

Training in Psychological Assessment: Current Practices of Clinical Psychology Programs

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Training in psychological assessment has been studied periodically since 1960. The goal of this project was to provide an update of training practices in clinical psychology programs and to compare practices across Clinical-Science, Scientist-Practitioner, and Practitioner-Scholar training models. All APA-accredited programs in clinical psychology were invited to respond to an anonymous online survey about program characteristics and assessment training; a 33% response rate was achieved. Assessment training over the past decade was generally stable or increasing. Training in treatment effectiveness and neuropsychology were areas of growth. Across training models, there was remarkable similarity in assessment instruction except for coverage of projective instruments, number of required assessment courses, and training in geriatric assessment. The most popular instruments taught in clinical psychology programs were the Wechsler Adult Intelligence Scale–IV, Wechsler Intelligence Scale for Children–IV, Minnesota Multiphasic Personality Inventory–II, the Beck Depression Inventory–II, and the Woodcock-Johnson III Tests of Achievement. Assessment coursework relevant to evidence-based practice, ethics, and multicultural issues may need more emphasis to support the development of core competencies in future generations of clinical psychologists.

Keywords: psychological assessment, training, clinical psychology, psychological tests, clinical psychology, assessment competency

Training in psychological assessment has been studied periodically since 1960 (Stedman, Hatch, & Schoenfeld, 2001; Watkins, 1991). Quantity of assessment training may be in decline. There are discrepancies between what is being taught in graduate programs and the skills needed for internship and evidence-based practice (Clemence & Handler, 2001; Hunsley, 2007; Stedman, 2007). A report from the Psychological Assessment Work Group of the 2002 Competencies Conference noted that doctoral programs appeared to be devoting less time and attention to assessment training (Krishnamurthy et al., 2004).

Another finding from assessment training surveys is that the same psychological tests have been among the most popular instruments for decades (Camara, Nathan, & Puente, 2000). Editions of the Wechsler Adult Intelligence Scale (WAIS),¹ Wechsler Intelligence Scale for Children (WISC), MMPI, Rorschach Inkblot

Test (Rorschach), and the Thematic Apperception Test (TAT) have been among the most popular instruments since 1960 (Childs & Eyde, 2002; Stedman et al., 2001; Watkins, Campbell, Nieberding, & Hallmark, 1995). Newer tests that became popular in the 1990s are editions of the Millon Clinical Multiaxial Inventory (MCMI), the Wechsler Memory Scales (WMS), the Beck Depression Inventory (BDI), and the Woodcock John Tests of Achievement (WJACH) (Childs & Eyde, 2002; Stedman et al., 2001). Training in projective personality measures is a persistent source of controversy (Musewicz, Marczyk, Knauss, & York, 2009). Watkins' review of the literature suggested that training in projective techniques was stable from 1960–1990 but academic psychologists had conflicted opinions about projective tests (Watkins, 1991; Watkins et al., 1995). In 2001, PhD but not PsyD programs reported less training in projective assessment (Stedman et al., 2001).

Core Competencies in Assessment

Despite these challenges in assessment training, assessment competencies are exclusive to psychologists and as such, training is valued and highly regarded by the profession (Butcher, 2006; Krishnamurthy et al., 2004). The Psychological Assessment Work Group of the Competencies Conference identified eight core competencies in assessment (Krishnamurthy et al., 2004) that included

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¹ Many tests were periodically updated during the decades over which assessment practices have been reviewed. For example, the WAIS, WISC, MMPI, MCMI, and WMS have more than one edition. For ease of communication, the main instrument abbreviation (e.g., WAIS) will be used to refer to all editions of the instrument.

psychometric theory, the bases of psychological assessment (e.g., theoretical, empirical), assessment techniques, outcomes assessment, functional assessment, collaborative professional relationships in assessment, associations between assessment and intervention, and technical skills. Childs and Eyde (2002) analyzed program materials and course syllabi from APA-accredited clinical psychology doctoral programs in relation to many of these competencies. Nearly all programs required formal supervised practice in administration, scoring, and interpretation of psychological tests. All programs covered intelligence and personality assessment. The majority of programs (60%) offered a neuropsychology course but a minority of programs (5%) required it. Sixty percent of programs covered validity and reliability whereas 43% of programs taught test development. A majority of programs covered multicultural (81%) and ethical (73%) issues in assessment.

