

# A GUIDE TO MENTAL TESTING

For Psychological Clinics, Schools, and  
Industrial Psychologists

By

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BY THE SAME AUTHOR

PSYCHOLOGY AND SOCIAL PROGRESS

YOUR MIND AND MINE :

An Introduction to Psychology

CROOKED PERSONALITIES

An Outline of Psychotherapy

GENERAL PSYCHOLOGY

THE DESCRIPTION AND MEASUREMENT  
OF PERSONALITY

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DEDICATED TO MY CO-WORKERS IN THE  
PSYCHOLOGICAL CLINIC AND  
THE EXPERIMENTAL SCHOOL.

CECILIA BAKER. RICHARD DEWHIRST.  
JESSEY LOWE. WINIFRED MILLER.  
DIANA MILLIS. MARJORIE RAILTON.  
MARGARET WALTON. JAMES WILLSON.



## FOREWORD

FOR some time there has been a lull in the progress of mental testing as a practical procedure. After the first wave of enthusiasm in the so-called Intelligence Tests, and their indiscriminate and often unintelligent application, this was bound to happen. It became evident that the results of these tests were influenced by factors other than intelligence, which seemed to elude measurement even if they were taken into account at all.

The psychotherapist, faced with problems of behaviour dependent on forces much more instinctive than intellectual, found the estimation of mental endowment alone of only limited value, especially since variations in mental capacity were always complicated by disturbances of the personality.

This was also the lot of the educational psychologist. Attainments often showed a marked discrepancy with test rating. Something obviously remained unexplained.

So the problem was thrown back and forth from one to the other, without any definite solution being arrived at.

In this book we have a much-needed and remarkably successful attempt to end this state of affairs. Looking on his subject from a wide angle, Dr. Cattell has sifted all those methods which aim at estimating, so far as can be, the various activities of the mind, using the term in a broad sense. He has wisely selected for detailed description only those whose value has been proved, and which are suitable for practical application. He has been critical and selective, and necessarily so, and he has substantiated his work with ample references.

Here, for the first time, is collected under one cover,

reliable information on all aspects of the subject. This book fills a long-felt want, and all practical psychologists, whether in educational, child guidance, or medical fields, will welcome it.

WILLIAM MOODIE, M.D., F.R.C.P., D.P.M.,  
*Medical Director, London Child Guidance Clinic.*

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## INTRODUCTION

FOR some unaccountable reason the expression 'Mental Testing' has been understood by many teachers and even a few psychologists as if it were written 'Intelligence Testing.' Text-books and articles dealing only with intelligence tests, or at the most with cognitive material, still appear bearing the title "Mental Tests." Obviously 'mental' should refer to the mind in all its aspects, intellectual and emotional, and that is the sense it bears in the title of this book, which deals with tests and diagnostic methods in regard to intelligence, attainment, special aptitudes, interests, emotional structure, temperament, and character.

My aim has been to provide (1) A handbook which shall contain between its covers sufficient instructions, test materials and norms to aid the psychometrist in assessing the principal aspects of personality so far made accessible to exact examination. Without a practical handbook of this kind the psychologist is reduced to the time-consuming inconvenience of having to consult many different reference books and of carrying with him portfolios of obstinately errant test material.

Naturally the exactness and reliability vary considerably between such fields as intelligence testing, where research has long provided a sound theoretical basis, and the latest essays at character analysis which tread closely on the heels of pioneer research and can only be tentatively interpreted. With this explanation perhaps no apology is necessary for presenting relatively untried tests in the character-temperament section. They have promise in a region where most tests are of low validity and their publication may at least stimulate further research.

(2) A guide to most other available tests of any value (and from which the above are a selection), with brief

comments on their origin, validity, and source of publication. In general, only one or two tests are given in each field. Where American and English Tests are of equal goodness, the latter are usually given, since American standardisations are in some fields inapt to testing purposes in this country; but always the test based on sounder research is given first consideration. Tests of doubtful value are generally given no more space than suffices to print their titles. Even so, a complete catalogue of every test described in journals or placed on the market has not been attempted. Such a complete list already exists in Dr. G. Hildreth's *A Bibliography of Mental Tests and Rating Scales* (Psychological Corporation, N.Y., 1933), where over four thousand titles are recorded. A slightly less exhaustive but even more valuable survey and commentary on available tests—valuable particularly because it is constantly kept up to date—is O.K. Buros' *Mental Measurements Yearbook*.

The psychology of measurement is still greatly beset by growing pains. Only a thoroughly trained professional psychologist can hope to get a right perspective on the value and use of recent developments. But, since many psychometrists with lesser training have to use tests, some explanation or summary of basic principles cannot be omitted in a book of this kind. Although it is intended primarily as a handy tool for the busy practical psychologist and as a guide for the inquirer after new tests, it prefaces each set of tests with a condensed account of the present position of research in the field concerned. Since this must be very brief, it is necessarily more dogmatic in tone than one would ideally like it to be. There is also a section on the interpretation and synthesis of test findings. These statements of the general background should be of considerable help to teachers and psychometrists, whilst even the fully qualified psychologist will sometimes find it convenient to have at hand ready references to the research sources of his accepted techniques.

Two eccentricities require explanation. I have omitted detailed description of the Binet Scale and its revisions be-

cause, in spite of its continued use by medical officers and others, I find no scientific evidence for its being as valid as most of the tests devised since Spearman's principles were discovered. Besides which, it has too few pass or fail items, does not include tests for higher mental ages, contains tests of low 'g' validity, and is overloaded with life experience and scholastic skill. It is presented, therefore, only as one test among many of equal worth. Secondly, I have used everywhere 'Consistency Coefficient' as well as 'Reliability Coefficient.' To the layman, at least, 'reliability' conveys more than that the test correlates highly with itself, and I am inclined to think that even to many psychologists it is subtly misleading. Consistency, on the other hand, expresses exactly what the coefficient measures. Probably the best system would be to apply the term Consistency Coefficient to self-correlations obtained by the 'split-half' method or from two testings in quick succession, and to reserve the term Reliability Coefficient for correlations obtained from testings separated by long intervals of time. In that case the Consistency Coefficient would be the measure of the self-consistency of the test, whilst the Reliability Coefficient would indicate in addition the degree of variability (with time) of the quality assessed, i.e. its "functional fluctuation."

All being well, this handbook will be revised at intervals in response to the progress of research and the publication of new tests. I shall be greatly indebted to anyone bringing to my notice tests which he considers ought to be included or supplying new and more extensive norms for tests already described. Much arduous work has in the past been unnecessarily repeated, and research inquiries duplicated through the lack of some central co-ordinating body, but with the recent establishment of the British Committee on Human Mental Measurements, to which the writer has the privilege to belong, this confusion should give way to a progressive organisation of test material, norms, and standards which it is hoped will be reflected in future editions of this or similar books.

I am greatly indebted to Professor Burt for permission to reproduce certain items from his classical *Mental and Scholastic Tests*, to which some sections of the present book are an introduction.

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