REVIEWs AND NOTICES

FEEBLE-MINDEDNESS AT THE FOURTH INTERNATIONAL CONGRESS OF SCHOOL HYGIENE,
FALO, NEW YORK, 1913

The Present Attitude of the Bureau of Child Hygiene of Buffalo Towards the Defective Child. F. W. B.

The Medical Inspector and Feeble-Mindedness. W. S. C.

The Results of Applied Therapeutics to So-called Deficient Children. J. J. CRONIN. Transactions, Pp.
444-485.
REVIEWS AND NOTICES

The Place of the School in the Problem of Mental Deficiency. 

normal Child. 

University in Relation to the Problems of Mental Deficiency. 

Mentally Deficient—How Many Are There—and How They Be Detected? 

Mentally Defective Child Be Educated in the Public 
Helen MacMurchy. Transactions, Vol. Ill, Pp. 486-

ant Factors in the Seeming Increase in Mental Defect. 

Transactions of the Fourth International Congress on School Hv-
med at Buffalo, New York, in August, 1913, are published in 
of six to seven hundred pages each. The nine papers listed 
directly with the subject of feeble-mindedness in the public schools, 
papers touch on the subject indirectly, but the whole does not 
hundred pages in all. This represents a rather scant recognition 
ct as compared with its importance to the schools. It undoubt-
the fact that the public schools on the whole still do not realize 
ent of feeble-mindedness among public school children and 
s their presence raises for the schools. However, some of the 
ble progress, at least in some localities. Barrows argues 
sentimentality of calling the really feeble-minded by disguised 
as “backward,” “ungraded pupils,” etc. He suggests that the 
should locate every feeble-minded child in the city by name 
and keep these on record. Farrell holds that “The public 
uld be the clearing house for all knowledge relating to the de-
of children which in any way affects the community interest,” 
the school holds the strategic place in solving the problems of 
endency.” Because the public schools are at present not vested 
ey to commit feeble-minded children in public schools to special 
feeble-minded the latter are assured further generations 
A plan is recommended to establish classes for the feeble-
public schools, where they are to be kept until later childhood, 
mitted to the special institution by a state board of physicians, 
ologists, and psychologists, which is to pass on all commit-
gives the child a thorough trial, leaves him in the care of the 
sexual maturity, and lessens the state expense. MacMurchy
regards the special classes as an indispensable part of the modern system. In addition to their regular functions, they should furnish of finding the feeble-minded, for which class they should have the house, to commit them to a permanent home and school of the village type. Cornell discusses the qualifications of the medical. The average physician does poor or mediocre work at first with defectives. A special training is required. He should have a knowledge of factors which cause mental deficiency, and of the clinical evidence of deficiency. It involves sociology, psychology and medicine. He must the right temperament and disposition to handle children. Gesell that the University may deal with the problems of feeble-mindedness in three ways. (1) Through University research and extension departments in connection with institutions for defectives. (2) Through psycho-educational clinics and normal training courses in connection with University departments of psychology and education. (3) Through five-year medical specialty in child hygiene. Goddard accepts the definition of feebleness given by the Royal Commission. He repeats his statement per cent. of the public school children are feeble-minded, and that Simon tests in the hands of one who understands them are adequate determining whether a given case is feeble-minded or not.

Faribault, Minnesota.

F. KUHLMANN

THE BINET-SIMON TESTS AT THE FOURTH INTERNATIONAL CONGRESS OF SCHOOL HYGIENE AT BUFFALO, NEW YORK, 1913


The Degree of Mental Deficiency in Children as Expressed in Relation of Age to Mental Age. F. KUHLMANN. Transactions, Vol. V, Pp. 629-636.


Fernald outlines a plan for a clinical examination to determine the grade of intelligence. He believes the Binet-Simon tests to be inadequate for the determination of the grade of intelligence of adolescents near the line of normal intelligence. Kuhlmann points out that the mental age alone, or the difference between age and mental age does not alone express the grade of intelligence in the case of children, and discusses the intelligence quotient, or mental age divided by age, as a truer index of grade of intelligence. Pyle argues that group tests might be used to examine all the children of a school system, and that those found to vary much from the average normal might then be tested individually. He discusses some group tests used by him for this purpose. The test results should be used as a guide in adjusting kind of work and method of teaching to individual children found to vary from the average. Burt notes that but little of the results of the extensive work done with the Binet-Simon tests is of scientific value, and lays down a number of suggestions that users of the tests should observe to remedy this. Squire notes some defects of the tests. The chief defect, she thinks, lies in the fact that the same or similar tests are not kept from one age group to the next, not making the tests comparable, age for age. Secondly, required knowledge as well as native ability. Thirdly, they are
affected too much by language ability. Fourthly, they should test capacities and functions. Fifthly, the procedure in giving them should be standardized. Berry thinks that in order to make the tests of those depending largely on experience should be eliminated.

