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Internship directors' perspectives on psychological assessment: the role of technology and emerging trends

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Graduate School of Education and Psychology

INTERNSHIP DIRECTORS' PERSPECTIVES ON PSYCHOLOGICAL ASSESSMENT: THE ROLE OF TECHNOLOGY AND EMERGING TRENDS

A clinical dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Psychology in Clinical Psychology

by

Cecilia Costa, M.A.

July, 2019

Carolyn Keatinge, Ph.D., Cary Mitchell, Ph.D. – Dissertation Chairpersons

This dissertation, written by:

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under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

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Mom (mama bear)—Thank you for being there for me unconditionally through the blood, sweat, and tears. Thank you for teaching me to never give up, and that everything worth having is worth fighting for. Thank you for inspiring me and motivating me every day.

Dad (papa bear)—Thank you for always being a voice of reason. Thank you for supporting me through this process and always being there for me, no matter what I've needed.

Daniel—Thank you for being by my side through this entire journey. You've kept me strong throughout this process. I'm so grateful for your patience and understanding, and for always believing in me and never doubting that I would reach my goals.

Tamara—Thank you for being my rock throughout the past few years. From late nights studying and writing papers, to self-care trips, you have been there for the good and the bad.

Bella—Thank you for always being by my side and staying up late with me when I needed it. You'll never know how much you've helped me.

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VITA

CECILIA B. COSTA, M.A.

EDUCATION

Pepperdine University, *Los Angeles, CA* **September 2015 – Present**
Doctor of Psychology in Clinical Psychology
Expected degree: 2019

Pepperdine University, *Los Angeles, CA* **September 2011 – June 2013**
Master of Arts in Psychology

University of California - San Diego*, La Jolla, CA* **September 2007 – June 2011**
Bachelor of Arts in Psychology
Provost honors

CLINICAL EXPERIENCE

North Florida/South Georgia Veterans Health System
*U.S. Department of Veterans Affairs, Malcom Randall VA Medical Center**,** Department of Psychology*, *Gainesville, FL*
Director of Clinical Training: Jeffrey Bates, Ph.D., & Kimberly Shaw, Ph.D.
Supervisor: Elizabeth Dizney, Psy.D.

Psychology Intern **July 2018 – November 2018**
Women's Primary Care/Mental Health & Military Sexual Trauma Rotation

- Collaborate with primary care interdisciplinary team to provide evidence-based individual psychotherapy for a full range of behavioral health issues and treatments related to specialized areas such as PTSD, military sexual trauma, transgender/gender dysphoria, and personality pathology.
- Conduct intakes and individual psychotherapy using CPT, CBT, DBT, MI, and mindfulness-based cognitive therapy.
- Develop appropriate therapy treatment plans and referrals.
- Participate in consultation with interdisciplinary medical team.
- Co-lead DBT groups for female Veterans with Borderline Personality Disorder and other co-morbidities.
- Conduct comprehensive psychological assessments involving interviews, psychological testing, and patient feedback as appropriate.
- Perform PCMHI warm handoffs and brief, skills based individual therapy sessions for patients presenting to the Women's Clinic in crisis.

Supervisor: Gavin Shoal, Ph.D., and Sara Civetti, Psy.D.

Psychology Intern **November 2018 – March 2018**
Inpatient Psychiatry Rotation

- Conduct psychiatric consults with complex Veterans hospitalized on a crisis stabilization unit. Presentations include mood disorders with suicidal ideation, personality disorders, substance use disorders, psychotic spectrum disorders, PTSD, and psychiatric patients with complex medical concerns.
- Implement time-limited courses of psychotherapy using CBT, ACT, DBT, and MI.

- Conduct psychodiagnostic and neuropsychological assessments of cognitive dysfunction related to psychiatric illness, as well as of a wide range of neurological conditions.
- Facilitate groups, including ACT, MI, CBT for Chronic Pain, and CogSMART.
- Consult with interdisciplinary treatment teams regarding patient care, discharge planning, and treatment recommendations.
- Perform psychological evaluations, which include the assessment of psychological and personality functioning (e.g., MMPI-2-RF, PHQ-9, PCL-5, and BAMR); conduct brief neuropsychological evaluations (e.g., Trail Making Test A & B, WTAR, Stroop Test, and HVLT); conduct mental health suicide risk assessments.

Supervisor: Jason Pickren, Psy.D.
Psychology Intern **March 2018 – June 2018**
Substance Abuse Treatment Team (SATT) Rotation

- Provide psychotherapy and assessment to male and female veterans receiving residential care, ambulatory detoxification, intensive outpatient services, and/or traditional outpatient services for the treatment of substance use disorders and co-occurring mental health disorders.
- Conduct treatment of substance use disorders and comorbid PTSD through delivery of brief, solution-focused interventions in individual psychotherapy using CPT, PE, MI, CBT, and DBT.
- Function as part of a multidisciplinary team for continuity of care purposes.
- Conduct group psychotherapy treatments, including residential and outpatient process groups; 12 step facilitation, Smart Recovery for relapse prevention, and trauma skills-based groups (e.g., Seeking Safety).
- Perform PTSD assessments and psychological evaluations, which include assessment of cognitive and personality functioning (e.g., MMPI-2-RF, PAI, BDI-II, BAI, BAM-R, PCL-5, and BPRS), diagnostic clinical interviews, chart reviews, and feedback of results.

Supervisor: Kimberly Shaw, Ph.D., & Timothy Ketterson, Ph.D.
Psychology Intern **July 2018 – June 2018**
Outpatient Therapy & Assessment Rotation
(Couples therapy, trauma, & PCMHI emphasis)

- Provide individual psychotherapy to male and female veterans seeking outpatient mental health services for a variety of psychological conditions such as major depressive disorders, anxiety disorders, PTSD, substance use disorders, personality disorders, and suicidality.
- Conduct couples and family therapy utilizing Cognitive Behavioral Conjoint Therapy for PTSD (CBCT-PTSD), interpersonal neurobiology, Emotion focused therapy (EFT), and Imago Relationship Therapy.
- Conduct PCMHI consults, assessments, and warm hand-offs through the primary care clinic.
- Provide evidence-based therapy using CBT, ACT, DBT, IPT, and client-centered therapy.
- Provide psychological assessment including diagnostic interviews, medical record reviews, objective and/or projective personality measures, intellectual, and neuropsychological testing.

- Co-lead Mindful Warrior groups with recreational therapists for Veterans with an array of medical and psychological concerns utilizing components of Tai Chi, Yoga, and Mindfulness training.
- Collaborate with Mindful Warrior group facilitators to develop outcome measures and evaluate treatment outcome.
- Employ measurement-based care using inventories such as the BDI-II, PHQ-9, BAI, BHS, and PCL-5, as well as the Outcome Rating Scale (ORS)/Session Rating Scale (SRS).

VA West Los Angeles Healthcare Center – CBT for Psychosis Clinic
U.S. Department of Veterans Affairs, VA West Los Angeles Healthcare Center, Department of Psychology, Los Angeles, CA
Supervisor: Najwa Culver, Ph.D., & Susanna Friedlander, Ph.D.
Psychology Pre-Intern **September 2017 – May 2018**

- Provided evidence-based individual psychotherapy utilizing CBT for Psychosis, CBT for Insomnia, and ACT to Veterans who have persistent psychotic symptoms and severe mental illness, including co-morbid PTSD, mood disorders, anxiety disorders, sleep disorders, substance use disorders, and social skills deficits.
- Facilitated CBT & ACT groups on inpatient psychiatry unit.
- Developed and provide group therapy in the outpatient psychosis clinic.
- Provided consultation to interdisciplinary medical team.
- Conducted intakes and individual psychotherapy from a CBT modality.
- Utilized CPRS to access Veteran medical records and write individual and psychotherapy progress notes.
- Participated in weekly individual and group supervision, which includes case presentation, case formulation and review of audio-recorded sessions.
- Attended weekly didactics.

UCLA Alzheimer's Disease Research Center
Department of Psychiatry and Biobehavioral Sciences, Semel Institute for Neuroscience and Human Behavior, Mary S. Easton Center for Alzheimer's Disease Research at UCLA, Los Angeles, CA
Supervisor: Christopher Nuñez, Ph.D, Shital Pavawalla, Ph.D., ABPP-CN., & Ellen Woo, Ph.D.
Psychology Extern **July 2016 – July 2017**

- Administered weekly full neuropsychological assessment batteries to patients. between 20 and 90 years old.
- Scored and interpreted psychological assessments.
- Wrote comprehensive neuropsychological assessment reports.
- Assisted in conducting clinical interviews.
- Weekly use of flexible approach to build assessment batteries.
- Maintained patient charts and records.
- Attended patient feedback sessions.
- Presented weekly cases presentation of patients and differential diagnosis during group supervision.
- Formulated patient recommendations based on the assessment results.
- Participated in weekly supervision.
- Attended weekly UCLA neuropsychology didactics.
- Common conditions included: neurocognitive disorders (Alzheimer's Disease, Mild/Major Cognitive Impairment, Lewy Body Dementia, Frontotemporal lobar degeneration), stroke, TBI, cancer, chronic pain, vision impairment, and

physical/orthopedic injuries substance use disorders, personality disorders, psychotic disorders, mood disorder, and anxiety disorders.

Pepperdine University West Los Angeles Community Counseling Center
Psychology Department, Pepperdine University, Los Angeles, CA
Supervisor: Aaron Aviera, Ph.D., & Dity Brunn, Psy.D.

Psychology Trainee **September 2015 – June 2018**

- Provide individual therapy to adults and adolescents.
- Provide 24 hours on call emergency services.
- Conduct psychodiagnostic intake evaluations and developed treatment plans in collaboration with clients.
- Provide evidence-informed individual psychotherapy on a weekly and/or bi-weekly basis.
- Write comprehensive intake reports and weekly psychotherapy notes.
- Administer brief psychological assessments.
- Maintain client charts and track progress.
- Manage client billing and statements.
- Attend weekly case conference meetings.
- Present client cases during clinic meetings.
- Participate in pager training for on call emergency services.
- Engaged in weekly individual, group, and peer supervision which includes case presentation and review of audio-recorded sessions.

Beautiful Minds Center for Autism
Los Angeles, CA
Supervisor: Gabrielle Izralson, Psy.D.

Behavioral Therapist **October 2014 – May 2015**

- Implemented programs based on Applied Behavioral Analysis (ABA) principles that increase communications, self-help and play skills.
- Managed and reduced inappropriate behaviors.
- Kept children motived to learn new skills.
- Provided intervention in home and community settings.
- Participated in trainings to stay up to date on research and clinical methods.
- Completed clinical and administrative tasks such as data recording and session progress notes.
- Communicated confidentially and professionally with behavior analysts, supervisors, families and company principals.

UCLA PEERS Clinic
Department of Psychiatry and Biobehavioral Sciences, Semel Institute for Neuroscience and Human Behavior, Los Angeles, CA
Supervisor: Elizabeth A. Laugeson, Psy.D.

Senior Clinical Assistant **June 2012 – June 2015**

- Conducted phone interviews for adolescents and young adults with ADHD, anxiety, depression, autism spectrum disorder, and other socioemotional difficulties presenting for social skills treatment.
- Collected information on patient developmental history, medical summary, and medication record prior to scheduling intake appointments to determine appropriateness of fit.
- Assisted in intake appointments by reviewing patient developmental history with the intake coordinator, and interacted with the adolescents and young

adults to assess for motivation.
- Managed the collection of pre- and post-treatment research measures of adolescents and young adults in order to track treatment outcome.
- Assisted with billing and financial statements for patients undergoing treatment through the PEERS for Adolescents and PEERS for Young Adults interventions.
- Assisted in writing integrated intake reports for adolescents, young adults, and parents/caregivers to collaboratively develop individualized treatment goals and conceptualize course of treatment.
- Administered research assessments following the PEERS intervention and assist in the collection of young adult, adolescent and parent data.

Behavioral Coach, *PEERS for Young Adults & Adolescents* **June 2012 – June 2015**
- Co-facilitated social skills groups for adolescents with ADHD, depression, anxiety, autism spectrum disorder, and other social impairments by conducting homework review and role-play demonstrations of targeted skills, proving performance feedback through behavioral rehearsal exercises, and providing immediate feedback to parents to promote generalization of skills.
- Assisted in behavior and social management of participants during sessions to maintain group focus
- Completed clinical documentation including individual and group progress notes in effort to assess treatment progress, identify barriers to treatment, and enhance treatment outcome.

CLINICAL RESEARCH EXPERIENCE

UCLA PEERS for Teenager & Young Adults Study
Department of Psychiatry and Biobehavioral Sciences, Semel Institute for Neuroscience and Human Behavior, Los Angeles, CA
Supervisor: Elizabeth A. Laugeson, Psy.D.

Senior Research Assistant **June 2012 – June 2015**
- Scored and verified pre- and post-intervention outcome data collected from young adults with autism spectrum disorder, ADHD, depression, anxiety, and other socioemotional difficulties participating in the caregiver-assisted, evidence-based social skills intervention PEERS.
- Oversaw clinic database to make ensure data accuracy for publishing and research purposes.
- Helped recruit potential participants at various recruitment events in the community for research projects conducted at the UCLA PEERS Clinic and The Help Group-UCLA Autism Research Alliance.
- Assisted the Clinic Coordinator with participant phone interviews, eligibility appointments, and the collection of research measures to monitor the intervention's efficacy and effectiveness.
- Trained new research assistants on the protocols for scoring, verifying, and maintaining data collected throughout the study.

USC Substance Abuse Lab
Department of Psychology, *Los Angeles, CA*

Supervisor: Susan Luczak, Ph.D.

Research Assistant **January 2012 – June 2012**

- Assisted in research that studied how variations in the alcohol use across Aldehyde Dehydrogenase 2 *(*ALDH2) gene among young adults influences their alcohol consumption within drinking episodes.
- Inputted, analyzed and verified data in SPSS from real-time assessments that examined naturalistic drinking patterns across individuals with variations in alcohol metabolizing genes.

USC Social Behavior Lab

Department of Psychology, Los Angeles, CA

Supervisor: Jesse Graham, Ph.D.

Research Assistant **September 2012 – June 2013**

- Assisted in research that investigated how young adults' political ideologies are influenced after being asked to adopt moral arguments that they may or may not believe to be moral.
- Attended weekly lab meetings to discuss new research ideas and track progress of experimental studies
- Ran young adult subjects in social behavior studies.
- Reviewed subject consent and right, followed by debriefing subjects participating in studies.

UCSD Infant Vision & Autism Lab

Department of Psychology, La Jolla, CA

Supervisor: Karen Dobkins, Ph.D.

Research Assistant **January 2010 – June 2011**

- Assisted in three studies with human subjects: 1) implementing face processing and habituation experimental studies on 9 and 10-month-old infant siblings of children with Autism, 2) theory of mind in children, and 3) synesthesia in adults.
- Contacted families to recruit candidates and made follow up calls to schedule subjects for studies.
- One of three research assistants selected to conduct eye-tracking studies with 9-month old infants and their parents to investigate face processing and habituation.
- Reviewed rights and consent forms with participants followed by delivering compensation.
- Executed MATLAB programs and assisted in programming.
- Scored Theory of Mind assessment and reported data for research purposes.
- Assisted in EEG studies with infants.

TEACHING & PEER SUPERVISION EXPERIENCE

Pepperdine University Community Counseling Clinic

Psychology Department, Pepperdine University, Los Angeles, CA

Supervisor: Aaron Aviera, Ph.D.

Clinical Peer Supervisor **September 2017 – June 2018**

- Hand-selected to provide weekly individual peer supervision for beginning and intermediate doctoral-level psychology trainees offering psychological treatment at the Union Rescue Mission, Wiseburn School District, and Pepperdine Counseling Center.

- Provide one hour of supervision to each trainee weekly, utilizing a competency-based consultation approach to foster the development of clinical skills, including comprehensive feedback on intake reports, case notes, and audiotaped therapy sessions.
- Collaboratively develop training goals with consultees for the year related to diagnosis, conceptualization, treatment intervention, crisis management, and legal/ethical issues.
- Discuss a variety of issues with trainees, including documentation, professional development, maintaining appropriate boundaries, managing countertransference, and therapeutic techniques.
- Co-facilitate case conferences and provide feedback to first-year, doctoral level therapists to increase case conceptualization and diagnostic skills.
- Participate in weekly supervision-of-supervision meetings.
- Participate in weekly didactics of supervision theory to enhance competencies.

Pepperdine University
Department of Psychology, Los Angeles, CA
Supervisor: Carolyn Keatinge, Ph.D., Susan Himelstein, Ph.D., Alison Vargas, Psy.D., & Judy Ho, Ph.D.

Teaching Assistant **September 2016 – June 2018**

- Grade exams for Doctoral and Masters psychology students in cognitive, personality, and advanced integrated assessment courses.
- Score and grade assessments administered by students.
- Administer assessment labs where students are tested on assessment administration skills.
- Provide written and direct comprehensive feedback to assessment students.
- Proctor exams for students.
- Meet with students to assist in their comprehension and learning of psychological assessments.

PRESENTATIONS & PUBLISHED ABSTRACTS

Costa, C. & Kingston, N. (April 2010). *Are vaccinations linked to autism?* Oral session presented at the University of California, San Diego. La Jolla, California.

Costa, C., Wylie, J., Macina, V., Souza, M., Contreras, A., LaPrade, R., & Fathi, M. (March 2012). *Hallucinogenic drugs and their connections to self-actualizing experiences and spirituality*. Poster presented at the Society for Humanistic Psychology Conference (APA Division 32). Pittsburgh, Pennsylvania.

Costa, C., Diaz, D., Hopkins, J., Cronin, M., & Laugeson, E. (October 2013). *Depression as a predictor of decreased social engagement for adolescents with autism spectrum disorder following the UCLA PEERS intervention*. Poster presented at the International Meeting for Autism Research (IMFAR), Atlanta, GA.

Diaz, D., **Costa, C.,** Hopkins, J., Bates, S., Cronin, M., & Laugeson, E. (October 2013). *Positive self-esteem as a predictor of decreased problem behaviors in adolescents with*

ASD following the UCLA PEERS intervention. Poster presented at the International Meeting for Autism Research (IMFAR), Atlanta, GA.

Costa, C., Diaz, D., Hopkins, J., Cronin, M., & Laugeson, E. (October 2013). *Depression as a predictor of decreased social engagement for adolescents with autism spectrum disorder following the UCLA PEERS intervention*. Poster presented at the American Psychological Association (APA) Convention, Washington, D.C., USA.

Diaz, D., **Costa, C.,** Hopkins, J., Bates, S., Cronin, M., & Laugeson, E. (October 2013). *Positive self-esteem as a predictor of decreased problem behaviors in adolescents with ASD following the UCLA PEERS intervention.* Poster presented at the American Psychological Association (APA) Convention, Washington, D.C., USA.

Ferrendelli, C., Hopkins, J., **Costa, C.**, & Laugeson, E. (November 2014). *Distinct perceptions of social functioning and treatment outcome across parents and adolescents following the UCLA PEERS intervention*. Poster presented at the Association of University Centers on Disabilities (AUCD) Annual Conference, Washington, D.C.

CERTIFICATIONS & TRAININGS

Cognitive Behavior Therapy for Chronic Pain (CBT-CP) **August 2018**
4-hour training at North Florida/South Georgia Veterans Health System, Gainesville, FL

IRB Human Participants Protection Education for Research Teams **October 2017**
National Institute of Health

Working with Gender and Sexual Minority (GSM) Veterans **September 2017**
West Los Angeles Veterans Affairs Health Care Center, Westwood, CA

Veterans Affairs CPRS Training **September 2017**
West Los Angeles Veterans Affairs Health Care Center, Westwood, CA

Online Training Course for Trauma-Focused CBT **October 2016**
Medical University of Southern Carolina

Online Training Course for Cognitive Processing Therapy **May 2015**
Medical University of Southern Carolina

Online Training Course for Trauma-Focused CBT with Childhood Trauma **May 2015**
Medical University of Southern Carolina

On-Call Therapist Pager Training for 24-hour Emergency Service **September 2015**
Pepperdine University, Los Angeles, CA

PEERS Certified Provider **June 2013**
Attended a 4-day training to implement the PEERS for Adolescents intervention for adolescents with autism spectrum disorder, ADHD, depression, anxiety, and other socioemotional difficulties in a clinical setting.

PEERS School-Based Certified Provider **July 2013**
Attended a 3-day training to implement the PEERS for Adolescents intervention for adolescents with autism spectrum disorder, ADHD, depression, anxiety, and other socioemotional difficulties in a school setting.

HIPPA **June 2012**
Completed the UCLA Health Insurance Portability and Accountability Act (HIPPA) to ensure patient confidentiality.

PROFESSIONAL AFFILIATIONS

International Society for Autism Research, Member	**2014 – Present**
Psi Chi Honor Society, Member	**2012 – Present**
American Psychological Association, Member	**2010 – Present**
Association for Psychological Science, Member	**2010 – Present**

ABSTRACT

Psychological assessment is regarded as a core competency in the field of psychology. In order to improve factors such as cost-effectiveness, reliability, and efficiency, clinicians and researchers incorporate the use of technology into psychological assessment through computer-based test administration, scoring, and interpretation, as well as through mobile platforms such as tablets. The purpose of the present study was to examine psychological assessment practices and trends across six categories of internship settings. The study utilized archival, questionnaire-based data from a national sample of psychology internship directors at APPIC-member programs ($N = 124$). The six types of internship settings examined in the present study were: university counseling centers, state/county/other public hospitals, Veterans Affairs Medical Centers, consortiums, prisons or correctional facilities, and community mental health centers. Descriptive statistics were calculated on the questionnaire responses and the Kruskal-Wallis test was used to examine whether there were significant differences across the six groups of internship directors on selected questionnaire items. There was moderately strong endorsement of the importance of technology in psychological assessment across all six internship categories. Internship directors also reported that emphasis on, and resources for, assessment would likely remain stable or slightly increase in the future. There were no statistically significant differences between groups on the questionnaire items examined in this study. The findings suggested at least some strengthening of the importance of technology applications in assessment practices at the internship level. The findings also provide current information to academic programs and doctoral students about the continued relevance and importance of psychological assessment across a broad range of internship categories. It is clear that pre-doctoral psychology internship applicants need to continue to be prepared and trained in psychological assessment in order to be competitive in the selection process at most internship sites.

Chapter I: Introduction

Psychological Assessment: A Core Competency

Assessment is an essential competency in the field of clinical psychology and a hallmark of psychological practice (Goldstein & Beers, 2004). Groth-Marnat (2009) stated that psychological assessment is "professional psychology's unique contribution to the wider arena of clinical practice" (p. 5), and it distinguishes the psychologist's role from that of other healthcare professionals. Consequently, psychological assessment is an essential skill to be included in the training of professional psychology doctoral students (Fouad et al., 2009).