The Current Study

The current study provides an update of training practices in psychological assessment. Self-report data were collected from APA-accredited clinical psychology programs to determine whether training in assessment increased or decreased over the past decade. Comparisons in assessment training were made across programs that adhere to Clinical-Science, Scientist-Practitioner, and Practitioner-Scholar training models. Briefly, the Scientist-Practitioner model places equal emphasis on training in research and practice in clinical psychology (Baker & Benjamin, 2000). The Practitioner-Scholar model emphasizes preparation for a career in clinical practice, while also acknowledging the importance of science training (Murray, 2000). The Clinical-Science training model rejects the dichotomy between science and practice and asserts that training in clinical science is the only viable means to train clinical psychologists, whether or not they focus their career in science or practice (McFall, 1991).

Method

Participants

All APA-accredited programs in clinical psychology, as of the Fall 2011, were invited to participate ($N = 233$; PhD $n = 171$, PsyD $n = 62$).

Procedures

An e-mail describing the study was sent to each program's Director of Clinical Training (DCT). The DCT was asked to forward the e-mail to a faculty member who was most knowledgeable about assessment training in their program. The anonymous online survey assessed program characteristics (e.g., training model, internship match rates), changes in assessment training over the past decade, assessment faculty, courses and course content, instruments, and practicum hours. Optional narrative comments were collected. Two follow-up e-mails about the study were sent, spaced 2–3 weeks apart. The study was approved by the Institutional Review Board of the University of Massachusetts Amherst.

Results

Participants

Seventy-seven out of 233 programs responded (33% response rate; $n = 56$ PhD programs and $n = 21$ PsyD programs), which is comparable to other assessment training surveys, which reported response rates from 18% (Musewicz et al., 2009) to 58% (Clemence & Handler, 2001). Three programs did not report their training model and thus, data from 74 programs are used in analyses ($n = 54$ PhD, $n = 20$ PsyD; 32% response rate).

Program Characteristics and Changes in Assessment Training

PhD and PsyD clinical psychology programs adhered to different training models (see Table 1). More students are admitted per year in Practitioner-Scholar programs than in Scientist-Practitioner or Clinical-Science programs. All students averaged 5–6 years to degree completion. Self-reported internship match rates were mostly above 75%, suggesting that successful programs self-selected to respond to the survey.

Few programs reported decreased assessment training in the past decade (see Table 1). Narrative explanations indicated that a few decreases were due to changes in faculty, reduction in previous assessment requirements that were too burdensome, or to make "room" in the curriculum for other APA requirements, such as research or intervention. Increased emphasis in assessment was more common and included new coursework and/or new practicum opportunities. Six program increases were to better prepare students for the competitive internship market. Seven programs increased assessment emphasis due to new faculty hires.

Two Practitioner-Scholar programs increased training in projective techniques over the past decade (see Table 1); the remainder reported no change or decreased emphasis. In narrative comments, one Scientist-Practitioner and one Practitioner-Scholar program reported a plan to decrease emphasis in the near future. Some programs never offered training in projective tests and reported that has remained the same. Many respondents questioned the reliability, validity, and utility of projective tests. It was noted that newer faculty do not teach projective tests and thus due to retirements, projective tests are being taught less often. Some programs sensed that students were less interested in projective tests but one program reported pressure to increase training in this area. Some programs teach projective tests due to demands from internships.

