

Retaining a neuropsychologist to assess and testify about the daily and lasting effects of your client's TBI is crucial. But be prepared for *Daubert* challenges and to obtain the information your expert will need.

By || **BRUCE H. STERN**

NEUROPSYCHOLOGY

& Traumatic Brain Injury

Traumatic brain injury (TBI) survivors typically experience physical, cognitive, and behavioral symptoms.¹ Many survivors have problems with attention, concentration, and short-term memory. But often—especially for those who have sustained a mild TBI—traditional neuroimaging studies, such as MRIs or CT scans, are normal.² Standard neuroimaging is neither specific nor sensitive enough to detect the damage done to the brain. Neuropsychological assessment is an objective evaluation method that can be used to diagnose TBI, especially the milder forms of it.³ In these cases, hiring a neuropsychologist to prove that your client is suffering from permanent and debilitating effects not visible on neuroimaging studies is important. You need to learn what this expert will bring to your case, how to get credentials and testimony admitted in court, and what roadblocks the defense may try to put in your way.

Clinical neuropsychology is the study of relationships between the brain and behavior.⁴ It relies on the concept of “deficits measurement”: It is assumed that the patient once functioned in a certain manner and now, because of the TBI, a deviation from the normal expectation of the patient's performance and behavior has developed. Neuropsychological testing is based on deviation from that norm.

A neuropsychological evaluation is a comprehensive, objective assessment of a wide range of cognitive, adaptive, and emotional behaviors that reflect the adequacy or inadequacy of higher brain functions. It comprises tests—usually known as a “battery”—that measure the brain's functions. A

neuropsychologist (a psychologist who specializes in studying brain behavioral relationships) conducts these tests. They have extensive training in the anatomy, physiology, and pathology of the nervous system. Although there is no specific license or degree required to practice neuropsychology—other than a psychology license—the two accepted board certifications for neuropsychologists are from the American Board of Clinical Neuropsychology (ABCN)⁵ and the American Board of Professional Neuropsychology (ABPN).⁶

Neuropsychological testing is imperative because it is an objective way to demonstrate and diagnose a TBI. Even when neuroimaging indicates an abnormality, it does not demonstrate the problems a survivor may have with activities of daily living (ADLs). MRIs and CT scans reveal structural damage to the brain only. Advanced neuroimaging, such as a PET scan or diffusion tensor imaging, provides evidence about how the brain is functioning but no reliable data about the person's ADLs. Neuropsychological testing plays an important role in explaining to a jury the existence and extent of the plaintiff's problems with work and other daily activities.

An issue that frequently arises when using neuropsychologists in TBI litigation is that most people never undergo neuropsychological testing before being injured, so there is no direct baseline comparison. Neuropsychological testing measures a person's performance compared to a normal population and contrasts it to how that person should have performed based on a review of education, standardized test scores, and

work history. Before the examination, you should obtain the plaintiff's school records, including standardized test scores, and medical and employment records to help the neuropsychologist determine a preincident baseline.

Admissibility in Court

Most courts have accepted neuropsychological testing as a valid method to detect and diagnose a TBI. But it is still the subject of *Daubert* and *Frye* attacks, which you need to be ready to confront.

Testing. Two schools of thought have developed over the years. The first comprises neuropsychologists who administer a "fixed" battery: the same set of standardized and validated tests are given to all patients. The most widely known and accepted fixed battery is the Halstead-Reitan Neuropsychological Test Battery.⁷

The other school consists of those who use a "flexible" battery, selecting tests based on the patient's symptoms.⁸ Scholarly articles have discussed the debate between these schools for years.⁹ In 2008, a court finally addressed the issue. In *Baxter v. Temple*, the New Hampshire Supreme Court ruled that the flexible battery was "generally a reliable approach to neuropsychological assessment, and is thus a reliable methodology for determining a person's cognitive status."¹⁰

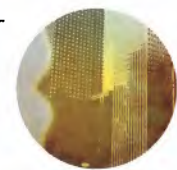
In *Claiborne v. Duff*, an infant plaintiff's parents asserted that their child sustained brain damage due to the ingestion of lead. The defendant moved in limine to strike the plaintiff's neuropsychologist's testimony, arguing that the administered tests were not reliable. Relying on the plaintiff expert's testimony and *Baxter*, a Rhode Island court held that the flexible approach was reliable and admissible.¹¹

Experts. Similar to other experts, either Federal Rule of Evidence 702 or the applicable state rule, which usually mirrors Rule 702, governs

the admissibility of neuropsychological expert testimony on diagnosis and causation.