In Clemence and Handler's (2001) survey study, the researchers examined the role of psychological assessment at 329 internship programs including child facilities, counseling centers at colleges and universities, Veterans Affairs medical centers, private general medical clinics, state and local hospitals, community mental health centers, medical schools, and private psychiatric hospitals. These investigators reported that 41% of respondents reported that assessment instruments were administered to most patients who received services at their facilities, indicating the pervasive use of psychological measures in psychology internship programs. Among the research sample, 99% of respondents also noted that they offered assessment-related training and provided introductory assessment training to their students, thus indicating that their interns were not always prepared for conducting assessment at these sites. The authors also specified that training in projective tests (i.e., Rorschach, TAT) was highly desired in particular settings such as psychiatric hospitals. These findings showcased the prevalence of assessment in psychological pre-doctoral internship programs and emphasized importance of students receiving training in assessment. The results also highlighted the varied assessment-related practices and needs across different types of internship settings.

Psychologists frequently use assessment when providing clinical services, and assessment is considered as a core component of their clinical training (APA Task Force on Evidence-Based Practice, 2006; Schaffer, Rodolfa, Hatcher, & Fouad, 2013). In professional settings, psychologists have reported allocating 10-25% of their work to performing assessment (Camara, Nathan, & Puente, 2000; Watkins, 1991), suggesting that it is among their principal activities. This indicates the importance of psychologists attaining competency in assessment due to its wide use in clinical application and practice and the significant number of individual tests typically administered (Camara et al., 2000).

Krishnamurthy et al. (2004) determined the eight core competencies that are required for psychological assessment (see Figure 1).

1.	A background in the basics of psychometric theory
2.	Knowledge of the scientific, theoretical, empirical, and contextual bases of psychological assessment
3.	Knowledge, skill, and techniques to assess the cognitive, affective, behavioral, and personality dimensions of human experience with reference to individuals and systems
4.	The ability to assess outcomes of treatment/intervention
5.	The ability to evaluate critically the multiple roles, contexts, and relationships within which clients and psychologists function, and the reciprocal impact of these on assessment activity
6.	The ability to establish, maintain, and to understand the collaborative professional relationship that provides a context for all psychological activity including psychological assessment
7.	An understanding of the relationship between assessment and intervention, assessment as an intervention, and intervention planning
8.	Technical assessment skills i. Problem and or goal identification and case conceptualization ii. Understanding and selection of appropriate assessment methods including both test and non-test data (e.g., suitable strategies, tools, measures, time lines, and targets) iii. Effective application of the assessment procedures with clients and the various systems in which they function iv. Systematic data gathering v. Integration of information, inference, and analysis vi. Communication of findings and development of recommendations to address problems and goals

Figure 1. Core competencies for psychological assessment (Krishnamurthy et al., 2004).

To provide competent psychological assessments, it is necessary to acquire the skill set to ensure the delivery of adequate services to patients and clients. In addition to these specific skill sets, it

is essential for clinicians to develop attitudes that are conducive to valid and useful assessment. Furthermore, ethical assessment requires the consideration of cultural and contextual factors that ultimately impact clients' lives and behaviors. These attitudes also impact the ability of trainees to conceptualize cases and build rapport with their clients (Krishnamurthy et al., 2004).

While scholars have debated which skills should be considered as benchmarks for competency, there is agreement among members of the American Psychological Association (APA) and the Association of State and Provincial Psychology Boards (ASPPB) that assessment should be included in psychologist training programs. In a major, collaborative effort to develop benchmarks, Fouad et al. (2009) identified a range of skills that could be used to determine when a trainee is prepared for clinical practicums, internships, and later matriculation to clinical practice. From the perspective of this model, trainees who are prepared for internship should be able to determine reliable assessment procedures that are best suited to the population that they are serving. Trainees should also demonstrate an awareness of the strengths and limitations of these measures that they administer, understand the interpretation and scoring of traditional psychological assessment measures, and remain familiar with the technological advances related to these measures. Further, trainees must be able to determine proper assessment procedures to diagnose their patients, apply concepts regarding behaviors to cases, and systematically collect information to write progress and assessment reports (see Figure 2). It is possible to gauge competency in assessment by evaluating a trainee's ability to conduct "assessment and diagnosis of problems, capabilities and issues associated with individuals, groups, and/or organizations" (Fouad et al., 2009, p. S16).

Assessment: Assessment and diagnosis of problems, capabilities and issues associated with individuals, groups, and/or organizations.		
READINESS FOR PRACTICUM	**READINESS FOR INTERNSHIP**	**READINESS FOR ENTRY TO PRACTICE**
9A. Knowledge of Measurement and Psychometrics		
Demonstrates basic knowledge of the scientific, theoretical, and contextual basis of test construction and interviewing	**Selects assessment measures with attention to issues of reliability and validity**	**Independently selects and implements multiple methods and means of evaluation in ways that are responsive to and respectful of diverse individuals, couples, families, and groups and context**
9B. Knowledge of Assessment Methods		
Demonstrates basic knowledge of administration and scoring of traditional assessment measures, models and techniques, including clinical interviewing and mental status exam	**Demonstrates awareness of the strengths and limitations of administration, scoring and interpretation of traditional assessment measures as well as related technological advances**	**Independently understands the strengths and limitations of diagnostic approaches and interpretation of results from multiple measures for diagnosis and treatment planning**
9C. Application of Assessment Methods		
Demonstrates knowledge of measurement across domains of functioning and practice settings	**Selects appropriate assessment measures to answer diagnostic question**	**Independently selects and administers a variety of assessment tools and integrates results to accurately evaluate presenting question appropriate to the practice site and broad area of practice**
9D. Diagnosis		
Demonstrates basic knowledge regarding the range of normal and abnormal behavior in the context of stages of human development and diversity	**Applies concepts of normal/abnormal behavior to case formulation and diagnosis in the context of stages of human development and diversity**	**Uses case formulation and diagnosis for intervention planning in the context of stages of human development and diversity**
9E. Conceptualization and Recommendations		
Demonstrates basic knowledge of formulating diagnosis and case conceptualization	**Uses systematic approaches of gathering data to inform clinical decision-making**	**Independently and accurately conceptualizes the multiple dimensions of the case based on the results of assessment**
9F. Communication of Assessment Findings		
Demonstrates awareness of models of report writing and progress notes	**Writes assessment reports and progress notes and communicates assessment findings verbally to client**	**Communicates results in written and verbal form clearly, constructively, and accurately in a conceptually appropriate manner**

Figure 2. Competency benchmarks: assessment (Fouad et al., 2009).

The Ethical Principles for Psychologists and Code of Conduct includes guiding principles for providing appropriate and ethical services to clients and clarifying the expectations for

conducting psychological assessment (APA, 2002). Specifically, this code indicates that assessment should be performed for appropriate reasons (e.g., treatment recommendations, diagnostic questions, court mandates, etc.) and should include informed consent for the patients who are receiving testing services. The ethics code requires the maintenance of the client's confidentiality when conducting assessments and the performance of the assessments by trained and certified professionals, or by professionals in training who are properly supervised. Further, assessors are required to consider diversity factors that may impact performance, administer updated and relevant testing instruments, and provide feedback to the clients (APA, 2002). The inclusion of assessment in the Ethical Principles for Psychologists and Code of Conduct further attests to the presence of assessment in this field, and its consideration as a core component of training in psychology.

Proficiency in working with diverse populations is a requirement of the Psychological Association Competency Benchmarks (see Figure 3), and this expectation applies to psychological assessment as well.

Individual and Cultural Diversity: Awareness, sensitivity and skills in working professionally with diverse individuals, groups and communities who represent various cultural and personal background and characteristics defined broadly and consistent with APA policy.		
READINESS FOR PRACTICUM	**READINESS FOR INTERNSHIP**	**READINESS FOR ENTRY TO PRACTICE**
2A. Self as Shaped by Individual and Cultural Diversity (e.g., cultural, individual, and role differences, including those based on age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language, and socioeconomic status**) and Context**		
Demonstrates knowledge, awareness, and understanding of one's own dimensions of diversity and attitudes towards diverse others	**Monitors and applies knowledge of self as a cultural being in assessment, treatment, and consultation**	**Independently monitors and applies knowledge of self as a cultural being in assessment, treatment, and consultation**
2B. Others as Shaped by Individual and Cultural Diversity and Context		
Demonstrates knowledge, awareness, and understanding of other individuals as cultural beings	**Applies knowledge of others as cultural beings in assessment, treatment, and consultation**	**Independently monitors and applies knowledge of others as cultural beings in assessment, treatment, and consultation**

(continued)

Individual and Cultural Diversity: Awareness, sensitivity and skills in working professionally with diverse individuals, groups and communities who represent various cultural and personal background and characteristics defined broadly and consistent with APA policy.		
READINESS FOR PRACTICUM	**READINESS FOR INTERNSHIP**	**READINESS FOR ENTRY TO PRACTICE**
2C. Interaction of Self and Others as Shaped by Individual and Cultural Diversity and Context		
Demonstrates knowledge, awareness, and understanding of interactions between self and diverse others	**Applies knowledge of the role of culture in interactions in assessment, treatment, and consultation of diverse others**	**Independently monitors and applies knowledge of diversity in others as cultural beings in assessment, treatment, and consultation**
2D. Applications based on Individual and Cultural Context		
Demonstrates basic knowledge of and sensitivity to the scientific, theoretical, and contextual issues related to ICD (as defined by APA policy) as they apply to professional psychology. Understands the need to consider ICD issues in all aspects of professional psychology work (e.g., assessment, treatment, research, relationships with colleagues)	**Applies knowledge, sensitivity, and understanding regarding ICD issues to work effectively with diverse others in assessment, treatment, and consultation**	**Applies knowledge, skills, and attitudes regarding dimensions of diversity to professional work**

Figure 3. Competency benchmarks: assessment (Fouad et al., 2009).

Psychological Assessment Training and Practice

There is continual advancement in the evolution of training practices for psychological testing and assessment. The ASPPB, which was founded in 1961, developed the Examination for Professional Psychology Practice (EPPP), a national examination for psychology, in 1964 to promote the standards and to align the procedures for obtaining licenses among the states (Hess, 1977). This exam, which is now used in 49 states, is the current gold standard measure of the psychological knowledge related to clinical practice (Hess, 1977). Although the EPPP identifies six areas, the first three are specific to assessment. These areas include knowledge that is applicable to professionals' aptitude regarding:

1. Choice, adjustment, and use in practice of psychological assessment tools inclusive of survey instrumentation, interview procedures, observation protocols and testing.

2. Interpretation and reporting of assessment results inclusive of referral source and client feedback.
3. Implementation, design, and evaluation of intervention plans relating to the assessment results, monitoring, and evaluation (AASPB, 1982, as cited in Stigall, 1983, p. 304).

In addition, Watkins (1991) reviewed three decades of survey research (1960-1990) on psychological assessment training and practices. Bates provided a succinct and useful summary of Watkins' important conclusions:

1. Internship directors place considerable importance on psychodiagnostic assessment skills, expect graduate programs to prepare their students in assessment skills, seek interns who have these abilities, and generally feel that beginning interns are not very well prepared in psychodiagnostics.
2. Graduate students, who are well trained and relatively proficient in psychological assessment, will likely have increased opportunities to obtain internship and job placements.
3. Based on the relative stability of assessment practices over the years, a number of tests and assessment methods are recommended for graduate students to learn, across a variety of domains (Bates, 2016, p. 3).

While the importance of psychological assessment in graduate school and in predoctoral internships has continued, more recent researchers have revealed subtle changes in the years since Watkins's (1991) review. This is in regard to the types of assessment emphasized in the field of psychology (e.g., intelligence, projective, neuropsychology). According to Childs and Eyde (2002), although many scholars have explored how instruction in psychological assessment

should be conducted, few have investigated how this training is actually provided. To explore test-based assessment protocols, Childs and Eyde conducted a study to determine what psychological measures were most frequently taught in APA-accredited clinical psychology doctoral programs (see Figure 4).

Instrument	***% of Programs***
Wechsler Adult Intelligence Scale–III	93
Wechsler Intelligence Scale for Children–III	88
Minnesota Multiphasic Personality Inventory–2	86
Rorschach Inkblot Test	81
Thematic Apperception Test	71
Stanford-Binet Intelligence Scale: Fourth Edition	48
Bender Visual Motor Gestalt Test	46
Millon Clinical Multiaxial Inventory–III	38
Wechsler Pre-School and Primary Scale of Intelligence –Revised	37
Woodcock Johnson Test of Achievement –Revised	33
Minnesota Multiphasic Personality Inventory–Adolescent	30
Sentence Completion Test	29
Wechsler Memory Scale–Revised	26
Halstead-Reitan Neuropsychological Battery	25
Wide Range Achievement Test –Third Edition	25
Kaufman Assessment Battery for Children	24
Projective Drawings	24
Wechsler Individual Achievement Test	20

Figure 4. Most frequently taught assessment measures (Childs & Eyde, 2002).

Childs and Eyde (2002) revealed that clinical psychology doctoral programs most commonly taught the following instruments: the Wechsler Adult Intelligence Scale–III (WAIS–III; Wechsler, 1997); the Wechsler Intelligence Scale for Children–III (WISC–III; Wechsler, 1991); the Minnesota Multiphasic Personality Inventory–2 (MMPI–2; Butcher, Dahlstrom,

Graham, Tellegen, & Kaemmer, 1989); the Rorschach Inkblot Test; and the Thematic Apperception Test (TAT; Murray, 1943). Less frequently taught instruments included the Stanford–Binet Intelligence Scale (Termin & Merrill, 1973), the Bender Visual Motor Gestalt Test (Bender, 1946), the Millon Clinical Multiaxial Inventory–III (MCMI–III; Millon, Millon, & Davis, 1994), the Wechsler Preschool and Primary Scale of Intelligence–Revised (Wechsler, 1989), and the Woodcock–Johnson Tests of Achievement–Revised (Woodcock, McGrew, & Mather, 2001). The researchers reported that doctoral courses tended to focus on the scoring of these measures and the administration protocols. In addition, they found that the majority of these programs required that students gain practical expertise in the interpretation of these instruments.

Belter and Piotrowski (2001) and Camara, Nathan, and Puente (1998) reviewed current and historical testing procedures by practitioners and found that the use of particular psychological tests has been very consistent for the past 30 years. However, new versions of measures (e.g., MCMI-III and the MCMI-IV), in addition to newly validated instruments (e.g., the PAI) have been incorporated into practice recently. The list of the top 13 tests used by practicing clinical psychologists includes most of the tests that were reported by Childs and Eyde (2002), as well as other instruments that are not commonly taught in clinical psychology doctoral programs (Camara et al., 1998). Piotrowski and Belter (1999) reported on the assessment practices at 84 internships that were associated with the Association of Psychology Postdoctoral and Internship Centers (APPIC). These authors indicated that internship directors reported a continuing emphasis on objective assessments of personality and intelligence; the internship directors indicated a growing emphasis being placed on neuropsychological testing; and the directors also reported a decreased focus on projective assessment. Piotrowski and Belter also

reported that most of the internship directors indicated frequently using conventional or traditional assessment measures. For example, the MMPI/MMPI-2, Wechsler IQ scales, Rorschach, and TAT were the highest ranked assessment measures, followed by the MCMI in fifth place, which aligned with earlier studies on the increasing popularity of the Millon inventories (Belter & Piotrowski, 2001; Butcher, 2006; Childs & Eyde, 2002; Durand, Blanchard, & Mindell, 1988; Norcross & Karpiak, 2012; Piotrowski & Zalewski, 1993).

The prominent role that psychological assessment has played in clinical practice, psychological research, and the activities of professional organizations has not shown any signs of fading (Butcher, 2006; Piotrowski & Belter, 1999; Stedman, Hatch, & Schoenfeld, 2001a; Weiner, 2012). In a study that surveyed 412 clinical psychologists sampled randomly from the APA membership directory, Watkins, Campbell, Nieberding, and Hallmark (1995) reported that most of these psychologists engaged in some form of assessment. Nearly all (90%) of these psychologists that were sampled reported using personality assessment in their clinical practices. Intellectual assessment services were identified by 66% of respondents, while 15% identified vocational/career assessment, and 13% of respondents cited ability/aptitude assessment activities as part of their professional activities (Krishnamurthy et al., 2004). In another study, Meyer et al. (1998) stressed the importance of assessment in the field of psychology, especially training at the pre-doctoral level. These authors posited that a crucial element in assessment is first and foremost, a well-trained clinician with the ability to integrate the results of these assessments into a meaningful evaluation. They further state that the viability of test-based assessments relies upon the ability of psychology programs to properly train competent clinicals who can conduct and interpret these assessments (Meyer et al., 1998). The skill to produce multifaceted, integrated test-based assessments requires rigorous educational training and clinical knowledge. This calls

into question current academic programs and how they are preparing psychology students and future clinicians for this complex task.

Taken together, there have been noteworthy strides in the development of psychological testing and assessment since the 19th century, and the importance of assessment continues to be upheld across academic programs and applied training sites, including internships (Anastasi & Urbina, 1997; Clemence & Handler, 2001; Weiner, 2013). Assessment training is particularly important in psychology doctoral programs that emphasize professional applications including clinical psychology, counseling psychology, and school psychology. In addition, psychological assessment competence is and continues to be critical for a graduate student in psychology to be competitive for internship placement (Belter & Piotrowski, 2001; Clemence & Handler, 2001; Stedman et al., 2001a; Weiner, 2012).

Pre-internship training. Despite the importance of psychological assessment across many different practice settings, scholars have noted a growing concern regarding some recent trends in training practices for psychological assessment (Weiner, 2013). Weiner suggested that the emphasis on assessment in pre-doctoral training has decreased substantially, potentially resulting from misconceptions about the importance of clinical psychological assessment. This may impact the quality the assessment training in graduate programs of clinical psychology. Weiner also suggested that a narrow understanding of the value of psychological assessment and lessened emphasis on the practicality of assessment skills may lead to a decrease in courses offered in psychological assessment, changes in the necessary competency requirements for testing, and lower motivation for students to engage in research that related to psychological testing. Weiner posited that there is likely a large discrepancy between the quantity of assessment training provided during pre-doctoral training and the demand and need for

psychological assessment competence in actual practice (Butcher, 2006; Childs & Eyde, 2002; Weiner, 2013).

Piotrowski and Zalewski (1993) conducted a study of 80 program directors of clinical psychology doctoral programs that were APA-accredited. Their findings reported that training in psychological assessment was a key element of their principal training program. Belter and Piotrowski (2001), however, identified some changes in regard to the complexity and extensiveness of training in these programs almost one decade later. More specifically, these authors suggested that there was an overall increased weight being placed on various areas of psychological assessment, except in regard to projective testing. Although the findings suggested that slightly over 50% the program directors indicated a reduced focus on projective testing, 65% of the participants reported an increased focus on neuropsychological assessment, and close to half (40%) indicated more emphasis on competence in interviewing. Additionally, 7% of academic program directors in the sample indicated an increased focus on intelligence assessment, while just 4% reported a stronger focus on projective testing over the previous 5 years.

In another study, Stedman, Hatch, and Schoenfeld (2001b) collected data from 334 clinical and counseling psychology doctoral students who had applied to internship programs. A large proportion of these students reported a lack of adequate training in psychological assessment to prepare them for the requirements of their internships. The researchers revealed that only one quarter of this sample of psychology doctoral students had enough knowledge of the 13 most frequently administered assessment measures to meet the expectations of the directors at their pre-doctoral internship programs. Additionally, only one quarter of the surveyed students indicated receiving adequate amounts of training and preparation for report writing prior

to the start of their internship programs. Some students have reported that they find it hard to attain an internship or perceive that their limited training in psychological assessment is a weakness of their internship application that creates a barrier to gaining an internship placement (Butcher, 2006). Due to the ongoing variations in patient care and increasing competitiveness throughout the mental health care system, academic program leaders must ensure that they continue to emphasize assessment training and remain on track with the consistent needs for psychological assessment within the field of psychology. Through these actions, educators may assist in preparing doctoral students to attain pre-doctoral internships, particularly given the high level of assessment-related expectations that internship directors hold (Robiner, Arbisi, & Edwall, 1994).

Internship training. The internship training program is an important aspect of most doctoral training programs in professional psychology (Prinstein, 2013). The pre-doctoral internship training year is often considered to be a capstone of training experiences within professional psychology doctoral programs (Keilin & Constantine, 2001). The pre-doctoral internship typically takes place in the students' penultimate or final year of doctoral level programs, and frequently occurs in a setting that facilitates the application of clinical skills in practice (Keilin & Constantine, 2001; Prinstein, 2013).

Stedman, Hatch, and Schoenfeld (2001a) surveyed 324 internship directors and identified that most training programs made various types of psychological assessment measures available to interns. Stedman and coauthors also reported that there was an absence of uniformity and considerable variability across different training settings amongst the responses received by internship directors. These authors presented concerns regarding the quality of assessment preparation at the pre-internship level. They also recommended that doctoral students obtain pre-

internship training in intelligence, objective personality, and projective personality assessment measures, since competence in these assessment methods is valued by internship directors.

Stedman, Hatch, Schoenfeld, and Keilin (2005) built on these previous research studies through the exploration of assessment training at 573 internship programs via a survey about 21 different specialty rotations. Stedman and coauthors (2005) reported that the most frequently offered specialty rotation was in assessment, which was offered at 64% of programs that participated in the survey. Interestingly, no major rotations in assessment were offered by the university counseling centers and private hospitals that these authors surveyed. According to Stedman (2007), many internships may not deliver enough opportunities in psychological assessment training to allow students to improve their skills regarding psychological assessments. These survey results and observations also provide information that suggests the necessity of additional examination of the trainings available at specific internship sites. Stedman indicated that important differences may exist across types of internship programs regarding assessment-related practices, needs, and expectations.

Emerging Issues in Psychological Assessment

Use across different settings. Recently, there has been considerable growth in the variety of assessment applications, with growing emphasis on assessment related to forensic, healthcare, and organizational settings (Weiner, 2013). Despite this growth, however, the assessment measures being used across these settings often vary minimally and have not been adequately adapted for use among different populations. Too often, psychological measures are applied to individuals and situations for which they were not intended, and appropriate norms have not been developed (Graham & Naglieri, 2003). This highlights the importance of examining whether accessible norms are appropriate and if the interpretations made based on

these norms are actually valid and generalizable for each setting and cultural group that the norms were applied to (Graham & Naglieri, 2003). Understanding the impact of trends in potential funding related issues surrounding assessment practice across settings is also critical. This is due to the fact that there may be differences in the funding allotted for psychological assessment depending on the type of internship setting.

Impact of technology and computer assisted assessment. Technological advances have enabled the provision and adaptation of treatments such as cognitive behavioral therapy in digital formats (Andersson, 2014). Furthermore, technology advancements have fostered the development of innovative treatments using virtual reality technology to create exposure-based treatments for anxiety conditions (Valmaggia, Latif, Kempton, & Rus-Calafell, 2016). These technological advances could be relevant for psychological assessment as well.