for the higher ages are too difficult. The absence of tests for the eleven, thirteen, and fourteen makes it impossible to estimate from ten to fifteen accurately. The mode of procedure should be standardized. Morse reports the results of an examination of 123 colored and 225 white children by a graduate student. Children of varying abilities were selected by the teachers to make them representative. He finds ten per cent. of the white, and twenty-nine per cent. of the colored children retarded over one year, and eighty-four per cent. of the white, and seventy per cent. of the colored satisfactory. Dividing the white into "mill" and "city" children, shows the mill children inferior to the city children, but superior to the colored. Doll notes that the scale of tests can not measure beyond the mental age of ten. He discusses a number of reasons why it might by supposed that tests of intelligence of adolescents and adults cannot be devised, but does not consider them insurmountable. In devising tests the following should be considered: (1) There should be knowledge, or clear hypothesis of the psychology of the age considered. (2) There should be a careful selection of those mental functions essential or contributory to intelligence and then subject these to experimentation. (3) Objective tests should be selected according, and the satisfactory ones standardized. He gives a list of characteristics such tests should have. Grace M. Fernald thinks that tests may work well with the average school case, but that they do not with the delinquent with little or no school training. Tests of the motor-game type should be added in place of those of the abstract, school type. The absence of tests for ages beyond twelve particularly affects the testing of delinquents. Wallin discusses what he thinks are misunderstandings about what the tests can accomplish, and about the ability of examiners to use them. Schreuder reports the results of examining 141 Dutch school children, aged six to twelve years. They show that boys vary more from an average intelligence than do girls, and argues for the accuracy of the scale for practical purposes and for the ages of three to twelve the tests hardly need improvement. Uniformity in the use of the scale by different testers is called for. Man discusses (1) the selection of children for standardization.
REVIEW S AND NOTICES

Question of age grouping; (3) the per cent. of correct responses for placing a test in its age group; (4) the needed shifting of criteria for the elimination and substitution of tests; (6) desirable of tests per age group. The scale of tests should be extended, and other tests added throughout. The value of a scale of tests to aid in interpreting the results of the intelligence tests.

F. KUHLMANN.


This book of nineteen chapters is a collection of twelve reprinted articles, papers not published before, and two new chapters. Four deal with clinical psychology as a new science, its nature, functions, status and contributions. Four others discuss mental examinations, the Binet-Simon tests, and the mental examiner. Four chapters deal with physical welfare and physical defects of school children. Two treat of medical inspection, and two others of what the schools are doing in promoting child welfare. A final chapter gives a scheme of the clinical examination of children. These collected papers "aim to show in slight measure the aid which the practical psychologists and expert consultants hope to render in the important work of diagnosing, studying and training feeble-minded, backward and mentally abnormal children in the schools." A history and survey of the work in psychology in this country leads to the conclusion that the field is not yet clearly defined, and that the necessary qualifications of the psychologist sufficiently understood. Psycho-clinical work is largely in the hands of physicians, and psychologists with no special training for it. Mental examination in the public schools is in the great majority of cases limited to use of the Binet tests by amateurs not at all qualified for the function of the psychological clinic is given as fourfold. (1) Expert diagnosis of mentally deviating cases and expert prescription and (2) "The second purpose of the psychological clinic is to serve as a clearing house for mentally exceptional cases." It has no special interest in normal children. (3) "Research, particularly with a view to perfecting diagnostic tests and to extending our knowledge of causes and treatment of mental abnormalities." (4) "The dissemination of reliable information and knowledge regarding the condition of the mentally abnormal classes." The organization of the clinic
for large cities includes six classes of workers. (1) One director of the clinic and department of special education directly responsible to the superintendent of schools. (2) One supervisor of special education directly responsible to the director. (3) One or more social workers. (4) "One or more mental testers for some of the routine testing." (5) "One medical man, to serve as a 'clearing house,' or general utility man on the medical side. One or more clerks. Which of the above functions of the clinic each of these six members of the clinic's staff is not specifically stated.

