



NATIONAL ACADEMY OF NEUROPSYCHOLOGY

NAN BULLETIN: VOLUME 25 No. 1

PIVOTAL TOPIC:

Patient Diversity and the Practice of Neuropsychology

In this issue of the NAN *Bulletin*, we present two brief papers discussing how cultural background, racial/ethnic identity, and language fluency influence clinical interview, test administration, and interpretation. Many neuropsychologists might argue that these factors are *always* critical to a comprehensive exam, but the focus of this issue is on providing services to those patients whose background differs from your own (as the examiner), or from the cultural context in which you practice. Although each paper highlights different topics, there are clear themes around the importance of both individual and organizational action to improve competence in this area.

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Primary Challenges in the Neuropsychological Evaluation of Racial/Ethnic Minority Individuals: A Brief Report

Monica Rivera Mindt, PhD, Pedro Saez, MA, & Desiree Byrd, PhD

As the U.S. becomes increasingly ethnically diverse, neuropsychologists are being called to provide more services to racial/ethnic minority individuals (REMs). This brief report highlights the primary challenges to providing such services, and offers suggestions on ways to address them.

Challenge 1: Education & Training

Education and training are central to the provision of culturally competent neuropsychological services to REMs. Unfortunately, neuropsychologists often lack in-depth training in



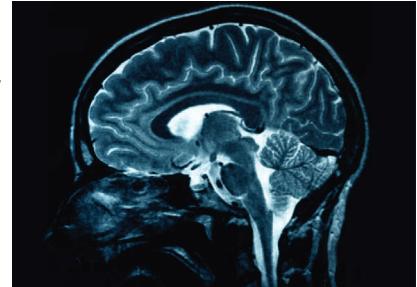
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the evaluation of REMs (van Gorp, Myers, & Drake, 2000), and our field lacks coherent, comprehensive standards for multicultural education/training ("The Houston conference on specialty education and training in clinical neuropsychology," 1998). It also appears that training programs have been slow to formally integrate multicultural issues into their neuropsychology curricula and training (Rivera Mindt, Byrd, Saez, & Manly, 2010). Furthermore, recruitment/retention of REM students and faculty into neuropsychology programs requires additional development. Indeed, few graduate programs with neuropsychology tracks have minority faculty who can serve as role models/mentors for REM students (Rivera Mindt et al., 2010).

Challenge 2: Research

A robust body of research is critical to the development of empirically informed practice (and education/training models). However, there are major research challenges specific to REM cohorts, which hinder the quantity and quality of needed research in these populations. To address the critical issue of group level test performance differences, relatively recent research has advanced the field by offering normative data that provides comprehensive demographic



corrections for certain REM and linguistic groups (e.g., Artiola i Fortuni, 1999; Heaton et al., 1991, 2004; Mungas et al., 2004; Pontón et al., 1996). However, there is a dearth of norms for many REM subpopulations (i.e., English-speaking Latinos, Asian/Asian-Pacific Islanders, etc.). While race/ethnicity based corrections significantly improve the diagnostic utility for particular REM groups, these norms do not address the role of sociocultural and linguistic factors, nor explain performance differences between groups (Ardila et al., 1992; Bialystok, 2007; Gasquione, Croyle, Cavazos-Gonzalez, & Sandoval, 2007). Thus, this research may inadvertently leave unexplained racial/ethnic differences in neuropsychological test performance open to harmful misinterpretation (Manly, 2005; Nell, 2000; Rivera Mindt et al., 2010). Work is also needed to establish the validity and reliability of neurocognitive models and measures within REM populations. Finally, there is an extreme paucity of neuropsychological practice research (including service utilization) with REM populations to inform practice and policy.

