# Pepperdine University

# Graduate School of Education and Psychology

# THE RELATIONSHIP OF INTERNSHIP SETTING TO INTERNSHIP DIRECTORS' PERSPECTIVES ON CULTURAL COMPETENCE IN PSYCHOLOGICAL ASSESSMENT

A clinical dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Psychology in Clinical Psychology

by

Micharra Joshua

July, 2020

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



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This clinical 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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# **DEDICATION**

To my mother, the personification of strength, wisdom, and grace. For your endless and unwavering support, and the exemplary model of perseverance that you are, I thank you.



#### **ACKNOWEDGEMENTS**

All praise to the Most High. To my dissertation chairs, Dr. Keatinge and Dr. Mitchell, I am tremendously grateful for your motivation and support throughout the years. You believed in my abilities when I doubted myself. Thank you. Dr. Cohen, you have supported me from the beginning of my journey as a doctoral student. The knowledge that I have attained under your tutelage has been priceless, and I am so grateful. Dr. Rowe, from you, I have learned to never allow my voice to be silenced. Your mentorship and support have impacted me tremendously, and I now walk in confidence. My thanks to you! Dr. Bryant-Davis, thank you for sharing your wisdom and having faith in me when I questioned myself. Dr. Newsom, for your guidance, training, and encouragement to care for myself, I am so grateful.

To my dear sister, the strongest, most talented, and beautiful person that I know, you supported me when I believed I could not continue. You lifted me when I could not stand. I love you. Thank you. My sister-friend, Marlene, I would not undertake this journey of a doctorate with anyone other than you. My sister, thank you for being you. Katy, I could not have persevered without you, and I am forever grateful. To my husband, Jason, you are my rock and I am grateful to have you by my side during this journey. Thank you! Pastor Victor Bell and the Praise House Worship Center Praise Team, all of my thanks to your support and understanding. I am grateful to you. Victoria & Holly, thanks for the cuddles. Daddy, I hope that I have made you proud. I'm a doctor now.



#### VITA

#### Micharra Joshua

#### Education

**Pepperdine University**, *Los Angeles*, *CA* Doctor of Psychology - Clinical Psychology

September 2015 – Present

Clinical Tracks: Multicultural Psychology, Cognitive Behavioral Therapy

Dissertation: The Relationship of Internship Setting to Cultural Competency in Psychological

Assessment

Defended: July 3, 2019

Dissertation Chairs & Committee: Cary Mitchell, Ph.D., Carolyn Keatinge, Ph.D., Daryl Rowe, Ph.D.

**Expected Graduation**: August 2020

#### Columbia University (Teachers College), New York, NY

Master of Arts - Clinical Psychology

February 2011

Clinical Emphasis: Personality and Psychopathology

Thesis: An Examination of Bullying as a Predictor of Violence Amongst Youth

# University of California, Irvine, Irvine, CA

Bachelor of Arts - Psychology and Social Behavior

June 2007

#### **Honors and Awards**

Pepperdine University Diversity Award, *Graduate School of Education & Psychology* September 2015 – Present

Pepperdine University Colleagues' Grant, *Graduate School of Education & Psychology*. September 2015 – Present

University of California, Irvine, *Tau Sigma National Honors Society* September 2006- June 2007

University of California, Irvine, School of Social Ecology, Graduated Cum Laude June 2007

#### **Clinical Experience: Predoctoral Internship**

#### **Psychology Intern**

Louis Stokes Veterans Affairs Medical Center (VAMC)

Cleveland, OH

#### APA Accredited Internship program

Rotation 1: Veterans Addiction Recovery Center (VARC)

August 2019-December 2019

Supervisor: Joshua L. White, Psy.D.

• Worked on a hospital interdisciplinary team to provide treatment to veterans who are in recovery for the use of following substances (i.e., cocaine, heroin, alcohol, methamphetamine, cannabis, and tobacco)



- Conducted psychosocial assessments, individual therapy, and group therapy upon veterans' admission to the drug residential treatment program
- Developed individualized treatment plans based on veterans' needs, substance history, and psychosocial challenges to aid the recovery process

Rotation 2: Inpatient Psychiatric Unit (Cares Towers 6)

December 2019-April 2020

Supervisor: William Ajayi, Ph.D.

- Worked on an interdisciplinary team to treat veterans who were acutely mentally ill and required crisis intervention, de-escalation and stabilization
- Facilitated groups to support veterans' recovery process and conducted psychological testing for diagnostic clarification
- Provided treatment recommendations to triage veterans to appropriate level of care upon their discharge from the unit

Rotation 3: Domiciliary

April 2020- August 2020

Supervisor: Kerry Renner, Ph.D.

- Provided psychological services to veterans who were homeless, resided at the domiciliary, and were diagnosed with co-occurring disorders
- Conducted groups to assist veterans with acquiring skills to aid in their recovery
- Administered psychological assessment measures to provide diagnostic clarification and inform future treatment

#### **Psychology Extern**

VA Los Angeles Ambulatory Care Center

Los Angeles, CA

Supervisor: Kimberly Newsom, Ph.D.

August 2018 - Present

- Provided individual therapy services to U.S. veterans who endured severe trauma (i.e., military sexual trauma, combat trauma) and suffer from PTSD, depression, and anxiety.
- Facilitated a psychology group for World War II Veterans who suffered from PTSD and selected topics that were applicable to the older adult population (i.e., nutrition and mental health, exercise and mental health, managing grief and loss)
- Facilitated structured cognitive behavioral groups to assist veterans with managing anxiety and depression
- Facilitated an unstructured group that assisted veterans with managing depression
- Attended didactics, seminars, and trainings on specific evidence-based practices

#### **Psychology Extern**

Metropolitan State Hospital

Norwalk, CA

Supervisor: Alisa Lite, Psy.D.

September 2017 - Present

- Received referrals from unit psychologists to conduct comprehensive assessments for patients who were deemed by the courts as Incompetent to Stand Trial, Not Guilty by Reason of Insanity, or civilly committed to the hospital
- Conducted routine suicide and violence risk assessments in addition to competency evaluations and brief cognitive screenings upon patients' admission into the hospital
  - O Wrote Admission Psychological Assessment (APA) after conducting these assessments to document patients' mental status and potential barriers to court competency restoration upon admission
- Consulted with supervisor in the development of test batteries to select appropriate psychodiagnostic measures based on the referral questions and reported deficits of the patients



- Conducted clinical interviews and chart reviews to gain comprehensive information regarding patients' histories and ongoing treatment prior to administering assessment measures
- Wrote integrated assessment reports that consisted of test results and their interpretations, answers to referral questions, and recommendations to assist with patients regaining their competency to stand trial or possible discharge
  - o Provided clinical judgment and clinical data in assessment reports when competency was unlikely to be restorable
- Provided weekly individual therapy to state hospital patients to assist them with managing their symptoms and daily stressors of residing in a forensic unit
- Co-facilitated a CBT for psychosis group on the female unit, to assist patients with gaining
  insight to their mental health and provide them with strategies to manage ongoing symptoms of
  psychosis
- Participated in ongoing didactics and conferences to enhance clinical skills and sharpen critical thinking when conceptualizing clients and their cognitive deficits during assessment phases (i.e. chart reviews, clinical interviews, assessments, report writing)

#### **Psychology Extern**

Ventura Youth Correctional Facility Camarillo, CA

Supervisor: Amanda Wolf, Ph.D.

August 2016 – July 2017

- Provided weekly individual therapy utilizing cognitive-behavior and dialectical behavior approaches, adapted for the purpose of increasing insight in male and female juvenile offenders
- Conducted interventions to assist in the development of effective strategies for coping with specific symptoms, and ultimately re-entry into society
- Co-facilitated weekly group sessions to assist juvenile offenders with managing their emotions and handling difficult feelings
- Administered Psychosis Screening Questionnaires (PSQ) to youth upon their entry into the facility to determine if an immediate mental health referral was required and screened if youth were an immediate danger to themselves or others
- Wrote case formulations and individual treatment plans to specify the juveniles' courses of treatment during incarceration
- Administered, scored, and interpreted cognitive and personality assessment measures to determine level of care and confirm diagnostic questions

#### **Psychology Extern**

Pepperdine University

Encino, CA

Supervisor: Anat Cohen, Ph.D., Anett Assilian, Psy.D.

September 2015 – August 2018

- Provided outpatient therapy to diverse populations including: children, adults, adolescents, and families, dealing with challenges such as: depression, anxiety, trauma, substance abuse, anger management, marital discord, and bereavement
  - Children of the Night in association with Pepperdine Community Counseling Center
    - Provided individual psychotherapy, utilizing a cognitive behavior approach to children and adolescents ages 11-17 who suffered the trauma of child sextrafficking, sexual and physical abuse, substance abuse, and self-injurious behaviors
    - Collaborated with COTN inpatient facility staff to provide individualized psychological services



- Attended didactic training sessions on the topics of trauma, multiculturalism, and crisis management to effectively serve children who are victims of trauma
- Wrote case notes on a weekly basis to provide documentation for client's progress, while maintaining designated deadlines
- Met with clinical supervisors twice a week (individual and group supervision) to discuss strategies for assisting clients and developing clinical skills

#### **Trainings & Seminars**

HCR-20, Violence Risk Assessment, Fitness Interview Test-Revised (*Metropolitan State Hospital*) Acceptance Commitment Therapy (ACT), Cognitive Processing Therapy (CPT), Imagery Reframing Therapy (IRT) (*VA Los Angeles Ambulatory Care Center*)

Acceptance Commitment Therapy (ACT) Bootcamp (Praxis Training/Education)

CBT for Substance Use, Suicide Prevention and Response (SPAR) (Ventura Youth Correctional Facility)

### **Research Experience**

Pepperdine University - Applied Science Community Lab (ASC)

September 2015 - Present

Los Angeles, CA

Lab Emphasis: Psychological Assessment

Dissertation Chairs: Carolyn Keatinge, Ph.D. & Cary Mitchell, Ph.D.

Dissertation: The Relationship of Internship Setting to Cultural Competency in Psychological Assessment

Defended: July 3, 2019

#### Staff Research Associate II

*University of California, Irvine, Center for Evidence-Based Corrections Irvine, CA* 

Supervisor: Susan Turner, Ph.D.

October 2011 - June 2012

- Examined the relationship between drug use and rehabilitation amongst parolees to determine if swift and certain sanctions assist parolees with their rehabilitation
- Investigated if implementing a 'social work' type of case management in the California Parole System would also assist parolees in their rehabilitation
- Collected data in the field and observed the interactions of operations with the participants (at the parole unit)
- Managed a database and entered data to document participants' progress throughout the pilot study
- Conducted manual file reviews and screened participants for eligibility, utilizing a California Parole Database
- Assisted UCI researchers with the random assignment of participants into control and experimental groups to ensure that all participants had an equal chance of group assignment
- Comprised a biweekly report on the participants' statuses, and progress through the pilot study
- Served as a liaison between UC Irvine and the California Department of Corrections and Rehabilitation to keep both parties informed on the progress of the study

#### **Research Assistant**

Columbia University (Teachers College)

New York, NY

Supervisor: Lena Verdeli, Ph.D.

January 2010 - December 2010

- Wrote article summaries to assist doctoral students with dissertation studies as needed
- Participated in monthly meetings to formulate plans and ideas for future research



#### Research Assistant/Visit Coordinator

University of California, Irvine

Irvine. CA

Supervisors: Meret Keller, Ph.D., Wendy Goldberg, Ph.D.

July 2006 - September 2007

- Coordinated research visits for a study to examine the effects of mother-infant co-sleeping on relationships within the family, working directly with mothers and their children
- Administered questionnaires to participants to assess co-sleeping patterns amongst mothers and their infants
- Rated the participants' "mother-child" interactions with scales that examined the mothers' sensitivity to their children's needs

#### **Teaching Experience**

#### **Teacher's Assistant**

Pepperdine University Graduate School of Education and Psychology (Encino & Malibu Campuses) Malibu, CA

Supervisor: Thema Bryant-Davis, Ph.D.

August 2016 – December 2017

Class: Trauma in Diverse Populations

- Working under the supervision and guidance of the instructor and providing assistance with grading papers, midterms, and final exams
- Providing a guest lecture per semester to enhance teaching skills and experience
- Assisting with the development of slide shows to promote student engagement and participation
- Contributing to the delivery of personal academic support and feedback on assignments for groups of graduate level students

#### **Guest Lecturer**

Pepperdine University Graduate School of Education and Psychology (Malibu Campus)

Malibu, CA

Fall Semester, 2017

Class: Multicultural Counseling

- Guest lectured for graduate level Master of Arts and Marriage and Family Therapy students at Pepperdine's Malibu Campus
- Reviewed the topic of assigning culturally sensitive diagnoses, conceptualization, and interventions
- Facilitated class discussions on clinical vignettes to promote critical thinking when conceptualizing clients and considering contextual factors that may be mistaken as psychopathology
- Discussed the process of selecting appropriate assessment measures/tools based on the cultural background and context of the patient

#### **Guest Lecturer**

Pepperdine University Graduate School of Education and Psychology (Encino Campus)
Encino, CA
Fall 2016, Sp

Fall 2016, Spring 2017

Class: Trauma in Diverse Populations

- Provided a guest lecture for graduate level Marriage and Family Therapy students, at Pepperdine's Encino Campus
- Covered the topic of Human Sex Trafficking, its impacts on adults and youth, and culturally sensitive interventions for this population
- Promoted scholarly discussion of the topic and provided case vignettes for the students' understanding of the impacts of human sex trafficking



## **Psychology Instructor**

Los Angeles Community College District, Project MATCH Los Angeles, CA

Supervisor: Staci Atkins, LCSW

May 2013 – December 2013

- Co-instructed a college level psychology course within the discipline of psychology, to assist with
   promoting academic excellence amongst students
- Presented lectures in a clear and concise manner, based on course material and student learning outcomes
- Utilized tools (i.e. media, handouts, props, activities) to enhance lectures, maintain student engagement, and stimulate interest within the discipline of psychology
- Served as a figure of support and a resource for students who wished to pursue academic success
- Assisted mentor with developing midterm/final questions, classroom activities, and additional assignments to enhance the learning experience of students.

# **Professional Experience**

#### Case Manager

Telecare Corporation Los Angeles, CA

Supervisor, Jacqueline Bravo, LCSW

March 2013 – July 2015

- Provided intensive case management and clinical services to adults who suffered from severe and persistent mental illness
- Charted clients' progress, utilizing Los Angeles County Department of Mental Health paperwork
- Made regular visits to clients' residences to keep track of their progress and promote medication compliance
  - Provided conflict resolution if clients experienced behavioral challenges at their board and cares/housing facilities
  - Assisted clients in acquiring skills to complete daily tasks (i.e. budgeting, scheduling doctors' appointments, attending court hearings)
- Assisted clients in pursuing their recovery and long-term goals
- Provided clients support in establishing SSI payments, and developing independent living skills
- Developed and implemented individual treatment plans for clients, to assist them in developing coping skills and utilizing resources within the community
- Worked as the site's Housing Specialist and liaison with the Los Angeles Housing Authority Department
  - Assisted clients with completing documentation for shelter plus care (section 8 housing)
  - o Attended meetings with clients for their housing authority meetings

#### **Phone Counselor**

Community Helpline Palos Verdes, CA Supervisor: Tina Cruz

February 2013 – June 2013

- Listened to individuals who called the hotline, and requested a person to express their concerns to
- Provided support, and assisted callers in identifying options to cope with their challenges
- Documented calls and debriefed staff on of areas of concern (i.e. suicidal callers, repeat callers)
- Assessed if callers were a danger to themselves or others, and provided referrals as needed



#### **Youth Care Worker**

Boys Town: Lennar Campus

Compton, CA

Supervisor: Ranita Richmond

November 2007 - July 2008

- Taught at risk and delinquent youth between the ages of 11-17 social skills to assist with their rehabilitation back into society
- Performed de-escalation and crisis intervention to teach youth how to utilize self-control, and refrain from inappropriate behaviors
- Worked with a clinical team to implement an individualized treatment plan for each youth to focus on specific areas of growth

## **Community Outreach Experience/Presentations**

#### Presenter

Portola Middle School in association with Pepperdine Community Counseling Center
Tarzana, CA
October 2017 & May 2016

- Lead a group of doctoral students in an anti-bullying presentation to approximately 400 middle schoolers to raise bullying awareness
- Provided students with examples of the impacts of bullying and being a bully
- Promoted cohesion amongst the students as a tactic to decrease the incidences of bullying on campus (i.e. help peers by reporting bullying and standing up to bullies)
- Co-facilitated discussions with the students on their personal experiences with bullying, to provide support to those who have been bullied and bystanders
  - Co-facilitated awareness on the impacts of specific forms of bullying (i.e. cyber bullying, physical and relational aggression) and discussed populations that are particularly at-risk (i.e. LGTB, persons of color)

#### Presenter

Lanai Road Elementary School in association with Pepperdine Community Counseling Center Encino, CA

March 2016

- Co-facilitated a presentation on bullying to elementary-aged school children
- Promoted discussion on the impacts of bullying to provide an awareness at the school
- Encouraged students to identify bullying in presented scenarios and provided them with tools to deal with bullying (i.e. reporting the bullying, supporting a friend)
- Supervised the artistic expression of anti-bullying through the creation of posters by the students

#### Mentor

Columbia University- Upward Bound & Talent Search Programs New York, NY

October 2010 - December 2010

- Coached inner-city youth to assist with their college applications and personal statements
- Advised youth with choosing the appropriate college/university and the best programs that suited their needs
- Provided support and guidance to youth with their academic achievements to promote success

#### Intern

VIP Mentors Fullerton, CA

Supervisor: Will Mittendorf, Ph.D.

