

BOOK REVIEW

Jerome Sattler (1988) *Assessment of Children* (3rd Edition) Sattler.

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Assessment of Children is a revision and expansion of Sattler's earlier volumes: *Assessment of Children's Intelligence* (1974) and *Assessment of Children's Intelligence and Special Abilities* (1981). The changes in title reflect an increasingly broader coverage of assessment procedures and related issues which, in turn, reflects, one would hope, an increasing concern by psychologists to place testing, especially of intelligence, in the wider context of psychological evaluation and treatment.

Like its predecessors, this volume is essentially practical in its orientation. Its aim is to assist the reader to acquire the technical and clinical skills needed in psychological and psychoeducational evaluation, but, as the author states quite clearly, it is not a substitute for test manuals or texts on child psychopathology. Nor is it intended to replace supervised clinical experience as the means of acquiring competence in assessment. Rather, it is intended to supplement test manuals and handbooks by providing additional information on test administration and interpretation, based on accumulated experience and research with the most commonly used children's assessment procedures that would not have been available when the tests were published. It also includes much material on techniques of assessment that are common to all individual testing procedures.

On first impression, at least, Sattler's book appears to be firmly grounded in a traditional, norm-referenced concept of assessment, although it does include some later chapters on observation and interviewing. Criterion-referenced testing is dismissed in a couple of pages — an unfortunate oversight when psychologists are increasingly under pressure to provide measures of "functional assessment", or measures that will lead directly into educational programming. An early chapter provides an overview of useful statistical and measurement concepts. For those who have forgotten their first year psychology, this will serve as a reminder of basic concepts such as measures of central tendency and dispersion, derived scores, reliability and validity, and factor analysis. The various procedures are very clearly explained, but the whole topic is treated at a relatively superficial level and readers seeking a more detailed understanding of the technical aspects of test construction and interpretation would be better advised to turn to old favourites such as Anastasi's *Psychological Testing*. A brief

mention of cluster analysis would have been useful for the understanding of profile types where these are based on this technique. Rasch item analysis (or for that matter any form of item analysis) does not rate a mention, even though some appreciation of these and other procedures used in test construction might be needed to evaluate the technical adequacy of a test before a decision is made on using it.

The chapter on statistics and measurement is followed by a well-balanced historical survey of theories of intelligence, including some of the more recent information-processing approaches. A further chapter covers a number of miscellaneous issues which presumably did not slot easily into other sections of the book. The sections dealing with the perennial issue of hereditary and environmental influences on intelligence show particular strength in their coverage of home environment and family background. The important topic of stability and change in intelligence could have received a more detailed treatment but, nevertheless, provides a valuable summary of research findings in this area, as well as a much-needed caution against placing too much reliance on a single test score.

Sattler then turns to the very practical issues of test administration. There is an excellent section on establishing rapport, with plenty of examples and concrete suggestions. General procedures, as well as suggestions for testing children with specific types of disabilities, are presented. The list of behavioural cues, and the behaviour and attitude checklist included in this chapter, are designed to enhance the examiner's observational skills during testing and provide a basis for subsequent evaluation and reporting of results in relation to the child's behaviour during the test. The general outline of testing procedures, presented in the form of a checklist, will be invaluable for the trainee psychologist.

Following these introductory chapters comes what some may consider to be the heart of the book and the feature that will undoubtedly prove its best selling point with psychologists, especially those working in an educational setting. These are the detailed chapters devoted to the psychological tests most commonly used with children. Three chapters are devoted to the Wechsler Intelligence Scale for Children — Revised (WISC-R). These provide far more than just a discussion or repetition of what is included in the test

manual, although the content could, perhaps, have been better organised. The initial chapter begins with a discussion of psychometric aspects, including studies comparing the WISC-R with the Wechsler Adult Intelligence Scale — Revised (WAIS-R) and the Wechsler Preschool and Primary Scale of Intelligence (WPPSI) at the overlapping age ranges. Factor analytic studies, including procedures for obtaining factor scores, are also presented. The chapter then moves on to general issues in administration of the WISC-R, the use of short forms, choosing between the WISC-R and the WPPSI and between the WISC-R and the WAIS-R, and administering the Wechsler tests to handicapped children. It concludes with a balanced evaluation of both the assets and limitations of the WISC-R.