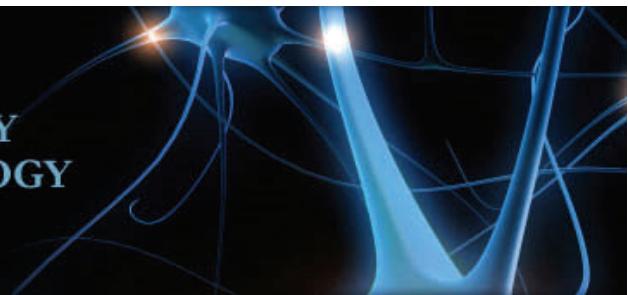
Challenge 3: Practice & Access

The limited empirical and anecdotal evidence available on neuropsychological services for REM populations suggests that disparities exist in both access to services and the quality of care received, including: underutilization of neuropsychological services, lack of availability of appropriate assessment instruments, reduced diagnostic specificity of existing measures, a paucity of bilingual examiners, limited practitioner competence, and limited guidelines for conducting neuropsychological evaluations with REMs (Echemendia et al., 1997; Echemendia & Harris, 2004; Llorente, 2008; Rivera Mindt et al., 2010; Rivera Mindt et al., 2008). Moreover, underutilization of neuropsychological services among REMs due to limited awareness of services and other cultural, financial, and institutional barriers places them at risk for a reduced standard of care and cognitive problems.



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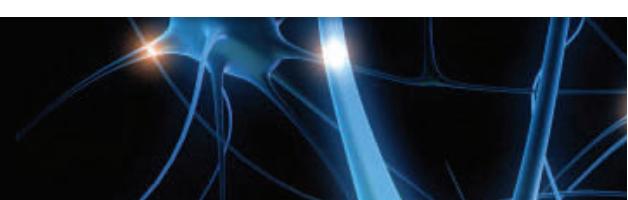
Concluding Thoughts

Education/training, research, practice, and access currently represent primary challenges to providing neuropsychological services to REMs. However, progress to address these challenges takes time, and while the field evolves, neuropsychologists are still called to provide services to REM populations. To this end, Rivera Mindt et al. (2010) recommend that neuropsychologists currently evaluating REMs consider the following: 1) utilize the best available neuropsychological instruments and norms possible *and* acknowledge the potential limitations of these tools in the interpretation of findings (i.e., clinical reports or manuscripts); 2) gather and utilize sociocultural information (i.e., acculturation, quality of education, linguistic information, etc.) to contextualize the neuropsychological findings of an REM client or research participant; 3) consider referring out cases (when possible) or seeking consultation when your expertise with the a particular population is limited; and 4) become actively involved in advancing your own cultural competence, as well as that of our field.

Long-term solutions to address these challenges will require coordinated, sustained efforts at the national level from both individual neuropsychologists and our professional organizations. For education/training challenges, the development of national graduate and post-doctoral neuropsychology training guidelines that systematically incorporate multicultural issues in research, practice, and ethics is an important step. Further, sustained programmatic efforts to recruit and retain ethnic minority faculty and students are crucial to address the pipeline problem. Second, professional organizations (NAN, APA Division 40, INS, AACN, ACPN, etc.) can advance the field by providing continuing education and training in cultural competence at conferences and/or other venues, with specific task forces charged with *consistently* working with program committees to provide coherent, comprehensive multicultural learning opportunities. Board-certifying organizations could also incorporate formalized cultural competency requirements into existing pre-requisites for obtaining board certification.

With regard to research, increasing REM representation is key, as is providing adequate characterization of REMs within studies (i.e., acculturation, quality of education, etc.). Examining the validity of neurocognitive models and psychometric integrity of neuropsychological measures in REM cohorts is also crucial. Development of evidence-based practice will be further enhanced by the development of norms for those groups for whom high quality comprehensive norms do not yet exist. Equally important is research to better understand the effects of sociocultural factors on neuropsychological test performance. Professional organizations could further advance the field by: 1) actively pursuing research (including practice research) on REM populations, and 2) collaborating to coordinate sustained efforts across multiple organizations (Romero et al., 2009).

In terms of practice, increasing awareness and access of neuropsychological services among REM populations should be considered locally through community outreach efforts, and nationally, through sustained organizational initiatives to increase service utilization within REM communities. Increasing the diagnostic specificity of neuropsychological instruments through research and





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increased dialogue with test developers is also critical to improving the standard of care for REMs. Finally, opportunities for neuropsychologists seeking to increase cultural competence are growing, including involvement in professional organizations, mentorship, and continuing education. Individual practitioners who pursue these opportunities contribute to the growth of our field as we strive to improve competence when providing neuropsychological services to REMs.