March 2007 - July 2007

• Interviewed and screened parolees to ensure their willingness to utilize the program for the assistance of their successful re-entry into society



- Screened and interviewed attorneys to successfully match them with a parolee to serve as a mentor
- Presented to parolees at community rehabilitation meetings to recruit participants for the program

# **Activities**

Active Minds, Black Student Network (Columbia University, Teachers College Chapters New York, NY)

**Certifications** Mental Health Rehabilitation Specialist (2013)



#### **ABSTRACT**

Psychological assessment represents a core competency and a highly specialized skill in professional psychology that is central to the identity of many practicing psychologists. However, more research is needed on the quality of assessment training that psychology doctoral students receive, particularly in relation to developing competence in the assessment of diverse individuals and groups. Moreover, diversity-related considerations for assessment should be broad and incorporate dimensions that include age, gender, gender identity, ethnicity, religion, sexual orientation, disability, language, socioeconomic status, and other factors. This clinical dissertation consisted of an archival study that examined predoctoral internship directors' perspectives on their interns' preparation to conduct psychological assessment with diverse populations. The study also examined: the impact of evidence-based practice on assessment in internships; the types of recently introduced assessment measures; and the measures internship directors would like to see introduced in the future. The study utilized a subset of data from a national survey of predoctoral internship directors (Bates, 2016; Faith, 2016; Shipley, 2019). The six most frequently occurring internship settings in the parent study were selected for focus in the current study and they were: Consortium programs (CON), Prisons/Correctional settings (PC), State/County Public Hospitals (SCPH), University Counseling Centers (UCC), Veterans Affairs Medical Centers (VAMC), and Community Mental Health Centers (CMHC). There were 124 internship directors in the present study, all from APPIC-member programs. Results indicated that overall, internship directors were somewhat satisfied with their beginning interns' preparation to conduct psychological assessment with diverse populations. Satisfaction levels differed significantly across internship settings, with CON and PC directors reporting higher mean satisfaction. There were no significant differences across groups in the perceived impact of evidence-based practice on assessment in the internship settings. Regarding recently introduced and desired measures for the future, internship directors often mentioned abbreviated versions of traditional measures, symptom-focused measures, Spanish language versions of measures, and measures for younger children. The critical importance of training for cultural competence in



psychological assessment is stressed. Other findings, study limitations, and suggestions for future research are also explored.



# **Chapter I: Introduction**

# **Individual and Cultural Diversity: A Core Competency**

According to the American Psychological Association's (APA) Code of Ethics (2002), psychologists must be aware and respectful of the following when working with their clients: "age, gender, gender identity, race, ethnicity, national origin, religion, sexual orientation, disability, language, and socioeconomic status" (p. 1063). In doing so, they are required to be aware of their own biases, and to not "knowingly participate in or condone activities of others based upon such prejudices" (p. 1560). Moreover, the Code of Ethics (2002) states that when working with persons who differ in regard to the aforementioned considerations of diversity, it is necessary for psychologists to obtain "training, experience, consultation, or supervision" that is needed to provide effective and competent services or provide referrals (p. 1064). Thus, an emphasis on training in diversity is essential, when providing clinical services to clients, including psychological assessment.

The professional literature provides various descriptions of cultural competence (Leong & Kim, 1991; Okazaki, 1998; Rogler et al., 1987; Sue et al., 1982; Stuart, 2004). Stuart (2004) defines multicultural competence as one's ability to "understand and constructively relate to the uniqueness of each client" while considering "diverse cultures that influence each person's perspectives" (p. 6). Dana et al. (1992) described cultural competence as, "The ability to provide services [clinical interventions and psychological assessment] that are perceived as legitimate for problems experienced by culturally diverse persons" (p. 221). There is emerging literature on implementing culturally competent psychological assessment for diverse groups (Okazaki, 1998). Specifically, researchers and clinicians are beginning to provide recommendations for this



task. Stuart (2004) provides 12 suggestions for achieving multicultural competence during the provision of therapy and assessment services (See Figure 1).

Figure 1

Twelve Suggestions for Achieving Multicultural Competence

- 1. Develop skill in discovering each person's unique and cultural outlook.
- 2. Acknowledge and control personal biases by articulating your worldview and evaluating its sources and validity.
- 3. Develop sensitivity to cultural differences without overemphasizing them.
- 4. Uncouple theory from culture.
- 5. Develop a sufficiently complex set of cultural categories.
- 6. Critically evaluate the methods used to collect culturally relevant data before applying the findings in psychological services.
- 7. Determine a means of determining a person's acceptance of relevant cultural themes.
- 8. Develop a means of determining the salience of ethnic identity for each client.
- 9. Match any psychological tests to client characteristics.
- 10. Contextualize all assessments.
- 11. Consider clients' ethnic and world views in selecting therapists, interventions goals, and methods.
- 12. Respect clients' beliefs, but attempt to change them when necessary.

According to Hansen (2002), when diversity is considered in the field of psychology, emphasis is placed on the "four historically underserved ethnic groups" (p. 205). These groups include: African American, Asian American, Latin American, and Native American persons. Hansen (2002) argues that while individuals of these four ethnic backgrounds are representative of diversity, this list is not comprehensive. Therefore, Hansen (2002) states that diversity training should include emphasis on the eleven dimensions of difference that are listed in the APA Code of Ethics (2002).

When considering cultural competence and its intersection with psychological assessment, a number of recommendations have been made (Dana, 2002; Hansen, 2002; Stuart, 2004). For example, Hansen (2002) describes specific training for psychology doctoral students, currently utilized at a doctoral program. This training consists of 15-hour didactics for training in



cultural competence in psychological assessment. These didactics facilitate extensive discussion of students' cultural identity and cultural countertransference they may experience at their practicums. Additionally, students engage in discussion about the concepts of culture, race, ethnicity, and biases within psychometric tests. Students are also trained in assessing their clients' cultural orientation and also training in the multicultural assessment model developed by Dana (2002). This model functions under the premise that culture is heterogeneous, and thus clients' culture should be assessed, to determine if culturally-specific assessment instruments are needed. Dana (2002) states that this practice increases the reliability of measures and results in more accurate diagnoses.

A nationally representative study on the U.S. population (N = 9,282) examined the utilization of mental health services within a 12-month period (Wang et al., 2005). Of the participants who endorsed a history of mental illness, 41% reported the utilization of mental health services. Further, 17.9% of the entire sample reported utilizing mental health services within a 12-month period (Wang et al., 2005). Individuals of diverse populations, however, utilized mental health services less frequently than individuals of European decent. This disparity was attributed to diverse populations lacking resources (i.e., funding, health insurance), which impeded their ability to attain services. Wang and coauthors (2005) posited that individuals of diverse populations might also be apprehensive about seeking services due to perceived prejudice or bias from healthcare professionals. The disparity can also be explained by findings stating that some diverse populations may rely on spiritual, and communal networks to manage mental health symptoms (Abe-Kim et al., 2004). Hence, when performing psychological assessment, cultural competency is critical to effectively serve diverse populations (Uzzell et al., 2013).



Fouad et al. (2009) developed a model to describe competency benchmarks for professional psychology associated with different levels of training or development, from practicum to pre-doctoral internship to postdoctoral practice. The model includes benchmarks related to individual and cultural diversity. Proficiency in working with diverse populations is a requirement of this model (see Figure 2), and the diversity-related expectations apply to psychological assessment as well.



#### Figure 2

Competency Benchmarks: Individual and Cultural Diversity

1. 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

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



According to the diversity-related competency benchmarks that Fouad et al. (2009) proposed, readiness for internship involves more than knowledge, sensitivity, awareness, and understanding. Internship readiness in professional psychology includes the ability to apply such skills to treatment, assessment, and consultation of diverse others. Psychology interns must be aware of themselves and what they contribute to the assessment experience through their own individuality and culture, in order to effectively utilize psychological assessment when working with diverse populations (Fouad et al., 2009). The authors identify three core areas that demonstrate a psychologist's expected skills in cultural sensitivity as awareness of:

Self as shaped by individual and cultural diversity... Others as shaped by individual and cultural diversity...and Interactions of self and others 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. (Fouad et al., 2009, pp. S13-S14)

The emphasis on cultural sensitivity training in assessment courses is discussed in the literature. Hansen (2002) notes that this specialized training is a requirement for doctoral education in applied fields such as clinical psychology. Moreover, Hansen (2002) refers to "culture-specific assessment procedures and tools," which promote proficiency in assessing issues that are significant to certain groups (p. 202). The author also refers to developing proficiency in adjusting assessment tools contingent on the needs of the examinee (Hansen, 2002).

Puente and Agranovich (2004) attest to the need for cultural sensitivity in assessment.

Their article focuses on the lack of cultural awareness, specifically in neuropsychological



assessment. They posit that neuropsychology is often taught and practiced based on the notion that all behavior is the same, which is not a culturally sensitive notion. Thus, an inaccurate understanding of behavior is often perpetuated in psychology, which all too often is based on the behavior of Caucasian, Western males. This is also an argument that privileges Western culture, which is the presumed standard. Puente and Agranovich (2004) also observe that a frequent approach in cognitive assessment is to attempt to enhance the cultural sensitivity of methods through the development of non-verbal items and measures. Clearly, much more is needed for neuropsychological assessment to truly be conducted in a culturally sensitive manner. Thus, further discourse and investigation in this area is warranted to produce culturally sensitive neuropsychology instruments and psychological assessments overall.

Nonetheless, too frequently it is falsely presented that all cultures think alike and utilize strategies and styles of cognition that are based again on individuals who are Western,

Caucasian, and male (Ardila, 2007). Clients may have varying attitudes toward testing, which can impair an assessor's ability to attain valid test results/data. Further, it is noted that in assessment, time/speed is also a factor, which is influenced by Western society, whereas moving slower can be interpreted as a cognitive limitation (Ardila, 2007). In contrast, moving slowly to achieve a task may be more culturally congruent for diverse populations. Hence, the presence of cultural competency and cultural awareness while conducting psychological assessment is vitally important for valid and ethical assessment with diverse clients (Puente & Agranovich, 2004; Ardila, 2007). Hansen (2002) emphasizes the importance of interpreting results through a cultural lens and acquiring skills in relaying assessment results in a "culturally sensitive manner" (p. 201). As noted earlier, pre-doctoral interns are expected to show cultural sensitivity when providing services to clients and also when selecting measures to administer (Fouad et al., 2009).



Krishnamurthy and colleagues (2004) touch on the importance of "cultural selfawareness" in psychological assessment and the need to utilize measures that are characterized by sensitivity to cultural diversity (p. 737). Cultural self-awareness is defined as being aware of one's biases and beliefs, which can impact the examiner's views and interactions with the client (Krishnamurthy et al., 2004). Krishnamurthy et al. (2004) posit that many internship directors lack expertise in this area and they suggest that the training directors may also require further training. López (2002) describes training that is provided to students at his academic institution. He presents a discussion of bridging the gap between traditional assessment and "multicultural assessment issues" (p. 227). He describes unique training strategies that he provides to students to evoke an awareness of the need for training in multicultural/diversity issues. López (2002) also discusses another goal of his assessment training, which is to support students in becoming aware of their own biases and how they can further influence their conceptualization and assessment of clients. Thus, training in diversity and multicultural issues contributes to further meeting the needs of clients by preparing clinicians to view clients' challenges through a culturally sensitive lens. It is likely that these are the types of experiences that help graduate students become prepared for assessment with diverse populations at the internship level and beyond.

The purpose of the present study was to explore predoctoral internship directors' perspectives on psychological assessment in regard to diversity and other contemporary issues across six major categories of internship setting. This archival study focused on directors' appraisal of: beginning interns' readiness for assessment of diverse populations; impact of evidence-based practice on psychological assessment in internship programs; and both



experienced and desired changes in psychological measures utilized. Before additional details are provided, relevant aspects of the literature will be considered.

# **Psychological Assessment: A Core Competency**

Regarded as a core competency for clinical psychologists, psychological assessment has been referred to as a "hallmark" of the field of professional psychology (Goldstein et al., 2004, p. ix). The practice of psychological assessment is a competence area that is largely specific to psychologists and is a distinguishing factor from other healthcare professionals (Groth-Marnat, 2009). Psychological assessment is also an integral component of the training of psychology doctoral students (Fouad et al., 2009). Clemence and Handler (2001) conducted a survey that reviewed the prominence of psychological assessment's role at 329 pre-doctoral internship programs in psychology. These internship programs included the following settings: university counseling centers, community mental health centers, child facilities, Veterans Affairs Medical Centers, state hospitals, private general medical centers, medical schools, and private psychiatric hospitals. The study demonstrated that 41% of the respondents administered psychological testing and assessment to clients at these settings. In addition, 99% reported that introductory training in assessment was offered and provided to interns at their sites, indicating that predoctoral interns are not always prepared for conducting psychological assessment. The study also found that training in projective tests (i.e., Rorschach, TAT), is highly desirable, especially in particular internship settings (e.g., psychiatric hospitals). These findings indicated that psychological assessment plays a pivotal role in pre-doctoral internship sites and strongly supported the practice of students receiving training in this area of specialization. Moreover, it can be surmised that assessment-related measures, training, needs, etc., may vary across internship settings.



Assessment is frequently utilized by psychologists who provide clinical services and is considered a pertinent aspect of their training in psychology (Anderson, 2006; Schaffer et al., 2013). Amongst professional psychologists, 10-25% of their work is comprised of conducting psychological assessment (Camara et al., 2000; Watkins, 1991). It is also likely that psychological assessment will be utilized throughout the careers of psychologists. This also shows the relevance of a psychologist's competency in psychological assessment due to its wide utilization in clinical application and practice (Camara et al., 2000).

Krishnamurthy and colleagues (2004) discuss eight core competencies that are critical for competency in psychological assessment (see Figure 3).



#### Figure 3

#### Core Competencies for Psychological Assessment

- 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

The authors report that competency in psychological assessment includes a specialized set of skills to ensure that clients are receiving optimal care and services. It is also pertinent that psychologists assimilate mindsets that facilitate the validity and usefulness of their assessments. To help ensure that psychological assessment is ethical, psychologists must continually consider their clients' cultural and contextual backgrounds, which ultimately impact their lives. These practices also facilitate the process of case conceptualization and psychologists' ability to establish a strong alliance with their clients (Krishnamurthy et al., 2004).