During the development of measures for psychological assessment, practitioners have consistently relied on the use of paper-and-pencil format tests and forms to measure a range of abilities (Parsey & Schmitter-Edgecombe, 2013). To improve factors such as cost-effectiveness, reliability, and efficiency, practicing clinicians and researchers have begun to integrate technology into assessment. Professionals in the military and sports psychology fields have used computer-based assessment as a quicker and more effective way of conducting cognitive psychological assessment (Parsey & Schmitter-Edgecombe, 2013). Similar developments in technology and computer programming have also made it easier to administer, score, and interpret assessment results (Parsey & Schmitter-Edgecombe, 2013). Additionally, through the integration of technology into assessment practices, professionals may gather additional information that is difficult to obtain through more traditional paper-based forms of assessment (Sahakian & Owen, 1992). Companies such as Pearson, one of the leading publishers of

psychological assessments, have begun to adapt their measures for use on digital platforms such as computers and portable tablets. Furthermore, Pearson has created their own software program called "Q-interactive," as a simple and efficient way to administer and score tests on a computer (Cayton, Wahlstrom, & Daniel, 2012).

Recent researchers have identified the potential benefit of technology for real time data collection from a patient or client, which may assist professionals in understanding daily changes in aspects such as mood and cognition, in addition to reducing the bias that may result from patients' or clients' self-report based on memory recall (Jones & Johnston, 2011). Several questionnaires are now readily available for use through an application or websites that can be accessed online, allowing for them to be instantly scored, interpreted, and compared to norms by a computer program (Fairburn & Patel, 2017). Scholars examining performance on computer-based testing compared to traditional pencil-and-paper tests have found overall similarities in performance (Alfonsson, Maathz, & Hursti, 2014). Currently many individuals use technologies such as cellular phones, computers, and television on an everyday basis. As a result, researchers have found that individuals with more experience with technology and computers over their lifetime perform better on computer-based assessments than they do on assessments that do not integrate technology (Tun & Lachman, 2010).

Scholars have identified potential issues relating to funding, as certain types of computer-based assessment that involves virtual reality may present high costs and require frequent maintenance when compared to more traditional pencil-and-paper testing. Researchers have increasingly examined the advantages of adapting measures to be administered on computers and tablets, which have been found to be cost-effective and reliable (Parsey & Schmitter-Edgecombe, 2013). There is a need for more research to understand the benefits of financial investment in

software and technology to further development of computer and technology assisted psychological assessment. Despite a multitude of technological advances, there is a scarcity of current research examining the use of such technologies in in assessment across different settings. This emphasizes the importance of exploring whether technology is being integrated into psychological assessment and understanding the potential differences across internship settings.

Purpose of the Study

Recently, Bates (2016), Faith (2016), and Shipley (2019) surveyed internship directors at APPIC pre-doctoral internship programs throughout the United States. APPIC was originally formed to standardize the internship application process, and programs need to meet 16 criteria in order to obtain and maintain APPIC membership (see Appendix A). The investigators of the parent study developed a 32-item questionnaire to explore assessment-related trends and practices at the internship level (see Appendix B). The findings revealed important shifts in the reported usage patterns of specific psychological tests and found potentially important differences across types of internships regarding important aspects of psychological assessment practice. For example, Bates (2016) identified some shifts in test usage across internship types. Bates reported a general increase in the use of short, symptom-focused scales, as well as some reduction in use of traditional projective measures such as the Rorschach. Bates also indicated that overall, directors of APPIC-member internship programs reported relatively high levels of satisfaction with entering interns' knowledge and preparation in psychological assessment. Bates (2016), Faith (2016), and Shipley (2019) also found that internship directors, as a group, did not anticipate reduction in the weight placed upon psychological testing and assessment at the internship level. Instead, they tended to report that the emphasis on assessment would stay the

same or increase in the future. While Bates (2016) examined test usage patterns across different types of internship setting, other study findings were typically reported only for the sample as a whole. Important questions remain about other potentially significant differences in psychological assessment practices or needs across various types of internship programs (e.g., VA medical centers versus university counseling centers versus prisons or correctional settings). For example, how do methods of test administration, scoring, and interpretation vary across different types of internship programs? Does the use of technology to support assessment practices differ across different types of internship programs? Do internship directors across various types of internship settings anticipate any future changes in the emphasis on, and resources allocated to, psychological assessment in their programs? There is a need to fine-tune the understanding of the specific assessment-related practices and experiences that may exist across different types of internships.

Assessment continues to be a key part of training and an essential component for graduate students to be competitive for not only internships but also success as a clinician (Belter & Piotrowski, 2001; Clemence & Handler, 2001; Stedman et al., 2001a; Weiner, 2012). The development of skills regarding psychological assessment is considered to be a complex and multidimensional process that brings many demands to practitioners (Krishnamurthy et al., 2004). It is necessary to identify and explore the differences that may exist across types of internship programs. The researcher's goal this study was to attempt to elucidate the differences in internship directors' perspectives that may exist across different categories of internship through re-analysis of an existing dataset.

Using the data collected by Bates (2016), Faith (2016), and Shipley (2019), the researcher analyzed internship directors' questionnaire responses compared across six different groupings

of internship type that these three researchers identified in their original study. The six clusters of settings were: university counseling centers (UCC), state/county/other public hospitals (SCPH), Veterans Affairs Medical Centers (VAMC), consortiums (CON), prisons or correctional facilities (PC), and community mental health centers (CMHC). More specifically, the researcher explored whether internship directors' outlooks on emergent trends in assessment differed across six different categories of internship. The researcher aimed to determine whether current administration and scoring practices for testing and assessment differed across types of internship program. The researcher also examined the role of technology in assessment practices on internship, and considered emerging trends regarding resources for assessment.

Chapter II: Method

The purpose of this archival study was to determine whether internship directors' perspectives on emerging trends in assessment differed across six categories of predoctoral psychology internship. As noted earlier, the researcher analyzed previously-collected data from Bates (2016), Faith (2016), and Shipley (2019) to evaluate selected questionnaire responses across the six most prevalent groupings of internship types identified in the original study. The researcher focused specifically on four questionnaire items that explored assessment-related practices and themes at the internship level: (a) current administration and scoring practices for testing and assessment, (b) the role of technology in assessment practices on internship, (c) emerging trends regarding resources, and (d) the overall importance of assessment at the internship level. Open-ended item responses from the questionnaire that were relevant to the four areas listed above were considered. The present study also explored demographic characteristics of the internship directors included in this subset of the archival data.

The researcher undertook this archival study in cooperation with the Applied Scholarship Community (ASC) group at Pepperdine University, and shared the study's methods and data with two co-investigators, namely Grusecki and Joshua. The researcher will discuss the shared methods and data in further detail in the succeeding sections of this chapter. The researcher expected that the results of this study would be of interest to psychology graduate students and internship directors, and would be applicable to the internship process. The results of this study may also be of interest to the stakeholders for academic curriculum development and training for academic programs, particularly concerning psychological assessment.

Research Approach and Design

Parent study. The researcher obtained archival data from an empirical study previously conducted by Bates (2016), Faith (2016), and Shipley (2019), which explored internship

directors' perspectives on psychological assessment and which will henceforth be referred to as the parent study. The parent study data were collected using a 32-item questionnaire created by Bates (2016), Faith (2016), and Shipley (2019), which focused on exploring internship directors' perspectives on psychological assessment in their internship programs. The online questionnaire covered topics including "internship directors' views on specific measures being utilized, training expectations and needs, emerging trends, and related concerns" (Bates, 2016, p. 12). In addition, the researchers of the parent study obtained data on the participants' demographic variables and on descriptive characteristics of their respective programs. An online method of data collection allowed the original researchers to obtain a larger sample from a wider geographical area.

The researchers identified the participants for the parent study using a publicly available database called the APPIC directory, which is accessible to students, faculty, and training directors who are searching for pre-doctoral internships and post-doctoral training programs in the United States and Canada. From the APPIC directory, Bates (2016), Faith (2016), and Shipley (2019) identified a total of 741 training directors, which the researchers contacted via email using a Pepperdine University account. A total of 191 participants returned a survey, representing a 26% response rate. From these 191 surveys collected, the researchers removed nine due to incomplete responses, resulting in a final sample of 182 participants. The sample from the parent study included training directors of a broad cross-section internship programs in the United States. The largest groups represented training directors from internships in Veterans Affairs Medical Centers (16%), university counseling centers (15%), and community mental health centers (14%).

In the sample for the parent study, the majority of the participants, were females (118;

66%). The participants' ages ranged between 29 and 72 years old, with an average age of 46.9 years (*SD* = 10.6). The majority of the training directors in the sample were Caucasian (88%). The largest group in the sample included training directors with a Clinical Psychology degree (76%), followed by those with a Counseling Psychology degree (16%). The highest level of education attained among the sample was most commonly a Ph.D. (62%), followed by a Psy.D. (37%). Most of the participants were licensed to practice psychology (98%), with 65% of those having obtained their licensure before 2006. This information is summarized below in Table 1.

Table 1

Internship Director Demographic Information

Characteristic		*n*	%
Age		180	--
	Range = 29-72 years Mean = 46.9 years SD = 10.6		
Gender			
	Male	62	35%
	Female	118	65%
	**Abstained from Responding*	2	<1%
Racial/Ethnic Identity			
	American Indian or Alaskan	1	1%
	Asian	4	3%
	Black or African American	3	2%
	Caucasian (White)	158	88%
	Latino/a	7	4%
	Native Hawaiian or Other Pacific Islander	0	0%
	Multiracial	4	2%
	Other (Hispanic, Mediterranean, Middle Eastern)	3	2%
	**Abstained from Responding*	2	<1%
Highest Academic Degree			
	Ph.D.	112	62%
	Psy.D.	68	37%
	Ed.D.	2	1%
	Other (JD/Psy.D.)	1	1%

(continued)

Characteristic	*n*	%
Nature of Degree		
Clinical Psychology	138	76%
Counseling Psychology	29	16%
Educational Psychology	0	0%
School Psychology	8	4%
Combined Program	4	2%
Other (Experimental, Developmental, Clinical Neuropsychology, General)	4	2%
License Status		
Licensed	178	98%
Prior to 2006	114	62%
2006 or later	64	36%
**Abstained from responding*	4	2%

Note. The data in this table are from "Internship directors' perspective on psychological assessment training: Current status and emerging trends," by Bates, 2016, p. 25-26.

Current study. In contrast to the parent study, the purpose of the current study was to determine whether there were differences across categories of internship regarding internship directors' perspectives on emerging trends in assessment, including the use of technology in assessment. Additional details are provided below.

Instrumentation and Procedure

The 32-item questionnaire that was developed for the parent study included fixed-choice response options, rating scales, and open-ended items (Appendix B). The archival dataset was screened by the three co-investigators for possible typographical or inputting errors. In line with the purpose of this descriptive and exploratory study, the present researcher focused on a subset of questionnaire items, as noted earlier. In addition, the researcher examined characteristics of the respondents' internship programs, including APA accreditation status, nature of the institutional setting, predominant theoretical orientation/s, types and numbers of trainees accepted, importance of testing and assessment in the respondent's internship, and the provision of training, experience, and supervision in testing and assessment. To include other contextual factors, the researcher also examined demographic data about the internship directors' age,

ethnic identification, gender, highest academic degree, and licensure status. The researcher used the participants' responses to the open-ended questions on the instrument to examine their views on assessment-related themes, as stated using their own words.

Participants and Clusters

In line with the purpose of this study, only the data from the directors of the six largest groups or categories of internship in the original sample were included for this study, which brought the total number of respondents down to 124 from 182 original respondents. These six largest groups included (a) community mental health centers (n = 24; 19.4%); (b) Veterans Affairs Medical Centers (n = 27; 20.9%); (c) university counseling centers (n = 27; 21.7%); (d) state/county/other public hospitals (n = 18; 14.5%); (e) prison and/or correctional facilities (n = 14; 11.3%); and (f) consortium programs (n = 14; 11.3%).

As noted earlier, the researcher did not use all of the items from the parent study questionnaire. First, to report demographic information from the dataset, the researcher analyzed the participants' responses to items 1 to 6 on the parent study questionnaire. This included information on the respondents' age, gender, ethnic or racial identity, highest academic degree, nature of degree, and the status of their licensure at the time of the parent study. Based on the researcher's focus on examining differences across categories of internship in regard to the utilization of technology in assessment and other emerging issues, the researcher only included four other items from the questionnaire used in the parent study. These four questions were:

> Question 24: Currently, which methods of administration and scoring are typically used within your site*?*
>
> Question 25: How significant is the use of technology in the training and practice of psychological assessment within your internship program?

Question 26: In the next 5 years, what do you expect regarding funding and resources for psychological testing and assessment in your internship program?

Question 27: In the future, how do you expect your internship program's emphasis on psychological testing and assessment to change?

In addition to analyzing the quantitative data, the researcher also examined qualitative data in the form of the responses to the open-ended questions (items 29, 30, 31, and 32). These questions provided opportunities for the participants to express their thoughts about the subject under investigation in their own words. This reduced the restrictions imposed by fixed-choice questions.

Data Analysis

Prior to conducting inferential analyses, the researcher and her co-investigators first calculated descriptive statistics. This included frequency statistics for the categorical demographic information of the respondents and for questionnaire items such as 24. In addition, the researcher calculated measures of central tendency for the responses to questionnaire items 25, 26, and 27.

To address the research questions of the study, the researcher conducted a Kruskall-Wallis H test to determine whether there were statistically significant differences in directors' questionnaire responses across the six internship categories. The initial plan was to conduct an analysis of variance (ANOVA), but the data did not meet the assumptions of normality required for use of ANOVA. Thus, the researcher conducted the Kruskall-Wallis H test as a rank-based, non-parametric equivalent to the ANOVA. In the case of any significant findings, the plan was to use the Dunn's test to determine which pairwise contrasts were significantly different at the .05 level.

Chapter III: Results

In the current study, the researcher examined internship directors' perspectives on psychological assessment at six types of internship setting: university counseling centers (UCC), state/county/other public hospitals (SCPH), Veterans Affairs Medical Centers (VAMC), consortiums (CON), prisons or correctional facilities (PC), and community mental health centers (CMHC). The researcher's aim was to identify whether there were differences across categories of internship regarding internship directors' perspectives on psychological testing and assessment at the internship level. Specifically, the researcher investigated the current administration and scoring practices for testing and assessment, and the role of technology in assessment practices on internship. In addition, the researcher explored emerging trends regarding resources and the importance of anticipated future changes in assessment at the internship level across the six different types of internship setting. The researcher also analyzed participants' responses to open-ended questions at the specific internship settings in order to provide additional information.

As described earlier, the researcher selected the six internship categories with the largest numbers of respondents in the original study for the present archival study. This resulted in 124 completed questionnaires, which was 68% of the original sample of 182. The researcher reanalyzed the 124 responses based on the internship settings and compared the responses across internship clusters in order to identify trends (see Appendix H).

Internship Director Characteristics

Questionnaire item 1 asked the internship directors their age. The mean age of the present sample (N = 124) was 47.02 (SD = 10.31). The researcher then calculated the mean age for each internship cluster. The mean age for internship directors at CON programs (n = 14; 11%) was 46.21 (SD = 9.5). At settings categorized as PC (n = 14; 11%), the mean age for internship

directors was 43.5 (*SD* = 9.79). A mean age of 43.44 (*SD* = 7.96) was obtained for internship directors from SCPH (*n* = 18; 15%). Internship directors at UCC sites (*n* = 27; 22%) had a mean age of 46.74 years (*SD* = 8.85). Internship directors from VAMC programs (*n* = 27; 22%) had a mean age of 48.66 (*SD* = 11.18). Finally, the mean age of internship training directors at CMHC facilities (*n* = 24; 19%) was 50.66 years (*SD* = 12.31). There appeared to be differences in the mean ages of training directors across settings, with CMHC internship directors reporting the greatest mean age and internship directors at SCPH settings indicating the youngest average age, which was similar to the average age of PC training directors; however, the researcher did not conduct statistical analyses to determine the significance of any differences in mean age.

With regard to gender (questionnaire item 2), 70% of internship directors were female and 30% were male (*N* = 124). At CON internship settings (*n* = 14), 36% of internship directors were male and 64% female. At PC internship sites (*n* = 14), 21% of the internship directors were male and 79% female. In regard to SCPH settings (*n* = 18), 28% of internship directors were male and 72% female. Likewise, the majority of internship directors at UCC sites (*n* = 27) were female (78%), compared to males (22%). At the VAMC settings (*n* = 27), 41% of internship directors were male and 59% were female. Finally, at the participating CMHC internship sites (*n* = 24), 29% of directors were male and 71% were female. A noteworthy finding was that internship directors at VAMC settings appeared to have a greater percentage of males when compared to the other internship settings. Additionally, internship directors at PC settings reflected the highest percentage of female training directors compared to other settings.

Questionnaire item 3 asked the internship directors to describe their ethnic or racial identity. Of the present sample (*N* = 124), the majority of internship directors identified themselves as being “Caucasian (White)” (*n* = 106; 85%). The second largest ethnic or racial

group was identified as being "Latino/a" (*n* = 5; 4%), followed by "Asian" (*n* = 4; 3%). There was an equal number of internship directors who identified as "Native Hawaiian or other Pacific Islander" (*n* = 3; 2%) and as "Black or African American" (*n* = 3; 2%). A small percentage self-identified as being multiracial (*n* = 2; 2%), followed by internship directors who self-identified as "American Indian or Alaskan Native" (*n* = 1; 1%). When examining the "Other" category, which requested internship directors to specify how they self-identify, there were two responses: "Mediterranean" (*n* = 1; 1%) and "Middle Eastern" (*n* = 1; 1%).

The least variance in ethnic and racial identity was seen in PC settings. In PC settings, all 14 (100%) internship training directors self-identified as "Caucasian (White)." Of the respondents from CON programs (*n* = 14), 12 of the internship directors identified themselves as "Caucasian (White)" (86%), one identified as "Latino/a" (7%), and one identified as being Multiracial (7%). In 18 SCPH settings, 17 internship directors (94%) identified as Caucasian with the remaining internship director identifying as Multiracial (1%). More diversity was seen in internship directors at UCC, VAMC, and CMHC settings. The sample of 27 UCC directors was comprised of 19 (70%) Caucasian, three (11%) Latino/a, two (7%) Asian, two (7%) Black or African American, and one (4%) American Indian or Alaskan Native persons. Of the 27 participating VAMCs, 23 (85%) directors identified as Caucasian, one (4%) as Asian, one (4%) identified as Black or African American, and one (4%) identified as Multiracial. A total of 24 surveys were returned from CMHC settings, with 21 (88%) of the directors identifying as Caucasian and one (4%) identifying as Asian. The remaining two (8%) CMHC internship directors identified as "Other," with one self-identifying as Mediterranean and the other Middle Eastern.

Questionnaire item 4 asked the internship directors about their highest academic degree. The responses included the following options: (a) Ph.D.; (b) Psy.D.; (c) Ed.D.; or (d) Other. Of the present sample (N = 124), the majority (n = 106) of internship directors indicated having a Ph.D. (63%). Most of the remaining internship directors reported having a Psy.D. (n = 45; 36%), while one had an Ed.D (n = 1; 1%).

When analyzing the data across clustered settings, results varied. At CON settings (n = 14), 64% of internship directors had a Ph.D. and 36% had a Psy.D. At PC internship training programs (n = 14), 43% of internship directors had a Ph.D. and 57% had a Psy.D. Most internship directors at SCPH settings (n = 18) reported they had a Ph.D. (56%), while 44% indicated they had a Psy.D. At UCC internship settings (n = 27), 59% of internship directors reported having a Ph.D., 37% had a Psy.D. degree, and one (4%) had an Ed.D. At VAMCs (n = 27), 85% of internship directors held a Ph.D. and 15% held a Psy.D. Lastly, at CMHC settings (n = 24), 58% of internship directors had a Ph.D. and 42% held Psy.D. degrees.

Questionnaire item 5 investigated the nature of the internship directors' highest degrees. Responses included the following options: (a) Clinical Psychology; (b) Counseling Psychology; (c) Educational Psychology; (d) School Psychology; (e) Combined Program; or (f) Other. Of the present sample (N = 124), the majority of internship directors reported having a degree in Clinical Psychology (n = 90; 73%), which was followed by Counseling Psychology (n = 27; 22%). Just 2% of internship directors reported having degrees in Educational Psychology (n = 3), 2% in Combined Programs (n = 3), and 1% in School Psychology (n = 1). Internship directors who selected "Other" (n = 3; 2%) indicated their highest degrees were in Clinical Neuropsychology, Experimental Psychology, and Developmental Clinical Psychology.

When analyzing the results across settings, the majority of internship directors at CON settings indicated having degrees in Clinical Psychology (*n* = 10; 71%). The remaining internship directors reported degrees in Counseling Psychology (*n* = 2; 14%) and Other (*n* = 2; 14%). At PC settings, the majority held degrees in Clinical Psychology (*n* = 12; 86%). The remaining internship directors reported degrees in Counseling Psychology (*n* = 2; 14%). At SCPH settings, all internship directors reported having degrees in Clinical Psychology (*n* = 18; 15%). At UCC internship settings, the majority of internship directors held degrees in Counseling Psychology (*n* = 17; 63%), with the remaining directors reporting degrees in Clinical Psychology (*n* = 10; 37%). This is a noteworthy finding that likely is reflective of the nature of the setting being a UCC and therefore counseling oriented. At VAMC settings, the majority of internship directors had degrees in Clinical Psychology (*n* = 23; 85%), followed by Counseling Psychology (*n* = 3; 11%), and Other (*n* = 1; 4%). Lastly, at CMHC settings, the majority of internship directors indicated holding degrees in Clinical Psychology (*n* = 23; 85%). The remaining internship directors reported degrees in Counseling Psychology (*n* = 3; 13%), School Psychology (*n* = 3; 13%), and Combined Psychology (*n* = 1; 4%).

Questionnaire item 6 asked internship directors if they were currently, or had ever been, licensed to practice psychology, with the option to select either "Yes" or "No." All training directors responded with "Yes" (*n* = 124; 100%), indicating that all of them were currently or had been licensed to practice psychology. The researcher also gathered data regarding what year the internship directors first obtained licensure. The results showed a wide range of licensure years, from 1973 to 2014, with the modal response being the year 2006 (*n* = 11; 9%).

Assessment Practices

The researcher examined current administration and scoring practices for testing and assessment at the internship level. Additionally, the researcher analyzed the role of technology in assessment practices on internship, emerging trends regarding resources allocated to assessment, and the importance of anticipated future changes in assessment at the internship level. For the purposes of this study, the researcher identified questionnaire items 24, 25, 26, and 27 as pertinent to the research questions and examined those items for analysis. The results of the data analysis are presented below.

