one year above age, and 3 two years above; 49 were retarded one year, 19 retarded two years, 3 retarded three years, 3 retarded four years, and 2 retarded five years, making a total of 250.

TABLE *I

Chronological Age	MENTAL AGE															Total	Per Cent
	0 mo.	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XV			
0 mo.	1															1	.....
1	2	1														3	33%
2	1	4	1													10	40%
3		1	2	8	2											13	51%
4			1	1	4	3										9	44%
5			1	1	2	16	5									25	64%
6					1	6	24	2								33	73%
7							26	3								29	90%
8						1	8	20								29	90%
9							2	3	15	2						22	88%
10								3	8	10	2	1				24	42%
11								1	1	3	7	10	1			23	43%
12										4	5	7				16	44%
13									2			1	3			6	50%
14											2		1	2		5	40%
15													1	1	2	50%	
Total.	4	6	8	11	9	25	30	39	32	26	25	17	12	6		250	

*In these tables Roman numerals stand for mental age as determined by the Binet tests. Arabic numerals in left hand column denote chronological age.

Table I shows the distribution of the two hundred fifty children according to mental and chronological ages. One sees how many were retarded, satisfactory, and precocious for each chronological age. In the table the numbers in heavy type show the number of children who tested at age. For example, of the six-year-old children one tested four mentally, six tested five, twenty-four tested six, and two tested seven mentally. In each age group one finds the largest number of children testing at ago. In only one case is the number larger below the average age, and that is in the one-year group where the number of children tested is not large enough to be significant. I have considered as satisfactory all those who tested less than a year above or below their chronological age, counting them as testing at age if they were a fraction above or a fraction below. Of the two hundred fifty tested, 69.6 per cent were satisfactory, testing at age or above; 30.4 percent were; retarded one year or more. In Dr. Goddard's report of the tests applied to two thousand children of an ordinary public school system, he finds 78 per cent satisfactory. He has allowed children testing one year above or one below to pass as satisfactory.

The tests from age groups III to X show that a majority of the children test at age, i. e., the same mental as chronological ago. Both below and above these ages the number tested is not sufficient to be very significant. In the case of children three years and under, twenty-seven in number, the retardation is more significant than in the older groups because the child's development is so rapid at this stage. The conditions existing before the admission of the child and the necessary limitations of individual training in an institution militate against the success of the tests of the younger children. The physical condition of infants is almost below normal when they are brought to the institution. They have not had a fair start and it takes time, care, and constant medical attention to restore the ill-nourished, neglected little bodies to normal physical condition. Then, too, where there are fifteen or twenty toddlers from a year and a half to three years of age to be cured for and trained, they cannot receive the individual attention in their play and in the use of hands in counting and in pointing out objects in picture books that any child in a home would receive. And the tests for these younger children depend on the presence of reflexes which appear in the ordinary physical development of the child at certain chronological ages, and on his manual dexterity and ability to fix his attention and point out objects which, under ordinary conditions, a child will do from his general experience as a member of the home group.

In the case of older children greater variation from the normal is noticeable and many are retarded between twelve and fifteen years of age because they fail in all or part of the adult test and are not graded between twelve and fifteen. The older tests are difficult for these children, too, because their experience has been such that their vocabulary is more limited than that of the average child—perhaps I should say that their polite vocabulary. Their definitions are, therefore, not apt to be stereotyped and their answers are often delightfully naive and frank. Many of the children are of foreign parentage and have come from homes where they have heard no English spoken. It is often difficult for these children to

use or understand English idiom and consequently they fall to pass some of the tests.

To determine the relative, ease or difficulty of the individual tests in each age group, for this group of children, the answers to every question have been gone over and tabulated showing just what percentage of children at the various ages can answer the different questions

TABLE II 3 MONTHS TO TWO YEARS

CHRONOLOGICAL AGE

MENTAL AGE	CHRONOLOGICAL AGE																
	3 Mos.		6 Mos.		10 Mos.		1 Year		2 Years		3 Years		4 Years		5 Years		
	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	
3 Mos.																	
1.....			1														
2.....			1														
3.....			1														
4.....			1														
5.....			1														
6 Mos.																	
1.....			1				3		1								
2.....			1		1		3		1								
3.....			1		1		3		1								
4.....			1		1		2		1								
5.....			1		1		2		1								1
1 Year																	
1.....					1		2	1	5		3						
2.....					1		2	1	5		3						
3.....					1		2	1	5		3						
4.....					1		1	1	5		3						
5.....					1		1	2	5	1	3						
2 Years																	
1.....							2	2	3	5	4	2	1				1
2.....							2	2	3	5	4	2	1				1
3.....							2	2	3	5	4	2	1				1
4.....							1	2	3	5	4	2	1				1
5.....							1	1	3	5	4	2	1				1