Training in neuropsychological assessment enjoyed substantially more emphasis over the past decade, particularly in Scientist-Practitioner and Practitioner-Scholar programs (see Table 1). Increased emphasis in neuropsychological training was due to new faculty hires, referral demands, internship preparation, and increased student interest. Decreased emphasis was due to faculty leaving the program and one program regarded neuropsychology a subspecialty that was more appropriate for postdoctoral than predoctoral training.

Training in treatment effectiveness assessment increased in all programs (see Table 1). Increases were due to evidence-based treatments (EBTs) being popular and the empirical basis of psychotherapy. Several programs mentioned that increased interest in treatment effectiveness was due to greater demands for account-

Table 1
Characteristics of Clinical Psychology Programs by Training Model

	Clinical-Scientist	Scientist-Practitioner	Practitioner-Scholar
Program Degree			
PhD	31.5%	64.8%	3.7%
PsyD	0.0%	10.0%	90.0%
Students Admitted per Year			
0–5	35.3%	18.9%	0.0%
5–9	58.8%	70.3%	10.0%
10–19	5.9%	8.1%	5.0%
20+	0.0%	2.7%	85.0%
Years to Graduation			
4 years	0.0%	2.7%	10.0%
5 years	17.6%	40.5%	45.0%
6 years	76.5%	40.5%	45.0%
7+ years	5.9%	16.2%	0.0%
Neuropsychology track	23.5%	26.5%	36.8%
Internship match rates			
0–49%	0.0%	0.0%	5.9%
50–74%	17.6%	3.0%	0.0%
75%+	76.5%	87.9%	94.1%
Change in assessment training			
Increased	17.6%	33.3%	45.0%
Decreased	5.9%	5.6%	0.0%
Same	76.5%	61.1%	55.0%
Change in training in projective tests			
Increased	0.0%	0.0%	5.0%
Decreased	70.6%	31.4%	15.0%
Same	29.4%	68.6%	80.0%
Change in neuropsychological assessment training			
Increased	23.5%	48.6%	57.9%
Decreased	5.9%	5.7%	10.5%
Same	70.6%	45.7%	31.6%
Change in treatment effectiveness training			
Increased	58.8%	57.6%	63.2%
Decreased	0.0%	0.0%	0.0%
Same	41.2%	42.4%	36.8%

ability in practice. Some programs responded that new faculty members have interests in EBTs. Many programs cited the APA Committee on Accreditation as a reason for increased emphasis in assessment of treatment outcomes.

Assessment Faculty, Course Numbers, and Practicum

The majority of programs (Clinical-Science 65%, Scientist-Practitioner 70%, Practitioner-Scholar 76%) had four or more faculty with assessment expertise, distributed across all ranks. The majority of Clinical-Science programs required one or two assessment courses (67%) whereas a majority of Practitioner-Scholar programs required four or more courses (85%); Scientist-Practitioner programs were intermediate with regard to number of required courses (65% required 2–4 courses).

An assessment practicum was required more often in Practitioner-Scholar programs (77%) than in Clinical-Science or Scientist-Practitioner programs (53% and 52%, respectively). The majority of programs rely on external practicum to supplement assessment training (Clinical-Science 65%, Scientist-Practitioner 78%, Practitioner-Scholar 77%); programs differed in the extent to which these external experiences were required (Clinical-Science 27%, Scientist-Practitioner 56%, Practitioner-Scholar 83%).

Training in Assessment Instruments

The 10 most popular instruments were covered in 50% or more of all programs (see Table 2). The WAIS-IV, WISC-IV, and the MMPI-2 were the most popular. No projective tests were in the top 10 tests. Chi-square analyses indicated significant differences ($ps < .01$) across training models in coverage of the TAT, Rorschach, Projective Sentences, Projective Drawings, Sentence Completion, Draw-a-Person, and House-Tree-Person, with Practitioner-Scholar programs covering these tests more often than Clinical-Science and Scientist-Practitioner programs. For example, the Rorschach was taught in 75% of Practitioner-Scholar programs, 38% of Scientist-Practitioner programs, and 12% of Clinical-Science programs ($\chi^2 = 14.45, p < .001$); TAT coverage was nearly identical: 68% Practitioner-Scholar, 47% Scientist-Practitioner, and 12% Clinical-Science ($\chi^2 = 11.89, p < .01$).

