

PSYCHOLOGY

Chairman: L. M. BAKER, Purdue University

Chairman for 1953 to be announced later

ABSTRACTS

University teachers self-perceived dynamics of effective teaching. PAUL C. BAKER and H. H. REMMERS, Purdue University.—The instrument used in this study was a 70 multiple-choice item questionnaire designed to elicit responses to four general questions: (1) What is being done in your department to help you become a more effective teacher? (2) What are you doing to become a more effective teacher? (3) What are the most serious hindrances to effective teaching? (4) What is your philosophy of Education?

The questionnaire was circulated among the faculty of Purdue University with instructions to answer each question by choosing one of the alternate answers, and then to rank the items in each section in order of their importance as contributors to effective teaching. Of the questionnaires returned, 257 were complete and were used in the statistical analysis.

Each of the two responses to every question was examined separately. By analysis of variance, statistically significant variations were identified among groups of respondents of (1) different schools and departments, (2) different academic ranks, and (3) different academic degrees. When viewed in the light of known facts of departmental differences, these variations give strong support to the validity of the results obtained.

The respondents, as a group, feel that among the most important contributors to the achievement of teaching effectiveness are: (1) Constant experimentation with new and different teaching methods. (2) Keeping abreast of recent developments by constant reading of their respective literatures. (3) Advanced research. (4) Staff meetings where teaching problems are discussed.

Among the things felt not to be important are: (1) Use of the Purdue Rating Scale for Instruction to gauge student reaction to teaching. (2) Class visitation by a peer. (3) Consultation with the dean or department head on teaching problems.

The most serious hindrances to effective teaching are felt to be: (1) Bad physical conditions in the classroom and office. (2) Lack of emphasis upon research. (3) Poor sectioning of students. (4) Time wasted with trivial and routine matters. (5) Lack of recognition for superior teaching.

A factor analytic investigation of some aspects of the social behavior of Schizophrenics. HARRY W. BLAIR, Beatty Memorial Hospital.—A diversity of conceptual treatment of the observations of social impairment in schizophrenia suggests a need for a common set of concepts which will facilitate further systematic exploration in this area. Among the various

methodological alternatives to which a clinical psychologist may resort, factor analysis offers many advantages.

The present investigation dealt with a variety of behavioral observations in an interview situation which seemed to be of social import. After rough scaling and later reduction to dichotomous categories for the computation of tetrachoric correlations, factors were extracted by the multiple-group method. Data was obtained from 100 schizophrenic patients who were later compared on factor loading indices with 40 non-schizophrenic patients. Factor loadings for case history variables were also obtained.

Of the six oblique factors obtained, a highly related triad of factors evolved into a more general factor of social ability. These three related factors were named: General social orientation and capacity, Socio-motoric responsiveness, and Reactive assertion and reproduction. Differences between non-schizophrenics and the various schizophrenic subtypes as to factor loading indices were highly significant, as were many of the comparisons among schizophrenic subtypes.

The entire investigation is viewed as exploratory and the relationships observed are regarded as tentative, despite a circumscribed demonstration of their descriptive usefulness.

The effects of moving on various factors of adjustment. N. M. DOWNIE, Purdue University.—This study was made in a community in the Pacific Northwest. In some classes nineteen out of twenty-five children had attended schools other than the local ones. Academic ability, as measured by the Otis Self Administering Test of Mental Ability, and social adjustment, as measured by a sociometric device, were studied.

In 1949, all children in 18 classes making up grades five through eight were given the Otis test. Also during the first three months of school, before various activities began, each child was asked to name three other children with whom he would like to carry out each activity. Twelve such questions were given each student.

An analysis of the intelligence test scores on the basis of number of schools attended showed no differences in the mean score of the different groups. Social acceptance, as measured by the sociometric device, showed rather confused results. Children with one or two moves or who were in the school system from one to three years after moving had better social acceptance scores than those who had always been in the local schools, those who had moved around quite a bit, or those who had been in the local schools less than one year.

A study of personal data as predictors of the job behavior of telephone operators. N. FRIEDMAN and E. J. MCCORMICK, Purdue University.—Studies in several situations have indicated that personal data are predictive of employee job behavior. This study was concerned with examining the relationship between personal data and tenure with view toward reducing turnover by scientifically determined selection procedures.

The predictors were biographical items called from the application blanks of 336 telephone operators from one large exchange. Further, 254 of these operators were rated by three supervisory personnel on over-all

job performance. These ratings were intended to serve as an ultimate check on recommended selection procedures.

Analysis with a primary group indicated that four items were related to tenure. An item selection technique, developed for this study, when applied to the holdout group, indicated that two of these four items afforded maximum prediction of the criterion. The two items were education and marital status. An analysis of variance was run for the job performance ratings of operators in each of six combined marital status and education categories. The results of these analyses suggest the following conclusions:

1. That hiring single applicants with a high school education (or preferably less) would decrease turnover.
2. That operators selected on the basis of the tenure analysis would not differ significantly in over-all job performance from the total operator population.

An analysis of nine personality scales. FRANK S. MCKENNA, DePauw University.—A battery of nine personality scales composed of the Allport A-S Reaction Study, abridgments of Guilford's scales of Cycloid Emotionality and Rhathymia from An Inventory of the Factors STDCR, and the six Heston Personal Adjustment Inventory scales of Analytical Thinking, Sociability, Emotional Stability, Confidence, Personal Relations, and Home Satisfaction were administered to 235 college sophomores. Scale intercorrelations were calculated and three factors were extracted utilizing Thurstone's centroid analysis. Orthogonal rotations of the reference axes were performed to give simple structure. Multiple regression equations were derived to predict factor scores on the basis of scale scores, and the score of each of the 235 subjects was predicted for each of the three factors. The highest and lowest 27 per cent of subjects in each factor score were identified and an item analysis of the 270 Heston items was performed, utilizing Flanagan's table of correlation coefficients.