TABLE III—THREE TO EIGHT YEARS

MENTAL AGE		CHRONOLOGICAL AGE																							
		2 Years		3 Years		4 Years		5 Years		6 Years		7 Years		8 Years		9 Years		10 Years		11 Years		12 Years		13 Years	
		+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
3 years—		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4 years—		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
5 years—		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
6 years—		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
7 years—		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
8 years—		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

10
QUARTERLY

TABLE IV—NINE TO FIFTEEN YEARS

MENTAL AGE		CHRONOLOGICAL AGE																					
		6 Years		7 Years		8 Years		9 Years		10 Years		11 Years		12 Years		13 Years		14 Years		15 Years			
		+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-		
9 Years—		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10 Years—		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11 Years—		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12 Years—		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15 Years—		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

BINETSIMON SCALE OF INTELLIGENCE
11

Table II. shows the number of questions answered in each age group from three months to two years, also the number of failures. The left-hand column of figures indicates the number of children who answered the question correctly and the right-hand column the number who failed, according to chronological age. For instance, of the eight children who took the test for a two-year-old, seven passed and one failed the first question. (II-5 under chronological age two). Table III shows the same for age groups from three years to eight years, and table IV for age groups from nine to fifteen years. Take question XIII-3, for instance, of the twelve-year-old children who take it ten pass and five fail; of the eleven-year olds who try the same question eight pass and nine fail; of the ten-year-olds only four pass and nine fail; while the thirteen-year-olds all three who take it pass. The question is rightly placed. Questions which are relatively easy are V-3, comparison of two weights, VI-2 aesthetic comparison, VI-3 definition according to use, VI-4 execution of three simultaneous commands, VII-4 recognition of mutilations in pictures, VIII-5 comparing two objects from memory, and IX-5 arrangement of weights. The tests which I found to be too easy for the age group in which they are placed are VIM description of a picture; of twenty-nine seven-year-olds all passed, twenty-five passed it at six years while six failed, thirteen passed at five years and three failed, and four passed at four years; X-2 comprehension of easy questions, twenty-three passed and none failed at ten years, twenty-two passed and none failed at nine years, twelve passed and one failed at eight years, and twelve passed at seven years; and XII-2 rhyming words, fifteen out of fifteen at twelve years passed, fifteen out of seventeen passed at eleven years, twelve out of thirteen at ten years, and three out of four at nine years. Of the tests which were too hard for the age group in which they are placed in IX-17 seven passed and sixteen failed at nine years, six passed and fourteen failed at ten years, three passed and nine failed at eleven years, and not until we reach the twelve-year-old children do four out of five pass. This test consists in being able to name nine pieces of money, including five and ten-dollar gold pieces, bills, and silver pieces of smaller denomination. Dr. Goddard uses this test in the ten-year group and, finding it too easy, recommends that it be placed in a lower-age group. This test very clearly shows the effect of experience. This particular group of children have had little or no experience with identifying coins. XI-5 giving the numbers to the parts of a form is also too difficult for the age group in which it is placed insofar as the response of this group of children is concerned. Three children out of eighteen at age fail in the test and four out of eleven at twelve years fail. Other tests that are relatively difficult for these children in the age group in which they are placed are V-2 drawing a square, VIII-I drawing a diamond, VIII-3 counting the value of stamps, and X-1. counting dots.

In attempting to determine the relation between specific conditions in the home and the mental age of the child from that home from very insufficient data no conclusions of any importance can be drawn except that the children test in the majority of cases "at age," the distribution being determined by the prevalence of the condition. For instance, where alcoholism is a condition in the home fifty-seven out of eighty-three children test at age, four testing above, and twelve retarded, and in the case of feeble-