Question 24 asked internship directors, "Currently, which methods of administration and scoring are typically used within your site*?* (Please SELECT ALL that apply)." The following response options were provided: (a) Traditional paper-based test administration; (b) Traditional hand scoring; (c) Computer-based test administration; (d) Computer-based test scoring; (e) Computer based test result interpretation; (f) Tablet-based assessment (e.g., IPAD); (g) App-based assessment (e.g., on a smartphone or tablet); and (h) Other (please specify). This question allowed internship directors to provide multiple responses; therefore, there were a total of 426 selections made. Overall, 112 internship directors (90% of 124) indicated that "Computer-based test scoring" was used at their sites. The second-most frequent response was "Traditional hand scoring," which was reported by 102 directors (82%). In terms of test administration, the findings showed that 83 internship directors (67%) reported using "Traditional paper-based test administration," and 69 internship directors (56%) indicated that they used "Computer-based test administration." There were 55 internship directors (44%) who reported that they used of "Computer based test result interpretation." Only five internship directors (4%) reported using "Tablet-based assessment (e.g., iPad)." None of the internship directors reported "App-based

assessment (e.g., on a smartphone or tablet)" or "Other" as methods of administration and scoring.

Overall, more internship directors reported using computer-based technology in test scoring (90%) than reported using hand scoring of tests (82%), although both methods were widely used. More directors also reported using traditional paper-based test administration (67%) than reported using computer-based test administration (56%) within their internship programs. Less than half of internship directors reported using computer-based test result interpretation (44%), and even fewer indicated using mobile technology-based assessment such as tablets (4%) or digital applications (0%). This suggests that most internship directors are finding value in technology for administration and scoring, but continue to use traditional paper and pencil methods. Overall, there were consistent trends across internship settings, which indicated that methods of administration and scoring used across internship settings appear to be comparable across various internship training sites.

Question 25 asked internship directors, "How significant is the use of technology in the training and practice of psychological assessment within your internship program?" The participants recorded their responses on a rating scale with the following options: (1) Not at all important; (2) Slightly important; (3) Somewhat important; (4) Very important; and (5) Extremely important. Internship directors in CMHC settings obtained the highest mean among the six groups (M = 3.29, SD = 1.04, Mdn = 3). Their mean score fell closest to the rating category of "Somewhat important." VAMC internship directors obtained a similar mean value (M = 3.15, SD = 1.10, Mdn = 3), as did the internship directors located in PC settings (M = 3.15, SD = 1.41, Mdn = 3). UCC directors (M = 3.00, SD = 1.18, Mdn = 3), SCPH directors (M = 3.06,

SD = 0.80, *Mdn* = 3), and CON directors (*M* = 3.00, *SD* = 0.78, *Mdn* = 3) all obtained mean ratings that were close to or at the rating of "Somewhat important."

Overall, internship directors across all settings identified the use of technology in the training and practice of psychological assessment within their internship program to be somewhat important. The researcher conducted statistical analysis to determine whether there were any significant differences across the six groups in their responses to this questionnaire item. Because the assumptions for normal distribution of data were not met, the researcher used a nonparametric test. The researcher determined the Kruskal-Wallis test, sometimes referred to as a one-way ANOVA on ranks, to be an appropriate analysis. The result of the Kruskal-Wallis test was not statistically significant, χ^2 (5) = 1.0931, p = 0.9547. This indicated that there were no significant differences across groups, meaning that the use of technology in the training and practice of psychological assessment was essentially consistent across internship categories. As the researcher noted above, the mean ratings indicated that the use of technology in psychological assessment was seen to be "somewhat important." Although not significantly different, it appeared that CMHC internships directors may place slightly greater value on the use of technology in assessment (*M* = 3.29) compared to internship directors at CON settings (*M* = 3.0).

Question 26 asked internship directors, "In the next 5 years, what do you expect regarding funding and resources for psychological testing and assessment in your internship program?" The participants recorded their responses on a rating scale with the following options: (1) Significant decrease in funding/resources; (2) Slight decrease in funding/resources; (3) No change in funding/resources; (4) Slight increase in funding/resources; and (5) Significant increase in funding/resources. Internship directors in VAMC settings obtained the highest mean

among the six groups (M = 3.37, SD = 0.49, Mdn = 3). Their mean score fell closest to the rating category of "No change in funding/resources." SCPH setting internship directors obtained a similar mean value (M = 3.33, SD = 0.49, Mdn = 3), as did the internship directors located in UCC settings (M = 3.26, SD = 0.53, Mdn = 3). CMHC (M = 3.17, SD = 0.87, Mdn = 3), PC (M = 3.14, SD = 0.66, Mdn = 3), and CON (M = 3.07, SD = 0.47, Mdn = 3) internship directors all obtained slightly lower means compared to the other three groups.

Overall, internship directors across all settings indicated they expected little to no change regarding funding and resources for psychological testing and assessment in their internship programs in the next 5 years. The means for all six groups were above 3.0 on the rating scale, suggesting that the inclination was toward a very slight increase in future funding and resources for psychological assessment. Statistical analysis was conducted in order to determine whether there were any significant differences across the six groups in their responses to this questionnaire item. Because the assumptions for normal distribution of data were not met, the researcher used the Kruskal-Wallis test. The result of the Kruskal-Wallis test was not significant, χ^2 (5) = 4.2281, p = 0.5171. Once again, there did not appear to be any significant differences across groups. Across all six internship settings, there was a consistent trend towards internship directors indicating that in the next 5 years, they expected no change or slight increases in funding and resources for psychological testing and assessment.

Question 27 asked internship directors, "In the future, how do you expect your internship program's emphasis on psychological testing and assessment to change?" The participants recorded their responses on a rating scale with the following options: (1) Significantly decrease; (2) Slightly decrease; (3) Stay the same; (4) Slightly increase; and (5) Significantly increase. Internship directors in VAMC settings obtained the highest mean among the six groups (M =

3.74, *SD* = 0.71, *Mdn* = 4). Their mean score fell closest to the rating category of "Slightly increase." PC setting internship directors obtained a mean value of 3.50 (*SD* = 0.52, *Mdn* = 3.5), as did the internship directors located in CON settings (*M* = 3.50, *SD* = 0.52, *Mdn* = 3.5). UCC (*M* = 3.44, *SD* = 0.89, *Mdn* = 3), CMHC (*M* = 3.38, *SD* = 0.77, *Mdn* = 3.5), and SCPH directors (*M* = 3.17, *SD* = 0.51, *Mdn* = 3) all obtained slightly lower means that the other groups regarding expected change on the emphasis on psychological testing and assessment in their programs.

Overall, internship directors across all settings obtained mean ratings that fell between "Stay the same" and "Slightly increase" in regard to anticipated change in the future in the emphasis on psychological testing and assessment in their internship programs. The researcher conducted statistical analysis to determine whether there were any significant differences across the six groups in their responses to this questionnaire item. Because the assumptions for normal distribution of data were not met, a nonparametric test, the Kruskal-Wallis test, was used. The result of the Kruskal-Wallis test was not statistically significant, $\chi^2(5) = 7.5296$, $p = 0.1841$. In other words, there were no statistically significant differences across the groups. In fact, this suggested that internship training directors across all six settings shared similar views on their expectations regarding how the emphasis on psychological testing and assessment would change, expecting that the emphasis would "stay the same" or "slightly increase" in the future.

Open-Ended Questions

For the purposes of this study, the researcher examined the participants' responses to open-ended questions to identify themes that fit with questionnaire item 25, which asked internship directors, "How significant is the use of technology in the training and practice of psychological assessment within your internship program?" The researcher considered each open-ended question in regard to whether it produced responses that contained themes relating to

the use of technology in assessment. Because this occurred relatively frequently, the researcher also considered statements that addressed the importance or quality of pre-internship training in assessment. Finally, the researcher looked at patterns of responses across the six categories of internship.

The questionnaire developed for the parent study included four open-ended questions: 29, 30, 31, and 32. Question 29 asked internship directors, "What new psychological tests or measures has your site begun using within the last 5 years?" After a review of the data collected, of the 124 internship directors who participated in this study, a total of 83 internship directors responded to this item (67%). Thirteen (13) internship directors from CON settings (16%), eight directors from PC settings (10%), 14 directors from SCPH programs (17%), 18 directors from UCC internships (21%), 16 directors from VAMCs (19%), and 14 directors from CMHC settings (17%) responded to this item.

For themes relating to the integration of technology in assessment, one PC internship director reported a technology-relevant response in the form of "Rorschach Software Interpretation Program." One VAMC internship director indicated, "More pen/paper items added to computer administered application" (see Appendix I). Responses also included references to the use of assessment measures that use technology, such as computers to score and interpret tests, such as the Q-Global program to score and interpret the MMPI-A, MMPI-2, MCMI-III, MACI, and BASC-2. Although only VAMC and PC internship directors reported the use of new psychological tests over the past 5 years that incorporated technology, this would suggest at least an incremental increase in the use of technology for assessment in those specific internship programs.

Question 30 asked internship directors, "Within your site, what psychological tests or measures would you like to see used in the future that are not currently being used?" Of the total 124 internship directors who participated in this study, 83 internship directors responded to this item (67%). The researcher analyzed responses from six internship directors at CON settings (7%), eight directors from PC settings (10%), 16 directors from SCPH programs (19%), 18 directors from UCC internships (22%), 16 directors from VAMCs (19%), and 19 directors from CMHC programs (23%).

In relation to the integration of technology in assessment, directors from various settings indicated they would like to see technology-based assessment measures in the future. For example, one PC director expressed the desire to have "more technology for interpretation" (see Appendix J). One SCPH internship director reported plans to move toward using tablets for administration and scoring; he or she also indicated already having Apple iPads and being in the process of developing a use agreement between his or her agency and Pearson. One internship director from a VAMC setting also made comments indicating the desire to have measures on Apple iPads or other electronic tablets. Additionally, another VAMC director reported wanting computer scoring for more rapid turn arounds. One respondent noted wanting to integrate technology in order to have the "ability to use iPad measures via telehealth for working in highly rural areas between VA community-based outpatient clinics and the main training sites." Lastly, an internship director at a CMHC setting indicated wanting more computerized assessments such as the Wisconsin Card Sorting Test. This director also noted wanting more tablet-based tests. Overall, there appeared to be at least some evidence that internship directors from varying categories of internship were motivated to introduce assessment methods or practices that would reflect greater integration of technology.

Question 31 asked internship directors, "What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?" Of the total 124 internship directors who participated in this study, 105 internship directors responded to this item (85%). The researcher analyzed responses from 12 internship directors at CON settings (12%), 11 directors from PC settings (10%), 18 directors from SCPH programs (17%), 20 directors from UCC internships (19%), 23 directors from VAMCs (22%), and 21 directors from CMHC programs (20%). Out of all the open-ended questions, Question 31 received the most responses.

Concerning technology themes, only one comment was made by an internship director within a PC setting; this director stated, "Make sure students are taught how to interpret tests and integrate them. Not simply rely on computerized interpretations" (see Appendix K). This comment places importance of understanding how to interpret tests and not simply reading what computerized interpretations provide. This falls in line with responses from the greatest number of internship directors across all settings who described a need to better prepare students to administer and interpret assessments prior to beginning an internship program (n = 13). Internship directors also reported seeing an increase in students that can administer assessment measures, but then do not understand adequately how to interpret and write reports (n = 13; 10%). As the researcher mentioned earlier, this open-ended question received the highest number of responses, suggesting that internship training directors appear to be particularly interested in making recommendations and providing feedback to academic programs regarding pre-internship training in psychological testing and assessment.

A director from a VAMC program emphasized the critical importance of pre-internship training in psychological testing and assessment, stating:

> Make sure students have both classroom training AND clinical experience in administering, scoring, and interpreting test results and experience with writing integrated reports. Each student should write at least 20 integrated reports during their graduate training or else they are not adequately prepared for the demands of an internship where this skill is required.

A CMHC internship director made a strong statement about interns' relative lack of pre-internship training or preparation in assessment:

> Students are less prepared and there seems to be less emphasis on psychological testing. Many students have not administered any tests before they come to the site. There is much less training on the Rorschach, the Millon and other projective tests.

This theme was also brought up by a SCPH internship director, who said:

> Many trainees are limited in the assessment experiences offered by local practicum/externship sites. Perhaps academic programs could increase collaboration with local clinical placements in order to increase opportunities to obtain hands-on, clinical assessment experiences.

Finally, questionnaire item 32 stated, "Please add anything else you would like to offer regarding psychological assessment training and practice at the internship level that was not covered in this survey." Of the total 124 internship directors who participated in this study, 28 internship directors responded to item 32 (23%). The researcher evaluated responses from five internship directors at CON settings (18%), two directors from PC settings (7%), four directors from SCPH programs (15%), five directors from UCC internships (18%), six directors from VAMCs (21%), and six directors from CMHC programs (21%).

In relation to the integration of technology in assessment, most internship directors did not comment on the use of technology. In fact, only one internship director from a SCPH setting made a comment that was related to technology. This director explained, "Schools produce students who report assessment experience, but do not understand psychometrics, standard scores, test error and are only able to 'interpret' tests relying on computer-generated interpretation" (see Appendix L). Additionally, this open-ended item received the lowest number

of responses, with a significant decrease compared to previous questions. A theme that stood out was consistent with the responses to Question 31, which elicited expressions of dissatisfaction with the quality or extent of pre-internship training in assessment for many interns. Several internship directors emphasized the need for increased training in psychological assessment prior to going on internship. This was seen through comments by an internship director at a VAMC site, who said:

> In my experience, internship programs are generally equipped to improve psychological assessment skills but do not have the time to train. Interns with a basic range of neurocognitive and personality assessment skills are much better able to generalize to new assessments. Many interns have also not been training in integrating findings into a broader case conceptualization and to provide meaningful recommendations from the data.

Additionally, another internship director at a CMHC setting stated:

> Over the past few years, during our intern recruitment and selection process, we have noticed a decline in the amount of academic and practicum experience in testing. I find this distressing since psychological assessment continues to be needed, and it is the domain of clinical work that only psychologists can do.

Chapter IV: Discussion

The purpose of this archival study was to explore whether internship directors' perspectives on emerging trends in assessment differed across six different categories of internship. Specifically, the researcher's intent was to investigate the current administration and scoring practices for testing and assessment, the role of technology in assessment practices on internship, emerging trends regarding resources to support assessment, and the extent to which internship directors anticipated any changes in the near future regarding the importance of psychological testing and assessment in their internship programs. The researcher aimed to add to the limited research on the integration of technology in assessment and continue to investigate the expected assessment-related competencies at the internship level of training for psychology trainees. The results of this study may be used to inform and update academic training programs in the field of psychology in regard to the importance of coursework and experiential training in psychological assessment practices.

Over recent few years, limited researchers have focused on the investigation of potential benefits of using technology to assist in psychological assessment. For example, a recent study demonstrated the potential benefits of technology using a computerized tablet to administer testing, which allowed the investigators to ensure that no items were omitted or skipped by patients, something that is harder to prevent in pencil-and-paper administration (King et al., 2017). This appears to be enough of a growing area of interest and importance for the APA to create Division 46, which is called the Society for Media Psychology and Technology.

Overall, the results of this study indicated relatively consistent trends across the internship setting clusters. Internship directors expressed that the use of technology in psychological testing and assessment had a moderately significant role in their internship programs. There were no statistically significant differences in the rated importance of

technology used to support assessment across the six clusters. Although the current findings revealed no statistically significant differences across the six groups on this questionnaire item, the overall results suggested at least some movement in the direction of increased importance on the use of technology in assessment practices. The findings also indicated that some technology-supported practices are widespread, such as computer-based test scoring and administration.

An interesting additional finding related to the demographic characteristics of UCC internship directors. UCC internship programs have long been known for valuing diversity. The data collected through this study appeared to be reflective of this value for diversity, as more ethnic diversity was seen among internship directors at UCC programs than at other internships. Specifically, the sample of 27 UCC internship directors was comprised of 19 (70%) Caucasian, three (11%) Latino/a, two (7%) Asian, two (7%) Black or African American, and one (4%) American Indian or Alaskan Native persons. VAMC and CMHC settings also appeared to have more diversity among their internship directors when compared to SCPH, CON, and PC programs.

Another noteworthy difference among the program groupings is that UCC directors were much more likely to have doctorates in Counseling Psychology, while all others were more likely to have doctorates in Clinical Psychology. At UCC internship settings, the majority of internship directors held degrees in Counseling Psychology (n = 17; 63%), with the remaining directors reporting degrees in Clinical Psychology (n = 10; 37%). This provides some useful information about counseling psychologists and how they may end up working in UCC settings as opposed to other settings such as VAMCs. This may also be a reflection that the psychological service needs at UCC settings are different from those of VAMC settings, as the emphasis in UCC settings is on providing counseling and not necessarily diagnostic assessments that are

more frequently needed within VAMC settings. Additionally, settings such as VAMCs may be more likely to see individuals experiencing acutely severe clinical symptoms compared to UCC settings, where a Counseling Psychology degree may be more appropriate.

Question 27 asked, "In the future, how do you expect your internship program's emphasis on psychological testing and assessment to change?" Across all six internship settings, training directors' mean responses to this item fell between 3 (i.e., "stay the same") and 4 (i.e., "slightly increase"). This reflected the continued importance of assessment as a core competence area in psychology across differing categories of internship. Additionally, the results also affirmed that intern applicants need to continue to be well prepared in assessment in order to be competitive in the selection process at most internships.

Relating to item 24 ("Currently, which methods of administration and scoring are typically used within your site?"), computer-based test scoring and traditional hand scoring were the most frequently reported responses. Computer-based test scoring was the most widely used method (reported by 112 internship directors), but traditional hand scoring was a close second (reported by 102), and many of the internship programs obviously use both. Technology most likely makes it faster and more efficient to score a test compared to hand scoring, though computer-based scoring may not be available or practical for all psychological tests. Interestingly, more than half (56%) of training directors indicated they used "Computer-based test administration," and less than half of internship directors reported using computer-based test result interpretation (44%). Even fewer directors indicated using mobile technology-based assessment such as tablets (4%) or digital applications (0%). Another noteworthy finding was that only five internship directors (4%) reported using "Tablet-based assessment (e.g., iPad) and none of the internship directors reported use of "App-based assessment (e.g., on a smartphone or

tablet).” This indicated that tablet administration is not being widely used, despite the potential for this technology to be easily distributed and accessed by patients. It is possible that internship directors’ views on not expecting much, if any, increase in funding for assessment in the near future, may influence their view on the ability to increase the use of technology at their sites, as purchasing technology such as iPads can become costly. This finding may be a reflection of the cost that goes into funding technology-based assessment; however, it may also be a reflection of the current limitations of scoring and interpretation programs. Although there has been an increase in the number of assessment measures that provide computer scoring and interpretation, most tests have yet to be adapted. Additionally, it is possible that more internship directors used computer-based test administration than computer-based test result interpretation as technology may be less accurate in interpreting results compared to psychologists with strong backgrounds and training in interpretation of results. The high cost of computer-based test result interpretation may be an additional reason why this method is used less frequently.

Question 25 asked internship directors, “How significant is the use of technology in the training and practice of psychological assessment within your internship program?” Among the six groups, directors in CMHC settings had the highest mean score (M = 3.29, SD = 1.04, Mdn = 3), falling closest to the rating category of “somewhat important.” The directors from VAMC settings exhibited a similar mean value (M = 3.15, SD = 1.10, Mdn = 3). Across all settings, internship directors reported the use of technology as “somewhat important,” which illustrated that internship training directors are finding benefits and value in the use of technology. Even across internship settings, it appeared that the emphasis on the use of technology in assessment was similar and consistent across groups. These findings were consistent with internship directors’ responses to questionnaire item 24, where 90% of internship directors reported using

computer-based test scoring, 56% indicated using computer-based test administration, and 44% reported using computer-based test result interpretation.

This is an important finding as psychological assessment is one of the hallmarks of being a psychologist. Internships training programs vary in how much they emphasize assessment due to multiple factors that include client needs and the amount of time that testing, scoring, and report writing takes. Training programs, therefore, may also vary regarding the importance they place on integrating technology into their assessment practices. In the free response questions, one theme that emerged was that some training directors experience trainees as lacking in their knowledge and ability with psychological assessment. It may be that psychology doctoral programs are offering fewer courses in assessment than they formerly did, though further research would be necessary to confirm whether that is the case. If this trend persists or expands, it may be that future internship directors will find increased value in the use of computer assisted programs and technology to assist interns in test scoring and interpretation. Greater use of technology in assessment may increasingly become a more time-efficient resource for interns trying to meet the demands of their internship training programs. Alternatively, purchasing technology tools may be a lower priority if the interns do not have the basic skillset in the administration, scoring, integration of psychological assessment measures and report writing. There is a clear need for more research to examine the role that technology has in assessment practices among internship programs.

Question 26 asked internship directors, “In the next 5 years, what do you expect regarding funding and resources for psychological testing and assessment in your internship program?” Across all six settings, internship directors’ mean ratings on this item fell between 3.0, which indicated “No change in funding/resources,” and 4.0, which reflected, “Slight increase

in funding/resources." The means ranged from 3.07 to 3.37. This outcome may drive the responses relating to the use of technology in assessment. If internship directors do not expect significantly more funding, then this view likely impacts their outlook on their ability to purchase computers, iPads, and other new forms of technology to make technology-related changes to their psychological assessment practices. This may point to an increased need for studies to be conducted showing the benefits of technology assisted assessments to allow internship directors to have more evidence and make a case for gaining additional funding towards the integration of technology in assessment.

On the positive side, the responses to item 26 indicated that internship directors expect a stable funding and resource picture regarding assessment practices at the internship level in the coming 5 years. If anything, there was evidence of slight increases anticipated at some internships in the resources allocated to assessment. VAMC (M = 3.37), SCPH (M = 3.33), and UCC (M = 3.26) internship directors obtained the highest means on this item, suggesting some incremental increases in funding for assessment were anticipated in at least some of those settings. This information should be useful to doctoral students applying to internship programs in the next few years as there is evidence of the expectation of ongoing funding and a perhaps even a slight increase. If more funding is gained and allocated towards training in psychological assessment, this may provide future internship applicants with more opportunities to gain training in psychological assessment, which may lead to increased competencies and opportunities for interns when applying to postdoctoral fellowships and staff positions.