Although there is ongoing dialogue regarding the skills that should be specified as benchmarks for competency in the field of psychology, the American Psychological Association (APA) and the Association of State and Provincial Psychology Boards (ASPPB) agree that psychological assessment is critical to a psychologist's clinical training. Fouad and colleagues (2009) provide benchmarks listing skills that should be exemplified at various stages of one's clinical training: practicum, internship, and professional practice (Fouad et al., 2009). This model posits that trainees who display readiness for internship are skilled at selecting and administering measures that are valid to an individual, given his/her historical and contextual background.

Trainees should also be aware of the strengths and weaknesses of measures that are administered, show skill in scoring and interpreting measures, and display familiarity with technology that may enhance the usefulness of these measures.

Additionally, trainees should display competence in obtaining information, writing progress reports and assessment reports, selecting measures that are appropriate for their clients, and utilizing knowledge regarding normal and abnormal behavior to inform case conceptualization (see Figure 4). Furthermore, competency in psychological assessment is determined by 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).



#### Figure 4

## Competency Benchmarks: Assessment

2. Assessment: Assessment and diagnosis of problems, capabilities and issues associated with individuals, groups, and/or organizations.

#### READINESS FOR PRACTICUM

# 9A. Knowledge of Measurement and Psychometrics Demonstrates basic knowledge of the scientific, theoretical, and contextual basis of test construction and interviewing

# READINESS FOR INTERNSHIP

# Selects assessment measures with attention to issues of reliability and validity

# READINESS FOR ENTRY TO PRACTICE

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 Utilizes case formulation and diagnosis for intervention planning in the context of stages of human development and diversity



# READINESS FOR PRACTICUM

#### **READINESS FOR INTERNSHIP**

9E. Conceptualization and Recommendations

Demonstrates basic knowledge of formulating diagnosis and case conceptualization

Utilizes systematic approaches of gathering data to inform clinical decision-making

READINESS FOR ENTRY TO PRACTICE

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

The Ethical Principles for Psychologists and Code of Conduct list guidelines for the provision of ethical services for clients and further, identify expectations of sound professional practice for clinicians who perform psychological assessment (APA, 2002). Specifically, psychological assessment should be conducted for clinically-relevant reasons such as to address diagnostic questions, to develop treatment recommendations, or to comply with court mandates, etc. A key principle is that informed consent should be obtained from clients who are receiving assessment services. The client's confidentiality must be carefully maintained, and any individual who conducts psychological assessment must be appropriately trained or receive supervision from a clinician who is trained and competent in this aspect of clinical practice. Clinicians must be continually aware of cultural, contextual, and historical factors that may impact a client's performance on psychological tests; they should strive to administer the most updated measures available, and it is important that they provide appropriate feedback to their clients (APA, 2002). These expectations listed in the Ethical Principles for Psychologists and Code of Conduct support the maintenance of high standards for assessment in the field of psychology, and thus, strengthen its role as a core competency.



# **Psychological Assessment Training and Practice**

Training for psychological testing and assessment is evolving, which is to be expected for all aspects of the doctoral-level curriculum in professional psychology. The Association of State and Provincial Psychology Boards (ASPPB), developed the Examination for Professional Psychology Practice (EPPP) in 1964 ensure that licensed psychologists adhere to optimal standards and to facilitate the process of licensure within the United States (Hess, 1979). Currently administered in 49 states, the EPPP is considered the best measure to determine one's knowledge of professional psychology and clinical application (Hess, 1979). According to Stigall (1983), the EPPP examines six areas of competency, the first three of which focus significant attention on psychological assessment: selecting and modifying test instruments, interpreting and reporting assessment results, and devising and implementing a treatment plan based on an interpretation of the results that were acquired during the testing process.

Watkins (1991) examined 30 years of survey findings regarding psychological assessment training and practice. The studies Watkins analyzed reviewed findings from academic program directors, pre-doctoral internship directors, and practicing psychologists. The surveys considered were published between 1960 and 1990. One key finding that was mentioned by Watkins (1991) is that psychological assessment is viewed by internship directors as a skill of importance. Thus, the expectation is that trainees receive appropriate training in this area. Watkins (1991) stated that students are sought out who possess these skills; however, upon the start of internship, many are not prepared in this area. Watkins (1991) also stated that since psychological assessment is regarded as an important skill, students who have received sufficient training in this area are estimated to have an increased likelihood of securing an internship and employment after graduation. Lastly, Watkins (1991) discussed common suggestions for training



in psychology graduate student coursework, noting that training recommendations are typically based on practices of assessment within the professional field of psychology.

Literature is useful for showing the types of assessments that are more prominent within the field of psychology, including which tests are used most often. Childs and Eyde (2002) note that there is an abundance of literature which provides suggestions for clinical training in psychological assessment, however there is a scarcity of literature that shows how this is actually taught in doctoral programs. Childs and Eyde (2002) conducted a survey of American Psychological Association (APA) accredited, clinical psychology doctoral programs and reported on the assessment measures that are most frequently taught to doctoral students (see Figure 5).



Figure 5

Most frequently taught assessment measures

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 -Re-	vised 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

Childs and Eyde (2002) identified the measures that are most prominently utilized in the training of clinical psychology doctoral students. The following measures were those that academic program directors most frequently listed as being included in doctoral training: 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 et al., 1989); the Rorschach Inkblot Test (Exner & Erdberg, 2005); and the Thematic Apperception Test (TAT; Murray, 1943). Instruments that were



reported as less frequently utilized included the following: the Stanford–Binet Intelligence Scale fourth edition (Thorndike et al., 1986), the Bender Visual Motor Gestalt Test (Bender, 1946), the Millon Clinical Multiaxial Inventory–III (MCMI–III; Millon et al., 1994), the Wechsler Preschool and Primary Scale of Intelligence–Revised (Wechsler, 1989), and the Woodcock–Johnson Tests of Achievement–Revised (Woodcock, 1991). The authors reported that doctoral courses in clinical psychology placed emphasis on administering, scoring, and interpreting psychological instruments (Childs & Eyde, 2002).

While the literature indicates stability in what measures have been emphasized in recent decades, newer measures such as the Personality Assessment Inventory (PAI) and the Millon Clinical Multiaxial Inventory (MCMI-III/MCMI-IV) are being utilized more frequently (Belter & Piotrowski, 1999; Camara et al., 1998). Camera et al. (2000) conducted a national survey of clinical psychologists and neuropsychologists to determine what measures were being used by practicing professionals. In regard to clinical psychologists, the findings showed many similarities when compared to what Childs and Eyde (2002) reported was being taught in academic programs. Specifically, clinical psychologists reported utilizing mostly Intellectual/Achievement measures (34%) and Personality/Psychopathology measures (32%). The third most frequently utilized measures consisted of Neuropsychological instruments, which represented 13% of the sample of clinical psychologists. This differed slightly from the results of Childs and Eyde (2002), which ranked the Bender-Gestalt test as the seventh most frequently utilized assessment instrument. Figure 6 shows the measures most widely utilized by practicing professionals, as well as the ranks.



Figure 6

Tests used by clinical psychologists and neuropsychologists

	Clinical psychologists		Neuropsychologists			
Test	Rank	n	Rank	n	Total r	
Aphasia Screening Testa	23	27	17	156	186	
Beck Depression Inventory	10	53	11	200	253	
Bender Visual Motor Gestalt Test	5	112	25	96	208	
Boston Naming Test	42	13	8	209	222	
California Verbal Learning Test	36	18	14	189	207	
Category Test	31	20	9	203	223	
Children's Apperception Test (CAT-A)	16	38	60	29	67	
Conners' Parent and Teacher Rating Scales	18	37	39	57	94	
FAS Word Fluency Test	37	17	5	241	258	
Finger Tapping Test <sup>a</sup>	29	22	6	228	250	
Grooved Pegboard Test <sup>b</sup>	44	12	15	180	192	
Halstead-Reitan Neuropsychological Test Battery	23	27	7	214	241	
Hand Dynamometer (Dynamic Hand Grip Strength Test)	44	12	20	136	148	
Hooper Visual Organization Test	59	8	19	145	153	
House-Tree-Person (H-T-P) Projective Technique	8	60	31	78	138	
Human Figures Drawing Test	13	49	41	55	104	
Millon Adolescent Clinical Inventory	16	38	56	35	73	
Millon Clinical Multiaxial Inventory	10	53	24	100	153	
Minnesota Multiphasic Personality Inventory (MMPI) I and II	2	138	i	359	497	
Peabody Picture Vocabulary Test—Revised	20	34	28	89	123	
Rey Complex Figure Test	25	25	12	196	221	
Rorschach Inkblot Test	4	124	18	153	177	
Rotter Incomplete Sentences Blank	14	45	51	41	86	
Sentence Completion Test	15	40	42	54	94	
Thematic Apperception Test (TAT)	6	107	26	91	198	
Trail Making Test A&B <sup>c</sup>	12	52	4	246	298	
Vineland Adaptive Behavior Scales	18	37	44	51	88	
Wechsler Adult Intelligence Scale—Revised (WAIS-R)	1	151	2	331	482	
Wechsler Intelligence Scale for Children—Revised (WISC-R-III)	3	135	16	178	313	
Wechsler Memory Scale—Revised	9	58	3	257	315	
Wide Range Achievement Test—Revised and III	7	86	9	203	289	
Wisconsin Card Sorting Test	33	19	12 .	196	215	

Studies have also focused on specific instruments that are utilized in internships that are affiliated with the Association of Psychology Postdoctoral and Internship Centers (APPIC). Piotrowski and Belter (1999) surveyed 84 APPIC-affiliated internships and reported a steady emphasis on personality and intelligence measures, concurrent with an increasing emphasis on neuropsychological assessment and a trend toward less emphasis on projective measures. The top listed measures included the following: the MMPI/MMPI-2, Wechsler IQ Scales, and the Rorschach Inkblot Test. Additionally, one of the Millon Inventories (i.e., the MCMI) appeared to increasing in popularity, as it ranked fourth on the list of instruments that the internship directors



considered essential for psychological practice (Piotrowski & Belter, 1999). These findings appeared consistent with other literature discussing the popularity of instruments utilized within the field (Belter & Piotrowski, 2001; Butcher, 2006; Childs & Eyde, 2002; Durand et al., 1988; Norcross & Karpiak, 2012; Piotrowski & Zalewski, 1993).

Psychological assessment has remained a prominent skill for professional psychologists, with assessment applications being reported across various practice settings (Butcher, 2006; Piotrowski & Belter, 1999; Stedman et al., 2000; Weiner, 2012). When clinical psychologists are questioned, a vast majority report at least some utilization of psychological assessment measures (Watkins, 1991). Moreover, when 412 clinical psychologists were surveyed, the majority of respondents reported the utilization of psychological assessment in their clinical practices (Watkins et al., 1995). Of these respondents, 90% report utilizing some form of assessment, with 66% reporting utilizing intellectual assessment, 15% reporting vocational and career assessment, and 13% reporting utilizing assessments that measure abilities/aptitude (Watkins et al., 1995).

In another study, Meyer et al. (1998) highlighted the role of psychology in the training of pre-doctoral level clinicians. Meyer and coauthors stated that a well-trained clinician can integrate test data meaningfully. Moreover, the future of psychological assessment is contingent on the training of future clinicians who can competently produce this quality of work. The production of this quality of work (i.e., producing and integrating test-based assessments) is reliant on rigorous clinical training and clinical supervision, thus raising the question of how well are pre-doctoral level clinicians being trained in the area of psychological assessment.

Gains have been attained through the development of psychological assessment, thanks to its continued importance in doctoral academic programs, practicum sites, and pre-doctoral internships (Clemence & Handler, 2001; Weiner, 2013). Training in psychological assessment is



very prominent in psychology doctoral programs that focus on clinical application (i.e., clinical, counseling, and school psychology). Given that psychology internship directors continue to value pre-internship experience in assessment, developing competency in psychological assessment is necessary to increase the competitiveness of doctoral students when applying for pre-doctoral internships. Moreover, the pre-doctoral internship is a prominent opportunity for students to further build and refine their skills in psychological assessment (Belter & Piotrowski, 2001; Clemence & Handler, 2001; Stedman et al., 2000; Weiner, 2012).

### Pre-Internship Training

Although psychological assessment is a relevant skill within various clinical settings, there is a growing concern regarding the methods in which assessment is taught and how clinicians are trained. Weiner (2013) suggests there has been a decrease in assessment training within clinical psychology doctoral programs, which he believes is a result of misunderstanding its continued relevance to the field psychology. Thus, previous standards of excellence in assessment training may have decreased among many clinical psychology doctoral programs (Weiner, 2013). Weiner further surmises that having a limited understanding of the importance of psychological assessment leads to more limited offerings of assessment courses to students by their academic programs. Further, clinical psychology doctoral programs may be decreasing requirements for assessment training, which decreases motivation for students to engage in research related to assessment. Literature is also showing that there is a disparity between the amount of quality assessment training that is provided in doctoral academic programs and assessment being practiced amongst psychologists (Butcher, 2006; Childs & Eyde, 2002; Weiner, 2013).



Earlier research indicates that assessment training has been a core component of the curriculum in psychology doctoral programs (Piotrowski & Zalewski, 1993). However, this trend may be decreasing, as research also reports some changes in the focus of training in psychological assessment in recent years (Belter & Piotrowski, 2001). Belter and Piotrowski (2001) conducted a survey of 82 academic program directors from APA-approved clinical psychology doctoral programs. Their findings showed a slight decrease in emphasis on teaching projective testing in doctoral programs. The academic program directors in this sample reported they were retaining or increasing emphasis in all areas of psychological assessment, with the exception of projective testing. Most of the program directors (65%) reported increased emphasis in neuropsychological assessment, and 40% reported having increased their emphasis on interviewing. Only 7% of the sample reported an increased emphasis in intelligence testing in the prior five years, while 4% reported increasing their emphasis in projective testing over that same time period (Belter & Piotrowski, 2001).

Research also includes feedback from psychology students. Stedman et al. (2001a) reported that substantial numbers of clinical and counseling psychology doctoral students who applied for pre-doctoral internships did not believe they received adequate training in psychological assessment prior to internship. The study also noted that only 25% of this sample of psychology graduate students reported they had sufficient assessment experience to meet expectations at their internships. Additionally, 25% of these students reported minimal training in assessment report writing prior to internship. According to Butcher (2006), there are doctoral students who have challenges placing at an internship and find that their lack of assessment training renders them less competitive during the internship application and match phases. When competitiveness within the mental health care system is considered, applied psychology doctoral



programs (i.e., clinical, counseling, and school psychology programs) would do well to ensure that their emphasis on assessment-related issues keeps pace with trends in the field. This will also promote their students' competitiveness for internship selection, given the high expectations regarding assessment-related training (Robiner et al., 1994).

### Internship Training

The pre-doctoral internship is a critically important aspect of applied doctoral degree programs in psychology, including clinical psychology (Prinstein, 2013). The internship year is usually considered the capstone of clinical training experiences at the doctoral level (Keilin & Constantine, 2001). The pre-doctoral internship typically occurs during or near the final year of doctoral training and usually takes place in an applied setting that emphasizes clinical practice (Keilin & Constantine, 2001; Prinstein, 2013).

Stedman et al. (2001b) surveyed 324 internship-training directors and found most sites provided interns with abundant opportunities for intellectual, objective personality, projective personality, and neuropsychological test training. Moreover, consistent with Clemence and Handler (2001), Stedman and coauthors (2001b) reported a lack of uniformity among responding internship directors, as emphasis on test-based assessment training varied considerably across settings. These two studies were critical of the adequacy of pre-internship assessment training. They also raised questions about whether assessment training during internship could provide enough professional development in assessment to meet the demands of clinical practice beyond graduation. A national survey by Stedman et al. (2005) expanded on the aforementioned studies by examining the assessment training patterns of 573 internship programs, all of which were members of the Association of Psychology Postdoctoral and Internship Centers (APPIC). Their data indicated that of the 21 internship specialty rotations reported on in the survey (e.g., serious



mental illness, trauma, forensics, substance abuse, etc.), an assessment rotation was the most frequently offered specialty rotation. In fact, most of the internship directors surveyed (64%) reported their programs offered an assessment rotation. Furthermore, this study found that major rotations in assessment were most commonly offered in military (80% of 10 military sites) and child (92% of 48 child sites) internship programs. Other noteworthy findings included that of the 105 university counseling center and 28 private hospital internship directors surveyed, none offered a major rotation in psychological assessment. According to Stedman (2007), a significant number of pre-doctoral internship programs may not provide enough emphasis in assessment training to produce clinical psychology graduates with sufficient assessment competency. The studies reviewed above further warrant additional examination of the training available at specific categories or types of internship program. The research findings indicate that important differences may occur across different types of internship program regarding assessment-related expectations and practices.

