Access issues related to a learning disability assessment pilot study with a Hawaiʻi college sample

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Abstract
The Akamai Learning Disability Model, a culturally sensitive learning disability assessment model that accounts for Hawai‘i multicultural factors, was critically evaluated and assessed in this study. Due to access issues across individual, community, and systemic levels, the study was revised to address access issues specific to Native Hawaiian individuals. A survey was created to examine access issues (e.g., financial, transportation, insurance, Asian and Native Hawaiian family and gender role power hierarchies, mental health stigmatization/shame, minority mental health perspectives versus Western mental health, and Native time) and Native Hawaiian individuals' attitudes and beliefs that may affect learning disability testing. Participant demographics included 37 participants (28 women, 9 men, $M_{age} = 31.7$ years, age range: 18-50 years) with completed surveys, and 10 participants (6 women, 4 men, 0 transgender, $M_{age} = 25.9$ years, age range: 18-50 years) with partially completed surveys. Data analysis consisted of frequencies and averages, and trends were noted. It should be noted that access issues identified in the Akamai Learning Disability model were also salient in this study; participants endorsed that these access issues impacted their engagement in mental health treatment and assessment services.

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ACCESS ISSUES RELATED TO A LEARNING DISABILITY ASSESSMENT PILOT STUDY WITH A HAWAI‘I COLLEGE SAMPLE

A DISSERTATION

SUBMITTED TO THE FACULTY

OF

SCHOOL OF PROFESSIONAL PSYCHOLOGY

PACIFIC UNIVERSITY

HILLSBORO, OREGON

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CHELSEA WONG, M.S.

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Abstract

The Akamai Learning Disability Model, a culturally sensitive learning disability assessment model that accounts for Hawai‘i multicultural factors, was critically evaluated and assessed in this study. Due to access issues across individual, community, and systemic levels, the study was revised to address access issues specific to Native Hawaiian individuals. A survey was created to examine access issues (e.g., financial, transportation, insurance, Asian and Native Hawaiian family and gender role power hierarchies, mental health stigmatization/shame, minority mental health perspectives versus Western mental health, and Native Hawaiian time) and Native Hawaiian individuals’ attitudes and beliefs that may affect learning disability testing. Participant demographics included 37 participants (28 women, 9 men, $M_{\text{age}} = 31.7$ years, age range: 18-50 years) with completed surveys, and 10 participants (6 women, 4 men, 0 transgender, $M_{\text{age}} = 25.9$ years, age range: 18-50 years) with partially completed surveys. Data analysis consisted of frequencies and averages, and trends were noted. It should be noted that access issues identified in the Akamai Learning Disability model were also salient in this study; participants endorsed that these access issues impacted their engagement in mental health treatment and assessment services.

Key words: learning disability, Hawaiian, assessment
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Introduction

The evolving demographics of the United States have resulted in a need to modify common practices in learning disability (LD) assessment. This is because assessment practices and instruments (e.g., cognitive ability and neurocognitive measures) are predominantly based on Western theories that are culturally inappropriate for many ethnic minority populations (Puente & Agranovich, 2003). Use of these culturally inappropriate assessment tools may result in biased findings that do not reflect an examinee’s true abilities. In the field of LD assessment, in which there is no uniform way that an LD is assessed or consistently defined in terminology (see the *Diagnostic and Statistical Manual of Mental Disorders* [5th ed.; DSM-5; American Psychiatric Association, 2013], the American with Disabilities Act [ADA; Brown, 2000], and Individuals with Disabilities Education Act [IDEA; Individuals with Disabilities Education Act, 2004]), ethnic minorities are more likely to be misdiagnosed than people who are not ethnic minorities (Kavale & Forness, 2000; Overton, Fielding, & Simonsson, 2004).

Learning disability diagnostic issues and racial disproportionality are well illustrated in the case of “invisible” ethnic minority groups, including Asian Americans, Pacific Islanders, Native Hawaiians, American Indians, Alaska Natives, and multiethnic individuals (Artiles, Trent, & Kuan, 1997; Okazaki & Sue, 2000; Ro & Yee, 2010; Wong & Fujii, 2004). This is because the majority of LD research does not address concerns relevant to these populations, which results in clinician and researcher unfamiliarity and clinical competency issues (Artiles et al., 1997; Niu & Luo, 1999; Ro & Yee, 2010; Sue & Sue, 2008).

In populations where invisible ethnic minority multiculturalism is salient (e.g., Hawai‘i), the clinical implications are detrimental to individuals seeking LD assessment services. In multicultural communities such as Hawai‘i, which is predominantly comprised of multiethnic
and indigenous populations (e.g., Asian Americans at 38.6%, Native Hawaiian/Pacific Islanders at 10%, Whites at 24.7%, and multiracial individuals at 23.6%), individuals may experience the effects of outdated assessment guidelines. This is because clinical research based on Western theory or practices are informed by Western values; and cultural recommendations are most often specific for dominant visible ethnic minority groups such as African Americans, Hispanics, and Latinos (Butay, Wong, & Burns-Glover, 2011; US Census Bureau, 2011).

In order to understand the limitations of LD assessment guidelines with Hawai‘i’s invisible minority population, Hawai‘i’s history and multicultural factors must be briefly explored. (See Appendix A for a thorough examination of Hawai‘i’s history). Hawai‘i’s history includes a history of conflict in which an indigenous kingdom (i.e., Kingdom of Hawai‘i) was illegally invaded, overthrown, and annexed by American businessmen and the U.S. Minister of Hawai‘i, John Stevens, who used the U.S. Navy to overrun the kingdom (Grant & Ogawa, 1993; McCubbin & Marsella, 2009). It should be noted that the term Native Hawaiians specifically refers to indigenous blood quantum, such that they are indigenous natives to Hawai‘i. This is similar to the indigenous term American Indians. Hawai‘i’s historical context parallels the histories of many indigenous nations (e.g., American Indians) where Westernization resulted in the spreading of Christianity, literacy, education, Western politics and business, and Western lifestyles (Grant & Ogawa, 1993; McCubbin & Marsella, 2009).

As a result, cultural conflict, oppression, and forced Westernization dissolved Native Hawaiian culture and lifestyles. On the contrary, Westernization promoted White businessmen and their affiliated companies (e.g., the Big Five) across politics, government, land, and economics (McCubbin & Marsella, 2009). This Westernized economy resulted in increased immigration and racial segregation, which resulted in the evolution of pidgin culture. Pidgin
culture was built on the foundation of “points of commonality” (Grant & Ogawa, 1993, p. 150) that incorporated communities’ beliefs, values, and practices that promoted tolerance and flexibility. This reinforced a cultural integration of ethnic foods, language (i.e., pidgin), lifestyles, spirituality, religion, and traditions unique to the local Hawai‘i identity (Grant & Ogawa, 1993).

Based on Hawai‘i’s historical context, several multicultural factors emerged that impact LD assessment, conceptualization, and treatment with individuals with a Hawai‘i multicultural background. Such factors are: a) collectivism, which is the concept of interdependence, group cohesion, extended family relationships, community involvement, and conformity that benefits the overall group and community; b) family and gender roles, which is defined by age hierarchies, respect for authority, respect for elderly, and patriarchal versus matriarchal differences; c) cultural assertions, which are defined as Native Hawaiians indigenous identification, fluidity, and assertions based on their indigenous multicultural identity and background; d) education, which is impacted by historical events and based on Hawai‘i’s history of missionary schools and is associated with Hawai‘i’s socioeconomic disparities, racial stereotypes (e.g., Asian American viewed as model minority versus Native Hawaiian viewed as troublemakers), and regionality differences in education; e) community styles, which are comprised of informal and formal linguistics, pidgin, and talking story; f) language, which included issues of English proficiency and other languages spoken; g) mental health perspectives, which consists of Asian and Native Hawaiians beliefs about mental health services, stigmatization, shame, and emphasis of alternative healing and holistic treatments (Cruz, Salzman, Brislin, & Losch, 2005; Benham & Heck, 1998; Butay et al., 2011; McBrayer & García, 2000; McCubbin & Marsella, 2009; McDermott, Tseng, & Maretzki, 1980; Okazaki &
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Sue, 2000; Sandoval, 2002; Sue & Sue, 2008; Wong & Fujii, 2004; Wong, Scott, & Jenkins, 2011). See Appendix A for a detailed profile of each multicultural factor.

Given the dearth of LD research and the resulting implications for clinical work, this paper addresses several key issues for those with a Hawai‘i background and/or who identify as Native Hawaiian and who are seeking LD assessment. First, this paper will review the current context of LD and assessment practices and examine cultural factors that may influence learning disability assessment with an ethnically and indigenously mixed population. Second, a culturally sensitive LD assessment model (the Akamai Learning Disability Model) that addresses salient multicultural variables for invisible multiethnic populations from Hawai‘i will be discussed and critically evaluated. Third, this paper will examine access issues that resulted in a revised study. Therefore, this paper will critically evaluate access concerns across individual, family, and community levels that impact an individual’s access to LD services and treatment. Overall, this paper will highlight the need for additional resources and outreach for all mental health services, including treatment, assessment, and LD testing.

**Literature Review**

The term LD reflects several constructs based on formal legislation (e.g., IDEA) and diagnostic classification (i.e., *DSM-IV-TR*, American Psychiatric Association [APA], 2000; *DSM-5*, APA, 2013; Kavale & Forness, 2000). The differing perspectives reflected in LD terminology may influence assessment procedures and conceptualization of individuals presenting with learning difficulties (Kavale & Forness, 2000). Specifically, the term *learning disability* has been used in legislation and research with respect to recognizing and addressing disabilities in learning, whereas *learning disorder* is a diagnostic term that reflects a learning difficulty that may or may not rise to the level of disability. The following will examine LD
terminology in more detail, as well as assessment practices and implications for invisible ethnic minority clients. Conceptualization issues that influence multicultural indigenous populations will then be addressed through presentation of the Akamai Learning Disability Model.

**Learning Disability**

Kirk and Bateman (1962) introduced the earliest conceptualization of LDs and stated that an LD occurs through dysfunction of the central nervous system that results in learning difficulties and/or mental retardation. This theory was the foundation of the LD movement, in which hypotheses were established to explain the presence of learning difficulties and associated symptoms. The LD movement was furthered through the work of federal and nonprofit agencies, which resulted in state and federal legislation that required LD accommodations. Such legislative acts incorporated findings of the National Advisory Committee on Handicapped Children (NACHC; National Advisory Committee on Handicapped Children, 1968), IDEA, and ADA.

The NACHC proposed the first formal definition of the term learning disabilities. It stated that children presenting with specific learning disabilities have deficits in several psychological processes (NAHC, 1968). Such deficits may include impairments in writing, reading, spelling, arithmetic, listening, speaking, comprehending, and spoken or written language. These deficits result from perceptual handicaps, brain injury, developmental aphasia, neurological difficulties, and/or dyslexia. The NACHC also stated that an LD does not include mental retardation, hearing or visual deficits, emotional disturbance, or learning difficulties as a result of environmental disadvantages.

Following the NACHC’s proposed definition, the Education for All Handicapped Children Act was passed in which free education was mandated across the United States for
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students with disabilities (IDEA, 2004). In 1990, this act was renamed the Individuals with Disabilities Education Act (IDEA, 2004), which was congruent with the Americans with Disabilities Act (ADA; Brown, 2000; LD Online, 2006). For the next several years, IDEA was periodically reauthorized to accommodate evolving LD theories. For example, IDEA replaced the term handicapped with disabilities, ensured accommodations for students with disabilities, and included autism and traumatic brain injury among diagnoses eligible for services.

Currently, IDEA authorizes a wider range of services for students with disabilities in collaboration with No Child Left Behind (IDEA, 2004). These services include the integration of teachers in the Individual Education Plan (IEP), which allows for a broader range of accommodations in curriculum and statewide assessments. In addition, IDEA stated that accommodations should be available to all students presenting with Attention-Deficit/Hyperactivity Disorder (ADHD). IDEA has also recognized the changing U.S. demographics in which culturally appropriate services should be offered to ethnic minority individuals. Culturally sensitive services addressed the use of appropriate assessments, referrals, teaching, instructions, and utilization of services. These culturally appropriate services address racial disproportionality reflected by assessment discrepancies and overrepresentation or underrepresentation issues. IDEA also required free education to all students with an LD at the program, state, and federal level. Thus, all students are assured and assisted with appropriate intervention, assessments, referrals, and school accommodations. However, it should be noted that IDEA only protects and provides services to individuals who are enrolled in kindergarten to 12th grade. Services can only be extended into higher levels of education if universities or colleges receive federal funding (e.g., state and public universities). Therefore, private
universities are not required to provide services, whereas public universities must either honor and extend services or refer the student out to services.

As stated previously, the passing of the ADA influenced IDEA. At this present time, ADA assists in the protection of individuals who have disabilities by prohibiting discrimination and ensuring that disabled individuals are offered the same opportunities as others (Brown, 2000). With regards to individuals diagnosed with an LD, ADA’s definition is consistent with IDEA, that an LD may result from difficulties in listening, speaking, writing, reading, spelling, mathematics, reasoning, memory, organization, time management, and/or social skills. Moreover, mental retardation, deafness, blindness, and emotional disturbances are not included in the definition of an LD. Similar to IDEA, ADA states that accommodations must be provided.

It should also be noted that, although IDEA and ADA are consistent regarding LD terminology, there are differences in the application of these two mandates with respect to settings, and thus usually also with age of testing. IDEA assures the provision of referrals, assessments, interventions, and accommodations for children and adolescents who present with LDs in primary and secondary school settings and often extends services to public universities with federal funding. On the other hand, ADA assists, protects, and provides opportunities for older adolescents and adults who present with LDs in post-secondary and workplace settings not covered by IDEA (Brown, 2000; IDEA, 2004).

**Specific Learning Disorder**

Previously, in the *DSM-IV-TR*, the APA (2000) specified that there were four types of learning disorders: Reading Disorder, Mathematics Disorder, Disorder of Written Expression, and Learning Disorder Not Otherwise Specified. For example, a reading learning disorder was characterized by deficits in phonological awareness, spelling, and word reading (Shaywitz,
Learning disorders were diagnosed based on a pattern of strengths and weaknesses and if there were significant discrepancies between an individual’s intellectual ability and achievement scores in relation to age and expected education levels. Thus, in all of the LDs, basic achievement processing difficulties result in large-scale academic disadvantages and deficits due to subsequent problems with higher-level abilities (Mather, Wendling, & Woodcock, 2001). These implications served as the clinical and diagnostic foundation of the newly released DSM-5.

In 2013, the APA introduced the DSM-5 to reflect recent changes regarding mental health, behavioral, and neurocognitive disorders. These changes were evident with specific revisions related to the diagnosis of learning disorder, which was updated and classified as Specific Learning Disorders under Neurodevelopmental Disorders (APA, 2013). DSM-5 revisions incorporated DSM-IV-TR’s LD clinical formulations as well as current research that classifies learning difficulties as biologically loaded and inter-related deficits, based on an individual’s symptom presentation and severity (Marlow, 2013). Most importantly, DSM-5 revisions aligned with federal regulations in IDEA in which LDs are depicted as learning deficits across a continuum.

Based on these recommendations, clinicians utilize the DSM-5 to guide the assessment process in identification of LDs. Learning disorders are clinically referred to as Specific Learning Disorders (APA, 2013). There are several specifiers to Specific Learning Disorders: with impairment in reading, with impairment in written expression, and with impairment in mathematics. A specific learning disorder is diagnosed when an individual’s achievement scores on standardized tests/measures are substantially below the expected levels with regard to an individual’s education and age. This differs from previous diagnostic practices in which scores had to be markedly below an individual’s expected performance with respect to chronological
age. Currently, difficulties must also be substantial in an individual’s early school years for at least 6 months. Most importantly, if an individual’s achievement scores are 1.5 to 2 or more standard deviations (i.e., standard score of 78 or less) below his or her achievement or age-based expectations, then a specific learning disorder might be present. Clinicians may also consider using smaller discrepancies (e.g., 1 to 2.5 standard deviations [SD]) due to the presence of other cognitive processing conditions, cultural considerations, intellectual disability, medical conditions (e.g., hearing impairments, and vision difficulties), and mental health issues that may affect performance. It should be noted that individuals ages 17 years and older who have a documented history of learning difficulties may be diagnosed with Specific Learning Disorder.