Question 27 asked internship directors, "In the future, how do you expect your internship program's emphasis on psychological testing and assessment to change?" Across all six settings, the directors' responses fell between the rating categories of "Stay the same" and "Slightly

increase." The directors in VAMC settings exhibited the highest mean among the six groups (*M* = 3.74, *SD* = 0.71, *Mdn* = 4), which fell closest to the rating category of "Slightly increase." The directors from PC settings obtained a mean value of 3.50 (*SD* = 0.52, *Mdn* = 3.5), as did those in CON settings (*M* = 3.50, *SD* = 0.52, *Mdn* = 3.5). This finding was consistent with the findings for questionnaire item 26, which also indicated that VAMC directors anticipated some incremental increases in funding for assessment. Perhaps as this increase starts to happen, then more resources will be allocated towards assessment as well, allowing for the potential incorporation of more technology to support assessment. Regardless, the findings for item 27 further indicate a stable picture regarding the importance of assessment across a broad range of internship categories. If anything, the importance of assessment is likely to grow in upcoming years.

The findings of this highlighted the increased need for communication between academic doctoral programs and internship directors in order to continue modifying curriculums to meet the real-world services which psychologists provide. Question 31 asked internship directors, "What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?" Across various settings, there was consistent feedback from a small but noteworthy number of directors about the need to improve psychological assessment training prior to trainees beginning their internship year. A training director from a VAMC recommended that students have both clinical experience and classroom training in assessment. A CMHC director noted that students often have no practical experience in assessment before beginning their internship. Overall, this portrayed a perceived need among some internship directors to improve training in psychological assessment at the academic program level, rather than expecting students will receive this training strictly through internship

experiences. Another director of an SCPH internship made a similar comment, suggesting that academic programs could collaborate with clinical placement sites to offer practical assessment experiences.

Question 32 asked, "Please add anything else you would like to offer regarding psychological assessment training and practice at the internship level that was not covered in this survey." This item received some responses that had themes similar to those elicited by Question 31. An internship director from a VAMC site explained that interns must be better prepared for broader case conceptualization. In addition, an internship director at a CMHC setting explained that the number of interns with either academic or practical experience in testing has been declining in recent years, which this director perceived as "distressing."

Again, it appears that some internship directors tried to emphasize the need for increased training in psychological assessment prior to going on internship. These results provide further evidence that assessment continues to be a priority and a core component of emphasis at the internship level and that this is likely to continue or to increase slightly in the future across a broad range of internship settings. These comments not only reflected the value that internship directors place on psychological assessment, but that at least some internship directors shared the perception that there is a need for increased and more comprehensive training in psychological assessment for trainees before going on internship.

Limitations

Various limitations can be identified and connected with this study, including the limitations related to the use of archival data. Previous scholars have identified the various strengths and weaknesses of using archival data for research purposes (Berg, 2003; Kerlinger & Lee, 2000). The use of archival data limited the scope of the current study to the data originally

collected from internship directors at sites across the country. The present researcher did not collect any new data. Due to the nature of archival data, the investigator was unable to make any changes to the questionnaire or methods, and was limited to the data collected by the original investigators.

Another limitation of this study is that the sample sizes within each cluster of internship setting were small, which makes it difficult to generalize the findings to all internship programs of the corresponding categories. Moreover, it is unclear whether the findings are relevant for types of internships not included in this study, such as internships in military and private hospital settings. The relatively small sample sizes also limited statistical power and made it more difficult to identify statistically significant differences across the six groups. Future investigations of this topic would benefit from larger sample sizes. The findings may also be difficult to generalize to all internship directors because the sample was made up of predominantly Caucasian females. Additionally, perhaps the initial relatively low survey response rate (26%) may have been a reflection of a lack of interest in psychological assessment.

Another limitation has to do with the nature of a voluntary survey study. There may have been uncontrolled selection factors that impacted who participated in the study. For example, internship directors with particularly strong interest in assessment may have been more motivated to take part, while internship directors with less interest in assessment or more negative views of assessment may have been more inclined not to participate. Such factors could have impacted the results and could impact the extent to which the findings are truly representative of internship directors' opinions.

Although there were several limitations, one of the strengths of this study was that it provided information about the importance of psychological assessment at the internship level.

The current study sought to identify trends across different types of internship settings and found consistencies among internship directors across various settings. The results emphasize the continued importance of the role of psychological assessment in internship-level training. The results also highlight the internship directors' views regarding the stable resource picture for psychological assessment going into the future.

An additional strength of the current study was that it sought to identify whether there were significant differences across internship settings regarding assessment practices and trends. As noted, statistically significant differences on the questionnaire items examined tended to show more commonalities than differences. This study highlighted the view of some internship directors regarding the need to improve training in psychological assessment at the academic program level, prior to internship. Approximately 10% of the open-ended responses expressed some form of dissatisfaction with the psychological assessment training of students entering pre-doctoral internships. It may be important, therefore, for some doctoral psychology programs to re-evaluate their training curriculums and place stronger emphasis on assessment with regard to administration, scoring, interpretation, and report writing.

Recommendations for Future Research

The results from this study provided insight into internship directors' perspectives on emerging trends in assessment across different categories of internship programs. Due to the increasing amounts of interpersonal communications taking place on the internet through the use of technology, there is also a change in access to data and in increase the amount of data that can be collected through the internet (Kosinski, Stillwell, & Graepel, 2013). This suggests a need for future movement towards the integration of technology in not only psychological assessment, but perhaps in other areas of psychological practice as well.

An internship director from a VAMC setting made a comment for how the integration of technology could be useful:

> IPAD or other tablet based measures; more computer scoring for rapid turnaround; ability to use iPad measures via telehealth for working in highly rural areas between VA community-based outpatient clinics and the main training sites.

This may provide insight into an area of future research relating to the use of technology to facilitate the up-and-coming telemental health movement and increase access to psychological services for more remote communities, such as rural communities. Perhaps providing tablets to members of remote communities can allow psychologists to provide treatment through video and digital modalities and potentially remotely administer screeners and other assessment measures. Psychologists who provide home based treatment to remote or rural communities may also be able to benefit from the portability of tablets when visiting patients in their homes and can increase access to measures that can assess and clarify treatment recommendations for patients. In fact, one study has begun to investigate this and reported that telemental health is an additional form of technology that is increasingly being used in order to address the underserved populations and public safety difficulties that are often found in forensic and correctional mental health settings (Ax et al., 2007; Batastini, King, Morgan, & McDonald, 2016). Other areas of future research may include conducting a cost-benefit analysis of paper and pencil psychological tests compared to equivalent computer-based counterparts, as well as investigating ways to create efficiency through the use of technology in relation to the time-consuming processes of interpretation and report writing.

Conclusions

Overall, the findings of this study highlighted the importance of psychological assessment and continued emphasis on training in this area at the internship level. A small, but

notable number (10%) of internship directors in the present sample experience trainees as needing more training and experience in psychological assessment at the doctoral program level. It may be beneficial to continue to survey and turn to internship directors for insight and feedback on what changes may be needed in order to improve the assessment-related preparation of graduate students preparing for internship and for their futures as psychologists.

While internship directors in the present study appeared to value the use of technology for test scoring, administration, and interpretation, it also appeared they expected no change or a slight increase in funding for psychological testing in the near future. They also reported a stable picture, or slight increases, in the emphasis on psychological assessment in their internship programs in the future. The use of technology has the potential to improve various areas of the field of psychology, particularly psychological assessment. It may be important to continue improving training students in assessment, particularly as sites are not expecting much change in funding to do so at the internship level. The findings of this study are necessary to provide up-to-date information to doctoral training programs and inform psychological assessment practices at practicum sites in order to better prepare clinical psychology students to excel at the internship level and as licensed practitioners.

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APPENDIX A

APPIC Membership Requirements: Doctoral Psychology Internship Program

Preamble	**Internships that are accredited by the American Psychological Association or the Canadian Psychological Association are recognized as meeting APPIC doctoral membership criteria. All others must meet all of the following criteria (i.e., 1 through 16 below) and are reviewed for adherence to the criteria every three years.**
Criteria	
1	**A psychology internship is an organized training program, which in contrast to supervised experience or on-the-job training, is designed to provide the intern with a planned, programmed sequence of training experiences. The primary focus and purpose is assuring breadth and quality of training.** Clarification: The organization of an internship program is evident in a clear: a. Statement of the goals and objectives of the training activities. b. Description of the plan, location, and sequence of direct service experiences. Description of the training curriculum; i.e., the content, duration, and frequency of the training activities. c. Description of how the psychology training program is integrated into the larger organization. For programs with multiple sites, the services rendered by interns, the supervision offered, and the training director's involvement is clearly described at each site.
2	**The internship agency has a clearly designated doctoral level staff psychologist who is responsible for the integrity and quality of the training program. This person is actively licensed, certified, or registered by the State Board of Examiners in the jurisdiction where the program exists, and is present at the training facility for a minimum of 20 hours a week.** Clarification: The internship is administered by a doctoral level licensed (certified or registered for independent practice) psychologist who: a. Directs and organizes the training program and its resources. b. Is responsible for selection of interns. c. Monitors and evaluates the training program's goals and activities. d. Documents and maintains interns' training records.
3	**The internship agency training staff consists of at least two full time equivalent doctoral level psychologists who serve as primary supervisors and who are actively licensed, certified, or registered as a psychologist by the Board of Examiners in the jurisdiction where the program exists.** Clarification: "Full time equivalent" typically refers to 40 hours/week. However, there may be a range of hours that qualify as "full time equivalent" depending on the norms of the program; 35 hours/week is the minimum that will qualify for "full time equivalent" for APPIC member programs. "Full time" for interns could also be set at 35 hours/week if this meets licensure requirements in your

	jurisdiction. APPIC believes supervisor expectations should be similar to intern expectations. **It is expected that interns receive supervision during the year from at least two different supervisors.** Interns' primary clinical supervision and role modeling must be provided by psychologists on the program's staff members who are licensed (certified or registered) for independent practice at the doctoral level and who are: a. Officially designated as psychology intern supervisors. b. Significantly involved in the operation of the training program.
4	**Intern supervision is provided by staff members of the internship agency or by qualified affiliates of that agency who carry clinical responsibility for the cases being supervised. Regularly scheduled individual supervision is provided by one or more doctoral level licensed psychologists, at a ratio of no less than one hour of supervision for every 20 internship hours. Supervision is provided with the specific intent of dealing with psychological services rendered directly by the intern.** Clarification: Supervisors need to be clearly designated by the agency as clinically responsible for the cases (for example, countersigning documentation or having their name on the treatment plan or case summary). Depending on clinical needs, increased hours of supervision are expected. The required hours shall be through face-to-face individual supervision (rural sites may use visual telecommunication technology in unusual circumstances and when face-to-face supervision is impractical, but must demonstrate that such technology provides sufficient oversight). Programs shall adhere to all requirements of their state licensing boards.
5	**The internship provides training in a range of psychological assessment and intervention activities conducted directly with recipients of psychological services.** Clarification: Internship training in Psychology is primarily based on experiential learning which: a. Provides psychological services directly to consumers in the form of psychological assessment, treatment, and consultation. b. Exposes interns to a variety of types of psychological services and consumers.
6	**At least 25% of trainees' time is in face-to-face psychological services to patients/clients.**
7	**The internship must provide at least two hours per week in didactic activities such as case conferences, seminars, in-service training, or grand rounds.** Clarification: The Psychology training program should have scheduled didactic experiences available to meet the training needs of their interns, a minimum of 2 hours per week on average with not less than 8 hours in any given month. "Didactic activities" refers to actual training opportunities and should include training activities beyond Intern Case Presentations. Formal processes must be in

	place to encourage intern socialization.
8	**Internship training is at post-clerkship, post-practicum, and post-externship level, and precedes the granting of the doctoral degree.** Clarification: Interns must have completed adequate and appropriate prerequisite training prior to the internship. This would include both: a. Completion of formal academic coursework at a degree-granting program in professional psychology (clinical, counseling, school), and b. Closely supervised experiential training in professional psychology skills conducted in non-classroom settings.
9	**The internship agency has a minimum of two interns at the predoctoral level of training during any training year. These interns must be at least half-time (i.e., 20 hours per week). The minimum number of interns must be on site and in training at the time of the initial application for APPIC membership.** Clarification: The intention of this criterion is to allow opportunities for personal (face-to-face) interaction with peers in formal settings in the training program and on the training site during each training week. Part-time internships must ensure that intern schedules sufficiently overlap to allow substantial and meaningful peer contact.
10	**The internship level psychology trainees have a title such as "intern," "resident," "fellow," or other designation of trainee status.**
11	**The internship agency has a written statement or brochure which provides a clear description of the nature of the training program, including the goals and content of the internship and clear expectations for quantity and quality of the trainee's work. It is made available to prospective interns.** Clarification: Internship programs must make available descriptions of their training program, which give their applicants and interns a clear understanding of the program in terms of: a. The program's training goals and objectives. b. The program's training methods, content, and curriculum (for example, required rotations, sample weekly schedules, or available training seminars). c. The program's training resources (e.g., training/supervisory staff, physical facilities and training equipment, clerical support, etc.) d. The sites at which training and services are provided. For programs with multiple sites, clear descriptions are given for each site of services rendered by interns, supervision offered, and involvement of the training director. Clarification: APPIC must be notified in writing of substantive changes to the training program (personnel, placements, etc.) that have the potential to impact quality of training or which substantially alters the advertised training experience. The training program is likewise responsible for maintaining an up-to-date and accurate description of the program in the APPIC Directory.

12	**Internship programs have documented due process procedures that describe separately how programs deal with (1) concerns about intern performance, and (2) interns' concerns about training. These procedures include the steps of notice, hearing, and appeal, and are given to the interns at the beginning of the training period.** Clarification: Due process procedures describe how an agency deals with intern deficiencies and how the interns' handle grievances with the training program. The documentation would include: a. Description of formal evaluation and complaint procedures. b. The program's and intern's responsibilities and rights in the process. c. The appeal process. d. Description of procedures if interns have grievances about their training or supervision. Programs need two written policies: (1) Due Process and (2) Grievance Process. The procedures must be specific to the internship training program; reliance on a more general HR policy is insufficient. Both procedures should be provided to interns at the commencement of training. Due Process is a written procedure that comes into use when an intern's behavior is problematic. (The use of the term "impaired" is discouraged because if one identifies an intern by that term, legal issues having to do with the Americans with Disabilities Act (ADA) could be invoked.) Due process must include three elements: Notice (i.e. the intern must be notified that problematic behavior has been identified and that the internship is addressing the problem); Hearing (i.e. the program must have a formal process by which the identified problematic intern has an opportunity to hear concerns and to respond to the concerns); and Appeal (i.e. the intern must have an opportunity to appeal the actions taken by the program in regards to the identified problematic behavior. The appeal should extend at least one step beyond the Training Director). Grievance Procedure is a process that is invoked when an intern has a complaint against the training program. The procedure should include specific steps an intern takes in the complaint process and be broad enough to cover any and all complaints that may arise for interns (e.g. complaints about evaluations, supervision, stipends/salary, harassment, etc.)
13	**The internship experience (minimum 1500 hours) must be completed in no less than 9 months and no more than 24 months.** Clarification: Internships may be conducted on a full or part-time basis. Only School Psychology programs will be accepted at 1500 hour or for 9-10 month internships. It is required that internships provide training that meets the requirements for licensure eligibility in the state, province, territory or jurisdiction in which it is located.
14	**APPIC member programs are required to issue a certificate of internship completion, which includes the word "Psychology," to all interns who have successfully completed the program.**
15	**At least twice a year the internship program conducts formal written**

	evaluations of each trainee's performance. Clarification: The written evaluation process provides comprehensive evaluative feedback to doctoral psychology interns as follows: a. The evaluation provides summary information of performance in all major competence areas that are a focus of internship training. b. Interns have the opportunity to review their evaluation with supervisors to ensure the fullest possible communication between supervisors and interns. c. Evaluation procedures provide feedback that validates trainees' achievements by noting areas of unusual strength and excellence and facilitate trainees' further growth by identifying areas that would benefit from additional training. d. The program provides the doctoral psychology intern's graduate training director with feedback concerning the intern's progress in the internship program.
16	**The program has the necessary financial resources to achieve its training goals and objectives. Intern stipends shall be reasonable, fair, and stated clearly in advance. Unfunded internship positions are allowable only in unusual and infrequent circumstances.** Clarification: APPIC requires internship positions to be equitably funded across the site. Intern stipends shall be set at a level that is representative and fair in relationship to the geographic location and clinical setting of the training site. Stipends should be reasonable based on a comparison with other APPIC member programs in your area. Unfunded or poorly funded internship positions are allowed only in unusual and infrequent circumstances in which the creation of such a position would serve to alleviate a hardship for the potential intern candidate. The "burden of evidence" lies with the program to demonstrate that the lack of funding does not adversely affect morale or quality of training. In addition, training resources should be sufficient to afford the same training for an unfunded or poorly funded position as for fully funded positions. The payment of a stipend is a concrete acknowledgment that a trainee in the agency is valued and emphasizes that the primary task of the year is educational in nature. Stipends are generally lower than a salary received by a regular employee and implies that there is a significant training component in addition to experiential learning. Stipends are equal among trainees unless there is an extenuating circumstance (e.g., specialized skills, consortia agreements). This distinction between trainee and regular employee emphasizes that an internship is "an organized training program, in contrast to supervised experience or on-the-job training.

APPENDIX B

Original Questionnaire

(Bates, 2016; Faith, 2016; Shipley, 2019)

I. INSTRUCTIONS

The purpose of this questionnaire is to obtain psychology internship directors' perspectives on training and practice issues related to psychological testing and assessment. Please complete the survey in one sitting; it should take no more than 10 to 12 minutes. We encourage you to respond to every item, but you are free to omit items if you so choose. Click the "**Next**" button at the bottom of each page in order to proceed. You may discontinue at any time by clicking the "**Exit Survey**" button at the top of the page. After finishing, click the "**Submit Responses**" button. Please complete the questionnaire only once.

For this study, psychological **"assessment"** refers to the broad competence that incorporates multiple methods and sources of information to address referral questions and guide clinical practice. The methods used may include interviews, record reviews, standardized and non-standardized tests, and behavioral observation. Psychological **"testing"** is defined as the use of formal tests, such as standardized and norm-referenced measures, questionnaires, or checklists (e.g., WAIS-V; MMPI-II, DKEFS).

Thank you for your participation!

II. DEMOGRAPHIC INFORMATION

1. What is your age?

   [ ]

2. What is your gender?
   - ☐ Male
   - ☐ Female
   - ☐ Transgender
   - ☐ Other *(please specify)*

     [ ]

3. Please select the category that best describes your ethnic or racial identity:
   - ☐ American Indian or Alaskan Native
   - ☐ Asian
   - ☐ Black or African-American
   - ☐ Caucasian (White)
   - ☐ Latino/a
   - ☐ Native Hawaiian or other Pacific Islander
   - ☐ Multiracial
   - ☐ Other *(please specify)*

     [ ]

4. What is your highest academic degree?
   - ☐ Ph.D.
   - ☐ Psy.D.
   - ☐ Ed.D.
   - ☐ Other *(please specify)*

     [ ]

5. What is the nature of your degree?
   - ☐ Clinical Psychology
   - ☐ Counseling Psychology
   - ☐ Educational Psychology
   - ☐ School Psychology
   - ☐ Combined Program
   - ☐ Other *(please specify)*

     [ ]

6. Are you currently, or have you ever been, licensed to practice psychology?
   - ☐ Yes
   - ☐ No

   1. If yes, what year did you first obtain licensure?

      [ ]

III. INTERNSHIP SITE & PROGRAM INFORMATION

7. Is your internship program APA accredited at this time?
   - ☐ Yes
   - ☐ No
   - ☐ In Process

8. Which of the following best describes the setting of your internship program? *(Please **select ONE** from the list below.)*

   - ☐ Armed Forces Medical Center
   - ☐ Child/Adolescent Psychiatric or Pediatric
   - ☐ Community Mental Health Center
   - ☐ Consortium
   - ☐ Medical School
   - ☐ Prison or Correctional Facility
   - ☐ Private General Hospital
   - ☐ Private Outpatient Clinic
   - ☐ Private Psychiatric Hospital
   - ☐ Psychology Department
   - ☐ School District
   - ☐ State/County/Other Public Hospital
   - ☐ University Counseling Center
   - ☐ Veterans Affairs Medical Center
   - ☐ Other *(please specify)*

     [ ]

9. Which of the following best describes the predominant theoretical orientation(s) of your internship program's site? *(Please select **UP TO THREE** from the list below.)*

- ☐ Behavioral
- ☐ Biological
- ☐ Cognitive Behavioral
- ☐ Eclectic
- ☐ Humanistic/Existential
- ☐ Integrative
- ☐ Interpersonal
- ☐ Psychodynamic
- ☐ Systems
- ☐ Other *(please specify)*

10. On average, how many trainees do you typically accept each year in each of the following categories?

a. Practicum Students:

☐ N/A

b. Pre-doctoral Interns:

☐ N/A

c. Postdoctoral Interns:

☐ N/A

11. Does your site offer a **PRIMARY** rotation with an emphasis in psychological testing?

- ☐ Yes
- ☐ No

12. How much is psychological testing and assessment emphasized within your internship program?

- ☐ Extremely emphasized
- ☐ Strongly emphasized
- ☐ Somewhat emphasized
- ☐ Slightly emphasized
- ☐ Not at all emphasized

13. How is **training** in psychological testing and assessment provided within your internship program? *(Please **SELECT ALL** that apply.)*

- ☐ A dedicated assessment rotation
- ☐ Across multiple rotations
- ☐ Didactic seminars/training sessions
- ☐ Structured trainings that yield certifications (e.g., with certified trainers)
- ☐ Individual/one-on-one
- ☐ Other *(please specify)*

14. How is **supervision** of psychological testing and assessment provided within your internship program? *(Please **SELECT ALL** that apply.)*

- ☐ Individual Supervision
- ☐ Group Supervision
- ☐ Other *(please specify)*

15. What functions do psychological testing and assessment serve at your internship site? *(Please **SELECT ALL** that apply.)*

- ☐ Psychoeducation
- ☐ Differential diagnosis
- ☐ Treatment planning
- ☐ Monitoring response to treatment
- ☐ Assessing treatment outcome
- ☐ As a therapeutic intervention
- ☐ Disability determinations
- ☐ For accommodations/to access special programs
- ☐ Research purposes
- ☐ Other (please specify)

16. How important is **clinical experience** in psychological testing when selecting interns for your program?

- ☐ Extremely important
- ☐ Very important
- ☐ Somewhat important
- ☐ Slightly important
- ☐ Not at all important

17. How important is **knowledge** about psychological testing (gained from coursework and/or didactic training) when selecting interns for your program?

    ☐ Extremely important
    ☐ Very important
    ☐ Somewhat important
    ☐ Slightly important
    ☐ Not at all important

18. How satisfied are you with incoming interns' **level of clinical experience** in psychological assessment?

    ☐ Extremely satisfied
    ☐ Very satisfied
    ☐ Somewhat satisfied
    ☐ Slightly satisfied
    ☐ Not at all satisfied

19. How satisfied are you with incoming interns' **level of theoretical knowledge** about psychological assessment?

    ☐ Extremely satisfied
    ☐ Very satisfied
    ☐ Somewhat satisfied
    ☐ Slightly satisfied
    ☐ Not at all satisfied

20. How satisfied are you with incoming interns' **level of preparation** for conducting psychological assessment with **diverse populations**?