Content Covered in Assessment Courses

The 10 most popular content areas for assessment courses were taught in 78% or more of the responding programs (see Table 2). Other popular topic areas, covered in more than 50% of programs were, in order: Behavioral Assessment, Clinical Interviewing, Ethical Issues in Assessment, Clinical Assessment, Associations be-

Table 2
The 10 Most Popular Psychological Tests and the 10 Most Popular Topics Taught in Clinical Psychology Programs

	Clinical-Science	Scientist-Practitioner	Practitioner-Scholar
Tests			
Wechsler Adult Intelligence Test, Fourth Edition (WAIS-IV)	94%	82%	79%
Wechsler Intelligence Scale for Children, Fourth Edition (WISC-IV)	88%	85%	79%
Minnesota Multiphasic Personality Inventory-2 (MMPI-2)	88%	79%	79%
Beck Depression Inventory — II (BDI-II)	88%	74%	53%
Woodcock Johnson III Tests of Achievement (WJAch-III)	65%	65%	68%
Beck Anxiety Inventory (BAI)	77%	62%	53%
Wechsler Memory Scales, Fourth Edition (WMS-IV)	65%	62%	58%
Personality Assessment Inventory (PAI)	47%	56%	58%
Achenbach System of Empirically Based Assessment (ASEBA)	47%	56%	42%
Wechsler Individual Achievement Test, Third Edition (WIAT-III)	53%	53%	42%
Topics			
Test development	82%	82%	94%
Reliability	88%	82%	88%
Validity	88%	79%	88%
Psychometrics	88%	82%	82%
Normative data	88%	79%	77%
Assessment of intelligence	82%	82%	77%
Objective personality assessment	82%	82%	77%
Child assessment	82%	82%	77%
Adult assessment	88%	79%	71%
Feedback of assessment results to client	71%	82%	77%

Note. Four programs did not provide test data thus the samples are $n = 17$ Clinical-Science, $n = 34$ Scientist-Practitioner, and $n = 19$ Practitioner-Scholar. Seven programs did not provide course content data; thus, the samples are $n = 17$ Clinical-Science, $n = 33$ Scientist-Practitioner, and $n = 17$ Practitioner-Scholar.

tween Treatment and Assessment, Multicultural Issues in Assessment, Neuropsychological Assessment, Projective Tests, and Treatment Effectiveness. Functional assessment was covered in 34% of programs overall. The only significant difference between programs was Geriatric Assessment, which was covered by 18% of Clinical-Scientist programs, 21% of Scientist-Practitioner programs, and 71% of Practitioner-Scholar programs ($\chi^2 = 114.79$, $p < .001$).

Discussion

Assessment training over the past decade was generally stable or increasing in Clinical-Science, Scientist-Practitioner, and Practitioner-Scholar clinical psychology programs. Greater attention to assessment training was due to demands by internships, new faculty with assessment interests, and greater emphases on assessment practices relevant to treatment effectiveness and neuropsychology.

Training in treatment effectiveness, in particular, is growing in many programs. As recently as 2007, Hunsley noted a disconnect between what clinical psychology students learn about assessment and what they need to know about assessment to engage in Evidence Based Practice (EBP). Results of the current survey suggest that the field may be responding to demands for greater training in assessment that is relevant to EBP. Along these lines, the BDI and Beck Anxiety Inventory (BAI) were taught in the majority of clinical programs and these rating scales for depressive and anxiety symptoms, respectively, may be useful for tracking change in psychotherapy [for example, (Richter et al., 1997)].