A mental diagnosis involves both a laboratory and clinical results must give the general mental level, and a comprehensive clinical picture of the case. It must differentiate types and trace to causes. There are many aspects of mental deviation which form alone does not reveal. To become a clinical psychologist requires training. "The general practitioner, pediatrician, orthopedist, psychiatrist, educational, experimental, genetic or abnormal psychologists in some of the essentials which the expert psycho-clinician lacks." He must have an expert knowledge of general, experimental, genetic and abnormal psychology, and of child study. He in addition a thorough training in psycho-clinical procedure, in a laboratory clinic and a year's internship in the first-hand study of backward, feeble-minded, epileptic, psycho-pathic and disciplinary cases also thorough training in educational therapeutics, the differential, coagogies of the educational expert on mentally deviating children. Simon scale is only one of many diagnostic devices at the command of the trained clinical psychologist, and no system of formal intelligence devised can be used as an infallible measuring rod of intelligence, have many imperfections, but are a step in advance, and of consist to the trained examiner. "They provide a fairly impersonal method by which to grade or classify, with a fair degree of ac tutional and school cases relatively to one another." In the hands of the expert it is "a surprisingly serviceable means of classifying masses or groups of individuals." The 1908 scale should be us ence to any of the several revisions that have appeared, "until mass of clinical data is available for a thoroughly scientific revis it scale." The manner in which these revisions have been made criticised, calling forth the statement that "Superficial work like leading and tends to arouse contempt for the slipshod standard work obtaining in this field of applied psychology. Worse scales, because of the claims made as to their reliability, are and used by large numbers of uncritical Binet testers who are chologists nor scientists and thereby pupils are judged or stigma basis of unproved assumptions." The number of tests for each should be increased to ten. The present number measures to insure our striking a fair average for the whole. For the you
half years should be included. To establish reliable norms not less
der cases of each sex for each age-group should be tested, and
must be normal children. The tests should be given to the chil-
dually, for group tests do not give reliable norms. The tests need
of administrative procedure. In order that the results ob-
table reliable the tester must have the training of a clinical psycholo-
 of testing by amateurs are probably not more reliable than or-
room standards for determining pedagogical retardation.

mental program for the promotion of child welfare is given chiefly
chapter, on "The Euthenical and Eugenical Aspects of Infant
Orthogenesis." The physical and mental development of every
its entire growth period should be in charge of the community,
through the schools and other public institutions. To accomplish
measures are laid down. (1) Every child on entering school
physical and mental examinations by expert examiners. (2)
treatment should be given all children deviating from the nor-
"Specially trained teachers and special classes or institutions
vided for the mental and physical deviates." (4) For all chil-
and mental education should receive equal emphasis. (5) So-
mentally incompetent children should be permanently segregated
less adequate protective oversight is insured in the home. (6)
psychological work should aim to prevent more than to cure de-
measures usually advocated by eugeneists are for the most part
ideal from the eugenical standpoint, but a number of difficulties
pointed out. (1) The sexual emotions are the subjective side
that are biologically fixed. There is no instinctive repulsion to
matings, and it is questionable whether this can be aroused
nings and prohibitions. A racial instinct of sexual modesty op-
health examinations, and maternal and filial instincts oppose
ption of the eugenically unfit. (2) Public sentiment will not
colonization of all misfits. (3) There are no adequate means
who are eugenically fit and unfit. (4) Eugenical research