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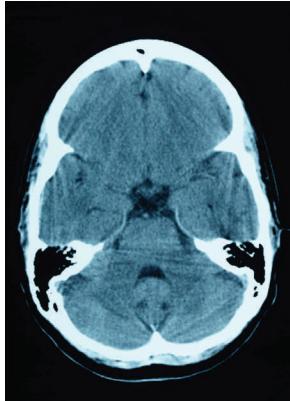
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Assessment of Linguistic Minorities **Tedd Judd, PhD, ABPP/CN & Roberta DeBoard, PhD, MEd**

The Ethical Dilemma

With the size of the linguistic minority population growing in the US, neuropsychologists face a dilemma in how to serve the roughly 18% who are not native English speakers. We have an ethical and legal obligation not to discriminate on the basis of country of origin or disability. This implies that we, likewise, must not discriminate due to language spoken (Department of Justice, 2002). At the same time, we are ethically obliged not to practice beyond our expertise, and most U.S. neuropsychologists feel inadequately prepared for this work (Echemendia, et al., 1997). So what is one to do when presented with a client who does not speak English? Beyond the very few who may speak the client's language well enough to proceed, we may need an interpreter (for spoken or signed language) or translator (for written materials). This can present an economic burden to the clinician, as we are obliged to absorb costs without passing them on to the consumer. Yet, the failure to provide an interpreter when needed can increase liability and risk of legal action [with recorded cases up to \$71 million (Ramirez v. Coral Reef General Hospital, 1984)].

The purpose of this brief article is to guide the practitioner in making ethical decisions regarding evaluation of clients who are not fluent in English, and importantly, to provide some direction for improving skills to conduct such evaluations. When in doubt, consultation can help to determine whether to refer a case, collaborate, or seek consultation. Neuropsychologists should be familiar with the language and cultural resources available within their professional communities (geographic and virtual, neuropsychological and related disciplines) for possible consultation and referral. Neuropsychological resources include the language search feature of the NAN membership directory (see <http://www.nanonline.org>), the Hispanic Neuropsychological Society membership directory (www.hnps.org), and the International Neuropsychological Society-International Liaison Committee Cross-Cultural Referrals Database (<http://www.ilc-ins.org/CCR.shtml>).

Learning to evaluate culture, language, and acculturation

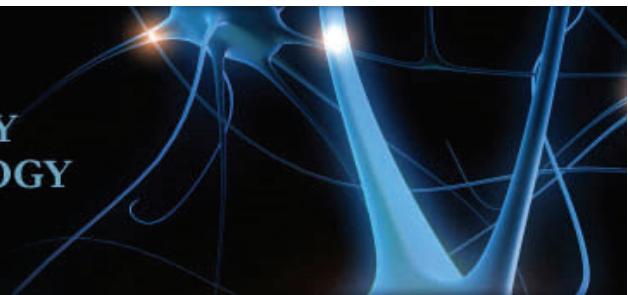
Unless the neuropsychologist is very familiar with the client's culture and language, background research will generally be needed prior to the evaluation. This can be done via Internet and professional literature, supplemented by colleagues, interpreters, and personal contacts.

Any thorough evaluation of an immigrant calls for a detailed history of their language learning and use (Paradis, 1987), educational history including quality and language, migration history including reasons and stressors, and evaluation of their acculturation (Judd & Beggs, 2005). Obtaining such a history depends on both a knowledge base and skill, learned through study and experience with supervision or consultation.



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Learning to use interpreters

Communicating through an interpreter requires a specific set of language skills that involve both knowledge and practice. Supervised practice is preferable, but when this is not available, reviewing recordings of the session and debriefing with the interpreter may be of some help. Additional interview time is typically needed for language interpretation, and also to confirm critical information through asking it different ways and through various sources such as family members, other informants and medical and other records.