### **Emerging Issues in Psychological Assessment**

# **Use Across Different Settings**

Over the years, there has been substantial growth in the range of settings where assessment is conducted, including more assessment applications in forensic, healthcare, and organizational settings (Weiner, 2013). Even though this growth is being seen, assessment measures used across different settings have often varied little and typically have not been sufficiently adapted for this broad range of applications. All too often, psychological measures are being used with individuals and in various settings for which they were not originally intended, and relevant norms have not been developed (Graham & Naglieri, 2003). Therefore, it has been brought to light how important it is to examine whether accessible norms are



appropriate and if the interpretations made based on these norms are in fact valid and reasonable for each setting and cultural group with whom the norms have been applied (Graham & Naglieri, 2003).

# Impact of Culture and Diversity

The United States is continually changing, in terms of ethnicity, language/s spoken, socioeconomic considerations, sexual orientation, age, and other considerations of diversity. Latinas/Latinos have emerged as the largest ethnic minority in the U.S. (Marotta & Garcia, 2003). Most of the psychological assessment measures and tools currently being used in the United States were normed on European American populations (Dana, 2000). This is an important consideration when utilizing psychological assessments on individuals who identify with different cultures. Moreover, the results might not be a valid representation of the individual. Studies show that assessments developed and normed using the English language should not be applied to individuals who do not speak English. This discourse is now being integrated into the legal and ethical aspects of the practice of psychological assessment. It is recommended that a translated and adapted version of the measure be used or that an attempt be made to assess the individual through different methods, such as tests that are non-verbal in nature (Frisby, 1999). This suggests a need to further investigate the use of assessment amongst varying cultures. It also indicates that in clinical training, it is important to consider how well graduate students are being prepared to conduct psychological assessment with diverse persons.

### The Influence of Evidence-Based Practice

There is ongoing discourse on the pertinence for psychologists to utilize assessment tools and strategies that are "economical, scientifically sound, and culturally sensitive" (Wood et al., 2002, p. 519). Psychologists are largely experiencing the impacts of managed care, which



advocates for the utilization of cost-efficient and less time-consuming measures. Psychologists are thus beginning to utilize briefer/abbreviated measures to address clinical and referral questions (Hunsley & Mash, 2007; Wood et al., 2002). For example, projective measures are being utilized less, due to questions of their efficacy, time requirements, and costs (Wood et al., 2002).

Evidence-based assessment (EBA) is being utilized to address these concerns by complimenting Evidence Based Practices (EBP) that are often utilized in clinical settings (Hunseley & Mash, 2007; Jensen-Doss, 2011). EBA is defined as, "an approach to clinical evaluation that uses research and theory to guide the selection of constructs to be assessed for a specific assessment purpose, the methods and measures to be used in the assessment, and the manner in which the assessment process unfolds" (Hunsely & Mash, 2007, p. 30). The utilization of evidence-based assessment is increasing in the field, as emphasis is also being placed for psychologists to remain updated on research and literature. Youngstrom (2013) states, psychological assessment lacks "directness and clarity" that is greatly desired by psychologists (p. 152). It is surmised that a shift in favor of complimenting EBP with EBA will promote psychologists utilizing the most effective treatments for the populations they are working with. Psychologists have increasingly been encouraged to take empirically-informed steps to ensure that their clients are receiving the most appropriate care (Jensen-Doss, 2011). This shift towards managed care and the use of EBA warrants investigation, as it may impact the future training emphases in psychology doctoral programs, given demands in the field.

# **Parent Study**

Recently, Bates, (2016), Faith (2016), and Shipley (2019) developed a 32-item questionnaire to explore assessment-related trends and practices at the internship level. They



surveyed internship directors at APPIC-member, pre-doctoral internship programs throughout the United States. Their study 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. She reported a general increase in the use of short, symptom-focused scales and some reduction in use of traditional projective measures such as the Rorschach. Their findings also indicated that overall, directors of APPICmember 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 emphasis on 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., V.A. medical centers vs. university counseling centers vs. prisons or correctional settings, etc.). For example, are there differences across different types of internship programs in directors' perceived satisfaction with the assessmentrelated training and preparation of beginning interns? Are there differences across categories of internship in directors' perspectives on incoming interns' preparation for assessment of diverse clients? Does the use of technology to support assessment practices differ across different types of internship program? Research on such questions is needed to fine-tune our understanding of



the specific assessment-related practices and experiences that may exist across different types of internships.

Assessment continues to be a critical element of training at the pre-doctoral level and an essential component for graduate students to be competitive for pre-doctoral internship placement and for success at the internship level (Belter & Piotrowski, 2001; Clemence & Handler, 2001; Stedman et al., 2000; Weiner, 2012). Because developing competency in psychological assessment is considered to be a "complex, intensive, and multifaceted process" that is noted to afford "numerous responsibilities and challenges to educators, trainers, learners, and professional practitioners" (Krishnamurthy et al., 2004, p. 737), it is important to identify and further explore differences that may exist across types of internship programs. The goal of the present study was to attempt to shed light on differences in internship directors' perspectives that may exist across different categories of internship through re-analysis of an existing data set.

# **Purpose of the Study**

The present study was an archival study that was conducted to shed light on how internship directors' perspectives on psychological assessment practices might vary across different types of internship setting. This study was conducted as part of an Applied Scholarship Community (ASC) at Pepperdine University that included the writer and two co-investigators, Katlyn Grusecki and Cecilia Costa. Each of the three investigators took a subset of questionnaire items from the parent study for particular emphasis. The primary focus of the present study was to look at the questionnaire item from the parent study that addressed diversity issues in assessment. This item examined internship directors' satisfaction with their beginning interns' preparation to conduct psychological assessment amongst diverse groups. The present study also examined internship directors' opinions on the extent to which the field of psychology's current



emphasis on evidence-based practice has impacted testing and assessment in their internship programs. Finally, this study also explored the responses to two open-ended items from the questionnaire. The study utilized the data collected by Bates (2016), Faith (2016), and Shipley (2019), and involved a reanalysis, exploring internship directors' questionnaire responses as a function of the six largest groupings of internship type that occurred in the original study. Because this was an exploratory study, no specific hypotheses were made.



### **Chapter II: Method**

### **Research Approach and Design**

The current study was a non-experimental, descriptive, and exploratory study that utilized archival data. Looking across different types of internship setting, the purpose of this study was to gauge psychology internship directors' satisfaction with their incoming interns' preparation to conduct psychological assessment with diverse populations. Additionally, emerging trends in psychological assessment were examined, specifically: the impact of evidence-based practices upon assessment; the introduction of new assessment measures in the internship program within the prior five years; and any measures the directors would like to see introduced that were not being used at the time of the survey. The researcher examined the results of an archival data set that was collected from a national sample of psychology internship directors within the United States (Bates, 2016; Faith, 2016; Shipley, 2019). The questionnaire developed by Bates (2016), Faith (2016), and Shipley (2019) explored assessment-related themes and contained items in a variety of response formats.

For the current study, the researcher worked in conjunction with two other researchers at Pepperdine University, as part of an Applied Scholarship Community (ASC) research group. One researcher (Grusecki, 2019) focused on the importance of psychological assessment across internship settings; interns' overall preparedness to conduct psychological assessment upon commencing internship; and important considerations in intern selection. Another researcher (Costa, 2019) investigated the role of technology in psychological assessment within internship settings; the methods of test administration, scoring, and interpretation utilized in the internship; the anticipated stability of funding for assessment in upcoming years; and whether emphasis on assessment was likely to change in upcoming years. The researcher for the current study focused



primarily on questionnaire items addressing diversity, evidence-based practice, and trends in measures used.

# **Participants and Clusters**

The participants for this study were recruited for the dissertation research conducted by Bates (2016), Faith (2016), and Shipley (2019) at Pepperdine University. Initially, the list of potential participants was identified from the APPIC directory, which is readily available from APPIC. The APPIC Directory is utilized as a resource for individuals in various stages of their careers in psychology (i.e., students, recent graduates, training directors, faculty), provides information about internships and postdoctoral training programs across the United States and Canada, and is updated yearly. Internship programs included in the directory are those that have received accreditation through the American Psychological Association (APA) or the Canadian Psychological Association (CPA). In addition, non-accredited internship programs may qualify for APPIC membership by meeting 16 criteria.

The researchers in the parent study contacted 741 of the eligible training directors via electronic mail (e-mail) from a Pepperdine University account and invited them to participate in the study. The number of participants was continuously refined based on the requirements listed in the initial email and based on failure to provide a response. In the end, there were 182 participants that both consented and responded to at least some portion of the questionnaire, which represented a 25% return rate.

Of the 182 internship directors represented in the original sample, 16% classified their institutional settings as Veterans Affairs Medical Centers (VAMC), 15% as university counseling centers (UCC), 14% as community mental health centers (CMHC), 12% as state/county/other public hospitals (SCPH), 8% as consortiums (CON), 7% as prisons or



correctional facilities (PC), 5% as medical schools, 4% as child/adolescent psychiatric or pediatric clinics, 3% as private outpatient clinics, 3% as private psychiatric hospitals, 3% as private general hospitals, 2% as Armed Forces medical centers, 2% as school districts, and 1% as psychology departments. Seventeen participants (9%) responded as "other" sites; similar responses were collapsed under the categories of Non-profit (2%), Residential Treatment (2%), Private Outpatient Clinic (1%), Court/Forensic (1%), Prison or Correctional Facility (1%), University Counseling Center (<1%), State/County/Other Public Hospital (1%), and Community Mental Health (<1%) (Bates, 2016).

The sample of 182 participants from the original study (Bates, 2016; Faith, 2016; and Shipley, 2019) included 118 (66%) females and 62 (34%) males. Their mean age was 46.9 years (SD = 10.6), with a range of 29 to 72 years old. With regard to ethnic or racial self-identification, 88% of the respondents identified as Caucasian, 4% as Latino, 3% as Asian, 2% as African-American, 2% as Multiracial, and 1% as American Indian or Alaskan Native. Three participants (2%) selected the "Other" category; they identified themselves as "Mediterranean," "Middle Eastern," and "Hispanic," respectively.

Regarding their highest academic degree, 62% of participants endorsed Ph.D., 37% selected Psy.D., and 1% indicated Ed.D. One participant selected the "Other" category (1%) and wrote that she or he had the following: "J.D., Psy.D." The discipline or focus of their degrees was also requested and results revealed that 76% identified Clinical Psychology, 16% indicated Counseling Psychology, 4% reported School Psychology, and 2% indicated they had a Combined Program focus. The "Other" category was selected by four participants (2%), who specified "Experimental and later retrained in Clinical Psychology, also have a JD," Developmental Clinical," "Clinical Neuropsychology," and "General Psychology" as their



respective areas of study. Concerning licensure, 98% indicated they were licensed to practice psychology, with 65% first becoming licensed before 2006, and 37% becoming licensed in 2006 or later (M = 2001; range =1965 to 2014). Four participants indicated they were not licensed (2%) (Bates, 2016; see Table 1).



 Table 1

 Internship Directors' Demographic Information

CHARACTERISTICS		N	%
Age		180	
_	Range = 29-72		
	Mean = 46.9  years		
	SD = 10.6		
Gender			
	Male	62	35%
	Female	118	65%
	Transgender	0	0%
	Other	0	0%
	*Abstained from responding	2	<1%
Racial/Ethnic Identity		_	
	American Indian or Alaskan Native	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	ó	0%
	Multiracial	4	2%
	Other/Written-In Responses:	3	2%
	1. Hispanic	3	270
	2. Mediterranean		
	3. Middle Eastern		
	*Abstained from responding	2	<1%
Highest Academic Degree	Abstained from responding	2	<b>\1</b> /0
<b>Highest Academic Degree</b>	Ph.D.	112	62%
		68	37%
	Psy.D. Ed.D.		1%
	Other	2 1	
Noture of Dogues	Other	1	1%
Nature of Degree	Clinical Devaluate are	120	760/
	Clinical Psychology	138	76%
	Counseling Psychology	29	16%
	Educational Psychology	0	0%
	School Psychology	8	4%
	Combined Program	4	2%
T	Other	4	2%
License Status	T · 1	1.70	0007
	Licensed	178	98%
	Not Licensed	4	2%
	Mean = 2001.12		
	Standard Deviation 8.68		
	Range (Min-Max) = $41$ years		
	*Max = 2014; Min = 1973		

Note. Demographic information from parent study (Bates, 2016; Faith, 2016; & Shipley, 2019)



Given the present focus on response patterns and possible differences across categories of internship, the present researchers examined the sample from the parent study and selected the largest categories. The goal was to include as much of the original sample as possible, while also having sufficient numbers of internship programs included in each category. The present researchers selected the six largest groups or categories, which incorporated 124 (68%) of the 182 original respondents. The six clusters and corresponding percentages were as follows: 1) Community Mental Health Centers (CMCH; n = 24; 19%); 2) Veterans Affairs Medical Centers (VAMC; n = 27; 22%); 3) University Counseling Centers (UCC; n = 27; 22%); 4) State/Public Hospitals (SCPH; n = 18; 15%); 5) Prison and/or Correctional Facilities (PC; n = 14; 11%); and 6) Consortium Programs (CON; n = 14; 11%). The demographic data and professional background variables on this subset of participants are presented in the Results chapter.

#### Instrumentation

The survey instrument developed for the original/parent study was comprised of 32 items that included differing response options: fixed-choice options, rating scale items, and open-ended items (see Appendix A). The questionnaire was administered to participants at www.surveymonkey.com. Specifically, the questionnaire contained items pertaining to demographics of the directors (i.e., age, ethnic identification, and gender), their highest level of education, and their licensure status. Questions also explored characteristics of the directors' internship programs, including APA accreditation status, nature of the institutional setting, theoretical orientation/s, types and numbers of trainees accepted, importance of testing and assessment in the respondent's internship, and how training, experience, and supervision in testing and assessment are provided. The questionnaire also included items addressing the topic



areas that are explored by the researcher in the current study. Further, several open-ended items allowed respondents to address assessment-related themes in their own words.

In an effort to increase validity and utility, Bates (2016), Faith (2016), and Shipley (2019) emphasized closed-ended questions, in either multiple-choice or Likert-style response formats, for their questionnaire, as well as several open-ended questions. When possible, they also incorporated some opportunities for participants to offer comments or clarification of responses through an "other" response option. This allowed for standardized data to be collected, while still permitting for variability in the collected responses and for minimizing limitations placed on respondents concerning their responses.

In order to address the goals of this study, the researcher focused upon select questions from the original survey questionnaire. To consider assessment-related issues regarding diversity, evidence-based practice, and emerging measures, the researcher selected the following items from the original questionnaire:

Survey Item 20: How satisfied are you with incoming interns' level of preparation for conducting psychological assessment with diverse populations?

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

Survey Item 29: What new psychological tests or measures has your site begun using within the last five years? (open-ended item)

Survey 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? (open-ended item)



### **Procedures**

Data from the original web-based survey study were used for the present analysis. The original survey used SSL (Secure Sockets Layer) encrypted software and all responses were anonymously recorded by the principal investigators. The original investigators screened the data file for answers that were out of the possible range of response options. Those types of error responses were deleted from the data set to ensure they were not analyzed with the legitimate data. Any edits made to the data set were recorded and kept by the original investigators. This allowed for proper data analysis by the original researchers, as well as for subsequent reanalyses.

The researcher for the present study obtained permission from Bates, Faith, and Shipley to utilize their data. The data were not accessed until the present study was approved by Pepperdine University's Institutional Review Board. The data that were reanalyzed for the present study did not have any personally identifying information included.