Following chapters are on "Experimental Oral Orthogenics,"
on of Oral Hygiene to Efficient Mentation," "Methods of Meas-
Orthophrenic Effects of the Removal of Physical Handicaps,"
Dental Inspection in the Cleveland Schools." The first of these
results of an experimental study on the mental effects of
ent of a group of children, and will be considered further in
A chapter on "Efficiency in School Organization and the Con-
the Mental Health of Children" gives twelve case histories of
es of deviates among school children, and comes to six conclu-
which, however, have already been noted in connection with other
Chapter XVIII on "Public School Provisions for Mentally Unusual
issues results obtained in answer to a questionnaire sent to pub-
The reader who has been following developments along which this book treats will have some things to criticize. As a treatment of one central theme the book is disappointing, as all reprints and old unpublished papers are apt to be. It lacks plan and unity, and is full of needless repetitions. It represents a miscellaneous collection of personal opinions of the author who has been rather too brief and limited in the many fields of inquiry to command the weight of authority. The author's failure to literature previously published, and the copious advice, suggestions and plans given leave the impression of the unscholarly and amateurish references to literature is given in only three out of the nine and only several of those in the list are referred to in the text for these chapters are: "The New Clinical Psychology, and clinician;" "Individual and Group Efficiency;" and "Medical inspection in the Cleveland Schools." Why the reader should read literature on these particular topics and not to literature on the clear. A chapter on "The Present Status of the Binet-Simon of Intelligence" gives no list of references, and only three for, out of several hundred publications have been consulted for this chapter one of the author's own to which more than half of the nine pages of this chapter is a study gives the results of examining 333 epileptics, and from the tests is judged. The author's strong and continuous standards of scientific work in mental diagnosis, and for a mental examiner is in itself commendable enough, but it leading, and involves some erroneous assumptions. To qualify as an expert one must be an expert clinical psychologist, when we note his enumeration of the qualifications of the psychologist it becomes obvious that either no such person or else "expertness" is taken in a rather loose sense. The author qualify as an expert according to his own definition. We are Binet-Simon tests is only one of many means the expert is making a mental diagnosis: that other mental tests, and of the case must be made to constitute a reliable diagnosis. Other tests with established norms are given by the author, come to his final chapter presenting his schema for the children we find nothing essentially different from a score in which the literature has abounded for years, but which has of great value in practical work. If the author had presented tests, with their manner of use, and had shown us definitely data called for in his schema could be gathered and utilized mental diagnosis some contribution would have been made. Instead the assurance simply that this matter may be left to
Practically all other psychologists of experience with the Binet-Simon tests who give their opinion testify that the tests should be at least a great aid to any teacher in arriving at a better knowledge of a child's intelligence. Dr. Wallin, however, is convinced that the results of such amateurs are of much greater value for this purpose than the regular school records already existing. He insists that the general and technical training of the psychologist are necessary to make a reliable Binet-Simon tester a kind of dogmatism that he severely criticizes in other students of the Binet-Simon tests. The reviewer's actual experience, agreeing positively and emphatically disproves this assumption.

The reviewer's actual experience agrees with that of others. The revisions of the tests that have appeared by different authors are unreliable, and apparently as poorer than the original that since the fact is lamented that the revisions, because of their reliability, are used by uncritical and uninformed testers. It is unfair to the revisers if the inference is made great and modest claims for their revisions. That he has made an improvement over the original, and no impartial reader will deny that this much is proven. But let us note the author's regarding the revisions all as unreliable. They are because (1) children have not been used to obtain the norms; (2) there has not been an extensive number of cases examined for every age; (3) the children have not just passed their birthdays at the time of examination; (4) his wide range method of testing was not used. We may grant all these statements as true. They are mostly irrelevant and all misleading in their implications. That the author should regard them as proof that the revisions are unreliable and no improvement over the original shows rather that he has not followed the analysis of the results on which the revisions are based and is lamentably ignorant of the theory and technique of the scale of tests like that of Binet-Simon.

The book contains two chapters on the results of two experimental studies. One gives the results of examining 333 epileptics with the Binet-Simon tests. The other gives the results in the use of special mental tests before and after dental treatment of 27 school children. These two chapters gives us a means of noting how the author lives up to the high standards he has set up in other chapters. It has already been noted that a number devoted to discussing defects in the Binet-Simon tests on results obtained in examining epileptics. These epileptics were feeble-minded, and he has only 333 for all ages included. The special type of mind which causes exceedingly irregular Binet-Simon testing. Apparently the author has not discovered regards it as irrelevant. I have always excluded results from worthless in discussing accuracy of the Binet-Simon tests. I have always excluded results from worthless in discussing accuracy of the Binet-Simon tests. The book contains two chapters on the results of two experimental studies. One gives the results of examining 333 epileptics with the Binet-Simon tests. The other gives the results in the use of special mental tests before and after dental treatment of 27 school children. These two chapters gives us a means of noting how the author lives up to the high standards he has set up in other chapters. It has already been noted that a number devoted to discussing defects in the Binet-Simon tests on results obtained in examining epileptics. These epileptics were feeble-minded, and he has only 333 for all ages included. The special type of mind which causes exceedingly irregular Binet-Simon testing. Apparently the author has not discovered regards it as irrelevant. I have always excluded results from worthless in discussing accuracy of the Binet-Simon tests. I have always excluded results from worthless in discussing accuracy of the Binet-Simon tests.
feeble-minded this statement would have been correct), and the case are they (the revisions) based on the performances of *selected* children." A comparison made between the epileptics and feeble-minded conclusions as to the relative frequency of the different grade intelligence in each is also interesting. He has examined the inmate institution for epileptics and compares them with the inmates of the (N. J.) School for Feeble-minded. He concludes that "The typical category is that of the condition of moronity. While the typical feeble-minded station is that of imbecility," because morons are numerous of any grade among the epileptics of this institution, and are most numerous among the feeble-minded at Vineland. Alas for the profession that this should come from the "expert clinical psychologist"! That the epileptic sent to an institution might be selected cases in any degree he does not think likely, and that possibly moron feeble-minded are not sent to an institution with the same relative frequency as are grades he does not mention.