    ☐ Extremely satisfied
    ☐ Very satisfied
    ☐ Somewhat satisfied
    ☐ Slightly satisfied
    ☐ Not at all satisfied

IV. PSYCHOLOGICAL TESTS AND MEASURES USED BY YOUR INTERNS

21. In your internship program, which of the following measures do **interns** use? *(Please **SELECT ALL** that apply)*

COGNITIVE FUNCTIONING
- ☐ Wechsler Intelligence Scales (WAIS-IV, WISC-IV/V)
- ☐ Stanford-Binet 5
- ☐ TONI-3
- ☐ Kaufman Assessment Battery for Children (KABC)

SYMPTOM INVENTORIES
- ☐ Beck Depression Inventory, 2nd Edition (BDI-II)
- ☐ Hamilton Depression Scale
- ☐ Beck Anxiety Inventory (BAI)
- ☐ Adult Manifest Anxiety Scale

DIAGNOSTIC INTERVIEW PROTOCOLS
- ☐ SADS
- ☐ SCID
- ☐ DIS

NEUROPSYCHOLOGICAL FUNCTIONING
- ☐ Boston Diagnostic Aphasia Exam
- ☐ Brief Rating Scale of Executive Function (BRIEF)
- ☐ Dementia Rating Scale-II
- ☐ California Verbal Learning Test
- ☐ Continuous Performance Test
- ☐ Delis Kaplan Executive Function System
- ☐ Rey-Osterrieth Complex Figure
- ☐ Bender Gestalt
- ☐ Trail Making Test A & B
- ☐ Wechsler Memory Scale III
- ☐ Wide Range Assessment of Memory and Learning
- ☐ Wisconsin Card Sorting Test
- ☐ Test of Memory Malingering (TOMM)

EMOTIONAL FUNCTIONING
- ☐ Millon Clinical Multiaxial Inventory, 3rd Edition (MCMI-III)
- ☐ Minnesota Multiphasic Personality Inventory, 2nd Edition (MMPI-2)
- ☐ MMPI-2-Restructured Form (MMPI-2-RF)
- ☐ Personality Assessment Inventory
- ☐ Rorschach Inkblot Method
- ☐ Rorschach Performance Assessment System (R-PAS)
- ☐ Thematic Apperception Test
- ☐ Sentence Completion Test
- ☐ Drawings (DAP, HTP, KFD, etc.)
- ☐ NEO Personality Inventory-Revised (NEO-PI-R)

ACADEMIC FUNCTIONING
- ☐ Strong Interest Inventory
- ☐ Wechsler Individual Achievement Test (WIAT)
- ☐ Woodcock Johnson-III (Achievement; Cognitive)
- ☐ Wide Range Achievement Test, 4th Edition (WRAT-4)

FORENSIC/RISK ASSESSMENT
- ☐ Psychopathy Checklist-Revised (PCL-R)
- ☐ Static 99
- ☐ Violence Risk Assessment Guide (VRAG)
- ☐ History-Clinical-Risk 20 (HCR-20)
- ☐ Validity Indicator Profile
- ☐ Structured Interview of Reported Symptoms (SIRS)
- ☐ Miller Forensic Assessment of Symptoms Test (M-FAST)
- ☐ Rey 15- Item Test
- ☐ Test of Memory Malingering (TOMM)

22. Please identify the measures most frequently used by **interns** at your internship program? (*Please select* **up to 10)**

COGNITIVE FUNCTIONING
- ☐ Wechsler Intelligence Scales (WAIS-IV, WISC-IV/V)
- ☐ Stanford-Binet 5
- ☐ TONI-3
- ☐ Kaufman Assessment Battery for Children (KABC)

SYMPTOM INVENTORIES
- ☐ Beck Depression Inventory, 2nd Edition (BDI-II)
- ☐ Hamilton Depression Scale
- ☐ Beck Anxiety Inventory (BAI)
- ☐ Adult Manifest Anxiety Scale

DIAGNOSTIC INTERVIEW PROTOCOLS
- ☐ SADS
- ☐ SCID
- ☐ DIS

NEUROPSYCHOLOGICAL FUNCTIONING
- ☐ Boston Diagnostic Aphasia Exam
- ☐ Brief Rating Scale of Executive Function (BRIEF)
- ☐ Dementia Rating Scale-II
- ☐ California Verbal Learning Test
- ☐ Continuous Performance Test
- ☐ Delis Kaplan Executive Function System
- ☐ Rey-Osterrieth Complex Figure
- ☐ Bender Gestalt
- ☐ Trail Making Test A & B
- ☐ Wechsler Memory Scale III
- ☐ Wide Range Assessment of Memory and Learning
- ☐ Wisconsin Card Sorting Test

EMOTIONAL FUNCTIONING
- ☐ Millon Clinical Multiaxial Inventory, 3rd Edition (MCMI-III)
- ☐ Minnesota Multiphasic Personality Inventory, 2nd Edition (MMPI-2)
- ☐ MMPI-2-Restructured Form (MMPI-2-RF)
- ☐ Personality Assessment Inventory
- ☐ Rorschach Inkblot Method
- ☐ Rorschach Performance Assessment System (R-PAS)
- ☐ Thematic Apperception Test
- ☐ Sentence Completion Test
- ☐ Drawings (DAP, HTP, KFD, etc.)
- ☐ NEO Personality Inventory-Revised (NEO-PI-R)

ACADEMIC FUNCTIONING
- ☐ Strong Interest Inventory
- ☐ Wechsler Individual Achievement Test (WIAT)
- ☐ Woodcock Johnson-III (Achievement; Cognitive)
- ☐ Wide Range Achievement Test, 4th Edition (WRAT-4)

FORENSIC/RISK ASSESSMENT
- ☐ Psychopathy Checklist-Revised (PCL-R)
- ☐ Static 99
- ☐ Violence Risk Assessment Guide (VRAG)
- ☐ History-Clinical-Risk 20 (HCR-20)
- ☐ Validity Indicator Profile
- ☐ Structured Interview of Reported Symptoms (SIRS)
- ☐ Miller Forensic Assessment of Symptoms Test (M-FAST)
- ☐ Rey 15- Item Test
- ☐ Test of Memory Malingering (TOMM)

23. Please indicate which measures you prefer your interns to have had clinical experience with **before** starting internship? *(Please **SELECT ALL** that apply.)*

COGNITIVE FUNCTIONING
- ☐ Wechsler Intelligence Scales (WAIS-IV, WISC-IV/V)
- ☐ Stanford-Binet 5
- ☐ TONI-3
- ☐ Kaufman Assessment Battery for Children (KABC)

SYMPTOM INVENTORIES
- ☐ Beck Depression Inventory, 2nd Edition (BDI-II)
- ☐ Hamilton Depression Scale
- ☐ Beck Anxiety Inventory (BAI)
- ☐ Adult Manifest Anxiety Scale

DIAGNOSTIC INTERVIEW PROTOCOLS
- ☐ SADS
- ☐ SCID
- ☐ DIS

NEUROPSYCHOLOGICAL FUNCTIONING
- ☐ Boston Diagnostic Aphasia Exam
- ☐ Brief Rating Scale of Executive Function (BRIEF)
- ☐ Dementia Rating Scale-II
- ☐ California Verbal Learning Test
- ☐ Continuous Performance Test
- ☐ Delis Kaplan Executive Function System
- ☐ Rey-Osterrieth Complex Figure
- ☐ Bender Gestalt
- ☐ Trail Making Test A & B
- ☐ Wechsler Memory Scale III
- ☐ Wide Range Assessment of Memory and Learning
- ☐ Wisconsin Card Sorting Test

EMOTIONAL FUNCTIONING
- ☐ Millon Clinical Multiaxial Inventory, 3rd Edition (MCMI-III)
- ☐ Minnesota Multiphasic Personality Inventory, 2nd Edition (MMPI-2)
- ☐ MMPI-2-Restructured Form (MMPI-2-RF)
- ☐ Personality Assessment Inventory
- ☐ Rorschach Inkblot Method
- ☐ Rorschach Performance Assessment System (R-PAS)
- ☐ Thematic Apperception Test
- ☐ Sentence Completion Test
- ☐ Drawings (DAP, HTP, KFD, etc.)
- ☐ NEO Personality Inventory-Revised (NEO-PI-R)

ACADEMIC FUNCTIONING
- ☐ Strong Interest Inventory
- ☐ Wechsler Individual Achievement Test (WIAT)
- ☐ Woodcock Johnson-III (Achievement; Cognitive)
- ☐ Wide Range Achievement Test, 4th Edition (WRAT-4)

FORENSIC/RISK ASSESSMENT
- ☐ Psychopathy Checklist-Revised (PCL-R)
- ☐ Static 99
- ☐ Violence Risk Assessment Guide (VRAG)
- ☐ History-Clinical-Risk 20 (HCR-20)
- ☐ Validity Indicator Profile
- ☐ Structured Interview of Reported Symptoms (SIRS)
- ☐ Miller Forensic Assessment of Symptoms Test (M-FAST)
- ☐ Rey 15- Item Test
- ☐ Test of Memory Malingering (TOMM)

V. FUTURE DIRECTIONS OF PSYCHOLOGICAL ASSESSMENT

24. Currently, which methods of administration and scoring are typically used within your site*?* *(Please **SELECT ALL** that apply)*

- ☐ Traditional paper-based test administration
- ☐ Traditional hand scoring
- ☐ Computer-based test administration
- ☐ Computer-based test scoring
- ☐ Computer based test result interpretation
- ☐ Tablet-based assessment (e.g., IPAD)
- ☐ App-based assessment (e.g., on a smartphone or tablet)
- ☐ Other *(please specify)*

25. How significant is the use of technology in the training and practice of psychological assessment within your internship program?

- ☐ Extremely important
- ☐ Very important
- ☐ Somewhat important
- ☐ Slightly important
- ☐ Not at all important

26. In the next five years, what do you expect regarding funding and resources for psychological testing and assessment in your internship program?

- ☐ Significant increase in funding/resources
- ☐ Slight increase in funding/resources
- ☐ No change in funding/resources
- ☐ Slight decrease in funding/resources
- ☐ Significant decrease in funding/resources

27. In the future, how do you expect your internship program's emphasis on psychological testing and assessment to change?

- ☐ Significantly increase
- ☐ Slightly increase
- ☐ Stay the same
- ☐ Slightly decrease
- ☐ Significantly decrease

28. How much has the profession's emphasis on evidence-based practice impacted your program's approach to psychological testing and assessment?

- ☐ Extremely impacted
- ☐ Strongly impacted
- ☐ Somewhat impacted
- ☐ Slightly impacted
- ☐ Not impacted at all

29. What new psychological tests or measures has your site begun using within the last five years?

- ☐ None

30. Within your site, what psychological tests or measures would you like to see used in the future that are not currently being used?

- ☐ None

31. What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?

- ☐ None

32. Please add anything else you would like to offer regarding psychological assessment training and practice at the internship level that was not covered in this survey.

☐ None

Thank you for participating in this study!

APPENDIX C

Group Coding by q8a for Data Analysis

Please note the change in coding for the data below:

Original Code	Setting
2	Consortium Programs (CON)
7	Prison and/or Correctional Facilities (PC)
13	State/County/Other Public Hospital (SCPH)
14	University Counseling Centers (UCC)
15	Department of Veteran Affairs Medical Centers (VAMC)
20	Community Mental Health Centers (CMHC)

Coding by q8	
q8 = 2	Consortium Programs (CON)
q8 = 7	Prison and/or Correctional Facilities (PC)
q8 = 13	State/County/Other Public Hospital (SCPH)
q8 = 14	University Counseling Centers (UCC)
q8 = 15	Department of Veteran Affairs Medical Centers (VAMC)
q8 = 20	Community Mental Health Centers (CMHC)

Coding by q8a[1]s	
q8a 6	Consortium Programs (CON)
q8a 5	Prison and/or Correctional Facilities (PC)
q8a 4	State/County/Other Public Hospital (SCPH)
q8a 3	University Counseling Centers (UCC)
q8a 2	Department of Veteran Affairs Medical Centers (VAMC)
q8a 1	Community Mental Health Centers (CMHC)

[1] The settings were re-coded as "q8a" to perform the statistical analysis and as reflected in the subsequent appendices. Each was assigned a number, not representational of a numerical value.

APPENDIX D

Questionnaire Response Coding

Item[1]	Response Option	Coding
24	Traditional paper-based test administration	3
	Traditional hand scoring	4
	Computer-based test administration	5
	Computer-based test scoring	6
	Computer based test result interpretation	7
	Tablet-based assessment (e.g., IPAD)	8
	App-based assessment (e.g., on a smartphone or tablet)	9
	Other (please specify)	1, 2
25	Extremely important	5
	Very important	4
	Somewhat important	3
	Slightly important	2
	Not at all important	1
26	Significant increase in funding/resources	5
	Slight increase in funding/resources	4
	No change in funding/resources	3
	Slight decrease in funding/resources	2
	Significant decrease in funding/resources	1
27	Significantly increase	5
	Slightly increase	4
	Stay the same	3
	Slightly decrease	4
	Significantly decrease	1

[1] Questionnaire items: 24) Currently, which methods of administration and scoring are typically used within your site? (Please SELECT ALL that apply); 25) How significant is the use of technology in the training and practice of psychological assessment within your internship program?; 26) In the next five years, what do you expect regarding funding and resources for psychological testing and assessment in your internship program?; 27) In the future, how do you expect your internship program's emphasis on psychological testing and assessment to change?

APPENDIX E

Wilcoxon Scores (Rank Sums) for Variables

Wilcoxon Scores (Rank Sums) for Variables "Q" Classified by Variable q8a

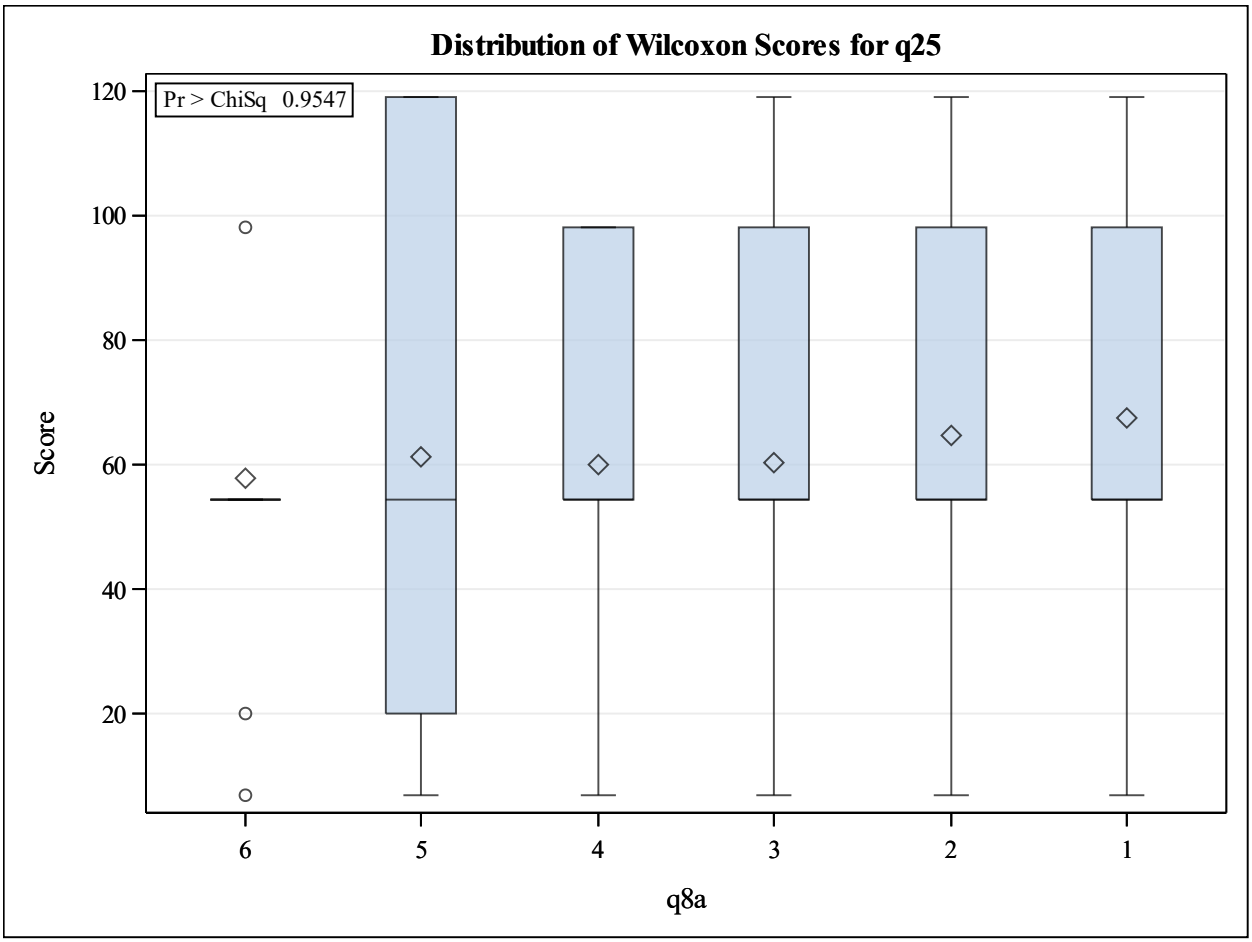
Q	q8a	*N*	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score[1]
25	6	14	811.50	875.00	119.441215	57.964286
5	14	857.00	875.00	119.441215	61.214286	
4	18	1082.00	1125.00	132.948376	60.111111	
3	27	1633.00	1687.50	155.762031	60.481481	
2	27	1746.00	1687.50	155.762031	64.666667	
1	24	1620.50	1500.00	149.107494	67.520833	
26	6	14	743.50	875.00	106.011584	53.107143
5	14	761.50	875.00	106.011584	54.392857	
4	18	1209.00	1125.00	118.000038	67.166667	
3	27	1659.00	1687.50	138.248591	61.444444	
2	27	1871.00	1687.50	138.248591	69.296296	
1	24	1506.00	1500.00	132.342271	62.750000	
27	6	14	896.00	875.00	114.076794	64.000000
5	14	896.00	875.00	114.076794	64.000000	
4	18	840.00	1125.00	126.977313	46.666667	
3	27	1664.50	1687.50	148.766346	61.648148	
2	27	1984.00	1687.50	148.766346	73.481481	
1	24	1469.50	1500.00	142.410683	61.229167	

[1] Average scores were used for ties.

APPENDIX F

Distribution of Wilcoxon Scores

Questionnaire Item 25

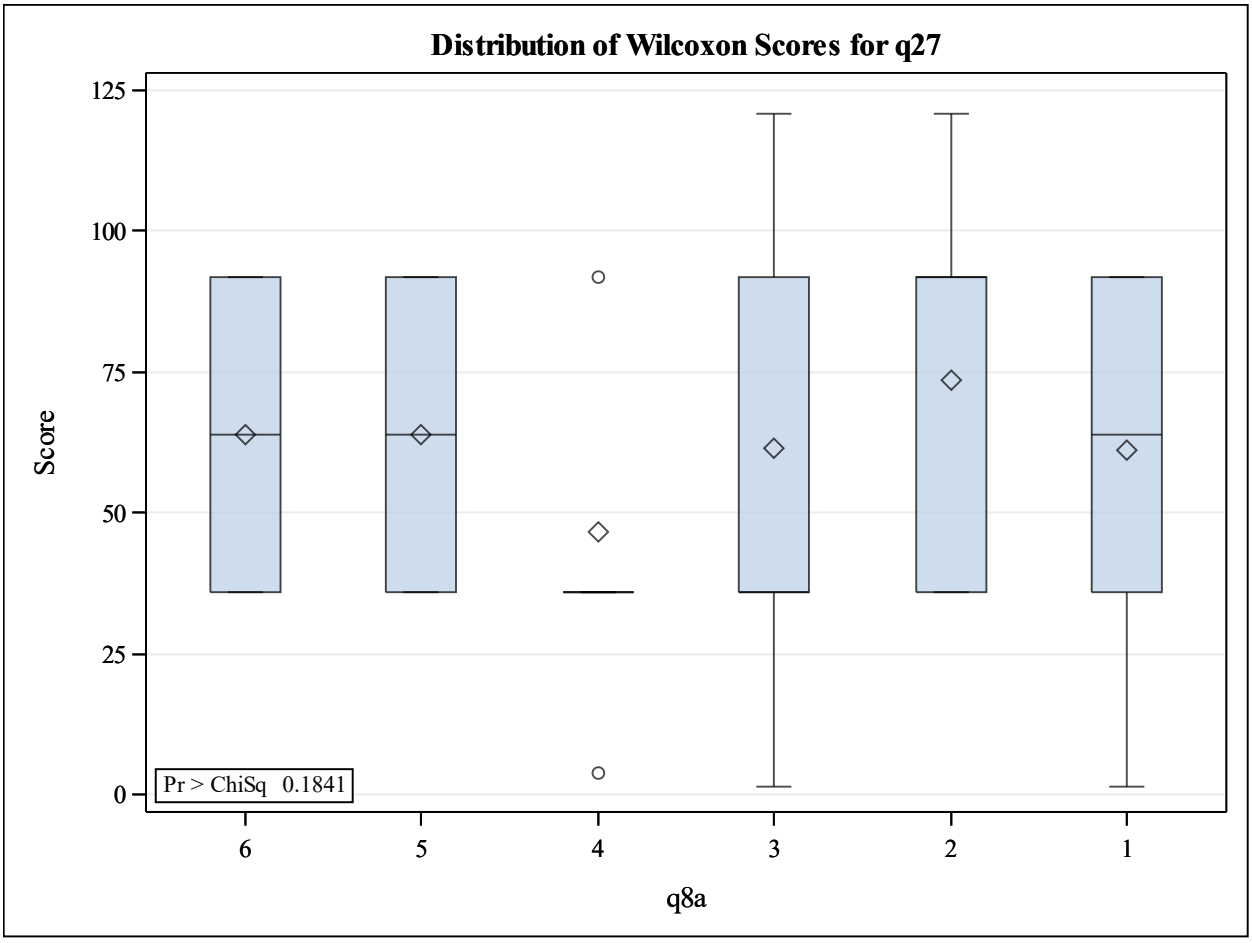


Distribution of Wilcoxon Scores

Questionnaire Item 26

Distribution of Wilcoxon Scores

Questionnaire Item 27



APPENDIX G

Kruskal-Wallis Test

Item	Chi-Square	DF	Pr > Chi-Square
25	1.0931	5	0.9547
26	4.2281	5	0.5171
27	7.5296	5	0.1841