The second chapter dealing with the WISC-R covers each of the subtests in turn, including a brief description, rationale, a summary of factor analytic findings, reliability and correlational highlights, administrative and interpretive considerations, and, where appropriate, comments on scoring criteria, further inquiry, and recording of responses or other performance aspects. The final chapter on the WISC-R deals with various procedures for interpretation that go beyond the use of IQ scores. Several approaches to profile analysis, or scatter analysis, based on the statistical significance of patterns of scaled scores and Verbal and Performance IQ discrepancies, are presented. The step-by-step outlining of procedures should help to avoid errors, but readers should note Sattler's caution that profile analysis is intended primarily to generate hypotheses about a child's performance, not to provide conclusive evidence about the presence of pathology or exceptionality. This chapter is supported not only by tables within the text, but by numerous tables in an appendix to aid in interpretation. These include a table of confidence intervals for WISC-R scales, based on standard errors of measurement reported in the manual, tables for interpreting the significance of differences between subtest, factor, and IQ scores, estimated deviation IQs for factor scores, and numerous other scales dealing with score discrepancies. The inclusion of a table providing Structure of Intellect (SOI) classifications for every item in the WISC-R, based on Guilford's theory of intelligence, is somewhat puzzling since elsewhere in his volume (page 56) Sattler implies that the SOI theory has little merit. Finally, a lengthy table summarises interpretive rationales, implications of high and low scores, and instructional implications for each of the WISC-R subtests. A qualitative comparison of subtests and some cautionary comments on interpretation complete the chapters on the WISC-R. Similarly useful chapters are included on the Wechsler Preschool and Adult Scales.

For many psychologists, a highlight of Sattler's book will be his chapter on the Stanford-Binet Fourth Edition, since this edition is still too recent to have received much attention in other volumes on psychological testing. As one of the authors of this

revision, Sattler can write on it with some authority. It might therefore come as a surprise to find that Sattler is now recommending an alternative factorial interpretation of the scale to that recommended in the test manual as the basis for Area Composite scores. This later Interpretation is based on principal components analyses of the 15 subtests administered to the standardisation sample, rather than on confirmatory factor analysis which was used originally. The analyses were carried out at separate age groups. Two factors scores — verbal comprehension and nonverbal reasoning/visualisation — are now provided for ages 2 to 6, and three factor scores — the same two with the addition of a memory factor — for the remaining age levels. Instructions for obtaining factor scores, including a sample worksheet, are provided, although users will still need to calculate Area scores in order to obtain a total Composite Score. This chapter is also amply supported by tables in the appendix to aid in the interpretation of factor scores, score discrepancies, and interpretive rationales and implications for each of the subtests. Nor does Sattler's co-authorship of the Fourth Edition inhibit critical comment where this is justified.

Subsequent chapters deal with assessment of intelligence and infant development with specialised measures, academic achievement and special abilities, visual-motor perception, auditory perception and motor proficiency, and adaptive behaviour and behaviour problems. Almost all of the tests discussed here will be familiar to Australian psychologists: The McCarthy Scales of Children's Abilities, the Kaufman Assessment Battery for Children, Raven's Progressive Matrices, the Woodcock-Johnson Psycho-Educational Battery, the Peabody Picture Vocabulary Test — Revised, the Bender Visual Motor Gestalt Test, and many others. These are necessarily dealt with in much less detail than the Wechsler and Stanford-Binet scales. Nevertheless, this is much more than just a compendium of available instruments: for those less familiar with some of these tests, the descriptive and technical summaries as well as the critical comments provided are well worth reading. For a few tests, further interpretive tables are also provided.

The chapter on assessment of adaptive behaviour and problem behaviour is possibly the most disappointing feature of the whole book. In a 1000-page volume on assessment of children, one would expect to find more than 25 pages devoted to this important topic, particularly at a time when, in the assessment of intellectual disability at least, adaptive behaviour is considered to be equally as important as intelligence. The Vineland Adaptive Behaviour Scales, one of the most difficult instruments to administer with competence, is covered in only two pages. Psychologists working with disabled children would benefit considerably from an expansion of this section, for example covering such issues as questioning techniques, establishing basal and ceiling scores, scoring criteria, and practical implications including program planning,

which is an essential part of the Expanded Version of these scales. To some extent, users of the Vineland Scales will be helped by the subsequent chapter which deals with assessment of behaviour by interview methods and includes advice on facilitating communication, formulating appropriate questions, using probe questions, and using reflection and feedback. This kind of advice, more specifically related to the Vineland, would be of considerable help to users in gaining confidence in the semi-structured interview technique employed in these scales.