Due to these deficits, mood and behavioral symptoms are often associated with an LD (APA, 2000; APA, 2013). Associated symptoms and features may include low self-esteem, demoralization, and social skill deficits that may result in further academic and functioning deficits. Furthermore, these symptoms often result in dropping out of school, communication deficits, and employment difficulties.

Learning Disorder/Learning Disability Assessment Practices for Adolescents and Adults

With DSM-5 revisions, clinicians continue to utilize various standardized procedures (i.e., Response to Intervention [RTI] and discrepancy model) and measures to assess for the presence of a learning disorder. Response to intervention is a program specifically for children and adolescents in education to target and address LDs. Meanwhile, the discrepancy model leads to use of standardized assessment of intelligence (e.g., Wechsler Intelligence Scales and Stanford-Binet Intelligence Scale), and achievement (e.g., Woodcock-Johnson Tests of Achievement and Wechsler Individual Achievement Test) to evaluate intellectual and achievement abilities (Niu & Luo, 1999; Overton et al., 2004). The utilization of procedures and measures allows teachers
and clinicians to address LDs, compare an individual’s achievement scores, evaluate expected achievement scores in relation to chronological age, and gain insight about an individual’s intellectual ability and functioning.

**Standardized assessment.** Regarding standardized assessment, a comprehensive investigation of an individual’s background and presenting concerns is needed when assessing for LD. An extensive examination usually includes the use of neurocognitive tests (Silver et al., 2006; Suhr, 2011). Prior to the neurocognitive evaluation, pertinent information is collected. Such information includes clarifying the referral question; exploration of presenting problems; asking about the background information, environmental factors, and medical history; and collecting collateral information through interviews with family members with a review of academic records (Silver et al., 2006; Suhr, 2011).

**Discrepancy model.** Researchers have acknowledged that there is no uniform protocol to diagnose a learning disorder (Moats & Lyon, 1993; Overton et al., 2004). Previously, the most common protocol in relation to *DSM-IV-TR* and *DSM-5* was the discrepancy model. The discrepancy model compared differences between intellectual and achievement abilities (Kavale & Spaulding, 2008). Currently, as recommended by the *DSM-5*, achievement scores must be markedly below an individual’s chronological age (e.g., 1.5 to 2 SD) and learning difficulties must be substantial in the early years of school for at least 6 months (APA, 2013). If an individual is age 17 years or older; a documented history of learning deficits is part of the justification for an LD diagnosis. Once an LD diagnosis is made, then recommendations are provided to address learning difficulties.

**Response to intervention.** RTI is an alternative method to diagnosing adolescents and children with LDs (Kavale & Spaulding, 2008) in elementary through high school. The RTI
model focuses on educational instruction and evaluation to screen and evaluate for LDs (Klotz & Canter, 2006). RTIs identify students who may benefit from intervention; however, they do not identify specific learning disabilities/disorders per se (Kavale & Spaulding, 2008). Rather, RTIs provide teaching strategies and interventions that take into account the individuals’ strengths and weaknesses. Importantly, RTIs are also consistent with IDEA and No Child Left Behind mandates (Kavale & Forness, 2000; Kavale & Spaulding, 2008).

However, RTIs have several limitations, such that there is no single and universally accepted RTI model (Kavale & Spaulding, 2008). This is important to consider, because RTIs do not emphasize neuropsychological or standardized assessment to diagnosis or identify LDs. Therefore, problematic levels usually are reached before intervention strategies can be implemented (Kavale & Forness, 2000; Kavale & Spaulding, 2008).

**Learning Disabilities/Disorders with Invisible Ethnic Minorities**

As previously noted, invisible ethnic minorities (e.g., Asian Americans, Native Hawaiians, and Pacific Islanders) are underrepresented across health research, whereas dominant ethnic groups (e.g., African Americans, Hispanics/Latinos) are more prevalent in research (Artiles et al., 1997; Ro & Yee, 2010; Wong & Fujii, 2004). This racial disproportionality is demonstrated by the fact that a decade of advocacy was necessary to establish and publish the first Asian American journal (i.e., *Asian American Journal*) in spring 2010 (APA, 2009). This pattern is consistent across LD research with respect to Asian American, Pacific Islander, and Native Hawaiian populations. For example, from 1982-1996, no article examined or explored LDs with Chinese Americans, further ensuring invisibility in this population (Niu & Luo, 1999).

Current aggregation of ethnic minority groups promotes invisibility within research, clinical advocacy, treatment; and it is also associated with ethnic misidentification, denial of
ethnic and interethnic differences, and biased stereotypes (Artiles et al., 1997; Butay et al., 2011). This is illustrated by the term Asian American, in which at least 30 heterogeneous racial/ethnic groups are lumped together under one label. Similarly, use of the term Native Hawaiian/Pacific Islander categorizes and groups Pacific Islander racial groups with individuals of Native Hawaiian aboriginal ancestry (McCubbin & Marsella, 2009; Singer & Chung, 2002). Such collapsing of these heterogeneous groups promotes ethnic misidentification, cultural ignorance, culturally inappropriate treatment, and tainted research (Butay et al., 2011).

Ethnic misidentification and cultural ignorance compounds preexisting problems in assessment of ethnic minority individuals. Many neurocognitive measures (e.g., intelligence and achievement measures) were developed based on Western culture, systems, values, and theories that assumed universality of cognitive behaviors and communication patterns (Greenfield, 1997; Puente & Agranovich, 2003). However values, communication patterns, and definitions may have multiple manifestations cross-culturally (Ardila, 2005; Greenfield, 1997).

During the assessment process, this may result in response differences when evaluating an ethnic minority individual who does not identify with Western culture (Ardila, 2005). For example, this is illustrated with the concept of intelligence, which various cultures may conceptualize intelligences alternately as tacit, practical, interpersonal, or ability-oriented (Greenfield, 1997; Hays, 2001). However, as stated above, neurocognitive intelligence measures are based on Western tradition. Thus, the psychometric perspective assumes that clients have previous knowledge of and experience with the testing process (known as testwiseness) and the educational background assumed by test developers (Wong, Scott, & Jenkins, 2011). In some cases, reliability and validity may be affected and result in biases that preferentially benefit individuals from Western cultures (García & Pearson, 1994).
Along with potential biases in measurement, test unfairness may be present. For example, language and communication patterns are culturally dependent and fluid depending on the regionality, context, and situation (Greenfield, 1997; Wong et al., 2011). Specifically, different cultures practice various dialects, slang, jargon, registers (e.g., tone of voice, vocal sounds), and nonverbal behaviors to convey and communicate information. However, measures may strictly emphasize formal Western communication patterns, and responses may be dichotomously scored. In Hawai‘i, the use of pidgin and talking story in response to test items may lower scores and not accurately reflect the examinee’s true intellectual functioning or achievement abilities, and therefore lead to misdiagnosis.

In addition, most neurocognitive measures are normed primarily on White middle-class individuals (García & Pearson, 1994). Norms based on White middle-class populations frequently use demographics such as age, gender, and education level. These demographics are normed on the U.S. Census. Therefore, it can be assumed that neurocognitive measures are normed on the U.S. racial majority, which identifies as non-Hispanic, White middle class individuals. Moreover, if norms are based on non-Hispanic, White middle-class individuals, then it can be assumed that racial and socioeconomic injustice has also occurred. This is because socioeconomic status is a confounding variable and is associated with increased environmental opportunities (e.g., health status, well-being, and access to medical care and good nutrition), which may result in higher intelligence scores as reflected in the Flynn effect (Brickman, Cabo, & Manly, 2006; Dickens & Flynn, 2006). With combinations of ethnicity and socioeconomic status, ethnic hierarchies and competition may be present, further deepening the normative differences between groups (Anyon, 2009).
These normative demographics can be problematic in test construction. This is because researchers conduct item analyses, with the lowest correlated items often being eliminated during test construction (Hays, 2001). However, the lowest correlated items are often the most valid for ethnic minorities but are the least likely to be kept on published measures and tests (García & Pearson, 1994). This reinforces existing racial hierarchies, competition, and the gap between privileged and less privileged individuals, and further highlights the fact that current demographic data does not accurately represent ethnic minority groups. Therefore, this perpetuates test unfairness and potentially biased test use.

In these ways, test development and normative data collection may reinforce discrepancies that result in lower ethnic minority testing scores in comparison to Caucasian examinees (Boone, Victor, Wen, Razani, & Pontón, 2007; Gasquoine, 1999; Gasquoine, 2009). Test unfairness may also result when stressful and anxiety-provoking testing conditions exist uniquely for ethnic minority individuals. This may result in lowered scores due to decreased motivation and energy levels. This is known as stereotype threat, which is “being at risk of confirming, as self-characteristic, a negative stereotype about one’s group” (Steele & Aronson, 1995, p. 797).

Stereotype threat is best demonstrated with African Americans and intelligence testing. For example, African Americans have been labeled based on preexisting negative stereotypes concerning intellectual ability, which may result in negative self-fulfilling prophesies when their intellectual ability is assessed (Steele & Aronson, 1995). This may interfere with the ability to demonstrate intellectual functioning on standardized testing, because additional variables (e.g., heightened arousal, task-irrelevant worries, frustration, low expectations, reduced effort, cautiousness, and self-consciousness) may lower testing scores and measured performance.
levels. As a result, lower intellectual and functioning scores may be reported as fact, resulting in misidentification and misdiagnosis of functioning levels and abilities.

Due to these concerns about invisibility and testing, little is known concerning the clinical implications for invisible ethnic minority groups with LDs. According to Wong and Fujii (2004), clinical implications for invisible ethnic minorities are vast and unknown to many clinicians. This is due to heterogeneity of symptoms, somatization, and cultural and environmental factors. It could be hypothesized that these clinical limitations at times result in LD misidentification and reinforce harmful stereotypes and biases. Such biases may result in under-representation of LDs in the literature, as demonstrated in Asian Americans and the model minority stereotype (McBrayer & García, 2000; Tews & Merali, 2008).

In light of these things, it is clear that “one size still does not fit all” in LD assessment (Warner, Dede, Garvan, & Conway, 2002, p. 56). Currently, test developers are acknowledging normative and test development biases in neurocognitive measures and LD assessment. Test developers are attempting to address these concerns by including more diverse normative samples and by moving their emphasis to measuring fluid reasoning abilities as opposed to crystallized and verbal abilities (P. Moran, personal communication, June 30, 2013).

Additionally, language-specific and culturally sensitive measures are being established for use with ethnic minority communities. Despite these movements in test development, remnants of normative and test development biases continue to result in stigmatization of ethnic minorities. In communities (e.g., Hawai‘i) where invisible ethnic minorities are the norm, clinical ramifications due to test development bias may be particularly striking despite recent trends to improve assessment. Thus, LD misdiagnosis still may occur due to deficits in cultural competency and clinician unfamiliarity with relevant multicultural variables.
Due to Hawai‘i’s unique cultural kaleidoscope, clinicians and researchers assessing Hawai‘ians should examine and explore multicultural variables that may influence LD assessment. To aid in this, the Akamai Learning Disability Model was proposed (Wong et al., 2011). This model examines cultural and historical factors that may influence LD assessment and provides a guide for clinicians assessing individuals of Native Hawaiian and/or Hawai‘i multicultural heritage and descent. Several cultural variables were addressed in the model and are briefly stated below. The variables include collectivism, family and gender roles, achievement, assertions, educational system, socioeconomic status, racial stereotypes, communication styles, language, and mental health perspectives (Wong et al., 2011). A more comprehensive discussion of Hawai‘i’s historical cultural variables can be found in Appendix A.

**Akamai Learning Disability Model**

The Akamai Learning Disability Model accounts for the interplay of multicultural and sociopolitical factors by providing more culturally appropriate guidelines for assessing individuals who identify from Hawai‘i or are of Native Hawaiian cultural descent (Wong et al., 2011). This model addresses some of the various issues that plague the LD assessment process and highlights the importance of further clinical research with invisible ethnic minority populations. The Akamai Learning Disability Model merges current assessment practices with adaptations to address Hawai‘i multicultural factors and provides recommendations incorporating Western and indigenous perspectives. The Akamai Learning Disability Model is outlined in Table 1. Included are assessment practices, cultural variables, and recommended modifications. Focused areas include access issues, pre-assessment tasks, the clinical interview, enculturation to assessment, testing, and providing results and feedback. It should be noted that the stated multicultural variables also impact other mental health services in addition to LD
LEARNING DISABILITY ASSESSMENT PILOT STUDY

assessment. Therefore, this model may also aid in the conceptualization and treatment of Native Hawaiian individuals who seek mental health services and treatment.

Table 1

_Akamai Learning Disability Model, a comparison of standard LD assessment and modified assessment for working with invisible minority clients from Hawai‘i (Wong et al., 2011)_

<table>
<thead>
<tr>
<th>STANDARD ASSESSMENT</th>
<th>CULTURAL VARIABLES</th>
<th>RECOMMENDED MODIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Issues:</td>
<td>Access Issues</td>
<td>Access Issues</td>
</tr>
<tr>
<td>• Business as usual</td>
<td>• Environmental factors (e.g., financial, transportation, and insurance)</td>
<td>• Culturally competent outreach in community and school systems</td>
</tr>
<tr>
<td>• Client seeks services</td>
<td>• Asian and Hawaiian family and gender role power hierarchies</td>
<td>• Ensure clinician cultural competency</td>
</tr>
<tr>
<td></td>
<td>• Mental health stigmatization / shame</td>
<td>• Address additional environmental factors associated with SES, regionality, etc.</td>
</tr>
<tr>
<td></td>
<td>• Minority mental health perspectives vs. Western mental health</td>
<td>• Exploration of <em>Hawaiian Time</em></td>
</tr>
<tr>
<td></td>
<td>• Native time</td>
<td></td>
</tr>
<tr>
<td>Pre-Assessment Tasks:</td>
<td>Pre-Assessment Tasks:</td>
<td>Pre-Assessment Tasks:</td>
</tr>
<tr>
<td>• Brief telephone contact</td>
<td>• Minority vs. Western mental health perspectives</td>
<td>• Ensure clinician cultural competency</td>
</tr>
<tr>
<td>• Paperwork</td>
<td>• Collectivistic vs. individualistic values</td>
<td>• Optional client-therapist ethnicity matching</td>
</tr>
<tr>
<td>• Assessment overview</td>
<td>• Family and gender role hierarchies</td>
<td>• Establish and foster culturally competent therapeutic relationship</td>
</tr>
<tr>
<td>• Orient to testing situation</td>
<td>• Informal communication styles vs. formal Western linguistics</td>
<td>• Use of informal communication style (i.e., talking story)</td>
</tr>
<tr>
<td></td>
<td>• Native time</td>
<td>• Elaborated assessment overview, explanation of what each test measures when appropriate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Exploration of <em>Hawaiian Time</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Emphasis on best performance more explicit</td>
</tr>
</tbody>
</table>

Clinical Interview: | Clinical Interview: | Clinical Interview:
<table>
<thead>
<tr>
<th><strong>Testing/Conclusions:</strong></th>
<th><strong>Testing/Conclusions:</strong></th>
<th><strong>Testing/Conclusions:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Isolation of examinee with stranger (examiner)</td>
<td>- Collectivistic vs. individualistic values</td>
<td>- Continue fostering culturally competent therapeutic relationship</td>
</tr>
<tr>
<td>- Selection of tests</td>
<td>- Family and gender role power hierarchies</td>
<td>- Communication style informal</td>
</tr>
<tr>
<td>- Standardized instructions</td>
<td>- Differing communication styles</td>
<td>- Culturally informed choice of tests</td>
</tr>
<tr>
<td>- Expectations for testing behaviors</td>
<td>- Language differences (e.g., talking story, pidgin)</td>
<td>- Cultural interpretation of non-verbal behaviors</td>
</tr>
<tr>
<td>- Standardized scoring</td>
<td>- Native time</td>
<td>- As appropriate, elaborated instructions for measures / tests</td>
</tr>
<tr>
<td>- Application of measurement theory</td>
<td></td>
<td>- Alternate scoring methods that do not bias against verbal skills</td>
</tr>
<tr>
<td>- Use of integrated approach using quantitative data, observational data, and background information</td>
<td></td>
<td>- Exploration of Hawaiian Time</td>
</tr>
<tr>
<td>- Use of evidence-based practices for differential diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Recommendations and/or accommodations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Feedback/Report:**

- Diagnosis discussed
- Recommendations / accommodations discussed
- Referrals

**Feedback/Report:**

- Collectivistic vs. individual performance
- Communication patterns
- Asian and Hawaiian family and gender role

**Feedback/Report:**

- Consultation / supervision with cultural experts
- Culturally competent therapeutic relationship informs feedback
Summary

Based on these stated concerns with invisible ethnic minorities and multicultural variables, the purpose of this pilot study was to address Hawai‘i multicultural factors and to test the efficacy of the Akamai Learning Disability Model with a Hawai‘i and Native Hawaiian sample. The goals of this pilot study were to increase clinician insight regarding case conceptualizations of individuals with a Hawai‘i background and to test the model with respect to accurately identification and cultural competency. This pilot study also reinforced the general need to improve and revise current assessment practices to reduce diagnosis issues with invisible ethnic minorities.