Overall, across training models, there was remarkable similarity in assessment training with a few exceptions. First, training in projective tests clearly demarcated the three types of training

programs. In the majority of Clinical-Science programs, training in projective tests declined over the past 10 years, whereas this was not the case in Scientist-Practitioner or Practitioner-Scholar programs. Projective tests were taught more often in Practitioner-Scholar programs than in Scientist-Practitioner and Clinical-Science programs. These data are consistent with Watkins (1991), who reported that more academically oriented faculty in clinical psychology programs held unfavorable attitudes toward projective tests of personality. In many programs, declining emphasis on projective tests may be due, in part, to retirements of more senior faculty who provide training on these measures. Narrative comments suggest that newer faculty are neither inclined nor prepared to teach projective tests.

A second difference between programs was that more assessment courses were required by Practitioner-Scholar than Scientist-Practitioner or Clinical-Science programs. Third, there was greater coverage of geriatric assessment in Practitioner-Scholar programs than in the other two training model programs.

Training in Core Competencies in Psychological Assessment

Most clinical psychology programs covered similar content in assessment courses. Psychometrics, test development, normative data, intelligence, objective personality, child and adult assessment, feedback, behavioral assessment, clinical interviewing, ethical issues, treatment and assessment, and multicultural issues were covered by over 60% of programs. These results are similar to Childs and Eyde (2002). Thus, in general, clinical psychology programs are providing content exposure to their students that aligns with core competencies in assessment (Krishnamurthy et al., 2004). However, coverage of these topics is not ubiquitous and the

quality of coverage was not assessed in the current study. These data indicate areas in which increased emphases are indicated. Functional assessment was only covered in 34% of programs but Hunsley (2007) argues cogently that functional assessment is a skill necessary to engage in EBP. He also argues for the increasing importance of therapeutic-outcomes assessment but treatment effectiveness was covered only by 51% of programs.

Coverage of ethical and multicultural issues was less than ideal. These topics are essential for competent research and practice. The field should settle for no less than universal coverage of these topics in assessment courses but our data suggest 60–70% coverage. Whereas it may be the case that ethics and multicultural issues are taught in other required courses or in practicum, their treatment in the context of assessment is vital. Conducting psychological assessments in a manner that is sensitive to diversity in its many forms is critical for competent care and sound clinical science. For example, assessment courses might cover if and how assessment instruments can be used with persons from different cultural and linguistic backgrounds, how to select the most appropriate measures and normative data for a particular client, and/or how to modify assessment procedures for persons with disabilities.

Most Popular Tests

Popular instruments in psychology endure over time but our results signal some significant changes. Editions of the WAIS, MMPI, Rorschach, and TAT have been centerpieces to assessment training since the 1960s (Watkins, 1991) but our data indicate that only the WAIS-IV and MMPI-2 are currently in the top 10 tests taught in clinical psychology programs. Other previously popular instruments that have fallen out of favor are the Bender-Gestalt, editions of the Stanford-Binet, sentence completion, and projective drawings. Child behavior rating scales may have replaced the Children's Apperception Test and the Robert's Apperception Test for popularity in child assessment. Tests that may be gaining in popularity are the Personality Assessment Inventory (PAI), the WMS-IV, WJACH-III, the BDI and BAI, and the Wechsler Individual Achievement Test-Third Edition (WIAT-III).

Limitations and Future Directions

We achieved a 32% response rate and it is likely that results do not generalize to programs that did not respond. Programs with an interest in assessment, more assessment faculty, and higher internship match rates may have been motivated to respond more than other programs. Results may reflect practices in a selection of programs that are functioning most optimally in their assessment training. Another limitation is that one member of each training program was asked to report on a wide range of assessment-related topics and this was likely a challenging task. Further, we did not collect data on the quality of training in assessment, which may vary widely across programs. Data about specific training practices, readings, course projects, and ratios of practicum to supervision hours would be useful to determine and compare the quality of assessment training across programs. An updated study on

perspectives of internship directors would be useful to determine how well clinical psychology programs are preparing students for the next stage of training.

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