APPENDIX H

Group Comparisons

Questionnaire Item 25[1]

Group Comparison by q8a	Group Comparison by Setting	Differences in Average Ranks	Cutoff at Alpha =0.05	Significant Difference
1-2	CMHC-VAMC	2.85417	29.5945	
1-3	CMHC-UCC	7.03935	29.5945	
1-4	CMHC-State/Public	7.40972	32.8924	
1-5	CMHC-Prison/Correction	6.30655	35.4760	
1-6	CMHC-Consortium	9.55655	35.4760	
2-3	VAMC-UCC	4.18519	28.7108	
2-4	VAMC-State/Public	4.55556	32.0997	
2-5	VAMC-Prison/Correction	3.45238	34.7423	
2-6	VAMC-Consortium	6.70238	34.7423	
3-4	UCC-State/Public	0.37037	32.0997	
3-5	UCC-Prison/Correction	0.73280	34.7423	
3-6	UCC-Consortium	2.51720	34.7423	
4-5	State/Public-Prison/Correction	1.10317	37.5913	
4-6	State/Public-Consortium	2.14683	37.5913	
5-6	Prison/Correction-Consortium	3.25000	39.8716	

[1] Questionnaire item 25: Chi-Square=1.0931; DF=5; Pr>Chi-Square=0.9547

Group Comparisons

Questionnaire Item 26[1]

Group Comparison by q8a	Group Comparison by Setting	Differences in Average Ranks	Cutoff at Alpha =0.05	Significant Difference
1-2	CMHC-VAMC	6.5463	29.5945	
1-3	CMHC-UCC	1.3056	29.5945	
1-4	CMHC-State/Public	4.4167	32.8924	
1-5	CMHC-Prison/Correction	8.3571	35.4760	
1-6	CMHC-Consortium	9.6429	35.4760	
2-3	VAMC-UCC	7.8519	28.7108	
2-4	VAMC-State/Public	2.1296	32.0997	
2-5	VAMC-Prison/Correction	14.9034	34.7423	
2-6	VAMC-Consortium	16.1892	34.7423	
3-4	UCC-State/Public	5.7222	32.0997	
3-5	UCC-Prison/Correction	7.0516	34.7423	
3-6	UCC-Consortium	8.3373	34.7423	
4-5	State/Public-Prison/Correction	12.7738	37.5913	
4-6	State/Public-Consortium	14.0595	37.5913	
5-6	Prison/Correction-Consortium	1.2857	39.8716	

[1] Questionnaire item 26: Chi-Square=4.2281; DF=5; Pr>Chi-Square=0.5171

Group Comparisons

Questionnaire Item 27[1]

Group Comparison by q8a	Group Comparison by Setting	Differences in Average Ranks	Cutoff at Alpha =0.05	Significant Difference
1-2	CMHC-VAMC	12.2523	29.5945	
1-3	CMHC-UCC	0.4190	29.5945	
1-4	CMHC-State/Public	14.5625	32.8924	
1-5	CMHC-Prison/Correction	2.7708	35.4760	
1-6	CMHC-Consortium	2.7708	35.4760	
2-3	VAMC-UCC	11.8333	28.7108	
2-4	VAMC-State/Public	26.8148	32.0997	
2-5	VAMC-Prison/Correction	9.4815	34.7423	
2-6	VAMC-Consortium	9.4815	34.7423	
3-4	UCC-State/Public	14.9815	32.0997	
3-5	UCC-Prison/Correction	2.3519	34.7423	
3-6	UCC-Consortium	2.3519	34.7423	
4-5	State/Public-Prison/Correction	17.3333	37.5913	
4-6	State/Public-Consortium	17.3333	37.5913	
5-6	Prison/Correction-Consortium	0.0000	39.8716	

[1] Questionnaire item 27: Chi-Square=7.5296; DF=5; Pr>Chi-Square=0.1841

APPENDIX I

Write-In Responses for Questionnaire Item #29

"What new psychological tests or measures has your site begun using within the last five years?"

Consortium (CON) Setting

CON

Domain	Measure	Responses	%
Cognitive Functioning		6	15%
	Universal Nonverbal Intelligence Test (UNIT)	1	
	Wechsler Adult Intelligence Scale –Fourth Edition (WAIS-IV)	3	
	Wechsler Intelligence Scale for Children –Fifth Edition (WISC-V)	2	
Emotional Functioning		7	17.5%
	Millon® Adolescent Clinical Inventory (MACI)	2	
	Minnesota Multiphasic Personality Inventory®-2 (MMPI-2)	2	
	Minnesota Multiphasic Personality Inventory®-2-Restructured Form® (MMPI-2-RF)	1	
	Minnesota Multiphasic Personality Inventory®-Adolescent (MMPI-A)	1	
	Thematic Apperception Test (TAT)	1	
Symptom Inventories/Behavioral Rating Scales		11	27.5%
	Adaptive Behavior Assessment System (ABAS)	1	
	Adolescent Anger Rating Scale (AARS)	1	
	Autism Diagnostic Observation Schedule (ADOS)	2	
	Autism Diagnostic Observation Schedule (ADOS-2)	2	
	Autism Spectrum Rating Scale (ASRS)	1	
	Behavioural Assessment of Dysexecutive Syndrome (BADS)	1	
	Child Behavioral Checklist (CBCL)	1	
	Child Depression Inventory (CDI)	1	
	Multidimensional Anxiety Scale for Children (MASC)	1	
Neuropsychological Functioning		6	15%

Questionnaire Item #29: “What new psychological tests or measures has your site begun using within the last five years?
Consortium (CON) Setting

CON

Domain	Measure	Responses	%
	Bender-Gestalt Test	1	
	Developmental Neuropsychological Assessment-II (NEPSY-II)	1	
	Neuropsychological Assessment Battery (NAB)	1	
	Repeatable Battery for the Assessment of Neuropsychological Status (RBANS)	1	
	Wechsler Memory Scale –Fourth Edition (WMS-IV)	2	
Academic/Achievement		8	20%
	Career Thoughts Inventory (CTI)	1	
	Conners Continuous Performance Test –Third Edition (CPT-3)	2	
	Nelson-Denney Reading Test	1	
	Wechsler Individual Achievement Test –Third Edition (WIAT-III)	1	
	Woodcock-Johnson (WJ) –Cognitive and Academic	2	
	Woodcock-Johnson-III (WJ-III) -Cognitive and Academic	1	
Forensic/Risk Assessment		1	2.5%
	Test of Memory Malingering (TOMM)	1	
Other Assessment		1	2.5%
	WIC-IC	1	

Questionnaire Item #29: "What new psychological tests or measures has your site begun using within the last five years?
Prison/Correctional (PC) Setting

PC

Domain	Measure	Responses	%
Cognitive Functioning		5	15%
	Kaufman Brief Intelligence Test, Second Edition (KBIT-2)	1	
	Montreal Cognitive Assessment (MoCA)	1	
	Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV)	1	
	Wechsler Intelligence Scale for Children –Fifth Edition (WISC-V)	2	
Emotional Functioning		8	24%
	Minnesota Multiphasic Personality Inventory®-2-Restructured Form (MMPI-2-RF)	2	
	Personality Assessment Inventory –Adolescent (PAI-A)	1	
	Rorschach Inkblot Test, Exner Manual	1	
	Rorschach Inkblot Test, Software Interpretation Program	1	
	Rotter Incomplete Sentences Blanks, 2nd Edition (RISB-2)	1	
	Social-Emotional Assets and Resilience Scales (SEARS)	1	
	Thematic Apperception Test (TAT)	1	
Symptom Inventories/Behavioral Rating Scale		6	18%
	Anger Regulation and Expression Scale (ARES)	1	
	Behavior Assessment System for Children, Third Edition (BASC™-3)	1	
	Childhood Trauma Questionnaire (CTQ)	1	
	Firestone Assessment of Violent Thoughts (FAVT)	1	
	Firestone Assessment of Violent Thoughts –Adolescents (FAVT-A)	1	
	Stress Index for Parents of Adolescents (SIPA)	1	
Neuropsychological Functioning		6	18%
	Bender Gestalt Test	1	
	Developmental Neuropsychological Assessment-II (NEPSY-II)	1	
	Repeatable Battery for the Assessment of Neuropsychological Status (RBANS)	1	
	Wechsler Memory Scale-Fourth Edition (WMS-IV)	1	

Questionnaire Item #29: "What new psychological tests or measures has your site begun using within the last five years?
Prison/Correctional (PC) Setting

PC

Domain	Measure	Responses	%
	Wisconsin Card Sort	1	
	Stroop Color and Word Test	1	
Academic/Achievement		4	12%
	Test of Word Reading Efficiency –Second Edition (TOWRE-2)	1	
	Wide Range Achievement Test 4 (WRAT4)	1	
	Woodcock-Johnson NU Tests of Achievement	1	
	Woodcock-Munoz Language Survey (WMLS III)	1	
Forensic/Risk		4	12%
	Inventory of Offender Risks, Needs, and Strengths (IORNS)	1	
	Risk-Sophistication-Treatment-Inventory (RST-I)	1	
	Structured Interview of Reported Symptoms, 2nd Edition (SIRS-2)	1	
	Test of Memory Malingering (TOMM)	1	

Questionnaire Item #29: "What new psychological tests or measures has your site begun using within the last five years?
University Counseling Centers (UCC)

UCC

Domain	Measure	Responses	%
Cognitive Functioning		3	8.5%
	Test of Nonverbal Intelligence Fourth Edition (TONI-4)	1	
	Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV)	2	
Emotional Functioning		7	20%
	Millon College Counseling Inventory (MCCI)	3	
	Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF)	2	
	Personality Assessment Inventory (PAI)	2	
Symptom Inventories/Behavioral Rating Scales		12	34%
	Adult-Attention Deficit Disorders Evaluation Scale (A-ADDES)	1	
	Bipolar Spectrum Scale	1	
	Conners' Adult ADHD Rating Scale (CAARS)	1	
	Counseling Center Assessment of Psychological Symptoms (C-CAPS)	4	
	Eating Disorder Inventory, Third Edition (EDI-III)	1	
	Jesness Inventory-Revised (JI-R)	1	
	Quick Inventory of Depressive Symptomatology (QIDS)	1	
	Social Responsiveness Scale (self-report and other report)	1	
	Yale-Brown Obsessive Compulsive Scale	1	
Neuropsychological		4	11%
	Delis-Kaplan Executive Functioning System (D-KEFS)	2	
	Wechsler Memory Scale, Fourth Edition (WMS-IV)	2	
Academic/Achievement		7	20%
	California Verbal Learning Test (CVLT)	1	
	Conners Continuous Performance Test (CPT)	1	
	Integrated Visual and Auditory Continuous Performance Test-2 (IVA-2)	1	

Questionnaire Item #29: "What new psychological tests or measures has your site begun using within the last five years?
University Counseling Centers (UCC)

UCC

Domain	Measure	Responses	%
	Learning Style Assessment	1	
	Test of Word Reading Efficiency –Second Edition (TOWRE)	1	
	Woodcock Johnson-IV Tests of Achievement	2	
Other Assessment		2	6%
	Minimal Dataset Assessment (MDS)	1	

Questionnaire Item #29: "What new psychological tests or measures has your site begun using within the last five years?
Veteran Affairs Medical Centers (VAMC)

VAMC

Domain	Measure	Responses	%
Cognitive Functioning		4	12%
	Kokmen Short Test of Mental Status	1	
	Mini Mental Status Exam (MMSE)	1	
	St. Louis University Mental Status Exam (SLUMS)	1	
	Wechsler Abbreviated Scale of Intelligence® - Second Edition (WASI-II)	1	
Emotional Functioning		6	18%
	Minnesota Multiphasic Personality Inventory-2-Restructured Form® (MMPI-2-RF)	4	
	Minnesota Multiphasic Personality Inventory (MMPI) Restructure Clinical (RC) Scales	1	
	Rorschach Inkblot Test, Software Interpretation Program (R-PAS)	1	
Symptom Inventories/Behavioral Rating Scales		3	9%
	Clinician-Administered PTDS Scale for DSM-5 (CAPS-5)	1	
	Geriatric Depression Scale (GDS)	1	
	Geriatric Anxiety Scale (GAS)	1	
Neuropsychological		13	38%
	Brief Visuospatial Memory Test-Revised (BVMT-R)	1	
	Behavioral Rating Inventory of Executive Functioning®–Adult (BRIEF-A)	1	
	California Verbal Learning Test® -Second Edition (CVLT-II)	1	
	Delis-Kaplan Executive Functioning System (D-KEFS)	2	
	Dementia Rating Scale (DRS)	1	
	Green's Word Memory Test	1	
	Neuropsychological Assessment Battery (NAB)	2	
	Repeatable Battery for the Assessment of Neuropsychological Status (RBANS)	2	
	Wechsler Memory Scale –Fourth Edition (WMS-IV)	2	

Questionnaire Item #29: "What new psychological tests or measures has your site begun using within the last five years?
Veteran Affairs Medical Centers (VAMC)

VAMC

Domain	Measure	Responses	%
Forensic/Risk		2	18%
	Test of Memory Malingering (TOMM)	1	
	Hopkins Competency Assessment Test	1	
Other Assessment		6	18%
	Clock Drawing Test	1	
	Digit Vigilance Test	1	
	Independent Living Skills (ILS)	1	
	Tests for Attention Deficit/Hyperactivity Disorders in Adults: Ruff 2 and 7 Selective-Attention Tests, Adult Self-Report Scale, and Brief Test of Attention	1	
	The B Test	1	
	World Health Organizations Disability Assessment Schedule (WHODAS)	1	

Questionnaire Item #29: "What new psychological tests or measures has your site begun using within the last five years?
Community Mental Health Center (CMHC)

CMHC

Domain	Measure	Responses	%
Cognitive Functioning		10	25%
	Montreal Cognitive Assessment (MoCA)	1	
	Wechsler Abbreviated Scale of Intelligence® - Second Edition (WASI-II)	1	
	Wechsler Adult Intelligence Scale –Fourth Edition (WAIS-IV)	2	
	Wechsler Intelligence Scale for Children –Fifth Edition (WISC-V)	6	
Emotional Functioning		9	22.5%
	Millon Adolescent Clinical Inventory (MACI)	1	
	Millon® Clinical Multiaxial Inventory-III (MCMI-III)	1	
	Minnesota Multiphasic Personality Inventory® -Adolescent (MMPI-A)	3	
	Minnesota Multiphasic Personality Inventory-2-Restructured Form® (MMPI-2-RF)	1	
	Personality Assessment Inventory (PAI)	1	
	Rorschach Performance Assessment System (R-PAS)	2	
Symptom Inventories/Behavioral Rating Scales		5	12.5%
	Adult Clinical Symptoms Interpretation	1	
	Autism Diagnostic Observation Schedule -Second Edition (ADOS-2)	1	
	Behavior Assessment System for Children, Second Edition (BASC-2)	1	
	Clinical Report and Scoring	1	
	Conners' Adult ADHD Rating Scale™ (CAARS)	1	
	Gillam Asperger's Disorder Scale (GADS)		
Neuropsychological		8	20%
	Behavioral Rating Inventory of Executive Functioning®–Adult (BRIEF)	1	
	California Verbal Learning Test® -Second Edition (CVLT-II)	1	
	Conners Continuous Performance Test 3rd Edition (CPT 3)	1	
	Conners 3rd Edition® (Conners-3)	2	
	Developmental Neuropsychological Assessment-II (NEPSY-II)	2	

Questionnaire Item #29: “What new psychological tests or measures has your site begun using within the last five years?
Community Mental Health Center (CMHC)

CMHC

Domain	Measure	Responses	%
	Wechsler Memory Scale –Fourth Edition (WMS-IV)	1	
Academic/Achievement		5	12.5%
	Batteria III ® Woodcock-Munoz	1	
	Clinical Evaluation of Language Fundamentals® (CELF)	1	
	Differential Ability Scales® (DAS-II)	1	
	Leiter International Performance Scale, Third Edition (Leiter-3)	1	
	Vineland Adaptive Behavior Scales (Vineland)	1	
Other Assessment		3	7.5%
	Health Dynamics Inventory	1	
	Instruments related to Autism Spectrum Disorders	1	
	Missouri Educator Gateways Assessment (MEGA)	1	

Questionnaire Item #29: "What new psychological tests or measures has your site begun using within the last five years?
State/County/Other Public Hospitals (SCPH)

SCPH

Domain	Measure	Responses	%
Cognitive Functioning		6	15%
	Brief Cognitive Status Exam (BCSE)	1	
	Comprehensive Test of Nonverbal Intelligence, Second Edition (CTONI-2)	1	
	MATRICS Consensus Cognitive Battery	1	
	Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV)	1	
	Wechsler Intelligence Scale for Children –Fifth Edition (WISC-V)	2	
Emotional Functioning		6	15%
	Minnesota Multiphasic Personality Inventory®-2 (MMPI-2)	1	
	Minnesota Multiphasic Personality Inventory-2-Restructured Form® (MMPI-2-RF)	4	
	Rorschach Performance Assessment System (R-PAS)	1	
Symptom Inventories/Behavioral Rating Scale		3	7%
	Adaptive Behavior Assessment System, Third Edition (ABAS-3)	1	
	Autism Diagnostic Observation Schedule (ADOS-2)	1	
	Childhood Autism Rating Scale™, Second Edition (CAARS-2)	1	
Neuropsychological Functioning		5	12%
	Bilingual Verbal Abilities Test	1	
	Delis-Kaplan Executive Functioning System (D-KEFS)	1	
	Repeatable Battery for the Assessment of Neuropsychological Status (RBANS)	1	
	Wechsler Memory Scale –Fourth Edition (WMS-IV)	2	
Academic/Achievement		7	17%
	Conners Continuous Auditory Test of Attention (CATA)	1	
	Conners Continuous Performance Test –Third Edition (CPT-3)	2	
	Leiter International Performance Scale, Third Edition (Leiter-3)	1	
	University Performance-Based Skills Assessment (UPSA)	1	

Questionnaire Item #29: "What new psychological tests or measures has your site begun using within the last five years?
State/County/Other Public Hospitals (SCPH)

SCPH

Domain	Measure	Responses	%
	Vocabulary Assessment Scales–Expressive (VAS-E)	1	
	Vocabulary Assessment Scales–Receptive (VAS-R)	1	
Forensic/Risk		11	27%
	ACUTE Assessment	1	
	Historical Clinical Risk Management-20 (HCR-20) (Version not specified)	2	
	Historical Clinical Risk Management-20, Version 3 (HCR-20, v3)	3	
	Sex Offender Risk Appraisal Guide (SORAG)	1	
	Stable Assessment	1	
	Static-99R	1	
	Violence Risk Appraisal Guide (VRAG)	1	
	Violence Risk Screening-10 (V-RISK-10)	1	
Other Assessment		3	7.3%
	Safe Shooting Ability Assessment (SSAA)	1	
	Medication Management Ability Assessment (MMAA)	1	
	ACS Migration Skills Assessment	1	

APPENDIX J

Write-In Responses for Questionnaire Item #30

"Within your site, what psychological tests or measures would you like to see used in the future that are not currently being used?"

Consortium Programs (CON) Settings

CON Settings

Domain	Measure	Responses	%
Cognitive Functioning		2	22%
	Cognitive Performance Test (CPT)	1	
	Wechsler Intelligence Scale for Children® - Fourth Edition (WISC®-IV) - Spanish Version	1	
Emotional Functioning		2	22%
	Minnesota Multiphasic Personality Inventory-2-Restructured Form® (MMPI-2-RF®) - Spanish Version	1	
	Rorschach Performance Assessment System® (R-PAS®)	1	
Symptom Inventories/Behavioral Rating Scales		2	22%
	Beck Depression Inventory®-II (BDI®-II)	1	
	Test of Everyday Attention for Children (TEA-Ch)	1	
Neuropsychological Functioning		2	22%
	Delis-Kaplan Executive Function System™ (D-KEFS™)	1	
	Sensory Profile™ 2	1	
Academic Functioning/Achievement		1	11%
	Differential Ability Scales ® -II (DAS-II ®)	1	

Questionnaire Item #30: “Within your site, what psychological tests or measures would you like to see used in the future that are not currently being used?”
Prison/Correctional (PC) Setting

PC Settings

Domain	Measure	Responses	%
Academic Functioning/Achievement		3	75%
	Batería III® Woodcock-Muñoz	1	
	Woodcock-Johnson® Tests of Achievement	1	
	Woodcock-Johnson® Tests of Cognitive Abilities	1	
Forensic/Risk Assessment		1	25%
	Miller Forensic Assessment of Symptoms Test™ (M-FAST™)	1	

Questionnaire Item #30: "Within your site, what psychological tests or measures would you like to see used in the future that are not currently being used?"
State/County/Other Public Hospitals (SCPH) Setting

SCPH Settings

Domain	Measure	Responses	%
Symptom Inventories/Behavioral Rating Scales		3	43%
	Schedule for Affective Disorders and Schizophrenia (SADS)	1	
	Structured Clinical Interview for DSM-5 (SCID-5)	2	
Neuropsychological Functioning		2	29%
	Conners Continuous Performance Test 3rd Edition™ (Conners CPT 3™)	2	
Forensic/Risk Assessment		1	14%
	Miller Forensic Assessment of Symptoms Test™ (M-FAST™)	1	
Other Assessments		1	14%
	DIS	1	

Questionnaire Item #30: "Within your site, what psychological tests or measures would you like to see used in the future that are not currently being used?"
University Counseling Centers (UCC) Setting

UCC Settings

Domain	Measure	Responses	%
Emotional Functioning		6	43%
	Millon® Clinical Multiaxial Inventory-III (MCMI®-III)	2	
	Minnesota Multiphasic Personality Inventory® (MMPI®)	1	
	Minnesota Multiphasic Personality Inventory-2-Restructured Form® (MMPI-2-RF®)	1	
	Personality Assessment Inventory™ (PAI®)	1	
	Rorschach® Technique	1	
Symptom Inventories/Behavioral Rating Scales		3	21%
	Schedule for Affective Disorders and Schizophrenia (SADS)	1	
	Structured Clinical Interview for DSM-5 (SCID-5)	2	
Academic Functioning/Achievement		4	21%
	Conners Continuous Performance Test™ (Conners CPT™) (Ed. Not specified)	1	
	Conners Continuous Performance Test™ (Conners CPT™)	1	
	Wonderlic Scholastic Level Exam	1	
Forensic/Risk Assessment		1	7%
	Miller Forensic Assessment of Symptoms Test™ (M-FAST™)	1	
Other Assessments		1	7%
	DIS	1	

Questionnaire Item #30: "Within your site, what psychological tests or measures would you like to see used in the future that are not currently being used?"
Veterans Administration Medical Centers (VAMC) Setting

VAMC Settings

Domain	Measure	Responses	%
Emotional Functioning		4	36%
	Minnesota Multiphasic Personality Inventory-2-Restructured Form® (MMPI-2-RF®)	2	
	Rorschach Performance Assessment System® (R-PAS®)	1	
	Rorschach® Technique	1	
Neuropsychological Functioning		4	36%
	Blessed Orientation Memory Concentration (BOMC)	1	
	Dementia Rating Scale–2™ (DRS-2™)	1	
	Neuropsychological Assessment Battery® (NAB®)	1	
	Repeatable Battery for the Assessment of Neuropsychological Status (RBANS®)	1	
Forensic/Risk Assessment		2	18%
	Miller Forensic Assessment of Symptoms Test™ (M-FAST™)	1	
	Structured Interview of Reported Symptoms (SIRS)	1	
Other Assessments		1	9%
	NBSI	1	

Questionnaire Item #30: "Within your site, what psychological tests or measures would you like to see used in the future that are not currently being used?"
Community Mental Health Centers (CMHC) Setting

CMHC

Domain	Measure	Responses	%
Cognitive Functioning		5	25%
	Wechsler Adult Intelligence Scale-Fifth Edition (WAIS-V)	1	
	Wechsler Intelligence Scale for Children®-Fifth Edition (WISC®-V)	4	
Emotional Functioning		2	10%
	Rorschach Performance Assessment System® (R-PAS®)	2	
Symptom Inventories/Behavioral Rating Scales		3	15%
	Autism Diagnostic Observation Schedule™ (ADOS™)	1	
	Autism Diagnostic Observation Schedule™, Second Edition (ADOS™-2)	1	
	Millon® Behavioral Medicine Diagnostic (MBMD®)	1	
Neuropsychological Functioning		9	45%
	Behavior Rating Inventory of Executive Function® (BRIEF®)	1	
	California Verbal Learning Test® (CVLT®)	1	
	Conners Continuous Performance Test™ (Conners CPT™)	1	
	Conners Continuous Performance Test 3rd Edition™ (Conners CPT 3™)	1	
	Delis-Kaplan Executive Function System™ (D-KEFS™)	2	
	Developmental Neuropsychological Assessment-II (NEPSY-II)	1	
	Weschler Memory Scale (WMS)	1	
	Wisconsin Card Sorting Test® (WCST) Computerized	1	
Academic Functioning/Achievement		1	5%
	Wechsler Individual Achievement Test® (WIAT®)	1	

APPENDIX K

Write-In Responses for Questionnaire Item #31

"What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?"