We may turn to his experimental study attempting "to determine by controlled, objective, mental measures the influence of hygienic and dental treatment upon the intellectual efficiency and working capacity of a squad of twenty-seven public school children." The following five tests were used: (1) Memorizing ten three-place numbers for forty-five seconds shown on a cardboard to the class. (2) A spontaneous association test, in which each pupil a column of thirty simple words, and telling the pupil the first suggestion for each word for eighty-five seconds. (3) An association test, in which the pupils wrote for each word of twenty-five that meant just the opposite. (4) An adding test in which the pupils added columns of ten one-place digits. (5) The "A-Test," in which the pupils crossed out the A's of a pied page for 100 seconds. Six series of these tests were made up. The first and second series of each before dental treatment. "The last two tests (series) were given to five months after the dental treatment had been completed and pupils, while tests 3 and 4 were given only one or two months beginning of the treatment for more than half the pupils." All group tests by the author "or by proxy." Besides the dental treatment these pupils were given instruction on oral hygiene and correct eating, and a nurse followed up the cases, giving individual instructions to parents and pupils, and noted whether the instructions were being followed. This is the experiment and its conditions. Does it meet the standards of accurate scientific work set up for others by the author? Let us apply them.

First, as to the tests themselves. Are they of such a nature as to measure small differences in intellectual efficiency and working capacity? To have to measure small differences, equal to considerably less than normal mental development, for no one would expect very large improvements in the course of several months following dental treatment. We do not know whether they measure intellectual efficiency at all, in
REVIEWS AND NOTICES

That any one of them alone reliably measures small differences is surely an unwarrantable assumption. Only five different tests were used. We recall the author's statement that in the Binet-Simon scale of tests for each age-group should be increased from five to ten to make those tests reliable. Yet the Binet-Simon scale does not measure differences smaller than that between two consecutive years of normal development, and it measures this difference not with one age-group alone, but with several age-groups, or twenty-five tests. Second, the procedure in giving the tests. These tests were given to the pupils individually, but were group tests. The author has warned us before that the results of group tests are not reliable. He that in order that the results of any test may be reliable the test must be given by a trained psychologist. These tests were given by the proxy, and he does not tell us anything further about the statement as to the time interval between dental treatment and the several series of mental tests is very indefinite. If these varied irregularly from one to two months for the third and fourth from three to five months for the last two series, it was a poor control of this factor. Third, the pupils tested. Pupils with dental defects before and after dental treatment, but no similar group without treatment were tested for control. What can we infer at all from results without such a control? Only twenty-seven pupils were tested but the author told us that in order to establish reliable norms for Binet tests not less than a hundred cases for each sex for each age must be tested. Fourth, the elimination of other factors that might have the same influence as the dental treatment. The aim of the experiment was to determine the degree of influence of the dental treatment. But these pupils received not only dental treatment, as was noted. Can we assume that effort in both school work and in the tests, and the assistance and encouragement from parents and home would be left entirely unaffected when so much ado is suddenly made over them? If the tests after the treatment showed improvement, to what can we attribute it? Possibly to treatment, possibly to these other changed conditions, possibly to improvement that would have taken place if nothing had been done with the pupils at all, and so the results can prove nothing. Yet from experiment, made under such conditions, and in the midst of scathing from the author of the methods of others, several pages of conclusions are drawn. These are, in a word, that the beneficial influence of treatment on mental efficiency has been demonstrated; that there are no important sex differences; that there are no important age differences; and finally, that "The conclusions which follow from the results of this of far-reaching importance to the state and nation." The reader cannot help but be reminded of the following statement in
the Preface: “Owing to these misconceptions (as to the value of amateur Binet-Simon testers) we are today tolerating and fostering a type of work in applied psychology which often is scientifically barren and sometimes positively pernicious.” Or again, in a later chapter when speaking of different revisions of the Binet-Simon tests that others have published: “Superficial work like this is misleading and tends to arouse contempt for the slipshod standards of scientific work obtaining in this field of psychology.”

Faribault, Minnesota. F. KUHL