

SECTION ON PSYCHOLOGY

Chairman: A. R. EIKENBERRY, Manchester College

Attendance at the meetings of the Section on Psychology was reported to be the largest of any meeting to date, approximately 150 persons attending some of the meetings.

At the luncheon meeting Dr. George A. Kelly, of Fort Hays Kansas State College, presented an interesting discussion on the place of the psychologist in the small school system.

Dr. F. B. Knight, of Purdue University, was chosen chairman of the section for 1939. The following were named to constitute the program committee: Fowler D. Brooks, DePauw University; Irvin T. Shultz, Butler University; and R. C. Davis, Indiana University.

ABSTRACTS

Orientations in mental deficiency. L. P. HARSHMAN, Fort Wayne State School.—The approach to the problem of feeble-mindedness is more than a study of distribution, classification, limited education, and some form of institutional care. There must be a study in the mental dynamics of the patient as applied to his individual problems of challenging the world. Stresses should be made on the reciprocal relations of importance in determining the social destinies of the defective. Only by such an approach can there grow a consciousness and a common concern relative to mental hygiene's biggest problem.

The place of the psychologist in the small school system. GEO. A. KELLY, Fort Hays Kansas State College.—Attempts to increase the annual production of the school plant have resulted in a type of organization in which administrators are removed from pupils and teachers and compelled to recognize greater responsibilities to administrative regulations and to curricula and less responsibility for the welfare of individual pupils. If the school psychologist is simply to be another specialist, we cannot justify his existence in a small school system. The place of the psychologist should be envisaged as that of a teacher without curriculum, whose major responsibility is to assist individual pupils and teachers. An outline of the typical activities of such a psychologist in a small system is presented, together with suggested plans for including his salary in the budget.

Persistence of attitudes concerning conservation issues. A. C. WILLIAMSON and H. H. REMMERS, Purdue University.—The problem of this study was two-fold: first, to measure persistence of group attitudes changed by means of defined social stimulus material, and second, to measure the variability of the groups to discover whether they become more or less homogeneous after the presentation of such material. The

results indicate that there is a significant change in attitude and in variability, and this change persists over a period of time—in this study, four months for the urban group and eight months for the rural group.

An experimental comparison of old and young coördinations in normal college adults and diagnosed pathological cases. BRYAN PAYNE, Indiana University.—With the use of the mirror-vision technique, we have been able to measure, on the one hand, the efficiency of a coördination that is genetically old in the life of the subject and, on the other hand, the efficiency of another coördination beginning relatively not so far from zero. In this study we have measured the efficiency of a day's practice in mirror-vision and of a day's practice in direct-vision for 78 diagnosed pathological cases. A day's practice consisted of ten repetitions of the task, each repetition being separated by an interval of one-half minute. Comparisons have been made with the efficiencies of normal college adults practicing under identical conditions. The following summary and conclusions seem warranted by the results of this study: (1) Pathological cases are reliably lower in direct-vision efficiency than normal college adults. (2) Pathological cases are reliably lower in mirror-vision efficiency than normal college adults. (3) The difference between direct-vision and mirror-vision efficiencies is relatively greater for pathological cases than for normal college adults. The greater deviation lies in the direction of the mirror-vision efficiency, i. e., the pathological cases are relatively lower in mirror-vision efficiency than in direct-vision efficiency. (4) We interpret these facts to mean that, while the old habit patterns are somewhat disturbed in the pathological state, they are not disturbed to the extent that the more embryonic pattern is. In terms of the eye-hand coördination, abnormality is more largely in the direction of an inability to build up the new coördination than it is to maintain the old in the face of stimulation.

A simple and direct approach to measurement of the attention value of advertising copy through eye-movement photography. JAMES S. KARSLAKE and JOSEPH TIFFIN, Purdue University.—A photographic technique placing advertising copy at reading distance and approximating normal reading conditions has been developed to meet very nicely precisely those factors which are peculiar to the determination of consumer interest in advertising. A method of direct photography, recording eye-movements by reflection from a half-silvered mirror together with a picture of the page or pages by transmission through the mirror, has been found to yield to a sufficiently accurate approximation of fixation areas just what material, if any, is of consumer interest. Six people without previous experience were able to judge ten looks at several pages of a well-known periodical, correctly identifying 58 of their combined total of 60 placements.

The distribution of muscular action potentials during maze learning. ROBERT S. DANIEL, Indiana University.—The problem of the amount of muscular tension concomitant with the acquisition of a motor skill in an assigned task is the basis of this research. Results of the study indicate a differential level of tension for the four body positions studied,

which is maintained throughout the learning. However, the most significant conclusions are derived from the curves of the progress of tensions as the task is mastered. Early tensions were high as the subject approached the job. Tension levels fall in every member towards the middle of the practice series, then rise again as the last trial approaches. Statistically, the early decline in tensions (progressive relaxation) is associated with the attempt of the subject to eliminate errors or to achieve accuracy. The later rise in tensions is in the same way associated with the attempt of the subject to increase his speed. This interpretation of the results is made in connection with a peripheral-motor theory of learning.

An experiment in shifting attitudes. HARRY MASON, Purdue University.—A group of 57 seniors in the West Lafayette High School were given attitude scales concerning the attitude object: That a half-time schedule of opportunities to learn while on jobs in businesses be substituted for the traditional system of high school administration. A test of information on subjects relating to the vocational adjustments of youth was also presented. Propaganda intended to shift attitudes toward favor for the proposal was introduced, and the same scales and tests repeated. Interesting relationships between attitudes, intelligence, and information were evident upon analysis of the data by statistical means. By use of two techniques of measurement of attitude, some theoretical considerations of measurement in this field were brought to light.

A practical test for punch press operators. NATHAN B. GEWIRTZ, Purdue University.—Following the principle that a psychological aptitude test is usually more valid when it closely approximates the job, a test for punch press operators has been constructed, the press of the same general design as that used in industry. The operator is asked to put 50 plates through the press four times, making a total of 200 pieces. Two scores are obtained—a time score and an error score. Preliminary norms, as well as a comparison between unselected persons and experienced punch press operators, are presented. Correlations obtained from this preliminary data between efficiency ratings and scores on the test are discussed.

Industrial psychology. JOSEPH TIFFIN, Purdue University.—The test, used to supplement present methods of employment, attempt to give a picture of the actual efficiency of an employee before he is hired. In each case the test is "tested" on present operators before it is recommended to the employment manager. "Testing" the test on present operators involves giving the test to a fairly large number of present employees and determining whether those who test high tend in general to be more efficient than those who test low. In this way it may be determined definitely whether the test will pick efficient operators. Obviously, in using present employees to test the test, the results would have no bearing whatsoever upon the present status of those employees of the company. An experimental testing program of the type described has been under way for some time in two plants. Results show

clearly that manipulative operators can be selected with considerable precision by means of such tests as finger dexterity, hand precision, and keenness of vision.

The person as a laboratory subject, as a statistical case, and as a clinical client. GEO. A. KELLY, Fort Hays Kansas State College.—The definition of the science of psychology eventually will be written by those who are not psychologists. It is difficult for anyone except a confirmed psychologist to see the laboratory subjects of the academic psychologists as the same human beings who inhabit the land. It is somewhat easier for an administrator, an economist, or a social worker to recognize the statistician's case as a workable entity. Great numbers of intelligent and interested laymen who have been newly awakened to so-called human values are thinking in terms of clinical clients and what the psychologist does for them. This forcing of the psychologist's hand may draw him into scientific inaccuracies or may cast for him a new and more vital role. Illustrations of the problems which psychologists will be expected to solve are offered.