Interpreters may be found through the institution in which one works; through referral sources such as government programs, immigrant community clinics, or attorneys; or through community and private agencies. Phone and video interpreting are less desirable alternatives but may be the only practical alternative for rare languages. Neuropsychologists need to be familiar with interpreter ethics (American Translator's Association, 2002) and with ways of evaluating interpreter qualifications and skills.

Interview

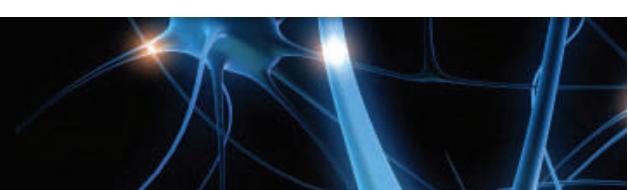
Neuropsychologists should be sensitive to culture-typical conversation, and interview styles and conventions. It is typical that extra attention is needed to establish rapport, to communicate the parameters of the evaluation, and when selecting and interviewing informants. Interviews may be supplemented by language competence testing (cf., Woodcock, 1990) and acculturation scales (Matsudira, 2006).

Testing

Testing with an interpreter makes test selection critical for each individual. In addition to the language, culture, and education considerations described below, it can be helpful to consider what specific issues need to be addressed and what test results have the potential to address unanswered questions, or to change the conclusions and recommendations.

It is important to know the validity of tests for the target population, or that failing, for their cross-cultural application. The International Test Commission (ITC, 2002) has well-developed guidelines for test translation, adaptation, and application, but few translated neuropsychological tests comply with these guidelines. It is especially important to consider the educational level of the norm group relative to the client, especially for clients of low education considering the impact of the first years of education on neuropsychological test performance (cf. Rosselli & Ardila, 2003). Neuropsychologists working with Spanish-speakers should be familiar with the wide variety of Spanish neuropsychological tests now available. Likewise, testing of the deaf is relatively well-developed, although the socio-linguistics of this population are quite complicated and require specialized knowledge or consultation. When appropriate tests and norms in the client's language are available, then testing by means of sight-translation of English tests and use of English norms is generally not acceptable.

For other languages present in the U.S. (e.g., Russian, Vietnamese, Cantonese, Somali, Arabic, etc.) tests specific to the language/population are scarce. In these populations the norm-referenced use of tests has very limited application. Some tests (e.g., Fuld Object-Memory Evaluation,





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(Fuld, 1981); Five Digit Test (Sedó, 2007)) have demonstrated good consistency across a number of languages and cultures and can be applied with some norm reference. Others (e.g., MMSE, animal naming, WHO battery, (Maj, et al., 1991)) have been applied across many groups and have adaptations and/or provisional norms available by population. Some tests may be used in a “clinical signs” manner, or for comparing the person to themselves (e.g., sensory and motor tests).

The process of testing using an interpreter is complicated, with little literature to guide practice. In general, the neuropsychologist will need a specific plan for how to proceed with each test prior to the evaluation, and will need to review this in advance with the interpreter. The plan will depend upon factors such as whether or not the test is already in the language of testing; the degree of bilingualism of the evaluatee; the use of a live, video, or telephone interpreter; the questions to be addressed by the test; and specific test logistics. For example, for verbal memory tests it may be necessary for the interpreter to function as a psychometrist under close supervision rather than confounding the testing by saying the material aloud in English and then having it interpreted. Additional considerations apply to testing the deaf (Hill-Briggs, et al., 2007); for example, visual materials cannot be demonstrated and explained at the same time.

The use of an interpreter appears to increase the variability of test results when compared to testing directly in the primary language (Casas, et al., 2010). Conclusions drawn from tests administered via interpreter generally require extra caution, reduced confidence in the conclusions, and extensive comparison to non-test information. Conclusions may be improved by debriefing with both the evaluatee and the interpreter, and by consultation with experts.

In summary, we have a professional obligation to serve non-English speakers who require neuropsychological assessment as part of their medical care, particularly if they cannot be referred to a colleague who speaks their native language. Many of us may share concerns about inadequate training in this area, but resources exist for obtaining additional training and support in preparation for such evaluations. While we have briefly reviewed some of the resources currently available to our field, it appears that more systematic attention to this topic is needed at an organizational level, including requirements for training and for board certification.

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