However, several limitations and access issues impacted the original pilot study, and no Native Hawaiians agreed to participate in the study. This resulted in revisions to the study methodology. Specifically, the study was revised to address recruitment, referral, and access issues that limited recruitment into this study. Therefore, an online survey was created to examine access issues and culturally relevant variables that impact mental health, psychological testing, and LD assessment and testing. It was felt imperative to examine all access issues and
cultural variables that may restrict and impact any mental health service including LD testing. As stated above, access issues identified in the Akamai Learning Disability were also consistent to access concerns seen in mental health services as a whole. Based on these observations, access issues in the Akamai Learning Disability Model provided a starting point to address critical access issues and cultural concerns that impact Native Hawaiian individuals. Thus, this revised study emphasized and highlighted the need for culturally appropriate adaptations in treatment, intervention, assessment, and research in order to provide the most culturally attuned services and treatment for Native Hawaiian individuals.

**Methods**

**Sample and Participants**

*Original pilot study.* The original pilot study of the Akamai Learning Disability Model planned to recruit referred participants through a university Learning Support Services department in the Pacific Northwest. The targeted sample size for the original pilot study was four to six participants; due to the nature of this research study all participants would receive free LD assessment.

*Revised study.* The lack of participants willing to be referred resulted in a revision to the original pilot study. It should be noted that access issues that were proposed in the Akamai Learning Disability Model were evident throughout the recruitment phase in the original study. No referrals were received. Due to these recruitment and access concerns, the study was revised to assess relevant access issues that impacted potential participant’s engagement in the study. It should be noted that access issues in the Akamai Learning Disability Model are also access issues for any mental health service or healthcare/medical provider. Therefore, the study was
revised to address all access concerns that may impact an individual from seeking mental health services and treatment in addition to seeking learning disability and/or psychological testing.

Based on these revisions, the revised study included participants age 18 years or older who identified as Native Hawaiian and/or with a Hawai‘i cultural background. Participants were excluded from the study if they were under the age of 18 or did not identify as Native Hawaiian. There were 37 participants (28 women and 9 men, $M_{age} = 31.7$ years, age range: 18-50 years) with completed surveys and 10 participants (6 women and 4 men, $M_{age} = 25.9$ years, age range: 18-50 years) with partially completed surveys. All participants were eligible to enter a drawing to win one of five $20.00 Amazon gift cards.

Materials

Participants completed an online survey through SurveyGizmo. The survey collected demographic information and assessed culturally relevant variables that influenced Native Hawaiian individuals attitudes, beliefs, and perceptions affecting LD testing, psychological testing, and mental health services. See Appendix E for the survey.

Procedure

Once approved by the university Institutional Review Board, the principal investigator forwarded an email (see Appendix F) with the online survey link to community contacts that had access to eligible participants. Snowball sampling also was used.

Once participants clicked on the survey link, informed consent was obtained, and participants proceeded to take the survey. Upon completion of the survey, a link was provided for those who opted to enter a drawing to win one of five $20.00 Amazon gift cards.

Data Analysis
All completed and partially completed surveys were analyzed and included in data analysis in a program designed to collect and assess survey responses. Data analysis consisted of both quantitative (e.g., nominal categories and methods of ranking) and qualitative data (e.g., notable trends across survey responses) that was described descriptively with percentages and frequencies related to each response.

**Results**

To evaluate all data, the principal investigator analyzed and separated data into two groups: completed surveys and partially completed surveys. Due to the small participant sample size and difficulties with participant recruitment, partially completed surveys were included. Several prevalent themes were noted in each sample, which were based on frequencies and averages. Completed surveys included the informed consent and full completion of the survey. Partially completed surveys were surveys in which participants completed the informed consent and exited the survey before completion.

**Demographic Data**

Demographic data was similar across both sample groups (partial and completed surveys). The majority of participants was between the ages of 25-30, identified as female, and were born and raised in Hawai‘i (See Table 2). Participants’ ethnic and racial identification was consistent and participants identified as Native Hawaiian, Chinese, Japanese, White, and Others (See Table 3). Participants specified Others as Danish, German, Okinawan, Spanish, Portuguese, Irish, and Slovakian (See Table 3).
Table 2

Age and Gender Demographics (Completed- N=37, Partial- N=11)

<table>
<thead>
<tr>
<th></th>
<th>Frequency (Completed)</th>
<th>Frequency (Partial)</th>
<th>Percentage (Completed)</th>
<th>Percentage (Partial)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td>3</td>
<td>3</td>
<td>8.1%</td>
<td>30.0%</td>
</tr>
<tr>
<td>25-30</td>
<td>16</td>
<td>5</td>
<td>43.2%</td>
<td>50.0%</td>
</tr>
<tr>
<td>30-40</td>
<td>8</td>
<td>1</td>
<td>21.6%</td>
<td>10.0%</td>
</tr>
<tr>
<td>40-50</td>
<td>2</td>
<td>0</td>
<td>5.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>50-+</td>
<td>8</td>
<td>1</td>
<td>21.6%</td>
<td>10.0%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>28</td>
<td>6</td>
<td>75.7%</td>
<td>60.0%</td>
</tr>
<tr>
<td>Male</td>
<td>9</td>
<td>4</td>
<td>24.3%</td>
<td>40.0%</td>
</tr>
</tbody>
</table>

Table 3

Racial and Ethnic Identification Demographics (Completed- N=37, Partial- N=11)

<table>
<thead>
<tr>
<th></th>
<th>Frequency (Completed)</th>
<th>Frequency (Partial)</th>
<th>Percentage (Completed)</th>
<th>Percentage (Partial)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Racial Identification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese</td>
<td>10</td>
<td>3</td>
<td>27.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Native Hawaiian</td>
<td>35</td>
<td>6</td>
<td>94.6%</td>
<td>60.0%</td>
</tr>
<tr>
<td>American Indian</td>
<td>1</td>
<td>0</td>
<td>2.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Chinese</td>
<td>22</td>
<td>4</td>
<td>59.5%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Korean</td>
<td>3</td>
<td>0</td>
<td>8.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Filipino</td>
<td>5</td>
<td>3</td>
<td>13.5%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Samoan</td>
<td>2</td>
<td>0</td>
<td>5.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>White</td>
<td>17</td>
<td>4</td>
<td>46.0%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Other Asian</td>
<td>1</td>
<td>0</td>
<td>2.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other Pacific Islander</td>
<td>1</td>
<td>1</td>
<td>2.7%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Other race</td>
<td>8</td>
<td>2</td>
<td>21.6%</td>
<td>20.0%</td>
</tr>
<tr>
<td><strong>Ethnic Identification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese</td>
<td>9</td>
<td>1</td>
<td>24.3%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Native Hawaiian</td>
<td>35</td>
<td>6</td>
<td>94.6%</td>
<td>60.0%</td>
</tr>
<tr>
<td>Chinese</td>
<td>14</td>
<td>1</td>
<td>37.8%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Korean</td>
<td>2</td>
<td>0</td>
<td>5.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Filipino</td>
<td>2</td>
<td>2</td>
<td>5.4%</td>
<td>20.0%</td>
</tr>
</tbody>
</table>
Participant data varied concerning residence and living in Hawai‘i (See Table 4). The groups were significantly different with respect to years lived in Hawai‘i. An independent samples $t$ test was conducted, and Levene’s test for equality of variance was not significant; therefore, equal variances were assumed. Based on this, and using two-tailed significance testing, the groups were found to be significantly different [$t(43) = 2.08, p = .044$], with a mean difference of 6.11 years longer lived in Hawai‘i for the group who completed the survey. Therefore, participants who partially completed the survey cannot be assumed to be similar in other important ways with respect to how they responded to survey questions they did answer.

Table 4

*Residence Demographics (Completed- N=37, Partial- N=11)*

<table>
<thead>
<tr>
<th>Lived in Hawai‘i</th>
<th>Frequency (Completed)</th>
<th>Frequency (Partial)</th>
<th>Percentage (Completed)</th>
<th>Percentage (Partial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10 years</td>
<td>0</td>
<td>1</td>
<td>0.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>1</td>
<td>0</td>
<td>2.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>More than 15 years</td>
<td>5</td>
<td>1</td>
<td>13.5%</td>
<td>10.0%</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>5</td>
<td>4</td>
<td>13.5%</td>
<td>40.0%</td>
</tr>
<tr>
<td>More than 25 years</td>
<td>8</td>
<td>2</td>
<td>21.6%</td>
<td>20.0%</td>
</tr>
<tr>
<td>More than 30 years</td>
<td>4</td>
<td>0</td>
<td>10.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>More than 35 years</td>
<td>13</td>
<td>1</td>
<td>35.1%</td>
<td>10.0%</td>
</tr>
<tr>
<td>N/A</td>
<td>1</td>
<td>1</td>
<td>2.7%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Born and Raised</th>
<th>Frequency (Completed)</th>
<th>Frequency (Partial)</th>
<th>Percentage (Completed)</th>
<th>Percentage (Partial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samoan</td>
<td>1</td>
<td>0</td>
<td>2.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>White</td>
<td>8</td>
<td>3</td>
<td>21.6%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Other race</td>
<td>3</td>
<td>1</td>
<td>8.1%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>
## Table(156,236),(847,682)

<table>
<thead>
<tr>
<th></th>
<th>Hawai‘i</th>
<th>Continental US</th>
<th>Both (Hawai‘i and Continental US)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31</td>
<td>6</td>
<td>83.8%</td>
<td>60.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.7%</td>
<td>10.0%</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>10.8%</td>
<td>10.0%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
<td>10.8%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Lived on Mainland</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>1</td>
<td>2</td>
<td>2.7%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>7</td>
<td>2</td>
<td>18.9%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Less than 10 years</td>
<td>7</td>
<td>4</td>
<td>18.9%</td>
<td>40.0%</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>2</td>
<td>0</td>
<td>5.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>More than 15 years</td>
<td>2</td>
<td>0</td>
<td>5.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>More than 25 years</td>
<td>1</td>
<td>0</td>
<td>2.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>More than 30 years</td>
<td>0</td>
<td>1</td>
<td>0.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>More than 35 years</td>
<td>1</td>
<td>0</td>
<td>2.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>N/A</td>
<td>16</td>
<td>1</td>
<td>43.2%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

Regarding educational attainment, the majority of participants attended private schools and obtained their high school diploma or GED (See Table 5). Highest degrees obtained included Bachelor of Science/Arts and/or Master’s Degree, whereas some participants also reported that they were currently enrolled in undergraduate and graduate programs. Participants also reported that English was their primary language, and that they also spoke pidgin (See Table 6). Participants also reported speaking other languages such as Hawaiian, Japanese, Spanish, and Uduru. Lastly, the majority of participants generally denied any disabilities. However, a small number of participants endorsed having physical disabilities or ADHD (See Table 7).
### Domain Value Frequency (Completed) Frequency (Partial) Percentage (Completed) Percentage (Partial)

#### School
- Public 17 3 35.1% 30.0%
- Private 7 7 46.0% 70.0%
- Neither 17 0 18.9% 0.0%

#### Complete High School/GED
- Yes 35 10 94.6% 100.0%
- No 2 0 5.4% 0.0%

#### Highest Degree
- High School 8 2 21.6% 20.0%
- Associates Degree 5 1 13.5% 10.0%
- Bachelor of Science/Arts (BS/BA) 14 4 37.8% 40.0%
- Master’s Degree (MS/MA) 7 3 18.9% 30.0%
- Doctorate Degree 3 0 8.1% 0.0%

#### Enrolled
- Yes, Associates program (AA) 1 0 2.7% 0.0%
- Yes, Undergraduate College 2 2 5.4% 20.0%
- Yes, Graduate Program 5 2 13.5% 20.0%
- No 29 6 78.4% 60.0%

**Table 6**

*Language Demographics (Completed- N=37, Partial- N=11)*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Frequency (Completed)</th>
<th>Frequency (Partial)</th>
<th>Percentage (Completed)</th>
<th>Percentage (Partial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>37</td>
<td>9</td>
<td>100.0%</td>
<td>90.0%</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>1</td>
<td>0.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Pidgin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>22</td>
<td>7</td>
<td>59.5%</td>
<td>70.0%</td>
</tr>
</tbody>
</table>
### Disability Demographics (Completed- N=37, Partial- N=11)

<table>
<thead>
<tr>
<th>Disability</th>
<th>Frequency (Completed)</th>
<th>Frequency (Partial)</th>
<th>Percentage (Completed)</th>
<th>Percentage (Partial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>33</td>
<td>10</td>
<td>89.2%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Yes, ADHD</td>
<td>1</td>
<td>0</td>
<td>2.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Yes, physical disability</td>
<td>3</td>
<td>0</td>
<td>8.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>7</td>
<td>10</td>
<td>18.9%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Less than 10 years</td>
<td>7</td>
<td>0</td>
<td>18.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>2</td>
<td>0</td>
<td>5.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>More than 15 years</td>
<td>2</td>
<td>0</td>
<td>5.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>More than 25 years</td>
<td>1</td>
<td>10</td>
<td>2.7%</td>
<td>100.0%</td>
</tr>
<tr>
<td>More than 35 years</td>
<td>1</td>
<td>0</td>
<td>2.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>N/A</td>
<td>16</td>
<td>0</td>
<td>43.2%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

**Completed Surveys**

**Past history.** Results indicated several prevalent themes based on participant responses to past history (see Table 8). Based on past history, 86.5% of participants, $f(32)$, endorsed that they had never been diagnosed with a mental health condition, whereas 13.5%, $f(5)$, indicated a previous diagnosis of a mental health condition. Furthermore, 70.3% of participants, $f(26)$, endorsed that they had never sought mental health treatment, whereas 29.7%, $f(11)$, indicated participation in previous mental health treatment. In addition, 67.6% of participants, $f(25)$,
indicated that they never had any professional psychological testing, whereas 32.4%, \(f(12)\), indicated they had undergone previous psychological testing.

Table 8

*Past history \((N=37)\)*

<table>
<thead>
<tr>
<th></th>
<th>Frequency ((f))</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous mental health condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
<td>13.5%</td>
</tr>
<tr>
<td>No</td>
<td>32</td>
<td>86.5%</td>
</tr>
<tr>
<td>Past mental health treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>29.7%</td>
</tr>
<tr>
<td>No</td>
<td>26</td>
<td>70.3%</td>
</tr>
<tr>
<td>Previous psychological testing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>12</td>
<td>32.4%</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>67.6%</td>
</tr>
</tbody>
</table>

With respect to partially completed surveys, participant responses indicated several trends that were consistent with participants in the completed survey group. Participants generally denied that they had ever been diagnosed with a mental health condition, had no previous mental health counseling history, or any past experiences of psychological testing.