mindedness or epilepsy in the home (immediate fraternity or parents) fourteen out of twenty-four test at age, nine retarded, and one above age. Where sexual immorality exists, forty-nine out of eighty test at age, twenty-four are retarded, and seven above normal. Table V is valuable chiefly in that it shows the conditions which exist in the homes and in a majority of cases a combination of these conditions exists. In a great many cases there is no history whatever; often the death of one parent and illness and consequent inability of the other to provide for the child causes his dependence. Alcoholism was directly responsible for the dependence of 40 per cent of the children received in one year of whom any history was known. In only seven cases out of the two hundred fifty have I knowledge of the child's never having attended school, but the majority of the children have had very limited school advantages. In these seven cases, of course not enough to be significant, one child was four years retarded at fourteen, having been kept at work beyond her strength so that her physical development is poor; another, three years retarded at fourteen, never heard English spoken until she came to the institution a year ago. "Bad social conditions" is a very indefinite term, as in almost every case, broadly speaking, "bad social conditions" would be the cause of dependence, but in these instances so classed I have included conditions not otherwise classified but which are injurious to physical and moral health and foster vagrancy and mendicity.

TABLE V

HOME CONDITIONS	RETARDED					At Age	ADVANCED		Total
	5 Yrs.	4 Yrs.	3 Yrs.	2 Yrs.	1 Yr.		1 Yr.	2 Yrs.	
Alcoholism.....	2	1	1	6	12	57	4	.....	83
Sexual immorality.....	1	1	1	8	13	49	5	2	80
Bad social conditions.....	1	1	.....	4	6	30	3	1	46
Insanity.....	.....	.....	.....	1	2	18	3	.....	24
Feeble-mindedness & epilepsy.....	.....	.....	.....	.....	9	14	1	.....	24
Desertion.....	.....	.....	1	3	6	13	2	.....	25
Tuberculosis.....	.....	.....	.....	2	4	6	1	.....	13
Divorce.....	.....	.....	.....	1	.....	6	.....	.....	7
Criminality.....	.....	.....	.....	1	3	6	1	1	12
Poverty only.....	.....	.....	.....	1	1	3	3	.....	8
No schooling.....	.....	1	1	1	2	2	.....	.....	7
Physical deformity.....	.....	.....	.....	.....	2	3	.....	.....	5
Pauperism.....	.....	.....	.....	3	1	1	.....	.....	5
Institution children from infancy.....	.....	.....	.....	1	1	3	1	.....	6

Taking into consideration all of the factors, the stunted physical development owing to neglect, deprivation, and abuse, the necessary limitations of institution life, and the number of actual defectives who, through a desire to give them a chance to develop under normal conditions, have

been mistakenly committed to the institution, the percentage of children who are satisfactory according to the standards established for average children in the normal home environment is very fair. The results show a surprising accuracy of the Bluet-Simon scale as a test of intelligence for the intermediate-age groups.

As a psychological laboratory this institution would be invaluable. Some of the environmental factors in the experiment are under the psychologist's hands; other factors are existing conditions which may be studied from the point of view of heredity or sociology. It would be valuable to know what result in terms of mental growth is obtained from the changed physical conditions effected by the transfer of children from abnormal to normal environment, to trace the development of normal children from subnormal stock, to study the adaptability of foreign and native stock, and to be more immediately useful in the difficult matter of establishing individual children in normal relations with society.

REPORT OF WORK AND PLANS FOR THE RESEARCH DEPARTMENT OF THE HOME SCHOOL FOR GIRLS AT SAUK CENTER.

Miss Nancy Tomlinson, Home School for Girls.

Among the more insistent needs at the home school has been one for a department which should investigate the records and family histories of the girls at the time of commitment. Such a department was established tentatively January 1, 1914, and was named the Research Department.

The first thing to be done was to get all the back records up to date. Until August, 1913, no attempt had been made to fill out the history cards. At that time an addition to the office force made it possible to get the data on hand at least filed and some cards filled out,

When the officer in charge of the research department took up the work January 1st, there were still seventy-nine out of one hundred seventy personal history records to be taken; and all the commitment papers of the girls sent to the school since 1910 to be filed. There are two sets of files, one for the girls now in the school, and one for those paroled or of age since 1910. In the latter set of files are the blanks for the after-community record besides the history cards. None of these blanks had been filled in, and the reports of the parole agent had not been arranged and filed.

By August 1st, of this year, all the records of the girls in school had been written up as well as those of the thirty-seven commitments since January 1st. The blanks for the parole records, one hundred eighty-eight in all, have been filled in; and the monthly reports of the parole department for the last four years have been arranged and filed.

Besides the work on back and contemporary records, some field work has been attempted. The data necessary for the application and transfer of three girls to the school for the feeble-minded was gathered by this department. A few homes have been investigated and many relatives interviewed. The burden of home investigation, however, is still on the much overworked parole department. Then there have been many conferences with various state and county officials for the purpose of securing interest