On the basis of the factor loadings of the scales and items the three factors were tentatively identified as representing the bipolar personality traits of: (1) Relaxed Emotional Stability vs. Anxiety-Depression, (2) Rhathymic Extroversion vs. Shyness, and (3) Confidence vs. Inferiority-Submissiveness. The similarity of these factors to those reported in previous investigations increases the confidence in their importance as common traits of personality.

Problems of a clinical psychologist in a prison situation. N. S. HOLLIS, Indiana State Farm.—All of the problems that are common to clinical psychologists are found in the prison situation also, for prisoners are human too. Also, the same methods—intelligence tests, diagnostic devices and therapies, etc.—are used in the prison laboratory as they are in "outside" situations. The personality disorders encountered by the prison psychologist are similar to those he meets in his private clients except that the conflicts of the prisoner are usually more severe.

Some of the problems are only remotely related to usual clinical practices. They include dealing with men seeking work transfer; those wanting their case reviewed; chronic complainers about food, work conditions,

general treatment; those seeking a variety of special privileges; those requesting evaluation of "inspired" productions as poems, stories, pictures, music, hand-craft articles. There are a variety of "phonies" to be dealt with such as the religious reformers, lawyers, psychologists, hypnotists, some of whom have professional training but no adequate opportunity for usual practice and others who are posing. An over-all problem of great importance is trying to help men adjust in a situation that may be thought of as "abnormal" for each individual.

The testing of the intelligence of motor handicapped persons. EDWARD T. JORDAN, Indiana State Teachers' College.—1. The nature of the problem. Brain injuries, Cerebral Palsies, Vascular Insults, all have effects on the sensory and motor abilities of the persons suffering them.

Where the receptor organs are damaged and the motor functioning also impaired the usual psychometric techniques cannot be validly employed, owing to their large dependence on verbal expression, motor performance, or written responses.

Performance Tests have been relied upon in purely sensory involvements, where the motor capacity has been reasonably intact, but where the sensory and motor capacities are reduced at the same time, the response disability renders the test program, if using parts of the standard tests, quite invalid.

2. A possible solution. To overcome this difficulty tests have been conducted with cerebral palsy cases, post-cerebral trauma cases, and others, to discover methods of assessing intelligence, and the level of educability, independently of speech, writing, or motor performance abilities.

Perceptual intelligence was selected as the sole remaining avenue of impression with techniques involving the ability to produce a "Gestalt," by completion of the elements visually presented, and in keeping with Spearman's "Laws of Noegenesis," to determine the ability to perceive the relationships presented and educe the missing correlates in a given presentation.

A description of a tentative scale, with two forms for the pre- and post-grade school levels, which is the subject of research by the author, was given.

Attitudes toward public education, as related to n variables. R. BRUCE KIRK.—To investigate the relationships between the attitudes of high school students and those of adults toward the public school system, and also the interrelationships of the attitudes of the students, a questionnaire which had appeared in Life Magazine was adapted for high school students.

From a total of over 8,000 students throughout the country in schools which participate in the Purdue Opinion Panel, a sample of 2353 was selected, chosen randomly on all categories except grade and geographical region, these being stratified.

Chi-square tests revealed general agreement between the attitudes of students and those of adults toward the public school system. Significant differences were found between sub-groups of students when they were divided on the basis of their sex, grade in school, rural or urban residence,

religion, socio-economic status, political party, geographical region in the United States and mother's education. Most differences were found between students whose political party preferences were different, least between those whose mother's education levels were different. The items of the questionnaire were tested and it was found that the questions which were most discriminating were those regarding Federal aid to parochial schools, some free college education for all who want it and the pay of teachers.

These results are believed to have implications for the schools and for designers of curricula.

A validation study of intropunitive and extrapunitive signs on the Rorschach Test, based upon records given by suicidal and homicidal subjects. CAROLYN PRATT, V. A. Hospital, Indianapolis.—The present study is an attempt to validate those constellations of factors on the Rorschach Test which are interpreted as intropunitive and extrapunitive by quantitative and qualitative analyses of the protocols given by persons who have attempted to commit suicide and/or homicide. The experimental populations included 51 subjects who had attempted or committed suicide, and 48 subjects who had attempted or committed homicide. Wechsler-Bellevue IQs were available for 29 homicides, mean IQ 91, and for 29 suicides, mean IQ 108, a difference significant between 1% and 2% level of confidence, using the t test of significance.

When the two groups were compared by chi square with Beck's norms, they were found to differ statistically to a significant degree in many respects. When the experimental groups were compared with one another differences were found but interesting similarities were also noted.

Possibly the most significant findings were the result of an intensive analysis and comparison of the 12 most serious suicidal records with 12 less serious suicidal records and 12 random homicidal records. As a result of this comparison, it was suggested that the typical serious suicidal patient of this population was an individual of above-average IQ, whose Rorschach protocol showed a high number of responses, extratensive experience balance, emotional instability (high CF), inability to relate to others affectively (low FC), inability to appraise himself objectively (low V), marked dysphoria and anxiety (high Y), and aggressive trends (high S). His maladjustments were more likely to be expressed in significant content than by rejecting the cards. On the other hand, the less serious suicidal patient of this population was a person of about average intelligence who displayed an hysterical Rorschach pattern with low R, constriction of M, CF, FC, V, Y, and S, with a high rate of card rejection. The typical homicide of this population was a person of below-average intelligence whose record resembled that of the less serious suicide except in a higher number of Y responses.