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Patterns of Use of Psychological Tests in New Zealand

Jane Dugdale and Karyn Dunn
New Zealand Council for Educational Research

Introduction

The New Zealand Council for Educational Research provides a Test Advisory Service to its clients. The service provides information and advice on issues related to assessment to a range of test users from business, educational, health, vocational, and other settings. Data about this group and their information needs has been gathered only in a fragmentary and ad hoc manner. The present survey intended to obtain information about the practices and needs of test users in a systematic form.

Patterns of use of tests are of interest to test developers and publishers, academics and supervisors, practitioners, and researchers. Unfortunately, it is problematic to capture a complete picture of test use. In New Zealand, the population of psychologists and counsellors is relatively small, and is in danger of being over-sampled. To illustrate this point one of the authors has been in receipt of four surveys already this year.

Analysis of sales patterns also yields information about patterns of test usage. Again, this information is incomplete as it does not identify testing practice – the who, when, where and why of standardised assessment. There is also a wealth of anecdotal evidence about a covert market in testing, including using photocopied materials without manuals, and non-registered test users having access to restricted tests. By its nature, this market is beyond the scope of the present study.

Notwithstanding the limitations of such research, patterns of test usage have been studied and reported in the literature. Much of the available literature on practice in and attitudes to psychological assessment is from North America. While there are differences in education and training between New Zealand and North America, many tests available in New Zealand are developed and published in the United States, and therefore comparison of the two groups seems reasonable. The overseas findings will be briefly reviewed with the results of the present study.

The Present Survey

The aim of this survey was to identify the patterns of test usage, levels of satisfaction with, and gaps in the provision of, testing resources in New Zealand among test users registered as level “C” and “D” with NZCER.

Method

Based on prior research, a four-page, 12-item questionnaire was developed. Its intent was to capture data about the demographics, discipline, education, employment, clients, experience, professional affiliation and patterns of test use in the sample.

In order to establish the frequency of use of tests, a list of 26 tests was used, with an “other” option. This list was derived from the literature on patterns of test use, and from NZCER sales figures.

In addition, subjects’ reasons for using tests, their recommendations for inclusion of tests in training programmes, their sources of testing information and their levels of satisfaction were inquired about.”

Sampling

The names of 323 test users with the titles Psychologist, Management Consultant, Counsellor, or Education Staff were randomly selected (by taking alternate names) from a potential pool of 646 test users registered at levels C and D with NZCER. Each subject was mailed a packet containing the questionnaire, a letter explaining the research, and a prepaid return envelope. Subjects whose packets were returned with “gone no address” were replaced by the next name on the list. A further 96 were sent packets about 10 days later. Altogether, 440 packets were mailed.

Results

One hundred and nine usable questionnaires were returned, about 25% of the sample. About 10% of the packets were returned as “gone no address”, “retired” or “deceased”. Two returned questionnaires were not included in the analysis because of incompleteness.

Demographic data

Subjects ranged in age from 24 to 70. Forty-five percent of the sample were male and 55% female.

As can be seen in Table 1, the great majority were psychologists.

Table 1

Occupational Groups of Respondents

Occupational Group	%
Psychologists	93
Consultants	39
Counsellors	26

Table 2 shows that nearly half the psychologists classified themselves as working in the clinical domain, a further quarter working in the organisational psychology domain.

Table 2

Classification of Psychologist Respondents

Classification of Psychologists	%
Educational	9
Clinical	48
Organisational	24
Academic	8
Other	13

Highest educational qualifications

Eighty-five percent of the sample have at least a Masterate degree, with 28% holding a postgraduate diploma in educational or clinical psychology, and 20% holding a Ph.D.

Employment Setting

Subjects were asked to state their main employment setting. The largest single group was private practice (self-employed) at 28%, followed by “other” at 20%. This group comprised those who worked in schools, those with more than one main employer, and those spanning both the public and private sectors. The third largest group was those employed mainly in district health boards, comprising 17% of the sample. Tertiary institutions employed 11%. There were 8% employed in a private practice, and the remainder were in GSE, in Child, Youth and Family services, Corrections, as consultant to a public sector employer, private sector employer or commercial/industrial organisation. Table 3 shows how the respondents classified their clients.

Table 3

Classification of the Clients of the Respondents

Classification of clients	%
Mental health – adults	31
Mental health – children and adolescents	22
Education – children and adolescents	19
Non-clinical – adults	27
Other	25

It can be seen that the sample includes practitioners active across a broad range of domains, with many practicing across more than one domain.

Experience

The range of experience in terms of time was also wide. More than 90% of those answering had more than 5 years' experience, and three-quarters had more than ten years' experience in professional practice.

Accountability

All but four of the sample belonged to a professional society and many belonged to more than one. Nearly half of the sample belongs to the New Zealand Psychological Society, with a further 38% belonging to the two clinical organisations, New Zealand College of Clinical Psychologists and the Institute of Clinical Psychology.