**Current and future history.** Based on current history and involvement with mental health services, 91.7% of participants, \(f(33)\), denied any participation in mental health counseling or psychotherapy, whereas 8.3%, \(f(3)\), endorsed participation in mental health counseling or psychotherapy. Approximately 97.3% of participants denied taking any prescribed medication for a mental health disorder, whereas 2.7%, \(f(1)\), endorsed taking medication for a mental health disorder. When asked about future mental health services, 40.5%, \(f(15)\), indicated that counseling would be helpful if needed; 18.9%, \(f(7)\) indicated that psychological or cognitive testing would
be helpful if needed; and 2.7%, $f(1)$, indicated that medication would be helpful if needed. Six participants (16.2%) denied that mental health services would be helpful, and 21.6%, $f(8)$, indicated that they were unsure if mental health services would be helpful. For additional information, see Table 9.

Table 9

*Current and future history (N=37)*

<table>
<thead>
<tr>
<th>Participation Mental Health Counseling</th>
<th>Frequency (f)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3</td>
<td>8.3%</td>
</tr>
<tr>
<td>No</td>
<td>33</td>
<td>91.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Taking psychiatric medication</th>
<th>Frequency (f)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
<td>2.7%</td>
</tr>
<tr>
<td>No</td>
<td>36</td>
<td>97.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Future Services</th>
<th>Frequency (f)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, mental health counseling</td>
<td>15</td>
<td>40.5%</td>
</tr>
<tr>
<td>Yes, psychological or cognitive testing</td>
<td>7</td>
<td>18.9%</td>
</tr>
<tr>
<td>Yes, medication</td>
<td>1</td>
<td>2.7%</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>16.2%</td>
</tr>
<tr>
<td>Not sure</td>
<td>8</td>
<td>21.6%</td>
</tr>
</tbody>
</table>

With respect to partially completed surveys, participants denied any engagement in counseling or psychotherapy. They also generally denied taking any prescription psychiatric medication for a mental health disorder. When participants were asked whether they would find mental health services helpful in the future, the majority indicated that mental health counseling would be helpful. On the contrary, participants denied that psychological or cognitive testing or psychiatric medication would be helpful.
**Family and friends receiving mental health services.** Regarding family and friends receiving or engaging in mental health services; approximately 51.4% of participants, \(f(19)\), denied that any friends had received mental health services. On the other hand, 48.7% of participants, \(f(18)\), indicated that friends had received mental health services. This was consistent with participants’ responses regarding family mental health services, in which 51.4%, \(f(19)\), denied that any family members had received mental health treatment and 48.7%, \(f(18)\), indicated that family members had received mental health services. See Table 10.

Table 10

*Family and friends receiving mental health services (N=37)*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Value</th>
<th>Frequency (f)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends and mental health services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>18</td>
<td></td>
<td>48.7%</td>
</tr>
<tr>
<td>No</td>
<td>19</td>
<td></td>
<td>51.4%</td>
</tr>
<tr>
<td>Family and mental health services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>18</td>
<td></td>
<td>48.7%</td>
</tr>
<tr>
<td>No</td>
<td>19</td>
<td></td>
<td>51.4%</td>
</tr>
</tbody>
</table>

With respect to partially completed surveys, that majority of participants indicated Yes with respect to family and friends receiving mental health services.

**Perceptions about mental health services.** Several questions addressed participants’ feelings and perception of negative experiences, shame, and stigmatization in relation to mental health services (see Table 11). Approximately 81.1%, \(f(30)\), indicated that they or others had not had a negative experience with mental health services, whereas 18.9%, \(f(7)\), indicated that they or others close to them had negative experiences. Twenty participants (54.1%) indicated that they had mostly positive feelings towards mental health services, whereas 18.9%, \(f(7)\), indicated
that they had mixed feelings. Eight participants (21.6%) were unsure about how they felt about services, and 5.4%, \( f(2) \), endorsed mostly negative feelings.

Regarding the topic of shame, 54.1%, \( f(20) \), denied that they would have any feelings of shame if they sought mental health services. However, 21.6%, \( f(8) \), indicated that they would feel shame, and 24.3%, \( f(9) \), were unsure. When participants were asked if they would feel shame if they were diagnosed with a mental health condition, 48.7%, \( f(18) \), denied any feelings of shame; 40.5%, \( f(15) \), reported that they would feel shame; and 10.8%, \( f(4) \), were unsure.

When participants were asked if they would feel stigmatized if they were diagnosed with a mental health condition, 54.1%, \( f(20) \), indicated yes. Approximately 27%, \( f(10) \), reported that they would not feel stigmatized, and 18.9%, \( f(7) \), were unsure. When participants were further questioned about shame and stigmatization in relation to different disabilities, the following was reported: 35.1%, \( f(13) \), endorsed shame associated with a physical disability; 35.1%, \( f(13) \), endorsed shame associated with a learning disability; 13.5%, \( f(5) \), endorsed shame associated with ADHD; 35.1%, \( f(13) \), endorsed shame associated with other cognitive disorders; 29.7%, \( f(11) \), reported not feeling any shame or stigmatization; and 18.9%, \( f(7) \), indicated that they were not sure.

Table 11

*Perceptions about mental health (N=37)*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Value</th>
<th>Frequency (f)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Experiences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>7</td>
<td>18.9%</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>30</td>
<td>81.1%</td>
</tr>
<tr>
<td>Feelings about mental health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mostly positive feelings</td>
<td></td>
<td>20</td>
<td>54.1%</td>
</tr>
<tr>
<td>Mostly negative</td>
<td></td>
<td>2</td>
<td>5.4%</td>
</tr>
<tr>
<td>feelings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Mixed feelings</td>
<td>7</td>
<td>18.9%</td>
<td></td>
</tr>
<tr>
<td>Not sure</td>
<td>8</td>
<td>21.6%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shame &amp; Mental Health Services</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>8</td>
<td>21.6%</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>54.1%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>9</td>
<td>24.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stigmatization</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20</td>
<td>54.1%</td>
</tr>
<tr>
<td>No</td>
<td>10</td>
<td>27.0%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>7</td>
<td>18.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shame and Diagnosis</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>18</td>
<td>48.7%</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>40.5%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>4</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disabilities, Shame, and Stigmatization</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, physical disability</td>
<td>13</td>
<td>35.1%</td>
</tr>
<tr>
<td>Yes, learning disability</td>
<td>13</td>
<td>35.1%</td>
</tr>
<tr>
<td>Yes, ADHD</td>
<td>5</td>
<td>13.5%</td>
</tr>
<tr>
<td>Yes, other cognitive disorder</td>
<td>13</td>
<td>35.1%</td>
</tr>
<tr>
<td>No, shame or stigmatization</td>
<td>11</td>
<td>29.7%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>7</td>
<td>18.9%</td>
</tr>
</tbody>
</table>

With respect to partially completed surveys, participants indicated mixed experiences. The majority of participants reported a negative history of mental health experiences. However, participants also indicated mostly positive feelings towards mental health services.

Regarding shame, participants indicated that they would not feel shamed if they sought mental health services or if they were diagnosed with a mental health condition. However, participants indicated that they would feel shamed if they were diagnosed with a mental health condition. When participants were asked whether they would feel stigmatized by others if they...
were diagnosed with a mental health condition, participants indicated No. Furthermore, when asked about specific disabilities and feelings of shame and stigmatization, participants indicated that they would feel shamed and stigmatized if they were diagnosed with an LD.

**Willingness to seek mental health services.** When participants were asked about practical considerations that would affect their willingness to seek mental health services and/or psychological/cognitive services (see Table 12), approximately, 70.3%, $f(26)$, indicated that money/finances would affect willingness to seek services; 64.9%, $f(24)$ indicated that insurance would affect their willingness to seek services; 5.4%, $f(2)$, indicated that a language barrier would affect willingness to seek services; 10.8%, $f(4)$, reported that transportation would affect willingness to seek services; and 64.9%, $f(24)$, indicated that they would not know where to go for services. Four participants (10.8%) indicated other reasons that might affect their willingness to seek services (see Discussion).

Table 12

*Willingness to seek mental health services (N=37)*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Value</th>
<th>Frequency ($f$)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical Considerations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Money/finances</td>
<td>26</td>
<td>70.3%</td>
</tr>
<tr>
<td></td>
<td>Insurance</td>
<td>24</td>
<td>64.9%</td>
</tr>
<tr>
<td></td>
<td>Language barrier</td>
<td>2</td>
<td>5.4%</td>
</tr>
<tr>
<td></td>
<td>Transportation</td>
<td>4</td>
<td>10.8%</td>
</tr>
<tr>
<td></td>
<td>Not knowing where to go for services</td>
<td>24</td>
<td>64.9%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>4</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

With respect to partially completed surveys, when participants were asked about how practical considerations would affect their willingness to seek mental health services and/or
cognitive testing, responses varied. Participants indicated that money/finances, insurance, and not knowing where to go for services would impact their willingness to seek services.

**Referral for mental health services and/or testing.** Participants were asked several questions pertaining to clinician referrals. See Table 13 for percentages. When participants were asked about how they could find a clinician, participants reported: doctor referral (73%, f(27)); friends/family recommendation (59.5%, f(22)); school recommendation (21.6%, f(8)); community agencies (18.9%, f(7)); advertising online/newspaper (16.2%, f(6)) and other (18.9%, f(7)).

When participants were asked whether they would be more likely to seek mental health services if a doctor recommended it, 91.9%, f(34), reported Yes and 8.1%, f(3), reported No. When participants were asked whether they would be more likely to seek mental health services if a family or friend recommended it, 64.9%, f(24), indicated Yes; 21.6%, f(8), were Not Sure; and 13.5%, f(5), indicated No. When asked whether they would be more likely to seek mental health services if a teacher/professor recommended it, 40.5%, f(15), indicated Yes; 32.4%, f(12), indicated No; and 27%, f(10), indicated that they were Not Sure.

Table 13

*Referral for mental health services and/or testing (N=37)*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Value</th>
<th>Frequency (f)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referral Type</td>
<td>Friends/family recommendation</td>
<td>22</td>
<td>59.5%</td>
</tr>
<tr>
<td></td>
<td>School recommendation</td>
<td>8</td>
<td>21.6%</td>
</tr>
<tr>
<td></td>
<td>Advertising online/newspaper</td>
<td>6</td>
<td>16.2%</td>
</tr>
<tr>
<td></td>
<td>Doctor referral</td>
<td>27</td>
<td>73.0%</td>
</tr>
<tr>
<td></td>
<td>Community agencies</td>
<td>7</td>
<td>18.9%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>7</td>
<td>18.9%</td>
</tr>
</tbody>
</table>
With respect to partially completed surveys, when participants were asked questions pertaining to clinician referrals, participants indicated that they would be open to Friends/family recommendation, School recommendation, Doctor referral, and Community agencies referral. Furthermore, participants indicated that they would be more likely to seek mental health services if family or friends recommended it, a doctor recommended it, and/or if a teacher/professor recommended it.

**Important factors for mental health counseling and/or testing.** Several prevalent trends were noted when participants were asked about important factors if they sought mental health counseling or testing (See Table 14). The following factors are rank-ordered based on importance indicated by participants: 1) Clinician’s experience, 2) Reputation/name of clinician(s), 3) Culturally appropriate programs/services specifically offered by clinician(s) or agency, 4) Reputation/name of agency, 5) Location of services, and 6) Others. Clinician qualities was also ranked in order preference indicated by participants: 1) Experience and training, 2) Competency/experience in providing services to others from my cultural background, 3) Gender,
female preferred, 4) Age of clinician, older clinician preferred, 5) Race and ethnicity of clinician, 6) Age of clinician, younger clinician preferred, 7) Gender, male preferred, and 8) Other.

Table 14

*Important factors for mental health counseling and/or testing (N=37)*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Value</th>
<th>Frequency (f)/Total Score</th>
<th>Rank Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinician’s experience &amp; training</td>
<td>167</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Reputation/Name of clinician(s)</td>
<td>139</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Culturally appropriate programs/services</td>
<td>131</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Reputation/Name of the agency</td>
<td>123</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Location of services</td>
<td>100</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>22</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Clinician qualities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience &amp; training</td>
<td>245</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Competency/experience in providing services to others from my cultural background</td>
<td>218</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Gender, female preferred</td>
<td>151</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Age of clinician, older clinician preferred</td>
<td>138</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Race &amp; ethnicity of clinician</td>
<td>116</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Age of clinician, younger clinician preferred</td>
<td>104</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Gender, male preferred</td>
<td>78</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>37</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

With respect to partially completed surveys, responses were similar. The following important factors that would affect services or testing were ranked as followed: 1) Clinician’s experience and training, 2) Reputation/Name of clinician(s), 3) Culturally appropriate
programs/services specifically offered by clinician(s) or agency, 4) Reputation/Name of the agency, 5) Location of Services, and 6) Other.

With respect to clinician qualities, responses from partially completed surveys were ranked accordingly: 1) Age of clinician, older clinician preferred, 2) Competency/experience in providing services to others from my cultural background, 3) Age of clinician, younger clinician preferred, 4) Race and ethnicity of clinician, 5) Experience and training with mental health counseling or psychological/testing, 6) Gender, female, 7) Gender, male, 8) Other.

**Clinician.** Participants were further asked about how they would feel with an ethnic minority or a White clinician. See Table 15 for frequencies and percentages. Approximately, 81.1%, \( f(30) \), indicated that it would not matter; 18.9%, \( f(7) \), would prefer a clinician from their own cultural background; 2.7%, \( f(1) \), indicated that they would prefer an ethnic minority clinician; and 2.7%, \( f(1) \), indicated that they would prefer a White clinician. Moreover, when participants were asked if the clinician should be familiar with their cultural background, 73%, \( f(27) \), indicated Yes for counseling; 2.7%, \( f(1) \), indicated Yes for mental health testing; and no participant indicated Yes for cognitive/learning disability testing. Five participants (13.5%) indicated that it would not matter and 10.8%, \( f(4) \), were Not Sure.

Table 15

**Clinician Preferences (N=37)**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Value</th>
<th>Frequency (f)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinician</td>
<td>It wouldn’t matter</td>
<td>30</td>
<td>81.1%</td>
</tr>
<tr>
<td></td>
<td>Prefer an ethnic minority</td>
<td>1</td>
<td>2.7%</td>
</tr>
<tr>
<td></td>
<td>clinician from my cultural</td>
<td>7</td>
<td>18.9%</td>
</tr>
<tr>
<td></td>
<td>background</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prefer a White clinician</td>
<td>1</td>
<td>2.7%</td>
</tr>
<tr>
<td>Familiar with background</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There were no responses to this item on partially completed surveys.

**Family support.** Regarding if family would support their seeking mental health services, participants indicated: Yes [86.5%, f(32)], Not Sure [13.5%, f(5)], and none indicated No.

Furthermore, when asked if family would be involved in their treatment, participants indicated: Yes [48.7%, f(18)], Not Sure [35.1%, f(13)], and No [16.2%, f(6)]. Last, participants also included who would be involved with treatment: Mother [47.2%, f(17)], Father [27.8%, f(10)], Uncle(s)/Aunty(ies) [13.9%, f(5)], Grandparent(s) [8.3%, f(3)], Other [38.9%, f(14)], and N/A [25%, f(9)], See Table 16 for details.

Table 16

*Family support (N=37)*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Value</th>
<th>Frequency (f)/Total Score</th>
<th>Rank Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive of treatment</td>
<td>Yes</td>
<td>32</td>
<td>86.5%</td>
</tr>
<tr>
<td></td>
<td>Not Sure</td>
<td>5</td>
<td>13.5%</td>
</tr>
<tr>
<td>Family Involvement</td>
<td>Yes</td>
<td>18</td>
<td>48.7%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>6</td>
<td>16.2%</td>
</tr>
<tr>
<td></td>
<td>Not Sure</td>
<td>13</td>
<td>35.1%</td>
</tr>
<tr>
<td>Involved in treatment</td>
<td>Father</td>
<td>10</td>
<td>27.8%</td>
</tr>
<tr>
<td></td>
<td>Mother</td>
<td>17</td>
<td>47.2%</td>
</tr>
<tr>
<td></td>
<td>Grandparent(s)</td>
<td>3</td>
<td>8.3%</td>
</tr>
<tr>
<td></td>
<td>Uncle(s)/Aunty(ies)</td>
<td>5</td>
<td>13.9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>----------------</td>
<td>----</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>N/A</strong></td>
<td>9</td>
<td>25.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>14</td>
<td>38.9%</td>
<td></td>
</tr>
</tbody>
</table>

There were no responses to this item on partially completed surveys.