The inclusion of checklists for the assessment of problem behaviour in this chapter also does less than justice to this topic, and tends to confuse the two separate issues of adaptive behaviour and problem behaviour, which often concern two different client populations. The wealth of developmental research that underlies the Child Behaviour Checklist and its related instruments, for example, is covered in less than a page. The mention of only a single research study — and one which is of little significance in either the development or interpretation of the checklist — gives a somewhat misleading impression of the value of this checklist. There are, furthermore, issues in the psychometric assessment of problem behaviour that are not touched upon here. Again, the more detailed chapters that follow on assessment of behaviour by interview and by observational methods will be invaluable to trainee clinicians, but in a book that devotes so much of its attention to the psychometric assessment of other constructs, they are not a satisfactory substitute for a more thorough coverage of the psychometric assessment of behaviour.

The applications of assessment in context are discussed in chapters on learning disabilities, various behavioural disorders, sensory impairments, mental retardation and giftedness, and brain damage. The rationale for the grouping of these topics into three chapters is not immediately obvious, and it is somewhat confusing to turn to a page with the running head "assessment of gifted children" to find it entirely occupied by part of a semi-structured interview schedule for use with parents of developmentally disabled children (page 663). Despite such editorial shortcomings, these sections provide useful introductions to areas in which most assessment is likely to occur. However, clinicians who find themselves specialising in an area, such as mental retardation or hearing impairment, will need to read more widely if they are to develop expertise in the area. Sattler makes it clear, for example, in introducing his chapter on brain damage, that neuropsychological assessment requires specialised training that goes beyond the scope of an introductory course in assessment.

The volume is completed by chapters on report writing and issues in consultation. The latter contains much material that is specific to the United States, but the practical suggestions for handling such situations as consultation in medical settings and court appearan-

ces have universal value. The chapter on report writing not only provides guidelines for structuring a report, but also presents strategies for improving writing style. This chapter should be compulsory reading for all practising psychologists.

As well as numerous tables for test interpretation mentioned above, appendices include answers to "test your skill" exercises that are included at the end of each chapter, instructions for administering the WISC-R Performance subtests to hearing-impaired children, some sample observation coding systems, and a useful summary of highlights of instruments reviewed in the book.

Assessment of Children has a number of weaknesses, but these are far outweighed by its strengths. One hesitates to suggest that a volume of 995 pages suffers from inadequate treatment of some topics but this is the case, especially, as mentioned earlier, in the assessment of adaptive behaviour and problem behaviour. There is no mention at all of personality assessment, and while some psychologists, myself included, have doubts about the value of personality inventories in the assessment of children, many do find a use for projective or semi-projective techniques, or measures of more specific constructs such as self-concept or childhood depression. Assessment of family dynamics is another area that receives little attention. It would perhaps have been less misleading if Sattler had kept to one of his earlier titles and confined his work to assessment of intelligence and abilities, where he obviously excels. As it is, the title gives the impression of comprehensiveness which is not altogether justified.

On the more positive side, this volume contains so much information that will be useful to the practising child psychologist that it will undoubtedly become one of the most read books on the clinician's desk. It is clear, objective, and authoritative. The many summaries, checklists, and other aids to learning will enable diligent practitioners to gain competence in all aspects of test administration and interpretation, while the critical comments provided should make them more discerning not only in their choice of tests, but also in their use of test scores. One could argue that the supplementary information provided on the more widely used tests should be included in test manuals rather than presented here, but the fact is that much of this information only becomes available after years of accumulated research and experience in using a test, and manuals are not always updated as frequently as they should be. The book is relatively non-technical and non-academic, but appropriately cautious and well-grounded in research findings. Sattler is to be commended for his mammoth work in putting together so much information in a way that is so easily digested by the practitioner. His book should be in constant use (not just read) by trainee educational and developmental psychologists — and those who supervise them.