Summary of Respondents

This sample, randomly selected from NZCER's database of users of restricted tests, comprises practitioners who work in a diversity of fields, often across more than one, who are extremely experienced, highly educated, and who have accountability for their practice through a professional association.

Professional Practice

Subjects were asked to indicate how much of their professional time they spend on assessment, including standardised assessment. Their responses are shown in Table 4.

Table 4

Time Spent on Assessment

Time %	Subjects %
0–10	48
11–25	29
26–50	12
51–75	6
> 75	5

Overall, nearly half the respondents spend ten percent or less of their time on assessment. Just over 10% spend more than half their time on assessment with 5% of these spending more than 75% of their time on this activity. One would assume that this small group would be employed as assessment specialists.

Theoretical orientation

Subjects were asked to indicate their primary theoretical orientation from the following: Humanistic, Cognitive, Cognitive-Behavioural, Constructivist, Behavioural, Psycho-dynamic, Eclectic, and Other.

The primary theoretical orientation most frequently endorsed was cognitive – behavioural (35%), then eclectic (29%). Behavioural was the third most popular at 14%.

Frequency of use of particular tests

In order to measure frequency of use of the tests, subjects were presented with a list of 26 tests, derived from the previous New Zealand studies and NZCER sales figures for the last year. In addition, an “other” category was offered. Subjects were asked to tick the appropriate box indicating frequency of use: more than once per month, about once per month, less than once per month, never

The top five tests used once a month or more, as shown in Table 5, were the Beck Depression Inventory-II, followed by the Wechsler Adult Intelligence Scale-III, the Wechsler Intelligence Scale for Children-III, the Ravens Standard progressive Matrices, and the Myers-Briggs Type Indicator.

Table 5

Five Most Frequently Used Tests at Least Once per Month

	N	%
BDI-II	30	27
WAIS-III	24	22
WISC-III	18	16
SPM	17	15
MBTI	15	14

Looking next at the ranking of tests that are used by practitioners regardless of frequency of use yields very little difference in rank order, with the Beck again being the most frequently used test, followed by the WAIS, the SPM, the WISC-III and the State-Trait Anxiety Inventory as shown in Table 6.

Table 6

Five Most Frequently Used Tests

	N	%
BDI-II	43	39
WAIS-III	42	39
WISC-III	39	36
SPM	31	28
MBTI	29	27

The 'other' option generated a list of 34 tests, of which three had five or more endorsements. These were the SHL series, ACER ability tests, and "neuropsychology tests" as a category.

How do these findings compare with previous surveys? Observers have commented that patterns of reported test usage in North America have remained remarkably stable over the last 30 years. The five most frequently used tests are the Wechsler Adult Intelligence Scale, the Minnesota Multiphasic Personality Inventory, the Wechsler Intelligence Scale for Children, the Thematic Apperception Test or Rorschach, and the Bender-Gestalt. These titles are reported in more or less the same order by Wade and Baker (1977), Lubin, Larsen and Matarazzo (1984), Watkins, Campbell and McGregor (1988), Piotrowski and Keller (1989), Archer, Maruish, Imhof and Piotrowski (1991), and Watkins, Campbell, Nieberding and Hallmark (1995).

From Australia, Sharpley and Pain (1988) report that the 5 most frequently used tests were the WISC-R, WAIS-R, Wechsler Memory Scales, Goodenough Harris Drawing Test and the Goldman-Fristoe-Woodcock Test of Auditory Discrimination.

A recent New Zealand study (Patchett-Anderson, 1997) found similar patterns of test use as the American surveys and the present study. The most frequently used tests were the Beck Depression Inventory, the WAIS-R, Wechsler Memory Scale Revised, State-Trait Anxiety Inventory, and the WISC.

Recommended tests

An index of the attitudes of practitioners is the recommendations they may make about the inclusion of tests in training programmes.

In the United States, Wade, Baker et al. (1978) reported that the five most frequently recommended tests for clinical psychology students to learn were the Rorschach, the TAT, the WAIS, MMPI and Bender-Gestalt. For Watkins and others (1988) the top five recommended were the MMPI, TAT, Strong-Campbell Interest Inventory, the WAIS, and the Rorschach. In 1995 Watkins and others reported the MMPI, WAIS, WISC, MCMI and MACI as the five most frequently recommended tests.

Sharpley and Pain (1988) (Australia) found the five most recommended tests were the WISC, WAIS, Stanford-Binet, WPPSI and MMPI.

In New Zealand, Knight and Godfrey (1984) surveyed the test recommendations of hospital psychologists. The top five were the WAIS, WISC, Benton Visual Retention Test, Ravens Progressive Matrices, and the Wechsler Memory Scale. For personality measures only, the top five were the MMPI, Symptom – Sign Inventory, 16PF, Family Relations Test, and the TAT.