**Salient Themes**

Based on the data presented above, several prevalent participant response trends were noted in both groups. The following is organized to parallel data presented in the sections above.

**Past history.** In both groups, the majority of participants reported no mental health history or conditions, counseling, treatments, and psychological testing. However, a small percentage of participants endorsed previous psychological testing and specified what measure was used. Such responses included, “2000,” “Cognitive,” “IQ 152,” “IQ and learning,” “Meyers Briggs,” “Personality testing,” “Teachers thought I had add/ADHD, but it turns out I was just an energetic kid,” “Tests for PTSD from the VA,” “Testing for dyslexia,” “learning/cognitive testing,” “mental health,” and “personality test.” Therefore, it could be hypothesized that participants were familiar with psychological testing regardless of the high percentage of participants who denied having previous mental health history or services. This could indicate that participants were familiar with and had a basic understanding of mental health services and psychological testing.

**Current and future history.** The majority of participants indicated no current participation in counseling or psychotherapy and reported that they were not taking any prescribed psychiatric medication. When asked about the future, participants indicated that mental health counseling would be helpful if needed. However, participants also reported mixed feelings in which they were “Not Sure” “about future mental health counseling.” This supports the principal investigator’s concerns regarding Native Hawaiian’s participation of mental health
services in which engagement could differ based on individual preferences, attitudes, and perceptions. Thus, multicultural concerns and factors (e.g., family and gender role hierarchies, minority mental health perspectives, and concept of time) that are stated in the Akamai Learning Disability Model could influence Native Hawaiian and multicultural individuals’ engagement in services as indicated by participants’ mixed responses.

**Family and friends receiving mental health services.** Several trends were noted regarding family and friends and mental health services. In both groups, participants’ responses were split between friends receiving and not receiving mental health services. This was consistent with participants’ report of family receiving and not receiving mental health services. Furthermore, these findings reinforce previous concerns identified in the Akamai Learning Disability Model regarding family power/dyads, gender role hierarchies, and perceptions and attitudes towards mental health services. Most importantly, participants’ responses highlighted the need to evaluate the impact of family and friends’ perspectives on mental health services and treatment.

**Perceptions about mental health services.** When participants were asked about their mental health perceptions, several significant trends were noted. The majority of participants indicated that they and others had no negative experiences with mental health services, and they endorsed mostly positive feelings about mental health services. This is a positive finding, considering historical experiences with Western mental health services for invisible minority populations for whom treatment and services are often culturally inappropriate.

When participants were asked about shame, they indicated that they would not experience any shame if they sought mental health services nor would they if diagnosed with a
mental health condition. This is important to note, because previous literature identified shame as a prevalent factor affecting minority individuals seeking services (Sue & Sue, 2008).

When participants were asked about stigmatization, participants indicated that they would feel stigmatized if they were diagnosed with a mental health condition. Specifically, participants indicated that they would feel stigmatized if they had a physical disability, LD, and/or cognitive disorder. These responses are important to consider due to the impact of stigmatization on an individual’s engagement and perception of mental health services. Based on survey responses, it could be hypothesized that stigmatization has a greater impact than shame with Native Hawaiian and multicultural individuals. Based on these noteworthy trends, the severity of stigmatization should be further explored in the Akamai Learning Disability Model in relation to mental health disorders and disabilities.

**Willingness to seek mental health counseling.** Participants’ responses indicated several prevalent trends that influenced their willingness to seek mental health counseling. The top three factors were money/finances, insurance, and not knowing where to go for services. These factors are consistent with the identified access issues (e.g., environmental factors and barriers) in the Akamai Learning Disability Model. Moreover, participants provided several additional conditions that could affect their willingness and access to services, such as “availability of Native Hawaiian mental health practitioners,” “right now I no need da Kine help,” “time,” and “How would someone whose never been in my shoes give me counseling for something they have not experienced.” These responses reflect the need to include cultural variables that are specific to Native Hawaiians in mental health services and outreach. Additionally, these responses reinforced the importance of the Akamai Learning Disability Model, which addresses
prevalent access issues that influence an individual’s willingness to seek services and psychological testing.

**Referral for mental health services and/or testing.** When participants were asked about referral preferences, several trends were noted. Participants’ top three responses were to find a clinician were through a doctor referral, friends/family recommendation, and school recommendation. Participants also provided additional responses for referral options, such as through “former service,” “Google,” “I don’t know,” “insurance referral,” “VA,” “work,” and “yellow pages or phone book.” Additionally, participants indicated that they would be more likely to seek services if a friend or family recommended it, a doctor recommended it, or a teacher/professor recommended it. This is important, because the type of referral may directly influence an individual’s engagement in mental health services and treatment. It could also be hypothesized that Native Hawaiian individuals are more willing to adhere to recommendations from individuals of authority who have concern for their well-being and physical and mental health. These types of referrals should be further addressed in access issues in the Akamai Learning Disability Model.

**Important factors for mental health counseling and/or testing.** Participant responses pointed to several important factors that may affect mental health counseling and/or testing. These factors may influence an individual’s access to services. The top four factors important to participants if they sought services were clinician’s experience and training, reputation/name of clinician(s), culturally appropriate programs/services specifically offered by clinician(s) or agency, and reputation/name of agency. Participants also provided comments and factors that would be important such as “cost,” “reason,” “style of treatment,” and “none.” The least important quality was location of services. This demonstrated the importance of further training
and research with invisible minority populations to promote culturally sensitive services for
Native Hawaiian and multicultural individuals. For example, additional models similar to the
Akamai Learning Disability Model might be developed to promote more culturally sensitive
services.

**Clinician.** Participants also indicated qualities that would be important in a clinician.
Such qualities included experience and training with mental health counseling or
psychological/testing; competency/experience in providing services to others from my cultural
background; and gender, female preferred. Participants reported that that the least important
quality would be male gender. When asked about preferences of clinicians’ ethnicity,
participants indicated that it would not matter; however, participants reported that clinicians
should be familiar with their own cultural background. Participants also provided additional
comments that pointed to ideal qualities in clinicians, such as “heart,” “listening with mind, ears,
eyes, soul,” “place,” and “referral from a friend or family.” These qualities reinforce the
importance of clinician cultural competency and training to promote cultural sensitivity with
Native Hawaiian populations. It highlights the preferences of Native Hawaiians in which gender
roles, power hierarchies, training experiences, and familiarity with their cultural background are
important factors that affect treatment. These variables are explicitly stated in the Akamai
Learning Disability Model. Additionally, based on participants’ responses, clinicians’ ethnicity
would not directly influence treatment. Therefore, ethnicity matching, which is outlined in the
Akamai Learning Disability Model based on the existing literature, may not be necessary and
should be further explored.

**Family support.** Regarding family support, the majority of participants indicated that
their family would be involved in treatment. Specifically the majority of participants indicated
that their mother and father would be involved with treatment, and they also identified that their “brother,” “companion,” “cousins and friends,” “daughter and son,” “husband,” “sister,” ”spouse,” “boyfriend,” “significant other,” “support team,” and “wife” would be involved. The importance of family and gender role hierarchies, specifically the need to incorporate family systems and collectivist approaches with Native Hawaiian individuals, is clearly warranted. This incorporation of collectivist and family systems is specifically outlined in the Akamai Learning Disability Model.

Other comments listed. Lastly, participants were provided with the option of providing additional comments at the end of the survey. Participants responses varied: “everything we need to know or learn or seek or counsel we already have inside of us,” “we need mental health services that is understanding and compassionate,” “none at this time. I think some of the questions may be vague, but overall, I think the survey will meet its objectives, mahalo,” “since Hawaii is known as the ‘melting pot of the pacific’ I believe any counselor should be cognizant of the multicultural that make up our population.”

Discussion

As noted above, the original pilot study was revised to account for access issues related to recruiting Native Hawaiian participants for the study. These included difficulty in participant recruitment at an individual, community, and university level. For the pilot study as proposed, the principal investigator received no referrals from the university’s Learning Support Services or community agencies/contacts. To address these recruitment difficulties, the principal investigator conducted additional outreach at individual and community levels. Specifically, the principal investigator contacted community contacts who had significant relationships and partnerships with indigenous community mental health agencies within the Pacific Northwest
and informed them about the pilot study and free assessment services for participants. The principal investigator also provided additional recruitment flyers and emails to all referral sources and contacts.

Based on these recruitment difficulties, the principal investigator and research advisor revised the study to instead evaluate relevant access issues that were affecting participant recruitment. This was relevant to the original study, because these access issues paralleled those identified in the Akamai Learning Disability Model.

An online survey was created to investigate these access issues related to cultural concerns. The online survey included the original proposed demographic questionnaire, questions that addressed access issues in participant recruitment, and questions that examined access issues discussed in the Akamai Learning Disability Model. Such access issues included environmental factors (e.g., financial, transportation, and insurance), Asian and Native Hawaiian family and gender role power hierarchies (e.g., family involvement in treatment), mental health stigmatization/shame, minority mental health perspectives versus Western mental health perspectives (e.g., referral avenues, willingness to seek services), and the concept of Native time (Wong et al., 2011). To disseminate the survey, community contacts in Hawai‘i and US mainland distributed the online survey to family and friends. These community contacts had significant relationships and histories with Native Hawaiian communities.

It should be noted that, although the Akamai Learning Disability Model is specific to LD assessment, such access concerns could be generalized to all mental health services for Native Hawaiians. This is because these globally affect an individual’s access to services across all levels of mental health and medical settings. Such access barriers may prevent individuals from seeking care and treatment. In relation to this study, access concerns in the Akamai Learning
Disability Model were mirrored in this study’s recruitment difficulties in both the original pilot study and revised study. Referrals and participant recruitment were severely impacted by a combination of known and unknown access issues that were accounted for and unaccounted for by the Akamai Learning Disability Model.

Several hypotheses may explain this pattern. It could be that, even though the principal investigator (who has Native Hawaiian heritage) had preexisting relationships with referral sources and contacts, potential participants may have been apprehensive to partake in the study because they did not personally know the principal investigator. Additionally, the clinicians who would conduct LD testing had no relationships or connections to the Native Hawaiian community themselves and identified as non-Hawaiian. This may have compounded potential participants’ feelings of stigmatization is associated with receiving mental health services and testing. This may is especially salient, because participants endorsed higher impact of stigmatization compared to shame. Issues of trust and familiarity that are compounded stigmatization may greatly impact participants’ engagement in mental health services and assessment (Singer & Chung, 2002; Sue & Sue, 2008; Wong & Fujii, 2004). It could be that additional outreach and higher levels of community engagement by the principal investigator, future researchers, and clinicians may improve local Native Hawaiians community’s trust and relationship with healthcare agencies, providers, researchers, and universities. Thus, if the original proposed pilot study were conducted again, then the principal investigator and associated members of the study would need to conduct outreach to foster stronger relationships in the Native Hawaiian community at individual, family, community, and university levels. This may address and reduce some access concerns related to the original pilot study.
Study Strengths

Because of recruitment concerns, the revised study provides a starting point to address access issues and cultural variables that were salient in the original study with Native Hawaiian communities. The online survey responses allowed the exploration of access issues and attitudes towards mental health services, treatment, and testing with individuals that identified as Native Hawaiian. The study also evaluated participant perceptions of specific variables (e.g., shame, stigmatization, practical access factors, cultural competency, ethnicity matching between client and therapist that were identified in the Akamai Learning Disability Model. Results highlighted the need for clinician competency and training, experience and training, addressing ethnicity and gender preferences where applicable, and further evaluation of the nature and effects of stigmatization for Native Hawaiian individuals.

Most importantly, this study highlighted the need for additional community outreach to address access concerns that are specific to Native Hawaiian communities and individuals. A representative from the agency and/or the healthcare provider must conduct outreach with the Native Hawaiian community to foster a relationship at the individual, family, and community level. Such outreach efforts should incorporate psychoeducation about mental health services and assessment, emphasize culturally attuned services, provide basic agency information and location, and provide information to address insurance or billing questions. Cultural competency trainings for clinicians also should be provided. It should be noted that these factors were specifically addressed in the online survey by questions pertaining to participants’ willingness to seek treatment. This level of outreach may foster a relationship with the community, reduce concerns related to stigmatization or shame, and promote a more trusting relationship with healthcare providers, so that community members will feel more comfortable accessing services.
if mental health services or assessment is needed in the future. On a larger scale, this study may inform research with other invisible minority communities (e.g., American Indians), who have similar concerns about mental health services and psychological testing.

**Limitations of Study**

There were several important limitations in this study. First, the results cannot be generalized to other populations who do not identify as Native Hawaiian and/or with Hawai‘i cultural background. Generalizability is further limited by the small sample size. Moreover, the majority of participants were women who had a high level of education, no disabilities, no current mental health concerns, and no previous mental health treatment. To address these restrictions, a larger and more diverse sample size is needed to fully examine cultural variables that affect LD assessment and access to services.

Participant recruitment was also a significant limitation. This is because the original pilot study’s recruitment was through a Learning Support Service department at a university in the Pacific Northwest. Therefore, initial access to participants was limited to university and graduate school students. When no referrals were received, the principal investigator contacted community contacts/agencies and informed them about the pilot study. Despite the additional outreach, no referrals were received. As a result, the study was revised due to the lack of participant referrals. The revised study utilized an online survey with snowball sampling through university and community contacts. The participants were assumed to be computer literate and have access to the Internet. As a result, the sample was limited to a targeted group who were familiar with the principal investigator’s contacts and who had access to a computer and the Internet.
The online survey was also a limitation in this study. The online survey only addressed specific demographic and cultural variables that were identified in the Akamai Learning Disability Model. To address this limitation, a focus group would be helpful to more fully examine within group differences (e.g., Native Hawaiians residing on the mainland compared to Native Hawaiians who were born and raised in Hawai‘i), and additional cultural variables (e.g., cultural healing) that may not have been identified in the Akamai Learning Disability Model.

Separate surveys are also needed to examine critical cultural variables, due to participant responses. A separate survey is needed to examine the nature of stigmatization and shame with respect to mental health and psychological testing services. This is because participants indicated that stigmatization was a salient factor connected to mental health and testing/assessment, whereas shame was not. Additionally, a separate survey is needed to evaluate clinician qualities. This is because the majority of participants ranked experience and training, competency and training, and gender, female, preferred as ideal clinician qualities; however, a small number of participants alternately ranked age, older, and age, younger, as ideal clinician qualities. Due to these responses, it might be useful to examine the differing viewpoints regarding clinician qualities that may impact treatment.

**Future Study Recommendations**

Future recommendations include a larger and more diverse sample size. Participant recruitment could be expanded to include additional community mental health agencies and schools. Recruitment may also include focus groups, in-depth interviews, and paper surveys along with an online survey. Additional items on the survey could be included to account for additional variables that were stated in the participant feedback and comment sections. If additional cultural variables are identified in this way, these could be used to expand the Akamai
Learning Disability Model. It should be noted that access issues in the Akamai Learning Disability Model also identified similar access issues with respect to all mental health services for Native Hawaiian individuals. Thus, an additional survey may be created to address access concerns seen in general mental health and medical settings to provide information for improving access to other forms of health care and treatment. Most importantly, these findings reinforce the need for additional outreach by healthcare providers, clinicians, universities, and mental health agencies.
References


Appendix A

If Everyone was Akamai: Assessment of Learning Disabilities among Invisible Minorities in Hawai‘i

Wong, 2011

The U.S. Census Bureau (2011) listed Hawai‘i’s demographic composition as White (24.7%), Asian American (38.6%), Pacific Islander/Native Hawaiian (10%), and multi-racial (23.6%). Examinations of these numbers reveal that Hawai‘i’s demographics are almost the reverse of those found in the U.S. mainland. That is, the continental U.S. has the highest percentage of Whites (72.4%), with lower percentages of Asians (4.8%), Pacific Islanders/Native Hawaiians (0.2%), and multi-racial individuals (2.9%). Here it must also be noted that most Hawai‘i residents are not considered Native Hawaiian/Hawaiian, because the term refers specifically to individuals with indigenous heritage (Grant & Ogawa, 1993). Currently, most Native Hawaiians are ethnically mixed, a result of multiracial marriages and the historical trauma of Westernization. In sum, Hawai‘i’s reversed demographics in which the minority is the majority leads to a greater risk of misdiagnosis when assessing individuals using neuropsychological normative data, tests, and methods that lack multicultural sensitivity.