Internship Setting	Verbatim Response
CON	Focus less on TAT and Rorschach. They are not used often in actual clinical practice.
	Train in Woodcock tests (rather than just Wechsler).
	For practicum students, we prefer previous experience completing 2-4 complete assessments. For residents, we require a considerable level of independence. What we offer is a client group with very complex presenting issues, so students/residents gain experience in integrating info from many sources and producing strong theoretical conceptualizations.
	All students should have experience - not just practice administrations. Also need to increase experience writing reports on full test batteries.
	More emphasis on integration of results across tests and subtests, once the students are familiar with the basics of each test.
	In general, graduate students need greater exposure to psychological testing prior to the internship year than they currently receive.
	Include Rorschach.
	Students in a child/developmental program should have training in psychoeducational and psychodiagnositic assessment and report writing. All students should have training in assessment and report preparation for an intake and a diagnostic assessment.

Questionnaire Item #31: "What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?"

Internship Setting	Verbatim Response
	Academic programs must prepare students to utilize a variety of assessment measures including administration, interpretation, and data-based decision making.
CON	Focus less on TAT and Rorschach. They are not used often in actual clinical practice.
	Train in Woodcock tests (rather than just Wechsler).
	For practicum students, we prefer previous experience completing 2-4 complete assessments. For residents, we require a considerable level of independence. What we offer is a client group with very complex presenting issues, so students/residents gain experience in integrating info from many sources and producing strong theoretical conceptualizations.
	All students should have experience - not just practice administrations. Also need to increase experience writing reports on full test batteries.
	More emphasis on integration of results across tests and subtests, once the students are familiar with the basics of each test.
	In general, graduate students need greater exposure to psychological testing prior to the internship year than they currently receive.
	Include Rorschach.
	Students in a child/developmental program should have training in psychoeducational and psychodiagnositic assessment and report writing. All students should have training in assessment and report preparation for an intake and a diagnostic assessment.
	Academic programs must prepare students to utilize a variety of assessment measures including administration,

Questionnaire Item #31: "What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?"

Internship Setting	Verbatim Response
	interpretation, and data-based decision making.
CON	It needs to be stronger. I have sites in the consortium that struggle because students are not well prepared when they start. They need a strong foundation in objective and projective personality testing and more exposure to children's assessment.
	Interns come better prepared in the ability to integrate multiple assessment findings in a comprehensive assessment report to answer a specific diagnostic question. Additional practice in personality assessment.
PC	Train earlier for assessment. Some of our internship applicants are in their testing year at application time and so their assessment experience is very low at that time. They will have more testing experience at the start of internship, but we don't have an accurate record at the time of application to internship sites.
	Incoming interns really need to have a solid understanding of cognitive testing (especially the WISC/WAIS), and I think it is beneficial to have had training in the MMPI and the Rorschach. Most other measures can be easily learned if there is a solid foundation with those measures. Just a side note regarding the list of measures that you had earlier in the survey – many of the measures that we use are child measures and were not listed.
	More experience with writing integrative reports based on testing batteries.
	Complete more integrated reports
	Offer basic neuro batteries for all students. Do not call assessments using questionnaires (BDI, STAI, STAXI) integrated batteries. Teach the omnibus instruments & how to interpret. It is easier for learners to pare down from broad testing experience, than up from a narrow one.

Questionnaire Item #31: "What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?"

Internship Setting	Verbatim Response
PC	In reviewing applications for internship, I notice a wide range in the number of assessment batteries students have completed. I would suggest having a minimum # of assessment batteries and/or reports written prior to going on internship (e.g., 5 adult assessments, 3 child assessments) to ensure that students have a strong foundation of training in assessment while in graduate school, particularly since psychological testing and assessments sets clinical psychology apart from other fields.
	Have interns do at least one battery per rotation.
	Make sure students are taught how to interpret tests and integrate them. Not simply rely on computerized interpretations. It is also extremely important for students to be able to integrate the test results - not just report results measure by measure without any kind of connection or interpretation and what it all means together - how the pieces/measures fit together. Also to continue using full tests, not just screening instruments.
	Provide good training
SCPH	Many trainees are limited in the assessment experiences offered by local practicum/externship sites. Perhaps academic programs could increase collaboration with local clinical placements in order to increase opportunities to obtain hands-on, clinical assessment experiences.
	Make sure students have an appropriate number of available assessment opportunities at their assessment practicum.
	Do not give up on the Rorschach - please move from the Comprehensive System toward the RPAS
	Mandatory coursework in testing and assessment and experience in clinical settings.
	Teach a broad range of measures, including the Rorschach. At our site interns with Rorschach experience are at an advantage.

Questionnaire Item #31: “What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?”

Internship Setting	Verbatim Response
SCPH	Teach students about classification accuracy statistics.
	Please train students in testing. Stop delegating assessment training to outside practicum supervisors, who invariably often do not have time to conduct individual supervision, let alone review testing protocols and written reports. Have faculty observe students administering the WAIS and WMS. Every year, we have students who have difficulty demonstrating the ability to administer these tests in a standard manner.
	Observe administrations of tests and correct errors, check scoring, train more re: incorporation of diversity and other contextual factors in interpretation
	Stop having externship/practicum sites use students as Psyc Techs-- many of our interns have had lots of experience administering and scoring tests, but frequently they do not have a clue on how to interpret the test. Further, when they have interpreted and written reports, often they cannot integrate well and the interpretation is often of little depth -- some reports seem like a template with numbers just plugged in- sadly some interns have indicated that is the case- given by the site.
	Continued emphasis on cultural awareness in testing and assessment and integration of multiple tests in forming conclusions.
	I would like to see greater emphasis placed on integrated report writing in students' practicum experience.
	Require diverse and expansive psych assessment training, requirement for individual therapy that helps when challenging interpretations that are projections, and emphasizing the write up of testing.
	Require one year of experience pre-internship; support with two courses minimally.

Questionnaire Item #31: “What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?”

Internship Setting	Verbatim Response
SCPH	Better training and more emphasis on requiring students to have assessment and testing experience.
	More practical experience doing assessment required pre-internship; more emphasis on report writing skills and diagnostic formulation.
	Stronger emphasis on personality assessment, intellectual assessment, and basic neuropsychological assessment (at least screening).
	More focus on helping students learn how to integrate test findings. Interns need to learn how to administer, score, interpret tests and integrate data obtained from testing. We see many scoring errors or the intern is not skilled at interpreting. Most often interns struggle to integrate testing results from various sources.
UCC	Continued emphasis on multicultural considerations for testing and assessment.
	Assessment for therapeutic interventions and treatment outcome.
	They would have more experience with administering and scoring tests, not just passing familiarity with them.
	More training, and if at all possible experience, with multicultural considerations as they relate to the provision of assessment services.
	Prefer they have broad training in intellectual, academic, and personality and symptom testing if possible, because we aren't able to do that much training here in formal psychological testing. Our emphasis is on using testing therapeutically.
	Ensure that interns have the opportunity to learn the measures.

Questionnaire Item #31: "What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?"

Internship Setting	Verbatim Response
UCC	Assist students applying for internship in the completion of the APPI so that they accurately reflect their experience with testing and assessment.
	Students no longer have experience with batteries and report writing. Instead, they have administered many self-report measures such as the Beck. Testing cannot be taught on internship without more of a base from the applicant's prior training.
	At this time, I'm mostly concerned with incoming students being able to do a good clinical interview for the initial assessment. Oftentimes students have not taken a clinical interviewing class or conducted intakes and their diagnostic knowledge is lacking.
	Find ways for students to continue using their testing skills while in practicum placements so they do not arrive at internship having not administered scored or interpreted a test for three to four years.
	Intelligence and personality testing are still valued but as we move to shorter-term treatment (due to clinical demand), screenings have an important role as well.
	Provide more training in psychometrics so interns understand how the tests are constructed and actually work/for MMPI-2/Millon and instruments that have validity indictors, instill the value practice of looking at test taking attitudes/approach to test before jumping into interpretations. Many interns totally skip that part.
	Increased emphasis on proficiency with administration and scoring protocols, as well as increased training regarding application of testing results to case conceptualizations.
	Provide coursework and practical experience.
	More hands-on opportunities to practice administering and interpreting tests.

Questionnaire Item #31: “What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?”

Internship Setting	Verbatim Response
VAMC	Applicants are consistently under trained in psychological assessment.
	Graduate programs should provide both academic training as well as practical training (experience administering and scoring) a range of assessment measures within the context of a meaningful battery requiring integration of findings.
	Our minimum is that trainees have had one semester course in assessment and done three WAIS; we'll train beyond that and often do.
	Many students have very little testing experience. Why would administrators hire psychologists who can't test when they could hire social workers and other masters level therapists if they just want therapy positions filled. Assessment and testing training helps with the other main difference psychologists bring to the table - case formulation whether to treatment team or to organizational issues.
	Fluency with psychometrics.
	That there needs to be a broader base of training as some rotations do not have the ability to provide that at their sites. For example, we only serve adults but all psychologists should have some basic experience with children. There is not a lot of opportunity for a long battery in short term care settings and therefore some of that should be stronger.
	More integrated reports.
	Devote additional time/coursework to both cognitive assessment and personality assessment.
	Experience during training should be broadly enough based to allow interns to function in a wide variety of settings.

Questionnaire Item #31: “What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?”

Internship Setting	Verbatim Response
VAMC	Spend more time working with doctoral students to be better prepared to do testing. We find about 1/2 of our incoming interns have only done 1-2 MMPI's prior to the start of internship.
	Ensure that at least one full practicum is focused on assessment this would allow for more clinical practice (administering, scoring, integrative report writing, and providing feedback to clients).
	More experience!
	Make sure that students understand why they give what test. Often they work for a neuropsychologist as a psychometrition for a practicum, but don't understand why they are giving the tests they give. They just give a battery.
	Teach projective assessment and give students some experience administering the Rorschach!
	Teach them how to implement use in personal/case practice - because otherwise large-scale systems that are non-forensic (like VA) move further and further away from formal testing, yet this is a core function of our discipline.
	University based programs should have at least one and probably two classes on testing. Schools like Pepperdine are way ahead of the pure "clinical science" programs in this. Not all interns take rotations with a heavy assessment or testing focus. I was shocked to review many of our Compensation and Pension exams and find few with sophisticated psychological testing and often handing out PTSD diagnoses based on the naïve Diagnosis Based Questionnaire (DBQ). Anyone who wants to have PTSD gets it.
	Make sure students have both classroom training AND clinical experience in administering, scoring, and interpreting test results and experience with writing integrated reports. Each student should write at least 20 integrated reports during their graduate training or else they are not adequately prepared for the demands of an internship where this skill is required.

Questionnaire Item #31: “What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?”

Internship Setting	Verbatim Response
CMHC	Academic and internship programs need to dialogue in some venue about who's going to train what in psychological testing and assessment.
	More emphasis on test administration and report writing/Less emphasis on only neuropsych testing, making sure students' assessment training is broad.
	Sufficient training in lab-based tests and not just exclusive exposure to inventories. Keep training in projectives alive and well!
	More emphasis on therapeutic assessment.
	I would like to see projective tests taught again.
	To remember that one of our calling cards as psychologists is the ability to test and to act and train accordingly. And by test, I do not mean the currently in vogue face valid, easily faked paper and pencil inventories. I mean meaningful tests like the Rorschach as well as the MMPI-2, which work very well together to do individually tailored treatment plans. Of course, if we get duped into thinking that the so-called evidence-based therapies are all we need, we do not need testing.
	More practicum experiences... create a minimal amount that they must complete for comprehensive exams. say 10.
	Emphasize assessment more and testing less; / promote the idea of testing being for person-centered reasons, not for training-centered reasons; / provide interns with access borrow testing materials from schools since many training sites don't have funding to buy new materials on regular basis.
	More training on projective techniques - we continue to use a number of these in rounding out our comprehensive batteries.

Questionnaire Item #31: “What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?”

Internship Setting	Verbatim Response
CMHC	Focus on disorder-specific broadband assessment for diagnosis and assessment of treatment response. See psych testing as needing to add value to treatment and intervention. Understand what prescribers need to do their jobs better. Understand how patients absorb information about test results and use it for empowering change efforts. Train in neurodevelopmental disorder assessment and intervention.
	Have a wide range of experience and exposure to the most common tests.
	Range of testing for populations, including cognitive. And don't forget Projective training.
	Have students get actual experience with referred clients/patients and not volunteers; have experience providing feedback; be exposed to the testing continuum from neuropsych to therapeutic assessment.
	Students are less prepared and there seems to be less emphasis on psychological testing. Many students have not administered any tests before they come to the site. There is much less training on the Rorschach, the Millon and other projective tests.
	It would be helpful for preinternship training to have a focus on the art of testing, the engagement of client, countertransference in testing, understanding basic principles behind test instruments (T-Scores) and an openness to learning new instruments and an openness to the client's experience, not just the intern's perceptions.
	As a trainer, I am not as concerned by the number of measures an intern applicant has used, but rather I am interested in how many comprehensive batteries they have done on their own (i.e., selected battery, administered and interpreted measures, and wrote report with supervision). I think internship can be used to expand the testing repertoire, but pre-interns must have a good grasp of assessment basics and how to do comprehensive assessments (with supervision).
	More hands-on experience for students.

Questionnaire Item #31: “What recommendations do you have for academic programs regarding pre-internship training in psychological testing and assessment?”

Internship Setting	Verbatim Response
CMHC	Please don't send me 35 page assessments with all appendices attached, for 7-year-old boys with ADHD, in your internship application. Rediscover the lost art of teaching and training to write 5-7 page evaluations that tell a concise story.
	I believe an increase focus on integrative assessment will assist students transition into applied internship placements.
	Graduate students need much more experience in psychological testing and assessment, as well as how to utilize the assessment results in regard to intervention.
	Interns will benefit greatly from experience in graduate school writing reports efficiently - this takes practice and is a skill to develop. I find many interns enter their internship year having experienced that allowed up to 3 months to write a report after testing; tightening up this timeline to meet the demands of clinical practice is oftentimes a growth edge for incoming interns.
	There seems to be a lack of quality, integrated reports being done by students as evidenced by the work samples in their applications for internship.
	More education about the Exner scoring system for Rorschach.
	Increased training on providing testing to both children and adults. Increased training on projectives
	More hand-on experience. Interns are coming with VERY little knowledge.

APPENDIX L

Write-In Responses for Questionnaire Item #32

"Please add anything else you would like to offer regarding psychological assessment training and practice at the internship level that was not covered in this survey."

Internship Setting	Verbatim Response
CON	We have noted that many interns have some experience with integrated report writing during their graduate training, but receive little to no formal training in how to conduct a full psychiatric diagnostic evaluation prior to the internship year.
	It is difficult to answer questions for a consortium, since each site is different.
	Our interns as well as professionals in our field frequently utilize standardized behavioral, social-emotional, and adaptive measures in their assessment practices.
	I'd like to see students more enthusiastic about testing and being mindful that this is what sets us apart from other mental health providers.
	Too many academic programs aren't training their students in R-PAS in spite of substantial evidence-base. This puts great pressure on our site to train everyone in it since it's widely used in our system.
PC	Students should also have an understanding of the difference in testing adults vs. children. For example, different approaches and strategies must sometimes be used with children and adolescents. In addition, developmental factors are crucial when assessing children.
	When students are applying to internship, make sure they understand that an integrated battery would have to include more than 1 test - otherwise, what are they integrating it with? (Other than only history).

Questionnaire Item #32: “Please add anything else you would like to offer regarding psychological assessment training and practice at the internship level that was not covered in this survey.”

Internship Setting	Verbatim Response
SCPH	We are finding that fewer and fewer applicants have training in projective testing, yet we still use projective measures on occasion at our inpatient facility. Additionally, one of the most significant challenges reported by supervisors is trainees' limited ability to integrate test data in reports and to account for discrepancies in data.
	I have been training interns for 20 years and the quality and quantity of assessment training has decreased. Certain professional schools produce students who report assessment experience, but do not understand psychometrics, standard scores, test error and are only able to "interpret" tests relying on computer-generated interpretation.
	Psychological testing is the one unique skill that Psychology has compared to other disciplines and it is important that those in our field be well-trained in their use.
	Overall, when we evaluated potential interns' APPIC applications, we have generally noticed a significant decrease in their experience with projective measures in particular. Intern applicants and interns at our site also have a significant need for training in integrating testing results into their reports.
UCC	We also started using the Social Responsiveness Scale-2 to screen for Autism Spectrum Disorder with adults.
	Counseling Center settings don't emphasize as much overall.
	We had been requiring full personality batteries for many years as part of the internship. However, due to an increasing clinical demand for therapeutic services, inability to determine intern competence based on two batteries, and not enough staff, we decided to not require it any longer. We now focus on risk assessment and diagnostic assessment.
	A challenge (at least in a college counseling setting) to effectively implementing quality testing training relates to time allocation. Should interns be allotted several hours per week to perform/score/interpret tests? If so, this diminishes the number of regular clients they might consistently schedule. However, providing relevant testing time on an ad hoc basis potentially interrupts services provided to regularly scheduled clients.

Questionnaire Item #32: “Please add anything else you would like to offer regarding psychological assessment training and practice at the internship level that was not covered in this survey.”

Internship Setting	Verbatim Response
UCC	We must continue to emphasize and offer training in assessment. It is an important part of treatment, and a fundamental part of the professional identity of a psychologist
VAMC	In my experience, internship programs are generally equipped to improve psychological assessment skills but do not have the time to train. Interns with a basic range of neurocognitive and personality assessment skills are much better able to generalize to new assessments. Many interns have also not been training in integrating findings into a broader case conceptualization and to provide meaningful recommendations from the data. All students should get some experience with cognitive screening at least, even if they don't get experience with a wide variety of neuropsychological tests. With the growth of our geriatric population all psychologists need this skill. They should be exposed to instruments such as Cognistat, MOCA, SLUMS, and MMSE and taught how to describe the findings of these tests and how to integrate those findings into a report that includes history, chart review, and symptom presentation. Assessment has certainly changed. Rarely do people complete comprehensive batteries that cover a wide range of psychological domains. Everything seems to be very problem focused and often only 1-2 measures are used. We have been working hard in our program to figure out how to KEEP psychological testing alive and relevant. Difficulty on this within this large managed care environment. Many prospective interns seem to only have neuropsych experience and it would be valuable to ensure that they are trained in a wide range of assessment measures.
CMHC	Over the past few years, during our intern recruitment and selection process, we have noticed a decline in the amount of academic and practicum experience in testing. I find this distressing since psychological assessment continues to be needed, and it is the domain of clinical work that only psychologists can do.

Questionnaire Item #32: “Please add anything else you would like to offer regarding psychological assessment training and practice at the internship level that was not covered in this survey.”

Internship Setting	Verbatim Response
CMHC	This is an important service that helps people, but it can also be superficial and irrelevant. Trainers need to understand the science and economics of healthcare to know how to contribute to it. Therapy without assessment is weak. The list of test items did not include child tests so when I chose the MCMI we actually use the MACI or M-PACI and instead of the MMPI-2 we use the MMPI-A. Other child tests were not included in this survey (i.e., NEPSY-II) which is used more frequently with children than the DKEFS. Due to the deficiencies in teaching testing at the academic sites, we have had to reduce the number of batteries required. Our site used to require 15 batteries, then we reduced it to 12 and now it is at 8. Supervising students who have a lacking knowledge base and less experience requires more time and so we have essentially lowered our standards. Additionally, many of the students struggle with conceptualization and writing. Prepare student better through greater opportunities for experience using and receiving supervision in major psych tests AND writing integrated reports. Most students are significantly UNDER-PREPARED. Despite us not offering batteries, student's pre-existing ability to understand and interpret testing is important in terms of school advocacy and parent support.

APPENDIX M

IRB Exemption Notice

PEPPERDINE

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NOTICE OF APPROVAL FOR HUMAN RESEARCH

Date: January 11, 2018

Protocol Investigator Name: Katelyn Grusecki
Protocol #: 17-11-674
Project Title: THE RELATIONSHIP OF INTERNSHIP SETTING TO INTERNSHIP DIRECTORS PERSPECTIVES ON PSYCHOLOGICAL ASSESSMENT

School: Graduate School of Education and Psychology

Dear Katelyn Grusecki:

Thank you for submitting your application for exempt review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46.101 that govern the protections of human subjects.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Since your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event.
Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual at community.pepperdine.edu/irb.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require

clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,

Judy Ho, Ph.D., IRB Chair

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives
Mr. Brett Leach, Regulatory Affairs Specialist