Patchett-Anderson (1997), also in New Zealand, asked her sample to nominate the projective and objective assessment procedures in which they believed clinical psychology students should be competent. The projective tests were: Thematic Apperception Test, Rorschach, Children's Apperception Test, Sentence Completion Methods, Draw-A-Person, Projective Drawings, Bene-Anthony Family Relations Test, and Draw-A-Family. The objective tests were: Wechsler Scales, Beck Depression Inventory, Neuropsychological Tests (unspecified), MMPI-II, Wechsler Memory Scale, MCMI, and State Trait Anxiety Inventory.

It would appear from these findings that patterns of test selection are conservative. In New Zealand, the limited data available indicate that tests of cognitive ability are used more frequently, and recommended more frequently, than personality tests or projective tests, and this is supported by our findings, which follow.

Subjects were asked "With which five standardised assessment procedures should educational/clinical psychology students be competent?"

The question generated a list of 38 tests or general types of test (e.g., neuropsychological assessment). Of the individual tests, the top three were the WAIS-III, BDI, and WISC-III. For cognitive tests, the top two were the WAIS-III and the WISC-III. For personality and clinical tests, the ranking was the BDI, followed by the MMPI-II and the MCMI-III.

It would seem there is a clear pattern of choice of tests to recommend, which closely mirrors the pattern of frequency of test use as captured in the earlier questions. It differs from North American findings in that cognitive and objective tests are more frequently recommended than projective tests. This is to be expected, given that the most frequently endorsed theoretical orientation was cognitive-behavioural.

A number of subjects made the comment that training in specific tests was of less importance than learning about the general principles of assessment; and that the tests taught should depend on the student's field of interest.

Reasons for using assessment procedures

Another dimension of test use is the reasons test users give for using their assessment procedures. Wade and Baker (1977) reported that professionals used tests because they had clinical experience in them, the tests answered their assessment needs, they had acquired graduate training in their use, for their psychometric properties, and because of agency requirements. Their analysis found strong themes of subjectivity, experience and insight, and relative indifference to psychometric factors and research on technical aspects of tests.

Watkins, Campbell, Nieberding and Hallmark (1995) asked subjects about their reasons for using tests. In rank order, these were:

- Answers specific assessment questions;
- Previous experience with tests;
- Statistical reliability and validity;
- Graduate training experiences;
- Agency requirement;
- Available at agency.

Watkins' sample was also asked to rate reasons for recommending tests for clinical psychology students to learn about. In rank order, these were:

- To learn about assessment procedures;
- Yields information about client personality structure;
- Assessment results facilitate the therapeutic process;
- Provides therapist with a specialty specific to psychologists;

- Satisfies juristic or legal requirements;
- Enhances employability and / or income;
- Satisfies institutional demands;
- Enables therapist to make accurate behavioural predictions;
- Increases client-therapist rapport;
- Enhances therapist prestige as perceived by client.

Patchett-Anderson (1997) reported that in her sample the most important reason for using assessment procedures was that they answer specific assessment questions, followed by previous experience with tests, and statistical reliability and validity.

This survey also asked respondents their reasons for using standardised assessment tools. A 5-point Likert-type scale was used to ascertain agreement with the nine reasons given in Table 7 below.

Table 7

Reason	Agree or Strongly agree %
Enables a systematic gathering of information	94
Enables comparison to some criterion	89
Provides baseline data	83
Provides a structure to the assessment process	77
Provides normative data	77
Adds credibility to reports	69
Is a cost-effective use of time	49
Facilitates rapport with clients	37
Is determined by employer/agency policy	21

Comments made by some subjects expressed how strongly they felt about the place of standardised assessment in their work: for example, “vital”,” indispensable”, “the only possible way to obtain some information”.

Sources of Information

A question of interest to us as test publishers and distributors was that of how practitioners access information about testing matters. Subjects were presented with a list of sources of information and asked to indicate how frequently they use them – most frequently, sometimes, rarely and never. The reasons rated as used most frequently are shown in Table 8.

Table 8

Sources of Information

Sources of Information	%
Professional journals	87
Colleagues	79
Catalogues	71
Books	61
Publishers' information and advisory services	59
Professional newsletters	46
Internet	46
Continuing education	41
Advertising	18
Other	8

Satisfaction

Obtaining valid and reliable testing resources can sometimes be difficult in New Zealand. Most tests are imported from many countries including Australia, U.S.A., and England. The survey asked "How satisfied are you with the availability of testing resources in New Zealand?" and subjects responded on a five-point scale. Almost four-fifths of the sample said they were satisfied or more than satisfied with the availability of testing resources in New Zealand.

Conclusion

Despite the geographical and, some would say, cultural distance between North America and New Zealand, patterns of use some tests show little difference. Both use the Wechsler tests of cognitive abilities in preference to other available tests such as the Slosson, Kaufman, Stanford-Binet, Woodcock-Johnson, and so on. It might be speculated that to some extent, this is a self-perpetuating cycle; they are used in the field, therefore new practitioners take them up.

As noted earlier, projective tests are not widely used in New Zealand. This probably reflects the cognitive-behavioural models of practice in New Zealand psychologists, and is the most notable difference between the American studies and New Zealand surveys.