### **Data Analysis**

The data analyses included calculation of descriptive statistics, such as frequencies, means, and standard deviations. Because the data from the rating scale items on the questionnaire did not meet expectations for normal distribution, a non-parametric test was needed to examine for any significant differences between groups on questionnaire items 20 and 28. Therefore, the Kruskal-Wallis H test, which can be understood as a one-way ANOVA on ranks, was utilized. In the event of any significant findings, the Dunn's test was to be used to identify which pairwise contrasts were significantly different.



# **Chapter III: Results**

The current, archival study investigated assessment-related issues and themes across six categories of predoctoral internships in psychology. In addition to examining demographic and professional variables regarding the internship directors in the sample, the present study explored internship directors' satisfaction with their incoming interns' cultural competence related to psychological assessment with diverse populations. This study also examined internship directors' views on the impact of evidence-based approaches to assessment. The six categories of internship for the present study were: Consortiums (CON), Prisons/Correctional Facilities (PC), State/County Public Hospitals (SCPH), University Counseling Centers (UCC), Veterans Affairs Medical Centers (VAMC), and Community Mental Health Centers (CMHC). Finally, the study inquired about different trends that were occurring at these sites, especially regarding the introduction of any new assessment measures in recent years and the desire to introduce assessment measures not currently being utilized. These trends were examined by reviewing internship directors' responses to open-ended items on the questionnaire.

A total of 124 participant responses were drawn from the parent study's original sample of 182 internship directors. This subsample of 124 represented all of the internship directors in the parent study that were from the six types of internship program listed above. These six settings were the most frequently reported by internship directors in the parent study and were thus selected for close examination in the present study. Thus, the goal of the study was to better understand whether there were differences across these six settings in the variables of interest: cultural competence for assessment, impact of evidence-based practice on assessment, and trends in utilization of specific measures.



The results discussed in this section represent data that were reanalyzed for the current study. Descriptive statistics were calculated on the demographic and professional background variables of the 124 internship directors in the present study. This information was collected from the first six items on the 32-item questionnaire developed for the original study. Questionnaire item 20 asked internship directors to rate their satisfaction with their incoming interns' preparation level for conducting psychological assessments with diverse populations. Internship directors' views on the impact of evidence-based practice on psychological assessment in their internship programs was examined in questionnaire item 28. Responses to these two items were analyzed, utilizing descriptive statistics to compare and contrast answers. Because assumptions for the normal distribution of data were not met for items 20 and 28, the Kruskal-Wallis test was utilized to determine any significant differences across groups on those two items. Directors responses to two open-ended questions were also examined for additional information regarding internship settings and trends for psychological assessment. Specifically, internship directors were asked to list tests or measures that their sites had begun using within the past five years (questionnaire item 29). Lastly, directors' responses to questionnaire item 30 were examined, which asked them to list tests or measures they would like to see used at their sites in the future, that were not currently being used.

# **Participants and Demographic Information**

For the current sample (N = 124), the mean age was 47.02 (SD = 10.31). Mean ages were also calculated across settings. At CON settings (n = 14), the mean age was 46.21 (SD = 9.50). For PC settings (n = 14), the mean age was 43.5 (SD = 9.79). For SCPH settings (n = 18), the mean age was 43.44 (SD = 7.96). For UCC settings (n = 27), the mean age was 46.74 (SD = 10.31).



8.85). For VAMC settings (n = 27), the mean age was 48.66 (SD = 11.18). Lastly, for CMHC settings (n = 24), the mean age was 50.66 (SD = 12.31).

Table 2

Internship Directors' Mean Age by Setting

Descriptor	Setting	n	Mean	SD	Range
Age		124	47.02	10.31	43
	CON	14	46.21	9.50	33
	PC	14	43.5	9.79	31
	SCPH	18	43.4	7.96	31
	UCC	27	46.74	8.85	33
	VAMC	27	48.66	11.18	38
	CMHC	24	50.66	12.31	43

Regarding gender, 70% of the sample was female (n = 87) and 30% of the sample was male (n = 37). For CON settings, 64% of the sample was female (n = 9) and 36% were male (n = 5). At PC settings, 79% were female (n = 11) and 21% (n = 3) were male. At SCPH settings, 72% (n = 13) were female and 28% (n = 5) were male. For UCC settings, 78% were female (n = 21) and 22% (n = 6) were male. At VAMC settings, 59% were female (n = 16) and 41% were male (n = 11). For CMHC settings, 71% were female (n = 17) and 29% were male (n = 7).

 Table 3

 Internship Directors' Gender by Setting

Gender Male Female		124 37	
		37	2007
Female			30%
1 01110110		87	70%
	CON	14	11%
	Male	5	35%
	Female	9	64%
	PC	14	11%
	Male	3	21%
	Female	11	79%
	SCPH	18	15%
	Male	5	28%
	Female	13	72%
	UCC	27	22%
	Male	6	22%
	Female	21	78%
	VAMC	27	22%
	Male	11	41%
	Female	16	59%
	СМНС	24	19%
	Male	7	29%
	Female	17	71%

In regard to racial/ethnic identity, 85% of the sample identified as Caucasian/White (n = 106), representing the majority of the sample. Additionally, 4% of the sample identified as Latino/a (n = 5). Three percent of the sample identified as Asian (n = 4). Two percent of the sample identified as African American (n = 3). Two percent of the sample identified as Native Hawaiian or other Pacific Islander (n = 3), while just under 2% identified as Multiracial (n = 2). Lastly, one internship director identified as American Indian or Alaskan Native (1%).

 Table 4

 Internship Directors' Ethnic/Racial Identity by Setting

Setting	Ethnicity/Race	n	%
CON		14	11%
	Caucasian (White)	12	86%
	Latino/a	1	7%
	Multiracial	1	7%
PC		14	11%
	Caucasian (White)	14	100%
SCPH		18	15%
	Caucasian (White)	17	94%
	Multiracial	1	6%
UCC		27	22%
	American Indian or Alaskan Native	1	4%
	Asian	2	7%
	Black or African-American	2	7%
	Caucasian (White)	19	70%
	Latino/a	3	11%
VAMC		27	22%
	Asian	1	4%
	Black or African-American	1	4%
	Caucasian (White)	23	85%
	Latino/a	1	4%
	Multiracial	1	4%
CMHC		24	20%
	Asian	1	4%
	Caucasian (White)	21	88%
	Other	2	8%
	Mediterranean	1	
	Middle Eastern	1	

For racial/ethnic identity, the most variance was noticed in UCC settings. Of the internship directors within this setting, 70% (n = 19) identified as Caucasian/White; 11% (n = 3) identified as Latino/a; 7% identified as Black or African American (n = 2); 7% identified as Asian (n = 2); and 4% identified as American Indian or Alaskan Native (n = 1). For VAMC settings, 85% identified as Caucasian/White (n = 23); 4% identified as Latino/a (n = 1); 4% identified as Black or African American (n = 1); 4% identified as Asian (n = 1); and 4%



identified as Multiracial (n = 1). For CON settings, 86% identified as Caucasian/White (n = 12); 7% identified as Latino/a (n = 1); and 7% identified as Multiracial (n = 1). For CMHC settings, 88% identified as Caucasian/White (n = 21); 8% identified as Other (n = 2); and 4% identified as Asian (n = 1). For SCPH settings, 94% identified as Caucasian/White (n = 17) and 6% identified as Multiracial (n = 1). The least variance was noticed within PC settings, as all respondents identified as Caucasian/White (n = 17, 100%).

Respondents were also asked to list their highest degree of attainment (questionnaire item 4), with the following options: Ph.D., Psy.D., Ed.D. and Other. Within the sample, 63% reported having attained a Ph.D. (n = 78); 36% reported having a Psy.D. (n = 45); and just under 1% reported having an Ed.D. (n = 1). Regarding the breakdown of academic degrees by setting: for CON settings, 64% reported having a Ph.D. (n = 9) and 36% reported having a Psy.D. (n = 5). In PC settings, 43% reported having a Ph.D. (n = 6) and 57% reported having a Psy.D. (n = 8). In SCPH settings, 56% had a Ph.D. (n = 10) and 44% had a Psy.D. (n = 8). For UCC settings, 59% had a Ph.D. (n = 16); 37% had a Psy.D. (n = 10); and 4% had an Ed.D. (n = 1). For VAMC settings, 85% had a Ph.D. (n = 23) and 15% had a Psy.D. (n = 4). Lastly, for CMHC settings, 42% had Psy.D. (n = 10) and 58% had a Ph.D. (n = 14).

Questionnaire item number 5 asked respondents to specify the nature of their highest academic degree. The following options were provided: Clinical Psychology, Counseling Psychology, Educational Psychology, School Psychology, Combined Program, and Other. Of the total sample (n = 124), 73% reported having a degree in Clinical Psychology (n = 90). The second most frequently selected option was Counseling Psychology, representing 22% of the sample (n = 27). Directors from Combined Programs represented 1% of the sample (n = 1), while persons with a doctorate in Educational Psychology represented 2% of the sample (n = 3).



Lastly, School Psychology represented 1% of the sample (n = 1). For those who marked Other, their programs were listed as Clinical Neuropsychology (n = 1), Experimental and later trained as Clinical Psychology/JD (n = 1), and Developmental Clinical Psychology (n = 1).

Questionnaire item 6 questioned if internship directors were or had ever attained a license to practice in the field of psychology. According to the responses, 100% of the program directors were licensed to practice psychology.

Table 5
Internship Directors' Academic Degree and Discipline by Setting

Setting	Academic Degree		n	%
		Academic Discipline		
CON			14	11%
	Ph.D.		9	64%
	Psy.D.		5	36%
	•	Clinical	10	71%
		Counseling	2	14%
		Other:	2	14%
		Clinical Neuropsychology	2	
		Developmental clinical	2	
PC			14	11%
	Ph.D.		6	43%
	Psy.D.		8	57%
		Clinical	12	86%
		Counseling	2	14%
SCPH		C	18	15%
	Ph.D.		10	56%
	Psy.D.		8	44%
	•	Clinical	18	100%
UCC			27	22%
	Ph.D.		16	59%
	Psy.D.		10	37%
	Ed.D.		1	4%
		Clinical	10	37%
		Counseling	17	63%
VAMC		e e una e una g	27	22%
, , , , , ,	Ph.D.		23	85%
	Psy.D.		4	15%
	103.21	Clinical	23	85%
		Counseling	3	11%
		Other:	1	4%
		Experimental, clinical	1	170
		also have a JD	1	
CMHC			24	19%
	Ph.D		14	58%
	Psy.I		10	42%
	- 5 <b>y - 1</b>	Clinical	17	71%
		Counseling	3	12%
		School	3	12%
		Combined	3	5%

# Satisfaction with Incoming Interns' Cultural Competence in Psychological Assessment

Questionnaire item 20 asked, "How satisfied are you with incoming interns' level of preparation for conducting psychological assessment with diverse populations?" Internship directors were given the following options to select from: Extremely Satisfied (rating value of 5), Very Satisfied (rating value of 4), Somewhat Satisfied (rating value of 3), Slightly Satisfied (rating value of 2), and Not at All Satisfied (rating value of 1). Per the results, all six internship director group means fell closest to the "Somewhat Satisfied" selection on the rating scale. Specifically, CON internship directors (n = 14) obtained a mean score of 3.28 (SD = 0.73). PC directors (n = 14) likewise obtained a mean score of 3.28 (SD = 0.47). CMHC directors (n = 24) obtained a mean score of 3.04 (SD = 0.69). UCC directors (n = 27) obtained a mean score of 2.72 (SD = 0.75). Finally, VAMC directors (n = 27) obtained the lowest mean, with a value of 2.59 (SD = 0.69). The results are further described in the table below (Table 5).

 Table 6

 Internship Directors' Response to Questionnaire Item 20 by Setting

Setting	N	Mean	SD	Median	Range
CON	14	3.285	0.73	3	2
PC	14	3.28	0.46	3	1
SCPH	18	2.72	0.75	3	3
UCC	27	2.85	0.98	3	3
VAMC	27	2.59	0.63	3	3
СМНС	24	3.04	0.69	3	4

To determine if there were any statistically significant differences across the six internship settings in internship directors' satisfaction with incoming interns' preparation to conduct psychological assessment with diverse populations, the Kruskal-Wallis test was utilized. This test is also termed a one-way ANOVA on ranks. The results of the Kruskal-Wallis test was in fact statistically significant at the .01 level of significance,  $\chi^2(5) = 15.281$ , p = 0.0092. The Dunn's Test was then conducted to determine whether any of the pairwise contrasts were significantly different. Surprisingly, none of the pairwise contrasts reached the .05 level of statistical significance. However, since the overall Kruskal-Wallis finding was significant, that suggested that CON and PC directors, with their mean of 3.28, were more satisfied than other internship director groups, most notably the VAMC directors with their mean of 2.59.

# **Emphasis of Evidence-Based Practice on Assessment**

Questionnaire item 28 asked, "How much has the profession's emphasis on evidence-based practice impacted your program's approach to psychological testing and assessment?" Respondents were given the options of the following: Extremely Impacted (rating value of 5), Strongly Impacted (rating value of 4), Somewhat Impacted (rating value of 3), Slightly Impacted (rating value of 2), and Not Impacted at All (rating value of 1). Per the data analysis, the mean ratings for all six groups of internship directors fell closest to the "Somewhat Impacted" or "Strongly Impacted" responses on the rating scale. Specifically, CON internship directors (n = 14) obtained a mean score of 3.21 (SD = 0.97). PC directors (n = 14) obtained a mean score of 3.72 (SD = 0.75). UCC directors (n = 27) obtained a mean score of 2.85 (SD = 1.16). VAMC directors (n = 27) obtained a mean score of 3.18 (SD = 1.001). Finally, CMHC directors (n = 24) obtained a mean score of 3.12 (SD = 0.89).



 Table 7

 Internship Directors' Response to Questionnaire Item 28 by Setting

Setting	N	Mean	SD	Median	Range
CON	14	3.21	0.97	3	4
PC	14	3.57	1.16	3	4
SCPH	18	3.72	0.75	4	3
UCC	27	2.85	1.17	3	4
VAMC	27	3.18	1.001	3	4
CMHC	24	3.12	0.90	3	4

To determine if there were any statistically significant differences among the six groups of internship directors regarding the impact of evidence-based practices on their programs' approaches to psychological assessment, the Kruskal-Wallis test was again utilized. The results of the Kruskal-Wallis test did not indicate any statistically significant differences at the .05 level for this questionnaire item,  $\chi^2(5) = 9.6082$ , p = 0.0871.

### **Open-Ended Items.**

The remainder of the data analysis consisted of a review of responses for open-ended questionnaire items 29 and 30. For these two items, internship directors were given the opportunity to write their responses and to list measures recently introduced at their sites (item 29), as well as to list measures they would like to see utilized in the future (item 30). These items provided some information on recent developments in assessment methods at the sites, as well as on internship directors' aspirations regarding the incorporation of new assessment methods.

Given the emerging shifts in psychology (i.e., increase in diverse populations in the US,



managed care and evidence-based assessment within clinical settings), investigation in these areas is warranted. This information may shed light on the direction of psychology doctoral training currently and in the future.

Questionnaire item 29 asked, "What new psychological tests or measures has your site begun using within the past five years?" Measures were organized into the following domains: Cognitive Functioning, Emotional Functioning, Symptom Inventories/Behavioral Rating Scales, Neuropsychological Functioning, Academic/Achievement, Forensic/Risk Assessment, and Other Assessment.

For CON settings, a total of 40 responses were provided by internship directors. Of these responses, most frequently mentioned measures fell within the Symptom Inventories/Behavioral Rating Scales (27.5%). The second most frequently listed measures were in the Academic/Achievement category (20%), followed by Emotional Functioning (17.5%), Cognitive Functioning (15%), Neuropsychological Functioning (15%), Forensic/Risk Assessment (2.5%), and Other Assessment (2.5%) categories.