To further understand Hawai‘i’s multicultural factors and the resulting effects on LD assessment, the cultural kaleidoscope of Hawai‘i’s unique background will be highlighted. First, a historical context will be provided and cultural ramifications considered, followed by a discussion of the different variables that may influence LD assessment with multiethnic and multicultural individuals.
**Historical Context**

Grant and Ogawa (1993) stated:

With a population of over 1.1 million people, who represent nearly forty different ethnic and racial groups, none of which is a majority, the eight major Hawaiian islands have been home to a remarkable experiment in human cooperation and cultural interaction that has been widely acclaimed as the ‘melting pot of the Pacific,’ a ‘crossroads of East and West’ in a social setting imbued with the Polynesian spirit of aloha (p. 138).

This multicultural and multiethnic state has been likened to a fruit salad, where different fruits, marshmallows, and other ingredients are completely different, yet exist harmoniously. That is, the heterogeneous “ingredients” in Hawai‘i are complimentary ethnicities that together combine to form what many consider the culture of an ideal tropical paradise.

However, Hawai‘i’s “utopia” has been one of long struggle, transformed through cultural conflict, oppression, and forced Westernization. Westernization began with the arrival of Captain Cook in 1778, when he encountered the *kanaka maoli*, the islands’ indigenous people (Grant & Ogawa, 1993). With the introduction of White foreigners came the introduction of foreign diseases. As a result, in 100 years over 90% of Native Hawaiians died due to foreign diseases associated with Westernization (McCubbin & Marsella, 2009). According to Grant and Ogawa (1993), this resulted in Native Hawaiians becoming a minority within their own land, forced to watch the eradication of their culture.

In 1810, historic Native unity was brought about when King Kamehameha I united the Hawaiian Islands (McCubbin & Marsella, 2009). This signified the beginning of the Hawaiian monarchy and kingdom. However, 10 years later, American missionaries arrived, spreading Christianity, literacy, education, and Western lifestyles (Grant & Ogawa, 1993; McCubbin &
Marsella, 2009). In the end, the missionaries all but destroyed Native Hawaiian culture, and together with other local White businessmen, they controlled the politics, government, land, and economy of the region (McCubbin & Marsella, 2009).

Hawai‘i’s new Westernized economy promoted wealth and power over the Native people. White businessmen recruited locals as well as foreign immigrants to increase their wealth in the pineapple plantations and sugar cane industry. Cheap labor was recruited from China, Japan, Okinawa, Korea, Puerto Rico, Philippines, and Portugal due to the dwindling Native Hawaiian population (Grant & Ogawa, 1993; McCubbin & Marsella, 2009). Five large companies, known colloquially as the Big Five, were governed by kama‘aina haoles (i.e., Hawai‘i’s Caucasian long-term residents; Grant & Ogawa, 1993).

These companies were Alexander and Baldwin, Castle and Cooke, Theo Davies, American Factors, and C. Brewer (Grant & Ogawa, 1993). The Big Five held economic control over the islands, which resulted in wealth and political power. In addition, haoles did not interact with workers, which fostered a social hierarchy with immigrants and Native Hawaiian workers (Grant & Ogawa, 1993) at the bottom. Ethnic groups were also separated on ethnic background, and competition was fostered between groups. However, intermarriages with foreign workers and Native Hawaiians reduced this ethnic competition over time and resulted in increased numbers of multiracial individuals (Grant & Ogawa, 1993; McCubbin & Marsella, 2009).

The changing landscape of Hawai‘i also resulted in psychological turmoil within the Native Hawaiian community. Native Hawaiians dressed in Western clothing and adopted Western values to disprove their primitive and savage stereotype (McCubbin & Marsella, 2009).
As cited on page 379 in McCubbin and Marsella (2009), King Kalakaua, the last king of the Kingdom of Hawai‘i wrote:

The natives are steadily decreasing in numbers and gradually losing hold upon the fair land of their fathers. Within a century they have dwindled… to landless, hopeless victims to the greed and vices of civilization. They are slowly sinking under the restraints and burdens of their surroundings, and will in time succumb to social and political conditions foreign to their natures…[until] finally their voices will be heard no more forever.

(Kalakaua, 1888, pp. 64-65)

Five years later on January 16, 1893, the Kingdom of Hawai‘i was illegally overthrown. American businessmen and the U.S. Minister of Hawai‘i, John Stevens, illegally invaded the Kingdom of Hawai‘i with the use of the U.S. Navy (McCubbin & Marsella, 2009). A day later, known as Onipaa, Queen Lili‘okalani was overthrown and the monarchy disbanded. However, President Cleveland declared the invasion and overthrow an “act of war” and announced the restoration of the Kingdom of Hawai‘i. President Cleveland’s messages went unheard and instead, a new government declared itself the Republic of Hawai‘i. The following years resulted in more bloodshed and instability. Rebellions erupted after an attempt to restore the Hawaiian monarchy and its queen, Queen Lili‘uokalani (McCubbin & Marsella, 2009). Queen Lili‘uokalani was convicted of treason and sentenced to five years in jail, which she served under house arrest. During this time, the former queen witnessed the annexation of Hawai‘i as a U.S. territory without a single Native Hawaiian vote.

In 1959, Hawai‘i became the 50th state of the United States of America (McCubbin & Marsella, 2009). Lands were returned to the state, specifically the Native Hawaiian people. Years later, the Hawaiian renaissance emerged, marked by a revitalization of Hawaiian culture,
including dance, language, and art. Then in 1993, President Bill Clinton officially apologized to the Kingdom of Hawai‘i and its’ Hawaiian people. Public Law 103-50 was signed, which recognized the 100th year of the overthrow and apologized for the demise of the Kingdom of Hawai‘i. In 2000, Senator Daniel Akaka introduced the Akaka bill that would have recognized Native Hawaiians as an indigenous people; however, in 2006 the bill was defeated in Congress.

Nevertheless, in Hawai‘i’s current political climate, the issue of Hawaiian sovereignty is yet unfinished (Grant & Ogawa, 1993). Hawaiians continue to express their response to historical oppression and to exert their given rights to culture, privilege, and language. As they continue to navigate the waters of historical oppression, they attempt to live in harmony with other local islanders who also experienced Hawai‘i’s historical trauma as exemplified in plantation life. According to Grant and Ogawa, plantation life was a divide and rule society that prevented ethnic groups from holding power. However, this also served as Hawai‘i’s historical foundation of tolerance, which promoted ethnic diversity and allowed immigrants to each practice their own cultural traditions. For example, plantation owners tolerated and respected immigrant’s spiritual practices through the preservation of Buddhist temples, Shinto shrines, Catholic churches, and ethnic celebrations.

Old Hawaiian values also influenced Hawai‘i’s society. Aloha kanaka, love of one’s fellow human beings, was practiced in government and policy (Grant & Ogawa, 1993). In addition, residents welcomed former slaves who found employment and established new lives on the islands. Interracial marriages often resulted, but racism and discrimination were not uncommon:

The result was what Andrew Lind called the ‘policy of racial unorthodoxy,’ in which overt discrimination and hostility need to be submerged but are sublimated through
covert deeds of rudeness, gossiping, derision, interpersonal aloofness, or outright nastiness. Thus, it is not uncommon to hear an islander speak in glowing terms about the special aloha spirit of Hawaii while in the same breath complaining about the ‘damn haole’ or ‘uppity Jap’ or ‘lazy kanaka’ who lives next door. Newcomers are bewildered and often angered by the seeming incongruity between the racial harmony that is professed everywhere and the everyday reality that race awareness, ethnic separateness, and covert discrimination are also prevalent (Grant & Ogawa, 1993, p. 148).

The balance of ethnic tolerance and discrimination was further reinforced by the intergenerational influences resulting from multiculturalism. Cultural blending, known as pidgin culture, occurred through school systems and plantation life (Grant & Ogawa, 1993). Pidgin culture was the incorporation of ethnic foods, language, lifestyles, and traditions into a unique local identity. For example, pidgin (i.e., Hawai‘i Creole English) fused ethnic languages into a common local language, similar to that of African American Ebonics. These practices combined ethnic cultures that focused on commonality and created an overall local culture that did not disrespect original ethnic cultural values.

Grant and Ogawa (1993) referred to this principle as “points of commonality,” which emerged from communities’ beliefs, attitudes, values, and practices (p. 150). Commonality resulted in the coexistence of different ethnicities through understanding, respect, and negotiation. Points of commonality were demonstrated through mutual understanding of extended family and surrounding community relationships that fostered interdependence, openness, and flexibility. The attitude of “ain’t no big thing” was commonplace (p. 150). This allowed for resolution of conflicts between individuals when Hawai‘i residents engaged in racial humor and ethnic stereotyping to relieve racial tension.
According to former Governor John Burns, the danger of Hawai‘i’s racial harmony will only emerge with “51 percent” (Grant & Ogawa, 1993). That is, if a single race has the racial majority, then Hawai‘i will be vulnerable to racial turmoil and cultural instability. Racial and ethnic relationships will be strained, which would result in harmful political, social, and economical events. Furthermore, Grant and Ogawa stated, “multiculturalism is not an intellectual ambiguity in Hawaii but a living reality, where within a single individual, it is not uncommon to find eight distinct ethnic heritages” (p. 151-152). This diverse multicultural reality without a clear majority has resulted in unique cultural differences that contrast with the continental United States and must be explored in context as it applies to research, theory, and mental health practice (Butay, Wong, & Burns-Glover, 2011).

**Cultural Factors Influencing Testing**

Hawai‘i’s multicultural landscape provides an ideal setting to critique mental health assessments practices that are based on Western theory. As noted above, this is because Hawai‘i’s diversity is not congruent with Western assessment practices, normative data, and mental health theories. Hawai‘i’s unique composition allows researchers to examine cultural variables in the context of assessment practices that may result in the misidentification of LDs and other cognitive difficulties (e.g., ADHD). Therefore, some of Hawai‘i’s unique cultural factors will be examined so as to compare the applicability of assessment practices in Hawai‘i with those in the continental United States.

**Collectivism.** As previously noted, Hawaiian populations tend to rely on interdependence and extended family relationships that foster a group community (Grant & Ogawa, 1993). This is consistent with Asian American values that include respect for authority, conformity, collectivism, emotional restraint, and filial piety (Kim, Atkinson, & Yang, 1999; Omizo, Kim, &
Abel, 2008; Zane & Yeh, 2002). High value is placed on group cohesion, inter-dependence, and conformity that benefits the overall group (Sue & Sue, 2008). For example, collectivist achievement is exemplified by the building of a house, business, farm, or community. These collectivist values, as they relate to achievement, are not captured on Western tests that are based on individual performance and so may result in lower achievement scores.

**Family and gender roles.** Many Asian groups and Native Hawaiians emphasize familial relationships and utilize age hierarchies, in conjunction with holding collectivist values (Cruz, Salzman, Brislin, & Losch, 2005; Sue & Sue, 2008). That is, a sense of community and family unity is placed above the individual’s own needs, and respect for authority and the elderly are practiced (Sue & Sue, 2008; Wong & Fujii, 2004). This balance of power may affect the assessment relationship, in which a younger examinee may not exhibit his or her best performance due to respect for the age hierarchy. For example, for a Chinese individual, respect for authority (i.e., the examiner) may result in patient underreporting symptoms or psychopathology. It may also result in reluctance to speak up concerning his or her academic difficulties due to family disapproval and anticipated consequences to the entire family of stigmatization (Wong & Fujii, 2004). However, the opposite could also occur, leading to symptom over-reporting, again due to respect for an authority figure. That is, the individual may attempt to amplify his or her academic difficulties in order to portray learning disability traits through over-reporting and response magnification to an elder examiner’s questioning to ensure treatment. This occurrence is intensified due to Asian American and Native Hawaiian naivety associated with underutilization of services.

Gender roles also exist. In Hawai‘i, traditional Asian influences may reinforce conservative gender roles. For example, Asian families are patriarchal in which men have more
power than women (Sue & Sue, 2008). Males are expected to carry out cultural traditions, carry
on the family name, and assume responsibility for their parents. Women are expected to be
family mediators and submit to household and family goals. In assessment, this gender hierarchy
may affect performance. For example, if the examinee is female and the examiner male, her best
performance could be distorted by gender expectations. That is, she may underreport or
overcompensate to demonstrate that she is not suffering from intellectual difficulties that are
seen as weak. She may attempt to hide her difficulties to prevent shame on her family that is
associated with skill- or knowledge-based deficits (O’Hara, 2003). On the other hand, if the
examinee is male and the examiner female, his scores may also be distorted by gender
expectations. That is, the examinee may feel threatened by a female in a reversed gender power
hierarchy. He may feel weak or insulted, result in underreporting of academic or intellectual
functioning, such that he is able to hide his perceived weaknesses and reinforce the expected
gender hierarchy.

Asian perspectives about achievement include not only assumptions and expectations
about gender roles, power, and hierarchy, but also about conformity (Sue & Sue, 2008).
According to Sue and Sue (2008), conformity of feelings, behaviors, and responsibilities are
ingrained within the family, and the ability to control these variables is expected to result in
achievement. In addition, Native Hawaiian perspectives’ about achievement involves learning
oral traditions that are passed down through generations in which knowledge is acquired for
practical means (Cruz et al., 2006). These practical skills benefit the family, community, and
individual; however, many Native Hawaiians remain humble about personal achievements since
this reinforces group cohesion (Cruz et al., 2006). In contrast, Western cognitive testing does not
encompass this familial and community sense of achievement expressed through tacit or
practical knowledge and oral tradition. Rather, individualistic assessments are developed to identify specific constructs that are culturally insensitive to Asian and Native Hawaiian ideas about the nature of achievement and intellect.

**Acculturation, enculturation, or assimilation.** Additionally, Hawai‘i’s high rate of foreign immigration and intermarriage has resulted in faster cultural assimilation (Grant & Ogawa, 1993). Historically, foreign immigrants assimilated into Hawai‘i’s culture through contact with the plantation and sugar cane industry. As previously stated, *pidgin* culture allowed ethnic minorities to retain their own cultural identity while acculturating to the overall local culture regarding traditions, rituals, beliefs, and Hawai‘i Creole English (i.e., *pidgin*). As noted previously, Hawaiian *pidgin* is the product of enculturation and assimilation of the languages of foreign immigrants and locals (e.g., Chinese, Japanese, and Portuguese) with the Native Hawaiian language.

Second generation immigrants experienced the immediate effects of cultural integration and socialization experiences as well as individual assertiveness within this context (Grant & Ogawa, 1993). Currently, Hawai‘i residents continue to assert themselves within a cultural framework similar to how other multicultural individuals have asserted their ethnic and cultural identities in the Westernized world (Butay et al., 2011). It is important to note that individual assertion is not a reaction to assimilation, enculturation, or acculturation, but rather results from the complex interplay of multiethnic upbringing that relies on indigenous cultural heritage (Butay et al., 2011). According to Root (1993), multiethnic, multicultural individuals in Hawai‘i feel the right to identify with multiple groups, races, and ethnicities and to identify differently from their parents’ ethnic or racial identification. In addition, assertive multicultural individuals have the ability to communicate their multiracial or multiethnic backgrounds, remain ethnically
fluid, identify with more than one group, and trust or befriend individuals from different cultures. In Hawai‘i, individuals do not have to justify their ethnic legitimacy and existence in the world, separate out their different racial backgrounds, or be responsible for ethnic ambiguity.

Multicultural assertions by Hawai‘i residents have consequences for LD assessment. Of most immediate importance is that language and literacy factors may influence test performance. This is because the preservation of multiple ethnic identities may result in inconsistency in fluency between languages, and the complexity of language variables increases when use of *pidgin* is factored in. In all, language variables will certainly affect writing and reading scores when using a Westernized, English-language neuropsychological test.