It is worth noting what were the most commonly reported measures within each category. For the Symptom/Inventories/Behavioral Rating Scales, the Autism Diagnostic Observation Schedule (ADOS and ADOS-2) were most frequently listed. For the Academic/Achievement category, the Connors Continuous Performance Test-Third Edition (CPT-3) and Woodcock-Johnson (WJ)- Cognitive and Academic tests were most frequently listed. For the Emotional Functioning category, the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) and Millon Adolescent Clinical Inventory (MACI) were most frequently listed. For the Cognitive Functioning category, the Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV) was most frequently listed. For the Neuropsychological Functioning category, the Wechsler Memory



Scale-Fourth Edition (WMS-IV) was most commonly listed. For the Forensic/Risk Assessment category, the Test of Memory Malingering (TOMM) was the only measure listed. Lastly, for the Other Assessment category, the WIC-IC was the only measure listed.



 Table 8

 Testing/Assessment Instruments Recently Introduced at Consortium Program (CON) Internships

# 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/Beha	avioral 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	



# CON

Domain	Measure	Responses	%
Neuropsychological Function	ning	6	15%
	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%
o mor ribbobbilioni	WIC-IC	1	2.570



For PC settings, a total of 33 responses were provided. Of these responses, the most frequently listed measures fell within the Emotional Functioning category (24%). The second most frequently mentioned measures fell within the Symptom Inventories/Behavioral Rating Scales (18%) and Neuropsychological Functioning (18%) categories. This was followed by the Cognitive Functioning (15%), Academic Achievement (12%) and Forensic/Risk (12%) categories.

Within the Emotional Functioning category, the Minnesota Multiphasic Personality
Inventory-2-Restructured Form (MMPI-2-RF) was most frequently listed. For the Symptom
Inventories/Behavioral Rating Scale category, there were six measures that were each listed once
(see Table 8 for a comprehensive list). Similarly for the Neuropsychological Functioning
category, there were six measures that were each reported once (see Table 8). For the Cognitive
Functioning category, the Wechsler Intelligence Scale for Children-Fifty Edition (WISC-V) was
most frequently listed. For the Academic/Achievement and Forensic/Risk categories, there were
four responses in each domain. However, for both categories, there was no measure that was
mentioned more than once. See Table 8 for a comprehensive list of the measures that were listed
and their frequencies.



 Table 9

 Testing/Assessment Instruments Recently Introduced at Prison/Correctional Facility (PC) Internships

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%
Ç	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/Beha	avioral Rating Scale	6	18%
-	Anger Regulation and Expression Scale (ARES)	1	
	Behavior Assessment System for Children, Third Edition (BASCTM-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	



PC

Domain	Measure	Responses	<b>%</b>
Neuropsychological Functi	oning	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	
	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	



Within the SCPH settings, internship directors provided a total of 41 responses that listed measures that had been introduced within the past five years. Of these responses, measures within the Forensic/Risk category (27%) were most commonly listed. The second most frequently listed measures fell within the Academic/Achievement (17%) category. This was followed by the Cognitive Functioning (15%) and Emotional Functioning (15%) categories, Neuropsychological Functioning category (12%), Other Assessment (7.3%) category, and finally the Symptom Inventories/Behavioral Rating Scale category (7%).

Within the Forensic/Risk category, the Historical Clinical Risk Management-20, Version 3 (HCR-20, v3) was most frequently listed. For the Academic/Achievement category, the Conners Continuous Performance Test-Third Edition (CPT-3) was most frequently listed. For the Cognitive Functioning and Emotional Functioning categories, the Wechsler Intelligence Scale for Children-Fifth Edition (WISC-V) and Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF) were most frequently listed. For the Neuropsychological Functioning category, the Wechsler Memory Scale-Fourth Edition (WMS-IV) was most frequently listed. For the Other Assessment Category, there were three measures that were each listed once (see Table 9 for a comprehensive list). Similarly, for the Symptom Inventories/Behavioral Rating Scale category, there were three measures that were each listed just one time.



Table 10

Testing/Assessment Instruments Recently Introduced at State/County/Other/Public Hospital (SCPH) Internships

## 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-RI	F) 4	
	Rorschach Performance Assessment System (R-PAS)	1	
Symptom Inventories/Beh	avioral 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 Funct	ioning	5	12%
1 5	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	



## **SCPH**

Domain	Measure	Responses	%
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	
	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	<u>-</u>	3	7.3%
	Safe Shooting Ability Assessment (SSAA)	1	
	Medication Management Ability Assessment (MMAA)	1	
	ACS Migration Skills Assessment	1	



There were 35 responses for UCC settings. Of these responses, the most frequently mentioned measures fell within the Symptom Inventories/Behavioral Rating Scales category. These responses made up 34% of the total responses. The second most frequently listed measures fell within the Emotional Functioning category (20%) and the Academic/Achievement category (20%). These were followed by the Neuropsychological category (11%), Cognitive Functioning category (8.5%), and Other Assessment (6%) category.

Regarding the measures that were most frequently listed for each category, the

Counseling Center Assessment of Psychological Symptoms (C-CAPS) was most frequently

listed for the Symptom Inventories/Behavioral Rating Scales. For the Emotional Functioning

category, the Millon College Counseling Inventory (MCCI) was most frequently listed. For the

Academic/Achievement category, the Woodcock Johnson-IV Test of Achievement was most

frequently listed. For the Neuropsychological category, the Delis-Kaplan Executive Functioning

System (D-KEFS) and Wechsler Memory Scale, Fourth Edition (WMS-IV) were each listed

twice. For the Cognitive Functioning category, the Wechsler Adult Intelligence Scale-Fourth

Edition (WAIS-IV) was most frequently listed. Lastly, for the Other Assessment category, the

Minimal Data Set Assessment (MDS) was the only measure listed.



Table 11

Testing/Assessment Instruments Recently Introduced at University Counseling Center (UCC) Internships

## 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%
1 , 2	Delis-Kaplan Executive Functioning System (D-KEFS)	2	
	Wechsler Memory Scale, Fourth Edition (WMS-IV)	2	



# UCC

Domain	Measure	Responses	%
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	
	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 Data Set Assessment (MDS)	1	



The VAMC internship directors provided 34 responses that listed measures that have been introduced at their settings over the past five years. Among these responses, Neuropsychological measures were most frequently listed (38%), followed by Other Assessment Measures (18%), and Emotional functioning measures (18%). The fourth most frequently listed category were measures in the Cognitive Functioning category (12%), followed by the Symptom Inventories/Behavioral Rating Scales (9%) and lastly, the Forensic/Risk (5.8%) category.

Within the Neuropsychological category, the following measures were listed most frequently: Delis-Kaplan Executive Functioning System (D-KEFS), Neuropsychological Assessment Battery (NAB), Repeatable Battery for the Assessment of Neuropsychological Status (RBANS), Wechsler Memory Scale- Fourth Edition (WMS-IV). For the Forensic/Risk category, the Test of Memory Malingering (TOMM) and the Hopkins Competency Assessment Test were each listed once. For the Other Assessment category, there were six measures that were each listed once (see table for comprehensive list). For the Emotional Functioning category, the Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF) Scales was listed most frequently. For the Cognitive Functioning and Symptom Inventories/Behavioral Rating Scales categories, no measure was listed more than once (see Table 11 for the complete list).



Table 12

Testing/Assessment Instruments Recently Introduced at Veterans Affairs Medical Center (VAMC) Internships

### VAMC

Domain	Measure	ponses	%
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) Scale	es 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)		
	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	



### VAMC

Domain	Measure	esponses	%
Forensic/Risk		2	5.8%
	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	ve	
	Attention Tests, Adult Self-Report Scale, and Brief Test of Attention	1	
	The B Test	1	
	World Health Organizations Disability Assessment Schedule (WHODAS)	1	



Lastly, for CMHC settings, the measures listed most frequently fell within the Cognitive Functioning category (25%). The second most frequently listed measures fell within the Emotional Functioning Category (22.5%) and that was followed by the Neuropsychological category (20%). These were followed by the Symptom Inventories/Behavioral Rating Scales (12.5%), Academic/Achievement (12.5%) and Other Assessment (7.5%) categories.

When reviewing the measures that were most frequently mentioned in each category, the Wechsler Intelligence Scale for Children -Fifth Edition (WISC-V) was most frequently listed in the Cognitive Functioning category. For the Emotional Functioning category, the Minnesota Multiphasic Personality Inventory-Adolescent (MMPI-A) was most frequently listed. For the Neuropsychological category, the Conners 3<sup>rd</sup> Edition (Conners-3) and Developmental Neuropsychological Assessment-II (NEPSY-II) were most frequently listed. For the Symptom Inventories/Behavioral Rating Scales, there were no measures that were listed more than once (see Table 12). The same pattern was found for the Academic/Achievement and Other Assessment categories, where no measure was listed more than once. In regard to cultural diversity considerations, one internship director reported introducing a Spanish language measure in the Academic/Achievement area (Batteria III Woodcock-Munoz).



Table 13

Testing/Assessment Instruments Recently Introduced at Community Mental Health Center (CMHC) Internships

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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/Beh	avioral Rating Scales	5	12.5%
7 1	Adult Clinical Symptoms Interpretation	1	
	Autism Diagnostic Observation Schedule -Second Edition (ADOS-2)	1	
	Behavior Assessment System for Children, Second Edition (BASC-2)		
	Clinical Report and Scoring	1	
	Conners' Adult ADHD Rating Scale (CAARS)	1	
	Gillam Asperger's Disorder Scale (GADS)	1	



## CMHC

Domain	Measure	Responses	%
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 3 <sup>rd</sup> Edition (CPT 3)	1	
	Conners 3 <sup>rd</sup> Edition (Conners-3)	2	
	Developmental Neuropsychological Assessment-II (NEPSY-II)	2	
	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 30 asked, "Within your site, what psychological tests or measures would you like to see used in the future that are currently not being used?" There were 15 written responses from CMHC sites and 12 written responses from VAMC settings. Eleven responses were provided at UCC settings, and seven responses were provided at SCPH settings. At PC settings, four responses were provided, and at CON settings, nine written responses were provided for this survey item.

When the responses were examined based on each setting, there was variability in the desire for the future introduction of measures. Specifically, for CON settings there were measures listed for Cognitive Functioning (2), Emotional Functioning (2), Symptom Inventories/Behavioral Rating Scales (2), Neuropsychological Functioning (2), and Academic Functioning/Achievement (1). It is worth noting that among CON internship directors, the desire to introduce Spanish language versions of the Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF) and the Wechsler Intelligence Scale for Children-Fourth Edition (WICSC-IV) was mentioned.

For PC settings, emphasis was placed on introducing measures for Academic

Functioning/Achievement (3) and Forensic/Risk Assessment (1). At SPCH settings, there was a

desire for introducing measures within the following categories: Symptom

Inventories/Behavioral Rating Scales (3), Neuropsychological Functioning (2), Forensic/Risk

Assessment (1), and Other Assessments (1). It is worth noting that a respondent specified a

desire for the Bateria III Woodcock-Munoz, which is a Spanish version of the Woodcock
Johnson III. Additionally, several respondents did not list specific measures, but expressed a

need for neuropsychological batteries, symptom inventories, suicide assessment, and "More risk

assessment."



At UCC settings, there was more of an emphasis on measures for Emotional Functioning (6), Symptom Inventories/Behavioral Rating Scales (3), and Academic Functioning/Achievement (3) measures. In addition, a Forensic/Risk Assessment measure was listed, as was one measure in the Other Assessments category. One UCC internship director stated, "None, we do not use tests." Another UCC respondent wrote, "We would love to offer formal ADHD assessment, but we don't have the staffing to accommodate the potential demand." Other UCC category respondents stated, "Personality inventories," and "Measures that accurately assess for adult autism."

Additionally, at VAMC settings, there was an emphasis on measures for Emotional Functioning (4), Neuropsychological Functioning (4), Forensic/Risk Assessment (2), and Other Assessments (1). One respondent expressed a need for "lots of briefer measures for medical populations..." Another respondent expressed a desire for, "alternatives to the WAIS for evaluation of IQ." Respondents also noted their desires for aptitude and neuropsychological tests.

Lastly, for CMHC settings, there was a large focus on the introduction of measures for Neuropsychological Functioning (9), Cognitive Functioning (5), Emotional Functioning (2), Symptom Inventories/Behavioral Rating Scales (3), and Academic Functioning/Achievement (1). Regarding written responses, the respondents expressed a desire for a broad range of tests. Moreover, it is worth noting that the desire for "bilingual Spanish based tests," neuropsychological tests, and measures that assess the presence of autism were all mentioned by CMHC directors. (See Table 13 for the comprehensive list of specific measures listed by each setting.)



Table 14

Tests/Measures Directors Would Like to See Introduced in their Internships

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/Beha	avioral Rating Scales	2	22%
7 1	Beck Depression Inventory-II (BDI-II)	1	
	Test of Everyday Attention for Children (TEA-Ch)	1	
Neuropsychological Funct	ioning	2	22%
1 3 &	Delis-Kaplan Executive Function System (D-KEFS)	1	
	Sensory Profile 2	1	
Academic Functioning/Ac	hievement	1	11%
6	Differential Ability Scales -II (DAS-II)	1	



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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	

# 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	



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		3	21%
C	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	,



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	



# 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%
C	Wechsler Individual Achievement Test (WIAT)	1	



## **Chapter IV: Discussion**

The current study utilized archival data from a previous study by Bates (2016) Faith (2016) and Shipley (2019), which investigated internship directors' perspectives on current practices and emerging trends in psychological assessment at the internship level, including interns' overall preparedness for assessment. The data from this study was used to determine any variability across six major categories of internship regarding the following questionnaire items:

Survey Item 20: How satisfied are you with incoming interns' level of preparation for conducting psychological assessment with diverse populations?

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

Survey Item 29: What new psychological tests or measures has your site begun using within the past five years? (open-ended item)

Survey Item 30: Within your site, what psychological tests or measures would you like to see used in the future that are currently not being used? (open-ended item)

Significant differences were found across internship settings when internship directors were asked if they were satisfied with their incoming interns' preparation to conduct psychological assessment with diverse groups. Specifically, the PC and CON directors (M = 3.28) were particularly more satisfied than other groups, with the VAMC directors (M = 2.59) reporting the lowest mean satisfaction. This significant difference could be related to several factors. Based on findings of the current study, there may be more emphasis on culture and diversity training for psychological assessment in certain settings than others. Services may also be provided to more diverse groups within certain internship settings than others, and the use of formal assessment no doubt varies across internship settings. Literature has referred to the



veteran population as a specific culture that requires specialized care (Hobbs, 2008). Moreover, veterans' challenges with recovering from trauma-related disorders, substance abuse issues, etc., require culturally competent care (Hobbs, 2008). Thus, VAMC internships may have higher expectations for cultural competence than other sites. Further investigation is warranted to investigate the emphasis on diversity and cultural competence across internship settings.

Overall, the majority of responses fell between the "Slightly satisfied" and "Very satisfied" categories, with the most frequent response being "Somewhat satisfied." This finding suggests there may be insufficient training within doctoral programs on conducting psychological assessment with diverse groups. This finding is also congruent with the research of Ready and Veague (2014), who report that there is a need for cultural and diversity training within doctoral programs. Ready and Veague (2014) state that within a sample of doctoral programs that were surveyed to determine the role of assessment, multicultural training was "less than ideal" although cultural competence was acknowledged to be "critical for competent care and sound clinical science" (p. 282). This suggests a disconnect between stated goals or values and actual practices in doctoral programs.

Ready et al. (2016) examined a broad cross section of internship directors' views on their interns' preparedness for conducting psychological assessment at the predoctoral internship level. Although numerous areas of concern were listed, only 1% of respondents reported concerns regarding training in multicultural issues (Ready et al., 2016). This finding is noteworthy, considering that cultural competence is a benchmark in the training of developing psychologists (Krishnamurthy, 2004). The internship directors in the present sample may have shown a similar pattern. While their responses indicated modest satisfaction with their interns' preparedness to conduct psychological assessment with diverse groups, there were few indicators



that showed this level of preparedness was a concern to internship directors. For example, in reviewing answers to open-ended questions, it appeared that little attention was given to cultural and diversity factors. One hypothesis for this finding could be the homogeneity among the respondents. For the current study, there was a lack of diversity amongst the internship directors, as the group was mostly representative of White/Euro, middle-aged females. Thus, ethnically and culturally diverse respondents were largely underrepresented among directors across internship settings. It may be that if there were a larger representation of diversity amongst internship directors, more attention would be given to multicultural issues in psychological assessment within these settings.

An idea to consider is, if more internship directors were representative of diverse groups, would more students of diverse backgrounds be attracted to the field? Literature shows that diversity within training programs not only can impact student-faculty interactions, but promote students' intellectual development (Chang, 1996). Moreover, attention to diversity issues can also promote the engagement of diverse students within their programs (Antonio, 2001; Chang, 1996; Cole et al., 2003). Regarding race and gender demographics, the current study's sample was largely representative of the field of psychology. Specifically, ethnically diverse students have been historically underrepresented in psychology doctoral programs (Callahan et al., 2018). Further, regarding the overall psychology workforce, diverse groups (i.e., race, ethnicity, disabilities) are underrepresented in comparison to the US population (Callahan et al., 2018; Lin, et al., 2018). The lack of diversity within the current sample may provide a limited scope on diversity pertaining to psychological assessment. Thus, more diversity amongst internship directors and doctoral programs may also facilitate a larger representation of diversity within the field of psychology overall. Such changes may also help direct more attention to cultural factors.



Another possibility is that the questionnaire used in the present study was not adequately attuned to diversity issues. Additionally, the parent study was not primarily focused on diversity issues. Thus, relying on archival data to examine diversity issues in assessment among internship programs may represent a limitation of the present study. Had more specific questions been devoted to diversity-related considerations, internship directors may have conveyed more of their thinking on the matter and a different understanding of their perspectives may have emerged.

More research would be needed for this possibility to be explored.

Significant differences were not found across settings pertaining to the emphasis of evidence-based assessment on the programs' approaches to psychological assessment. Further, settings showed they were either "Somewhat Impacted" or "Strongly Impacted," with PC and SCPCH settings falling most closely to being "Strongly Impacted." This aligns with literature that is stating that evidence-based assessment is being utilized more frequently within clinical settings (Jensen-Doss, 2011). Further, evidence-based assessment is also being utilized as a tool to address the impacts of managed care by developing assessment practices that are empirically based, cost efficient, and applicable to the population that is being served (Hunsley & Mash, 2007; Wood et al., 2002).

It was interesting to note however, that UCC directors had the lowest mean on this item (2.85), suggesting less impact of evidence-based approaches, while SCPH directors had the highest mean (3.72), suggesting greater impact of this contemporary trend. More research with larger samples would be needed to shed light on whether there are in fact any significant differences among groups on this issue.

A trend worth noting in the present findings was that more neuropsychological assessment measures are reportedly being utilized within certain internship settings. This trend



was most prominent within VAMC and CMHC settings. Additional literature reports that neuropsychological training is increasing amongst doctoral programs (Mihura et al., 2017). In the aforementioned study, assessment training was investigated within doctoral programs. Further, neuropsychological assessment was the third most frequently endorsed type of assessment taught (94%), while only 46% of the programs listed neuropsychological assessment as an actual requirement of the training programs (Mihura et al., 2017). Thus, not only is neuropsychological assessment utilized more prominently in certain internship settings, but doctoral programs are also providing more training within this domain to address the rising needs of various clinical settings.

Another trend that was noticed across domains was the use of symptom-focused measures. These measures were most prominently found in CON and UCC settings. This finding is noteworthy, as literature has also discussed the shift away from formal psychological testing within managed care settings (Piotrowski, 1999). Piotrowski discusses the managed care model of many clinical settings, which places emphasis on capitation. Further, it is stated that capitation has significantly restricted psychological testing for clients, due to expenses and time required to administer, score and interpret measures (Piotrowski, 1999). Moreover, Piotrowski (1999) states that there is an ongoing devaluation of psychological assessment within managed care settings, which is considered a direct threat to professional psychology. Similarly, Griffith (1997) reports findings in which nine managed care agencies were surveyed and expressed that a clinical interview was more efficacious in psychodiagnosis and treatment planning than psychological assessment. Thus, shifts toward more symptom-based assessments may be indicative of these practices and warrant further investigation. Symptom-based assessment measures may also be more compatible with evidence-based approaches to practice, where



specific symptoms are targeted for intervention and monitored for responsiveness to treatment.

Clearly more research is needed on the ways that changes in assessment practices may be related to the growing influence of evidence-based practice.

When asked to list measures that they would like to see introduced at their sites in the future, a theme for abbreviated measures was noticed among internship directors. In particular, the MMPI-2-RF was commonly listed, in addition to the Rorschach Performance Assessment System (R-PAS). Both measures are abbreviated versions of the MMPI-2 and Rorschach Inkblot Method, respectively. One respondent within a VAMC setting stated he/she would like to see, "lots of briefer measures for medical populations." This further attests to the shift to briefer, symptom-based measures, which may also be related to the impact of managed care and its emphasis on cost containment.

Another theme that was noticed was internship directors' desire for versions of measures in Spanish formats/versions to be introduced in their internship programs. This theme reflected attention to, or awareness of, a diversity-related need in assessment practices on internship. It may also reflect utilization of psychological services by increasingly diverse communities. However, no other languages were mentioned in response to questionnaire item 30, and no other suggestions for culturally sensitive measures. This finding is particularly interesting, given the vast representation of diverse populations across the United States. Literature is showing that the United States population is increasing in its diversity (Butcher, 2006). It is predicted that in approximately 20 years, the United States will no longer have a single ethnicity which is considered a majority of the population (Hempel, 2013). Moreover, the representation of ethnically diverse populations continually increases. Specifically, the Latino population now represents 16% of the population, the African American community represents 12% of the



population, the American Indian community represents 1.2% of the population, and the Asian/Pacific Islander community represents 5.5% of the population (Wright et al., 2014). Thus, psychologists may be serving diverse populations at higher frequencies and require training in diversity, including training in multicultural issues that may be associated with assessment. Many psychological assessments were created to suit homogenous groups (Naglieri & Graham, 2013). Thus, care must be taken to ensure that assessment tools are applicable to the populations that psychologists are serving. Taking this information into consideration, for the current study, it would be suspected that more emphasis would be placed on selecting measures that were most suitable for diverse groups. These findings also attest to the need for further discourse in cultural competence in assessment training overall.

Measures were also listed for younger consumers of psychological services, including Spanish language versions of these measures. Interestingly, there were also no measures listed to specifically assess geriatric populations. This is another group that is receiving more attention, as the United States population is continually aging. The average life expectancy has largely increased from 46 to an average of 76, specifically, 76.1 years for men and 81.1 years for women (Fernandez-Ballesteros, 1999; Murphy et al., 2018).

#### **Recommendations for future research**

There are a number of opportunities for future research to further expand on this topic.

Results indicated a shift towards neuropsychological assessment and symptom-based measures within certain settings. Research could investigate the client populations that are receiving services at these sites to understand the needs and training that are beneficial for these populations. Moreover, future research could further investigate the impacts of evidence-based practice and managed care on assessment services within given settings. This information could



possibly provide information on the future of psychological assessment within these settings. It could also be useful to psychology doctoral students who are considering career development and training that is needed for specific practice settings.

In regard to psychological assessment, cultural competence, and cultural adaptations, a new questionnaire could be developed and administered to internship directors nationwide that first describes and explores all the dimensions of diversity. This step would be helpful, as diversity is often considered to be limited to ethnic and racial backgrounds; however, the APA code of ethical guidelines reports that diversity is reflected by a variety of dimensions (i.e., gender, gender identity, race, ethnic background, sexual orientation, national origin, age, religion, socioeconomic status, language, disability). Further, by researchers operationalizing diversity, respondents would be reminded to consider all aspects of diversity in their responses.

It would be beneficial to obtain the frequency of the directors' sites in providing clinical and assessment services to diverse groups. Specific questions first addressing trainees' broad use assessment at internship sites, followed by questions on the use of culturally sensitive measures could also be utilized, particularly regarding the frequency of their utilization. It would be helpful to have an estimate of the rates of diverse groups receiving services in comparison to their interns' abilities to provide assessment to these groups. This information could further attest to the need for cultural sensitivity training and cultural adaptations of assessment. Lastly, openended questions could be asked regarding the cultural adaptations of assessments and use of culturally sensitive measures that directors would like to see introduced into their programs. This could also attest to the trends of cultural adaptations for diverse groups in these settings and introduce further needed discourse regarding selecting measures and interpreting data in a manner that is culturally sensitive and optimally serves clients. Moreover, internship directors



could be asked to reflect upon their own staff members' cultural competence in regard to psychological assessment and what resources or additional development might be needed to strengthen their resources to provide mentoring and training to interns in the assessment of diverse communities.

#### Limitations

Several limitations are identified in this study. The current study was an archival study, which used data obtained from a parent study (Bates, 2016; Faith, 2016; Shipley, 2019). The parent study researchers developed an online questionnaire that was administered nationwide to internship directors. The current researcher's area of interest was diversity and trends that were prevalent amongst internship directors' programs. However, the researcher was unable to add any specific questions related to her interest area, and instead, had to utilize the data that was previously collected. Additionally, the question that examined competence in working with diverse groups did not list the dimensions of diversity, as defined in the APA Code of Ethics (2002). Thus, internship directors may not have fully understood this survey item. Although an abundance of data was interpreted, more information could be obtained from a questionnaire that listed all dimensions of diversity and provided respondents the opportunity to address each dimension, in relation to their interns' cultural competency.

Additionally, the sample size of the current study was smaller for a number of reasons. Primarily, the researcher analyzed data for the most frequently represented internship categories from the parent study: VAMC, CMHC, SCPH, PC, CON, and UCC. However, other internship settings were identified in the parent study. There may have been more discussion of diversity issues if the full sample had been utilized for the present study.



Another limitation of the study was the response rate of the sample. Previous literature has remarked on the difficulty of obtaining high response rates from internship and doctoral training directors due to their heavy workloads of supervision, faculty duties, program supervision, and personal caseloads (Shen-Miler et al., 2012). Moreover, obtaining a larger sample size within this population appears to be increasingly difficult. For instance, in the parent study,741 internship directors were invited to participate in the study, while 182 were consented to participate, resulting in a 25% return rate (Bates, 2016; Faith, 2016; Shipley, 2019). Likewise, in Ready and Veague's (2014) study on doctoral training in psychological assessment, 233 academic program directors of clinical training were invited to participate, yet 77 responded, resulting in a 33% response rate. Similarly, Shen-Miler and colleagues (2012) also examined training in psychology doctoral programs, specifically related to addressing competency challenges regarding diversity, and obtained a lower response rate. According to the authors, 64 programs were contacted, yet just 6 programs participated, resulting in responses from 22 participants, including faculty members (Shen-Miler et al., 2012). Literature has also shown a mean response rate of 49.6% in published survey studies in counseling and clinical psychology in the United States (Van Horn et al., 2009). Thus, the current study's response rate fell under the average response rate for survey studies that are ultimately published in peer review journals.

These outcomes attest to a challenging quest for researchers when attempting to obtain information from internship directors, faculty members, and doctoral training programs overall. There may be a need for some form of incentive or encouragement to participate in these studies, facilitate this process, and also provide internship directors with support for them to participate in larger numbers.



There are also limitations to the generalizability of the results of this study. Since only six categories of internship were examined, the findings may not apply to other types of internships, such as internships located in military settings or child guidance clinics. In addition, selection factors may limit the generalizability of the findings. Internship directors with especially positive or negative attitudes about assessment might have been more motivated to participate in the original study. However, their views may have been less representative of internship directors in general.

#### **Conclusions**

Findings for this and previous literature shows that diversity is continually growing and impacting the practices of psychologists. Thus, training in diversity and cultural competence is required as a competency benchmark for clinical practice. Although the U.S. population is steadily growing in its numbers of diverse populations, there is still a paucity of literature on moving forward in culturally adapting assessment measures and attending to diversity issues in psychological assessment. Moreover, it is unclear how many training directors are showing adequate interest in implementing and advocating for culturally-attuned measures that can be used in their programs. This warrants further discourse and research, as psychologists are providing more services to diverse populations, and thus trainees require guidance in this area.

Evidence-based assessment is also an emerging trend that is occurring amongst clinical sites. With proper investigation, evidence-based assessment may also provide guidance for implementing multicultural assessment and culturally adapting assessments for diverse groups.

Lastly, more emphasis is being placed on briefer assessments that require less time and are more cost efficient. These trends may also impact the future training of doctoral students, including their preparation for predoctoral internships.



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#### APPENDIX A

Original Questionnaire



#### 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:



	<ul> <li>□ American Indian or Alaskan Native</li> <li>□ Asian</li> <li>□ Black or African-American</li> <li>□ Caucasian (White)</li> <li>□ Latino/a</li> </ul>	<ul> <li>□ Native Hawaiian or other Pacific Islander</li> <li>□ Multiracial</li> <li>□ Other (please specify)</li> </ul>
	Latino, a	
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 ☐ Yes ☐ No	o practice psychology?
	If yes, what year did you first obtain licensu	re?
II	I. INTERNSHIP SITE & PROGRAM INFORMA	ATION
7.	Is your internship program APA accredited at this to Yes  ☐ No ☐ In Process	me?
8.	Which of the following best describes the setting of <b>ONE</b> from the list below.)	your internship program? (Please select
	<ul><li>□ Armed Forces Medical Center</li><li>□ Child/Adolescent Psychiatric or</li></ul>	Pediatric  ☐ Community Mental Health Center
	No. of the last of	

[ ]		Me Pri Pri Pri	nsortium edical School son or Correctional Facil vate General Hospital vate Outpatient Clinic vate Psychiatric Hospital		<ul> <li>□ Psychology Department</li> <li>□ School District</li> <li>□ State/County/Other Public Hospital</li> <li>□ University Counseling Center</li> <li>□ Veterans Affairs Medical Center</li> <li>□ Other (please specify)</li> </ul>
			_		ant theoretical orientation(s) of your (REE from the list below.)
]		Bio Co Ecl	havioral blogical gnitive Behavioral lectic manistic/Existential		Integrative Interpersonal Psychodynamic Systems Other (please specify)
			erage, how many trainees ries?	s do you typically acc	ept each year in each of the following
		a.	Practicum Students:  □ N/A		
		b.	Pre-doctoral Interns:  □ N/A		
		c.	Postdoctoral Interns:  □ N/A		
11. I	Doe	es y	our site offer a PRIMA	<b>RY</b> rotation with an e	emphasis in psychological testing?
[		Ye No			
		w n gra		sting and assessment of	emphasized within your internship
[		Ex	tremely emphasized		



<ul> <li>□ Strongly emphasized</li> <li>□ Somewhat emphasized</li> <li>□ Slightly emphasized</li> <li>□ Not at all emphasized</li> </ul>
13. How is <u>training</u> in psychological testing and assessment provided within your internship program? ( <i>Please SELECT ALL that apply.</i> )
☐ 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 <b>supervision</b> of psychological testing and assessment provided within your internship program? ( <i>Please SELECT ALL that apply.</i> )
☐ 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.)
<ul> <li>□ Psychoeducation</li> <li>□ Differential diagnosis</li> <li>□ Treatment planning</li> <li>□ Monitoring response to treatment</li> <li>□ Assessing treatment outcome</li> <li>□ As a therapeutic intervention</li> <li>□ Disability determinations</li> <li>□ For accommodations/to access special programs</li> <li>□ Research purposes</li> <li>□ Other (please specifiy)</li> </ul>
16. How important is <b>clinical experience</b> in psychological testing when selecting interns for your program?
<ul> <li>□ Extremely important</li> <li>□ Very important</li> <li>□ Somewhat important</li> </ul>



		Slightly important Not at all important
1.77	***	
1/.		w important is <b>knowledge</b> about psychological testing (gained from coursework and/or actic training) when selecting interns for your program?
		Extremely important Very important Somewhat important Slightly important Not at all important
18.		w satisfied are you with incoming interns' <u>level of clinical experience</u> in psychological essment?
		Extremely satisfied Very satisfied Somewhat satisfied Slightly satisfied Not at all satisfied
19.		w satisfied are you with incoming interns' <u>level of theoretical knowledge</u> about vchological assessment?
		Extremely satisfied Very satisfied Somewhat satisfied Slightly satisfied Not at all satisfied
20.		w satisfied are you with incoming interns' <u>level of preparation</u> for conducting vchological assessment with <u>diverse populations</u> ?
		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 <u>interns</u> use? (*Please* <u>SELECT ALL</u> that apply)