**Education.** Hawai‘i’s education system is rooted in its colonial past, with the establishment of missionary schools. Missionary schools were created to convert indigenous and local children of Hawai‘i into religious cultural orders of Christianity (Benham & Heck, 1998). These early missionary schools have transformed into elite private institutions that offer the ‘best’ education to Hawai‘i’s residents and have served as academic settings for famous former residents including President Barack Obama and Dr. Sun Yat Sen, the first president of the Republic of China. Nevertheless, the history of Hawai‘i’s missionary schools encompasses racial institutionalization, forced Westernization, and eradication of Hawai‘i’s historical past. During the 1800s, Hawai‘i was one of the most literate nations in the world, even though it had a high percentage of indigenous and immigrant populations (Kanaiaupuni & Ishibashi, 2003). Then, in 1896, public and private schools banned the Hawaiian language and taught only in standardized English. Finally, a century later, the Hawaiian language was re-recognized by the government and reintegrated into schools. Nonetheless, this historical struggle all but precipitated eradication of the Hawaiian language and culture, and it “resulted in a precipitous decline in Hawaiians’
understanding of their own culture, history, values, spirituality, practices, and identity as a people” (Kanaiaupuni & Ishibashi, 2003, p. 1).

**Socioeconomic status, power, and wealth.** Hawai‘i’s educational history, similar to that of Native Americans who were sent to boarding schools, reinforced the segregation of power, wealth, socioeconomic status, and privilege to non-native Whites (Benham & Heck, 1998). Even today, for many wealthy Hawai‘i residents, wealth and success may be traced to experiences of ancestors during the early colonization period, during which 20% of Hawai‘i’s students attended private schools. Currently, the majority of students who enroll at private institutions have middle to upper socioeconomic status with its associated privileges and power.

The segregation of public and private schools has resulted in socioeconomic differences that benefitted specific ethnic groups over others (Benham & Heck, 1998). Specifically, Caucasians have benefitted most from segregation, which reinforced their privilege, power, and wealth. Today, this balance of power has changed only a little. Caucasians continue to control the economy and political system regardless of the current increase of Japanese and Chinese power (Tamura, 1994). Other minority groups have attempted to gain privilege, including Japanese and Chinese Americans. However, Native Hawaiians continue to struggle disproportionately. In Hawai‘i’s colonial past, both Asians and Native Hawaiians were forced to “Americanize” (Benham & Heck, 1998). Asians excelled and transitioned into the hierarchy of power, while Native Hawaiians struggled. Specifically, Japanese and Chinese residents attained higher levels of employment and income, greater economic stability, and a larger share of power based on educational achievement (Grant & Ogawa, 1993). In contrast, Hawaiians, part-Hawaiians, and Filipinos were unable to assert themselves within this Western academic framework to gain privilege, occupational status, and higher incomes. According to the Hawai‘i
State Department of Education, Hawai‘i’s teachers are mostly White (26%) or Japanese (38%), which demonstrates the shift of power and status within Hawai‘i’s educational settings (Kanaiaupuni & Ishibashi, 2003). However, the establishment of the Kamehameha Schools, a private Native Hawaiian educational institution, allowed Native Hawaiians to strive educationally while maintaining a balance between Western education and traditional Hawaiian values.

The segregation of socioeconomic status and power highlighted Hawai‘i’s historical past and also underlies current underfunding of public education. Similar to the experiences of Native Americans on the mainland, Native Hawaiians and others who fought the institutional hierarchy were deemed lazy and stupid and labeled troublemakers (Benham & Heck, 1998). These stereotypes were pervasive across Hawai‘i’s educational system, in contrast to Asian groups who were viewed as high functioning due to their educational achievement (Benham & Heck, 1998; Kanaiaupuni & Ishibashi, 2003).

**Racial stereotypes.** Racial stereotypes continue to haunt Hawai‘i’s educational system. Hawaiian students traditionally lag behind White and Japanese students and account for 33% of Special Education students (Benham & Heck, 1998). In addition, Hawaiian students are underrepresented in Gifted and Talented programs (Cruz et al., 2006). Native Hawaiians also are underrepresented on Hawai‘i’s college campuses. Currently, Hawaiian students continue to struggle to assert themselves within a Western framework that conflicts with Native cultural values, community, cooperation, unity, and local communication styles (Benham & Heck, 1998).

In the end, the struggle to succeed in Western educational systems reinforces harmful stereotypes, often leading to self-fulfilling prophecies (Cruz et al., 2006). If Native Hawaiian students view themselves as ‘primitive’ or troublemakers, this may influence their performances
on standardized testing. If an individual’s best performance efforts are compromised in this way, then it may result in misdiagnosis and account for an increased number of LDs and other cognitive diagnoses among Hawai‘i multicultural residents, in turn leading to increased utilization of services.

**Regionality.** About 7% of Hawai‘i students seek district exemptions that allow them to attend the public institution of their choice, often a better academic institution than their assigned school (Benham & Heck, 1998). This is due to regional disparities between public and private schools based on each region’s socioeconomic status. Low-functioning public schools tend to be neglected by the community and located in rural, low socioeconomic areas with a high concentration of Native Hawaiian students. In contrast, high-functioning public schools tend to be located in areas with community support, high socioeconomic status, and few Native Hawaiian students (Benham & Heck, 1998). This has resulted in increased educational opportunities and support in areas with higher standards of living. In addition, these more affluent regions tend to have more Caucasian and Asian students than Native Hawaiian students (Blair & Qian, 1998).

**Communication styles.** Westernized communication styles in academic and neuropsychological settings are formal and concrete with an emphasis on precise grammatical structure. In Hawai‘i’s multicultural populations, this is not the case. Formal and correct diction are neglected in Hawai‘i and replaced with informal and casual linguistics, called *talk story/talking story* (Butay et al., 2011; McDermott, Tseng, & Maretzki, 1980). Talk story is a conversational style used by Hawai‘i locals that incorporates both *pidgin* and standardized English into conversational *talking story* patterns (McDermott, Tseng, & Maretzki, 1980). Such *talk story*, although a common Hawai‘i communication style, may hinder performance during
LD assessments that are based in part on knowledge of mainland standardized English. This is because assessment instruments do not measure informal linguistic styles and ways of exchanging information. Therefore, these differences may result in low scores on tests of language, reading achievement, and writing achievement, which form the basis for many diagnostic decisions when assessing for LD. In addition, communication styles that vary from those for which most tests are developed may also influence scores, due to the use of a formal instructional style that may or may not be as useful to individuals habituated to communicating using a more casual conversational pattern.

**Language.** In addition, Hawai‘i’s multiethnic composition introduces a variety of ethnic language variables. In this way, Hawai‘i residents may encounter similar difficulties with LD assessment that linguistic minorities experience. For example, individuals who are bilingual or for whom English is a second language (ESL) may struggle with English proficiency, which interferes with reading and writing assessment, thus leading to lower scores on achievement and intellectual functioning tests and potentially to misdiagnoses as well (Sandoval, 2002). This is because individuals may not completely understand the given instructions or content of some test items, introducing significant clinical error (McBrayer & García, 2000; Sandoval, 2002). Even when an individual is fluent in two languages, mental processing speed in both languages may not be equal (Sandoval, 2002). This is because processing information in English sometimes requires internal translation, resulting in mental fatigue and reduction in response speed.

**Mental health perspectives.** Asians’ and Native Hawaiians’ negative perspective of mental health diagnoses also may result in access issues and discomfort during evaluation. For this reason, many Asian American groups rarely seek mental health services or neuropsychological testing (Okazaki & Sue, 2000; Sue & Sue, 2008). Specifically, many Asians
avoid learning disability assessment whenever possible due to cultural shame and stigmatization associated with cultural values that “emphasize effort over abilities and community emphasis on achievement” (Okazaki & Sue, 2000, p. 276).

Stigmatization among Asians’ and Native Hawaiians may account for decreased utilization of mental health services and increased mental health problems, as well as difficulties with diagnosis and treatment (Wong & Fujii, 2004). This is because the U.S. mental health system is based on three values: Rights of the individual, autonomous decision-making, and the goal of eliminating suffering (Singer & Chung, 2002). These values highlight the individualistic tendencies of Western medicine and do not incorporate other cultural traditions, such as Asian and Native Hawaiian mental health philosophies. For example, Western mental health values do not focus on collectivist values, the welfare of the group is not placed above individual needs, decisions are not collective, and suffering is not considered an inherent aspect of life. The following review will briefly highlight different mental health perspectives of various Asian groups prominently represented in Hawai‘i.

Chinese. Traditional Chinese Americans view counselors and doctors as experts due to a strong emphasis on hierarchy in relationships (Wong & Fujii, 2004). The group is valued more than the individual, and the doctor’s recommendations are strictly followed. However, Chinese Americans stigmatize mental health diagnoses. And, any mental health condition results in stigmatization not only of the individual but also of the group, community, and family. This stigmatization leads to minimization of an individual’s reported symptoms and difficulties. Instead, a Chinese individual will usually attempt to resolve mental health issues within the family and not volunteer vital information regarding his or her cognitive or behavioral issues to an outsider. In addition, Chinese Americans may experience many mental health symptoms
somatically due to greater cultural acceptance of physical complaints over psychological ones. Chinese Americans often will rely on holistic health care providers and herbal medicines to help ease their symptoms.

**Filipinos.** Filipinos also traditionally experience stigmatization regarding mental health issues (Wong & Fujii, 2004), and they associate mental health diagnoses with weakness of character or family discord (Santa Rita, 1993; Wong & Fujii, 2004). Filipinos also take care to avoid open disagreements. For example, when confrontations with the health care providers occur, Filipinos engage in avoidance behavior demonstrated by treatment non-adherence and cancelled appointments (Wong & Fujii, 2004). This avoidance of open disagreement is rooted in cultural values in which authority figures are respected, and it would be considered impolite or rude to disagree with esteemed health care providers.

**Southeast Asians.** Traditional Southeast Asians practice filial piety and prefer to keep mental health issues within the family (Wong & Fujii, 2004). Similar to other Asian groups, the fear of stigmatization, shame, and repercussions to the family and community result in under-utilization of mental health services. According to Nishio and Bilmes (1998), it is uncommon for Southeast Asians to seek treatment or self-refer to therapy or counseling. In addition, Southeast Asians may view mental health disorders as having metaphysical causes (Nishio & Bilmes, 1998; Wong & Fujii, 2004), and this may account for higher levels of somatization as well as low utilization of mental health services (Wong & Fujii, 2004).

**Koreans.** Traditional Koreans value family and group cohesion (Wong & Fujii, 2004), are very sensitive to others, and value group connectedness (Harvey & Chung, 1980; Wong & Fujii, 2004). They hold a strong emphasis on achievement and success, and experience guilt if failure occurs (Harvey & Chung, 1980; Wong & Fujii, 2004). This perspective of mental health
is rooted in beliefs about the imbalance between the body’s *yin* and *yang* and values about family harmony (Wong & Fujii, 2004). Koreans are more likely to seek treatment compared to other minority groups, and it is not uncommon to seek services by Chinese holistic practitioners or Western doctors if symptoms worsen (Kim, 1996; Wong & Fujii, 2004).

**Japanese.** Japanese traditionally hold strong allegiances to their family and ethnic groups. They emphasize interdependence and place a high value on vertical relationships in which the highest-ranking individual is responsible for the entire group (Wong & Fujii, 2004). In addition, Japanese individuals strive to bring honor and respect to the family, and mental health difficulties often are hidden and discouraged because these may result in enduring shame for the entire family (Fujii, Fukushima, Yamamoto, 1996; Wong & Fujii, 2004). At the same time, Japanese people have a high tolerance for the mentally ill and will care for these individuals within the family system (Wong & Fujii, 2004). Like other Asian groups, Japanese individuals often will experience symptoms somatically and will only seek treatment if symptoms worsen and persist (Fujii, Fukushima, Yamamoto, 1996; Wong & Fujii, 2004).

**Hawaiians.** Native Hawaiians emphasize the value of social relationships and connectedness of the individual with society, nature, and the spiritual realm (McCubbin & Marsella, 2009). These relationships affect Native Hawaiians’ psychological well-being and may result in either harmful or positive outcomes. According to McCubbin and Marsella (2009), *lokahi* (unity) is required for Native Hawaiian mental health and psychological well-being, involving unity of the mind, body, and spirit. These values are ingrained in the family. Thus, among Native Hawaiians, mental illness is considered a manifestation of disharmony between social and spiritual elements. For example, behaviors that disrupt harmony include hate, jealousy, theft, fighting, violation of spiritual forces, and offending of ghosts, elders, or spirits.
To restore harmony, it is believed that individuals must engage in pro-social behaviors and spiritual or ritualistic events involving humility, purification baths, prayers, and/or apologies. In all, Native Hawaiian psychological well-being and mental health rely on a number of elements and social factors that promote harmony and balance (McCubbin & Marsella, 2009; Sue & Sue, 2008). In fact, because Hawaiians’ psychological well-being is understood to rest on both spiritual and social elements, to treat one is to treat the other (McCubbin & Marsella, 2009).
Appendix B

Clinician Outcome Survey

Please respond accordingly and circle the most appropriate response.

1. Was the Akamai Learning Disability Model utilized with this participant?
   a. Yes
   b. No

2. Did the Akamai Learning Disability Model influence the test administration with the participant?
   a. Yes
   b. No

   Please indicate what was influenced, modified, or adapted (e.g., test administration, scoring, feedback, results, etc.) for the participant.

3. Please rate the influence of the Akamai Learning Disability Model on your case conceptualization on a scale from 1 to 5.

   1 2 3 4 5
   No influence  Moderate  Highly influenced

4. Please indicate how your conceptualization was influenced by the Akamai Learning Disability Model.
5. Please indicate how the diagnosis and/or clinical recommendations were made given the cultural context of participant.

6. Please rate your confidence level as a clinician in working with a multicultural Hawai‘i population on a scale from 1 to 5.

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<td>Not confident</td>
<td></td>
<td>Moderate</td>
<td></td>
<td>Highly confident</td>
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7. Please describe any additional concerns or cultural considerations that presented during the assessment process.

8. Would additional cultural appropriate assessment models be useful for working with other ethnic minority populations? If so, what would be most helpful or useful?
Appendix C

Participant Outcome Survey

Please respond honestly and accordingly to the following questions.

1. Rate your openness to the testing experience (e.g., evaluation, interview, cognitive testing)?

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Please explain your rating.

2. Did you feel shamed for seeking a learning disability evaluation?
   a. Yes
   b. No

Please rate on the scale below.

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<tr>
<td>No shame</td>
<td>Moderate</td>
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3. Do you feel that the testing experience (e.g., questions asked, types of tests/measures, scoring, feedback, results) was sensitive to your cultural needs or familiar with your culture? Please rate below.

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<td>Not sensitive</td>
<td>Moderate</td>
<td>Highly sensitive</td>
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Please explain your rating.
4. Did you feel comfortable with the examiner that conducted the testing? Please rate below.

1  2  3  4  5
Not comfortable  Moderate  Highly comfortable

*Please explain your rating.*

5. How did you perceive the examiner? Was he or she knowledgeable or understanding of the Hawai‘i culture?

6. Were the results and recommendations clearly explained, defined, and stated to you? Please rate below.

1  2  3  4  5
Unclear  Moderate  Highly clear
(Not explained)  (Highly explained)

7. Were you diagnosed with a learning disability?
   
   a. Yes
   
   b. No

*If indicated Yes, what diagnosis was given?*

8. Do you feel that the testing (e.g., results, recommendations) was sensitive to your culture, such that you feel comfortable talking with family and friends about the testing experience?
9. Please indicate any positive experiences from testing.

10. Please indicate any negative experiences from testing.

11. Please indicate how you would change, modify, or adapt the testing experience for other individuals from Hawai‘i.

12. Please indicate additional concerns or questions regarding this testing process. *Please be as honest as possible. Information will Not be linked to you, your records, or clinician. All records, data, and responses are confidential.*
Appendix D

Participant Demographic Survey

Please respond accordingly in the space provided.