COGNITIVE FUNCTIONING	
☐ Wechsler Intelligence Scales	<b>EMOTIONAL FUNCTIONING</b>
(WAIS-IV, WISC-IV/V)	☐ Millon Clinical Multiaxial Inventory
☐ Stanford-Binet 5	3 <sup>rd</sup> Edition (MCMI-III)
□ TONI-3	☐ Minnesota Multiphasic Personality
☐ Kaufman Assessment Battery for	Inventory, 2 <sup>nd</sup> Edition (MMPI-2)
Children (KABC)	☐ MMPI-2-Restructured Form (MMPI
	2-RF)
SYMPTOM INVENTORIES	☐ Personality Assessment Inventory
☐ Beck Depression Inventory, 2 <sup>nd</sup>	☐ Rorschach Inkblot Method
Edition (BDI-II)	☐ Rorschach Performance Assessment
☐ Hamilton Depression Scale	System (R-PAS)
☐ Beck Anxiety Inventory (BAI)	☐ Thematic Apperception Test
☐ Adult Manifest Anxiety Scale	☐ Sentence Completion Test
ř	☐ Drawings (DAP, HTP, KFD, etc.)
DIAGNOSTIC INTERVIEW PROTOCOLS	☐ NEO Personality Inventory-Revised
□ SADS	(NEO-PI-R)
□ SCID	,
□ DIS	ACADEMIC FUNCTIONING
	☐ Strong Interest Inventory
<u>NEUROPSYCHOLOGICAL</u>	☐ Wechsler Individual Achievement
<u>FUNCTIONING</u>	Test (WIAT)
☐ Boston Diagnostic Aphasia Exam	☐ Woodcock Johnson-III
☐ Brief Rating Scale of Executive	(Achievement; Cognitive)
Function (BRIEF)	☐ Wide Range Achievement Test, 4 <sup>th</sup>
☐ Dementia Rating Scale-II	Edition (WRAT-4)
☐ California Verbal Learning Test	
☐ Continuous Performance Test	FORENSIC/RISK ASSESSMENT
☐ Delis Kaplan Executive Function	☐ Psychopathy Checklist-Revised
System	(PCL-R)
☐ Rey-Osterrieth Complex Figure	☐ Static 99
☐ Bender Gestalt	☐ Violence Risk Assessment Guide
☐ Trail Making Test A & B	(VRAG)
☐ Wechsler Memory Scale III	☐ History-Clinical-Risk 20 (HCR-20)
☐ Wide Range Assessment of Memory	☐ Validity Indicator Profile
and Learning	☐ Structured Interview of Reported
☐ Wisconsin Card Sorting Test	Symptoms (SIRS)
	☐ Miller Forensic Assessment of
	Symptoms Test (M-FAST)
	□ Rev 15- Item Test



☐ Test of Memory Malingering (TOMM)		
,	t frequently used by <b>interns</b> at your internship program?	
(Please select up to 10)	1	
COGNITIVE FUNCTIONING		
☐ Wechsler Intelligence Scales	EMOTIONAL FUNCTIONING	
(WAIS-IV, WISC-IV/V)	☐ Millon Clinical Multiaxial Invento	ory.
☐ Stanford-Binet 5	3 <sup>rd</sup> Edition (MCMI-III)	
☐ TONI-3	☐ Minnesota Multiphasic Personalit	y
☐ Kaufman Assessment Battery	• • • • • • • • • • • • • • • • • • • •	
Children (KABC)	☐ MMPI-2-Restructured Form (MM 2-RF)	
SYMPTOM INVENTORIES	☐ Personality Assessment Inventory	
☐ Beck Depression Inventory, 2		
Edition (BDI-II)	☐ Rorschach Performance Assessme	ent
☐ Hamilton Depression Scale	System (R-PAS)	
☐ Beck Anxiety Inventory (BA		
☐ Adult Manifest Anxiety Scale		
DIACNOSTIC INTERVIEW PROT	Drawings (DAP, HTP, KFD, etc.)	
<u>DIAGNOSTIC INTERVIEW PROT</u> ☐ SADS	OCOLS   NEO Personality Inventory-Revis (NEO-PI-R)	ea
□ SCID	(NEO-FI-K)	
□ DIS	ACADEMIC FUNCTIONING	
	☐ Strong Interest Inventory	
NEUROPSYCHOLOGICAL	☐ Wechsler Individual Achievement	t
FUNCTIONING	Test (WIAT)	
☐ Boston Diagnostic Aphasia F		
☐ Brief Rating Scale of Executi		
Function (BRIEF)	☐ Wide Range Achievement Test, 4	th
☐ Dementia Rating Scale-II	Edition (WRAT-4)	
☐ California Verbal Learning T	est	
☐ Continuous Performance Tes	FORENSIC/RISK ASSESSMENT	
☐ Delis Kaplan Executive Fund	· · · · · · · · · · · · · · · · · · ·	
System	(PCL-R)	
Rey-Osterrieth Complex Figure		
☐ Bender Gestalt	☐ Violence Risk Assessment Guide	
☐ Trail Making Test A & B	(VRAG)	
☐ Wechsler Memory Scale III	☐ History-Clinical-Risk 20 (HCR-20	J)
☐ Wide Range Assessment of N	•	
and Learning	☐ Structured Interview of Reported	
☐ Wisconsin Card Sorting Test	Symptoms (SIRS)	
	☐ Miller Forensic Assessment of	
	Symptoms Test (M-FAST)  Rev 15- Item Test	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	



☐ Test of Memory Malingering (TOMM)	
23. Please indicate which measures you prefer <a href="https://doi.org/10.2016/journal.org/">before starting internship? (Please SELECT)</a>	your interns to have had clinical experience with CT ALL that apply.)
COGNITIVE FUNCTIONING	
☐ Wechsler Intelligence Scales (WAIS-IV, WISC-IV/V)	
☐ Stanford-Binet 5	
☐ TONI-3	
☐ Kaufman Assessment Battery for Children (KABC)	EMOTIONAL FUNCTIONING
(12.25)	☐ Millon Clinical Multiaxial Inventory,
SYMPTOM INVENTORIES	3 <sup>rd</sup> Edition (MCMI-III)
☐ Beck Depression Inventory, 2 <sup>nd</sup> Edition (BDI-II)	☐ Minnesota Multiphasic Personality Inventory, 2 <sup>nd</sup> Edition (MMPI-2)
☐ Hamilton Depression Scale	☐ MMPI-2-Restructured Form (MMPI-
☐ Beck Anxiety Inventory (BAI)	2-RF)
☐ Adult Manifest Anxiety Scale	<ul><li>☐ Personality Assessment Inventory</li><li>☐ Rorschach Inkblot Method</li></ul>
DIAGNOSTIC INTERVIEW PROTOCOLS	☐ Rorschach Performance Assessment
□ SADS	System (R-PAS)
□ SCID □ DIS	<ul><li>☐ Thematic Apperception Test</li><li>☐ Sentence Completion Test</li></ul>
	☐ Drawings (DAP, HTP, KFD, etc.)
NEUROPSYCHOLOGICAL	☐ NEO Personality Inventory-Revised
<u>FUNCTIONING</u> ☐ Boston Diagnostic Aphasia Exam	(NEO-PI-R)
☐ Brief Rating Scale of Executive	ACADEMIC FUNCTIONING
Function (BRIEF)	☐ Strong Interest Inventory
<ul><li>□ Dementia Rating Scale-II</li><li>□ California Verbal Learning Test</li></ul>	☐ Wechsler Individual Achievement
☐ Continuous Performance Test	Test (WIAT)  □ Woodcock Johnson-III
☐ Delis Kaplan Executive Function	(Achievement; Cognitive)
System  Rey Octomisth Complex Figure	☐ Wide Range Achievement Test, 4 <sup>th</sup>
<ul><li>☐ Rey-Osterrieth Complex Figure</li><li>☐ Bender Gestalt</li></ul>	Edition (WRAT-4)
☐ Trail Making Test A & B	FORENSIC/RISK ASSESSMENT
☐ Wechsler Memory Scale III	☐ Psychopathy Checklist-Revised
☐ Wide Range Assessment of Memory and Learning	(PCL-R) □ Static 99
☐ Wisconsin Card Sorting Test	☐ 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 <u>SELECT ALL</u> 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.	Iow significant is the use of technology in the training and practice of psychological ssessment within your internship program?
	Extremely important Very important Somewhat important Slightly important Not at all important
26.	n the next five years, what do you expect regarding funding and resources for psychological esting 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.	n the future, how do you expect your internship program's emphasis on psychological esting and assessment to change?
	Significantly increase Slightly increase Stay the same Slightly decrease Significantly decrease



program's approach to psychological testing and assessment?	ied your
<ul> <li>□ Extremely impacted</li> <li>□ Strongly impacted</li> <li>□ Somewhat impacted</li> <li>□ Slightly impacted</li> <li>□ Not impacted at all</li> </ul>	
29. What new psychological tests or measures has your site begun using within years?	the last five
□ None	
30. Within your site, what psychological tests or measures would you like to see future that are not currently being used?	e used in the
□ None	
31. What recommendations do you have for academic programs regarding pre-in psychological testing and assessment?	nternship training
□ None	



None		

Thank you for participating in this study!"

#### APPENDIX B

Group Coding by q8a for Data Analysis



#### 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<sup>1</sup>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)

<sup>&</sup>lt;sup>1</sup> 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.



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#### APPENDIX C

Wilcoxon Scores (Rank Sums) for Variables



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

Q	q8a	N	Sum of	Expected	Std Dev	Mean Score <sup>1</sup>
			Scores	Under H0	Under H0	
20	6	14	1101.00	875.00	112.245408	78.642857
	5	14	1100.00	875.00	112.245408	78.571429
	4	18	969.00	1125.00	124.938822	53.833333
	3	27	1702.50	1687.50	146.378055	63.055556
	2	27	1271.50	1687.50	146.378055	47.092593
	1	24	1606.00	1500.00	140.124425	66.916667
28	6	14	860.50	875.00	119.955563	61.464286
	5	14	1012.50	875.00	119.955563	72.321429
	4	18	1440.00	1125.00	133.520890	80.000000
	3	27	1367.00	1687.50	156.432787	50.629630
	2	27	1673.00	1687.50	156.432787	61.962963
	1	24	1397.00	1500.00	149.749594	58.208333

<sup>&</sup>lt;sup>1</sup> Average scores were used for ties.



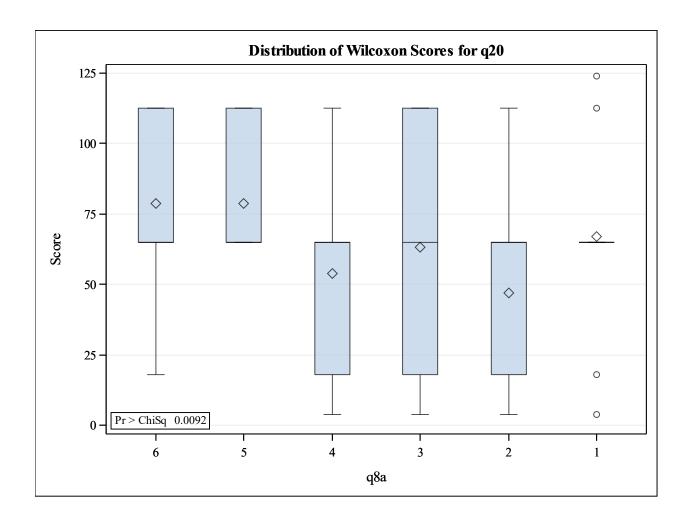
#### APPENDIX D

Distribution of Wilcoxon Scores



#### Distribution of Wilcoxon Scores

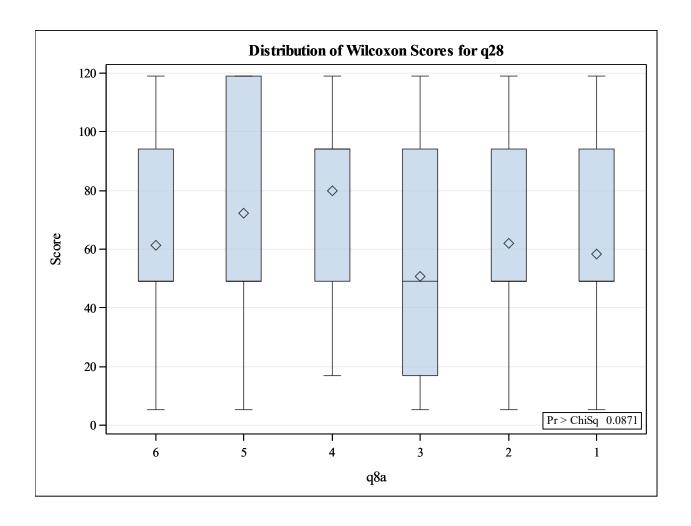
# Survey Item 20





#### Distribution of Wilcoxon Scores

# Survey Item 28





#### APPENDIX E

Kruskal-Wallis Test



#### Kruskal-Wallis Test

Item	Chi-Square	DF	Pr > Chi-Square	
20	15.2813	5	0.0092	
28	9.6082	5	0.0871	



#### APPENDIX F

**Group Comparisons** 



# **Group Comparisons**

# Questionnaire Item 201

Group Comparison by q8a	Group Comparison by Setting	Differences in Average Ranks	Cutoff at Alpha =0.05	Significant Difference
1-2	CMHC-VAMC	19.8241	29.5945	
1-3	CMHC-UCC	3.8611	29.5945	
1-4	CMHC-State/Public	13.0833	32.8924	
1-5	CMHC-Prison/Correction	11.6548	35.4760	
1-6	CMHC-Consortium	11.7262	35.4760	
2-3	VAMC-UCC	15.9630	28.7108	
2-4	VAMC-State/Public	6.7407	32.0997	
2-5	VAMC-Prison/Correction	31.4788	34.7423	
2-6	VAMC-Consortium	31.5503	34.7423	
3-4	UCC-State/Public	9.2222	32.0997	
3-5	UCC-Prison/Correction	15.5159	34.7423	
3-6	UCC-Consortium	15.5873	34.7423	
4-5	State/Public- Prison/Correction	24.7381	37.5913	
4-6	State/Public-Consortium	24.8095	37.5913	
5-6	Prison/Correction- Consortium	0.0714	39.8716	

<sup>&</sup>lt;sup>1</sup> Questionnaire item 25: Chi-Square=15.281; DF=5; Pr>Chi-Square=0.0092



# **Group Comparisons**

# Questionnaire Item 28<sup>1</sup> (RE ENTER)

Group Comparison by q8a	Group Comparison by Setting	Differences in Average Ranks	Cutoff at Alpha =0.05	Significant Difference
		0.7716	20.7047	
1-2	CMHC-VAMC	3.7546	29.5945	
1-3	CMHC-UCC	7.5787	29.5945	
1-4	CMHC-State/Public	21.7917	32.8924	
1-5	CMHC-Prison/Correction	14.1131	35.4760	
1-6	CMHC-Consortium	3.2560	35.4760	
2-3	VAMC-UCC	11.3333	28.7108	
2-4	VAMC-State/Public	18.0370	32.0997	
2-5	VAMC-Prison/Correction	10.3585	34.7423	
2-6	VAMC-Consortium	0.4987	34.7423	
3-4	UCC-State/Public	29.3704	32.0997	
3-5	UCC-Prison/Correction	21.6918	34.7423	
3-6	UCC-Consortium	10.8347	34.7423	
4-5	State/Public- Prison/Correction	7.6786	37.5913	
4-6	State/Public-Consortium	18.5357	37.5913	
5-6	Prison/Correction- Consortium	10.8571	39.8716	

<sup>&</sup>lt;sup>1</sup> Questionnaire item 28: Chi-Square=9.6082; DF=5; Pr>Chi-Square=0.0871



#### APPENDIX G

IRB Exemption Notice





Pepperdine University 24255
Pacific Coast Highway
Malibu, CA 90263
TEL: 310-506-4000

#### 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