1. What is your age? ______

2. What gender do you identify as? Please check the box that applies.

☐ Female

☐ Male

☐ Other -please indicate: ____________

3. What is your racial identification (e.g., Japanese, Chinese, Filipino, Native Hawaiian, Chinese-Hawaiian, Japanese-Caucasian, etc.)? Please check all that apply.

☐ Asian Indian  ☐ Japanese  ☐ Native Hawaiian
☐ African Am., Black  ☐ American Indian  ☐ Alaska Native
☐ Chinese  ☐ Korean  ☐ Filipino
☐ Vietnamese  ☐ Guamanian  ☐ Chamorro
☐ Samoan  ☐ White  ☐ Other Asian
☐ Other Pacific Islander  ☐ Other race

4. What is your ethnic identification (i.e., how you identify with a group based on values, culture, language, heritage, etc.)? Please check all that apply.

☐ Asian Indian  ☐ Japanese  ☐ Native Hawaiian
☐ African Am., Black  ☐ American Indian  ☐ Alaska Native
☐ Chinese  ☐ Korean  ☐ Filipino
☐ Vietnamese  ☐ Guamanian  ☐ Chamorro
☐ Samoan  ☐ White  ☐ Other Asian
☐ Other Pacific Islander  ☐ Other race

5. How long have you lived in Hawai‘i? Please check the box that applies.

☐ Less than 1 year  ☐ More than 10 years  ☐ More than 25 years
☐ Less than 5 years  ☐ More than 15 years  ☐ More than 30 years
☐ Less than 10 years  ☐ More than 20 years  ☐ More than 35 years

6. Where were you born and raised? Please check the box that applies.

☐ Hawai‘i
☐ Continental US
7. How long have you lived on the mainland? Please check the box that applies.

- Less than 1 year
- More than 10 years
- More than 25 years
- Less than 5 years
- More than 15 years
- More than 30 years
- Less than 10 years
- More than 20 years
- More than 35 years

8. Did you attend public, private school, or both? _________________________

9. What was your highest grade completed? ____________

10. Is English your primary language? Please check box that applies.

- Yes
- No

11. Other additional languages spoken? Please list additional languages.

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

12. Do you speak pidgin? Please check box that applies.

- Yes
- No

13. Have you previously had a learning disability? Please check box that applies.

- Yes
- No

What were the disability areas? Please check all that apply.

- Mathematics
- Writing
- Reading
- Other: please indicate ____________________________

14. Have you been previously diagnosed with a mental health condition or illness?

- Yes
- No

Please indicate what diagnosis: ____________________________________________
Appendix E

So da kine Hawaiian-perceptions on Learning Disabilities


You may find the following resources useful:

- Learning Disabilities Association of America (http://www.ldaamerica.org/)
- National Center for Learning Disabilities (http://www.ncld.org/learning-disability-resources)
- National Alliance on Mental Illness (www.nami.org)
- National Institute of Mental Health (http://www.nimh.nih.gov/index.shtml)
- Substance Abuse and Mental Health Services Administration (http://www.samhsa.gov/index.aspx)
- U.S. Department of Veterans Affairs (http://www.mentalhealth.va.gov/)

Informed Consent

You are invited to participate in a research study about a learning disability assessment model for Native Hawaiian individuals. You may not have a learning disability; however, this study is examining and looking at barriers with Native Hawaiians, who may need testing. Learning disabilities are identified with extensive psychological testing and characterized as learning difficulties and disorders that involve reading, writing, speaking, spelling, mathematics, or reasoning. Individuals with learning disabilities often receive academic accommodations (e.g., extended time, note takers, and audio books) and are covered under the Individuals with Disabilities Education Improvement Act (IDEA) and American with Disabilities Act (ADA). Your participation in this project will contribute to the movement of culturally appropriate assessment and evaluation of learning disabilities. This study is being conducted by Chelsea Wong, MS, CADC I under the supervision of BJ Scott, PsyD. This has been approved by the Pacific University IRB (IRB #) and will continue for one year. The study will consist of an online survey and data collected will be used for future publication of dissertation that will be available in the library and submitted for presentation at national conferences and submitted for publication in a peer-reviewed journal.

You must be 18 years of age or older and identify as Native Hawaiian and/or with a Hawai‘i cultural background. You may not participate in this study if you are under the age of 18, and do not identify as Native Hawaiian.

Upon completion and approval of this informed consent, you will be voluntary directed and asked to complete a brief survey. A list of additional resources is provided if interested in mental health resources or services. The survey will take an estimated 10-15 minutes to complete. At the conclusion of the survey, you will be eligible to enter a drawing for one of five $20.00 Amazon gift cards. Only one chance will be provided per email address to prevent multiple submissions. Please feel free to print and keep a copy of this for your record.
The study may expose you to potential minor risks that include physical, social, and emotional risks. These risks are not significantly greater than or would usually accompany online surveys. Physical risks include fatigue from using a computer to access the survey; emotional risks include shame associated with thinking about having a learning disability or mental health diagnosis, if present. These risks are not greater than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. There are no anticipated social, economic, or legal risks.

Several procedures will be utilized to minimize these stated risks. Specifically, the online survey is intended to address and minimize usual risks associated with cross-cultural mental health learning disability testing for Hawaiian individuals. A list of additional resources is provided in the survey if interested in mental health services or resources. If any distress occurs, you have the right to discontinue and withdrawal from the study at any time without any consequence. Please feel free to contact the principal investigator, Chelsea Wong (wong6445@pacificu.edu), if you have any questions or would like to report an incident where harm occurred in this study. At that point, you will be referred for appropriate mental health services, and the investigators will notify the IRB promptly and explain how we will manage the event. For serious adverse events, the IRB be notified within 24 hours. For other adverse events, notification by the next normal business day is recommended. In no circumstances should notification occur later than one week after the event.

This survey is anonymous, and no identifying information or IP addresses will be collected via the online survey; the survey was specifically designed not to collect this data. An optional link for the rewards drawing will be provided at the end of the survey that is not connected to your survey responses. The optional reward survey will require you to enter your email address. Your email address will be stored separately from your anonymous survey data and will be deleted and discarded after the reward drawing. However, the security of transmitted information cannot be guaranteed. Therefore, all electronic data will be password protected and stored on a password-protected laptop. Upon completion of the online survey, all data will be deleted from SurveyGizmo.

It is your decision whether or not to participate in this online survey. If you decide to participate, you are free to withdraw at any time without prejudice or negative consequences. If you choose to withdraw after beginning the survey, we will retain data collected before your withdrawal.

The investigator(s) will be happy to answer any questions you may have at any time during the course of the online survey. If you are not satisfied with the answers you receive, please call the Pacific University Institutional Review Board at 503-352-1478 to discuss your questions or concerns further. If you have questions about your rights as a research subject, or if you experience a research-related injury of any kind, please contact the investigator(s) and/or the IRB office. All concerns and questions will be kept in confidence.

If you have read andelectronically agree and consent to participate in this study, please click "yes, agreed and continue” and then click the “Next” button. If not, please proceed to close the window. Thank you for your time!
Yes, agreed and continue

Please answer the following demographic questions.

1. What is your age?
   - 18-25
   - 25-30
   - 30-40
   - 40-50
   - 50-

2. With what gender do you identify?
   - Female
   - Male
   - Transgender
   - Other

3. What is your **racial** identification (Please check all that apply)
   - Asian Indian
   - Japanese
   - Native Hawaiian
   - African Am., Black
   - American Indian
   - Alaska Native
   - Chinese
   - Korean
   - Filipino
   - Vietnamese
   - Guamanian
   - Chamorro
   - Samoan
   - White
   - Other Asian
   - Other Pacific Islander
   - Other race (please specify)

4. What is your **ethnic** identification (i.e., how you identify with a group based on values, culture, language, heritage, etc.)? Please check all that apply.
   - Asian Indian
   - Japanese
   - Native Hawaiian
   - African Am., Black
   - American Indian
   - Alaska Native
   - Chinese
   - Korean
   - Filipino
   - Vietnamese
   - Guamanian
   - Chamorro
   - Samoan
   - White
   - Other Asian
   - Other Pacific Islander
   - Other ethnicity (please specify)

5. How long have you lived in Hawai‘i?
   - Less than 1 year
   - Less than 5 years
   - Less than 10 years
   - More than 10 years
   - More than 15 years
   - More than 20 years
   - More than 25 years
   - More than 30 years
   - More than 35 years
   - N/A

6. Where were you born and raised?
LEARNING DISABILITY ASSESSMENT PILOT STUDY

- Hawai’i
- Continental US
- Both (Hawai’i and Continental US)
- Other (please specify)

7. How long have you lived on the mainland?
   - Less than 1 year
   - Less than 5 years
   - Less than 10 years
   - More than 10 years
   - More than 15 years
   - More than 20 years
   - More than 25 years
   - More than 30 years
   - More than 35 years
   - N/A

8. Did you attend public, private high school, or both?
   - Public
   - Private
   - Both
   - Neither

9. Did you complete high school/GED?
   - Yes
   - No
   - In progress

10. What is your highest degree obtained?
    - High School
    - GED
    - Associates Degree
    - Bachelor of Science/Arts (BS/BA)
    - Master’s Degree (MS/MA)
    - Doctoral Degree
    - N/A

11. Are you currently enrolled in one of the following educational programs: associates program (AA), undergraduate college, or graduate program?
    - Yes, Associates program (AA)
    - Yes, Undergraduate College
    - Yes, Graduate Program
    - No
12. Is English your primary language?
   - Yes
   - No

13. Do you speak pidgin?
   - Yes
   - No

14. Other languages spoken?
   - Yes, specify _________________
   - No

15. Do you have a disability?
   - No
   - Yes, learning disorder
   - Yes, ADHD
   - Yes, other cognitive disorder
   - Yes, physical disability

For the following questions, a mental health condition includes diagnoses such as depression, anxiety, learning disability, Attention-Deficit/Hyperactivity Disorder (ADHD), Posttraumatic Stress Disorder (PTSD), schizophrenia, developmental disability, autism/Asperger’s disorder, and dementia, or similar diagnoses. Mental health services include counseling/psychotherapy and testing for mental health or cognitive functioning. For the following questions, mental health services include medication treatment ONLY if specified.

16. Have you ever been diagnosed with a mental health condition or illness?
   - Yes
   - No

17. Have you ever sought mental health counseling?
   - Yes
   - No

18. Have you ever had professional psychological testing of any sort in the past? Psychological testing includes tests of personality or mental health, and learning/IQ/cognitive testing.
   - Yes, specify: __________
   - No
19. Are you currently participating in mental health counseling or psychotherapy?
   o Yes
   o No

20. Are you currently taking any prescribed medication for a mental health disorder?
   o Yes
   o No

21. Do you think that you would find mental health services (counseling, psychological testing, medication) helpful in the future, if you needed services?
   o Yes, mental health counseling
   o Yes, psychological or cognitive testing
   o Yes, medication
   o No
   o Not sure

22. Have any friends received mental health services?
   o Yes
   o No

23. Have any family members received mental health services?
   o Yes
   o No

24. Have you or others close to you had negative experiences with mental health services?
   o Yes
   o No

25. Which of the following best describes your feelings about mental health services?
   o I have mostly positive feelings about mental health services when needed
   o I have mostly negative feelings about mental health services even if needed
   o I have mixed feelings about mental health services
   o Not Sure

26. Do you think you might feel shame if you sought mental health services?
   o Yes
   o No
   o Not Sure

27. Do you think you might feel stigmatized by others if you were diagnosed with a mental health condition?
   o Yes
   o No
   o Not Sure
28. Do you think you would feel shame if you were ever diagnosed with a mental health condition?
   - Yes
   - No
   - Not Sure

29. Do you think you would feel stigmatized or shamed if you had any of the disabilities below? Check all that apply.
   - Yes, physical disability
   - Yes, learning disability
   - Yes, ADHD
   - Yes, other cognitive disorder
   - No, I would not feel stigmatized or shamed if I had any of these disabilities
   - Not Sure

30. What practical considerations might affect your willingness to seek mental health counseling or psychological/cognitive testing? Check all that apply.
   - Money/finances
   - Insurance
   - Language barrier
   - Transportation
   - Not knowing where to go for services
   - Other (please specify)

31. How might you find a clinician for mental health services or testing? Check all that apply.
   - Friends/family recommendation
   - School recommendation
   - Advertising online/newspaper
   - Doctor referral
   - Community agencies
   - Other (please specify)

32. Do you think you would be more likely to seek mental health services if a friend or family recommended it?
   - Yes
   - No
   - Not Sure

33. Do you think you would be more likely to seek mental health services if a doctor referred you to treatment?
   - Yes
   - No
   - Not Sure
34. Do you think you would be more likely to seek mental health services if a teacher/professor recommended it?
   o Yes
   o No
   o Not Sure

35. What would be important to you if you sought mental health counseling or testing? Please put these in order, from 1 being most important to 5 or higher being least important. Rank only those that apply.
   □ Reputation/Name of the agency
   □ Reputation/Name of clinician(s)
   □ Location of services
   □ Clinician’s experience and training
   □ Culturally appropriate programs/services specifically offered by clinician(s) or agency
   □ Other
   Please specify below: ____________

36. What qualities would you look for in a counselor/psychotherapist? Please put these in order, from 1 being most important to 5 or higher being least important. Rank only those that apply.
   □ Race and ethnicity of clinician
   □ Age of clinician, older clinician preferred
   □ Age of clinician, younger clinician preferred
   □ Gender, female preferred
   □ Gender, male preferred
   □ Competency/experience in providing services to others from my cultural background
   □ Experience and training with mental health counseling or psychological/cognitive testing
   □ Other
   Please specify below: ____________

37. How would you feel with a counselor/psychotherapist who appears White, versus an ethnic minority clinician? Check all that apply.
   □ It wouldn’t matter to me, as long as I felt comfortable with the clinician
   □ All other things being equal, I would prefer an ethnic minority clinician
   □ All other things being equal, I would prefer a clinician from my cultural background
   □ All other things being equal, I would prefer a White clinician

38. Do you feel that a mental health counselor/psychotherapist should be familiar with your cultural background in order to provide competent services?
   o Yes, for counseling/psychotherapy
   o Yes, for mental health testing
   o Yes, for cognitive/learning disability testing
   o No, this would not matter
   o Not Sure
39. Do you think your family would be supportive if you sought mental health services?
   o Yes
   o No
   o Not Sure

40. Would you like your family to be involved if you sought mental health services?
   o Yes
   o No
   o Not Sure

41. Who else might be involved in your treatment? Please pick all that apply.
   o Father
   o Mother
   o Grandparent(s)
   o Uncle(s)/Aunty(ies)
   o N/A
   o Other (please specify)

42. Are there any other comments you would like to add regarding your perceptions of or experiences with mental health services?

Thank you for your time! Please click on the following link and enter your email address if you are interested in participating in a drawing for one of five $20.00 Amazon gift cards. Winners will have gift cards emailed to them. Email addresses will not be connected to participant’s survey responses and will be deleted following the drawing.
Appendix F

Aloha,

My name is Chelsea Wong and I am a clinical psychology doctoral candidate at Pacific University’s School of Professional Psychology. You are invited to participate in a research project that explores access issues for mental health services including learning disability testing for Native Hawaiians and individuals with a Hawai‘i background. It is our hope that your participation will improve access to services for Hawai‘i’s ethnic and indigenous minorities who are seeking learning disability accommodations. To participate in this project you must be 18 years of age or older, and identify as Native Hawaiian and/or with a Hawai‘i cultural background. Your participation will include an online survey through SurveyGizmo, which is expected to take 10-15 minutes to complete. Your responses will be completely anonymous. Upon completion of the survey, you will be eligible to enter a drawing to win one of five $20.00 Amazon gift cards.

Please feel free to forward this notice to any friends or family members who might wish to participate. However, each person should complete their own survey independently.

If you are interested in participating, or have any questions or comments, you can reach me at wong6445@pacificu.edu. This research is being conducted under the supervision of BJ Scott, PsyD, and has been approved by Pacific University’s Institutional Review Board (IRB #______).


Thank you for your time and consideration!

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