In most jurisdictions, a neuropsychologist's testimony on the existence of a brain injury is accepted.¹² The majority of jurisdictions also permit the neuropsychologist to provide expert testimony on causation.¹³ But a minority of states, such as Florida, Georgia, and Virginia, prohibit it, ruling that only medical experts, such as physicians, are qualified to testify on diagnosis, causation, and prognosis.¹⁴

When retaining a neuropsychologist, make sure he or she is board certified or, at a minimum, has the qualifications for board



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certification that either the ABCN or the ABPN requires.

One of the first decisions to address the admissibility of a neuropsychologist's testimony on the existence of a brain injury was *Jenkins v. United States*.¹⁵ In *Jenkins*, the defense introduced the testimony of three psychologists who stated that the defendant had a mental illness when he committed crimes. The judge later instructed the jury to disregard the experts' testimony, ruling that psychologists were not competent to give medical opinions on the existence of a mental illness. The appellate court reversed, concluding that anyone who has specialized knowledge and skill is qualified to testify as an expert; it is not essential that the expert be a "medical practitioner."¹⁶

Similarly in *Valiulis v. Scheffels*, an Illinois court noted that "it would be somewhat anomalous to conclude that [the clinical psychologist and

neuropsychologist] would not be qualified to testify about [the cause of plaintiff's injuries] when the neurologists and psychologists who sought out his expertise and assistance in diagnosing the disease would most likely be qualified to do so."¹⁷

Adamson v. Chiovaro provides an excellent example of the credentials a neuropsychologist needs to be admitted as an expert witness and to testify about diagnosis, causation, and permanency.¹⁸

There, the defendants objected to a neuropsychologist testifying about the plaintiff's cognitive deficits and his opinion that those deficits were causally related to



a motor vehicle collision. The defense argued that the neuropsychologist could not offer such opinions because he lacked a medical degree. The court rejected that argument, ruling that the neuropsychologist was qualified: He was a diplomate in neuropsychology, and director of a traumatic brain injury program and a professor of rehabilitation at a hospital, where he taught medical residents and graduate psychology students.¹⁹

Third-Party Observers

Concerned about the fairness of a defense neuropsychological evaluation, you may decide to request that an independent third party be present during the plaintiff's evaluation. The defense will likely object, asserting that a third-party observer invalidates the evaluation's results. They will argue that all neuropsychological tests must be administered in a highly standardized manner

and permitting a third-party observer will destroy that standardization.

In opposing any request for a third-party observer, defense neuropsychologists rely on positions the American Psychological Association (APA) and the National Academy of Neuropsychology (NAN) have taken. They assert that the "presence of a third-party observer introduces an unknown variable into the testing environment which may prevent the examinee's performance from



being compared to established norms and potentially preclude valid interpretation of the test results."²⁰ The defense will assert that the observer's presence increases performance errors and false positives.²¹

There is an ongoing debate whether one should make this request in the first place. The concern over third-party observers in this situation is social facilitation: Studies going back to the 19th century have found that subjects do better on easier tasks and worse on more complex ones when a third-party observer is present.²² For plaintiff attorneys, this poses a serious dilemma. The general belief in neuropsychology is that patients get better over time, and usually

the defense neuropsychological evaluation is conducted last. Theoretically, a patient should do better on it. But if the theory of social facilitation holds, then a plaintiff will perform more poorly on these complex tests with a third-party observer present, leading the defense examiner to conclude that the testing is invalid and that the plaintiff failed to give his or her best effort.

While some might argue that a neuropsychological evaluation is no different from an ordinary orthopedic or neurological examination, this is not accurate. A typical orthopedic or neurological examination usually only takes minutes, and there is no way to verify whether the defense doctor actually administered the tests.²³

Some have suggested that the evaluation could be audio recorded or videotaped without the patient's knowledge. This would eliminate the issue of distraction. However, there is research demonstrating that audiotaping or videotaping the neuropsychological evaluation does not eliminate the effect of social facilitation.²⁴ From a practical standpoint, you must weigh whether the benefits of having a third-party observer outweigh the potential cost of the testing being declared invalid.

In a Louisiana case, the plaintiff's counsel requested that a third party accompany his client to a defense neuropsychological evaluation.²⁵ The defense objected, citing NAN's position. In response, the plaintiff submitted research that found no third-party observer effect on neuropsychological testing.²⁶ After a hearing, the trial court ruled that the neuropsychological examination could be videotaped from behind a one-way mirror.²⁷

Raw Data

Rather than insisting that a third-party observer be present during the evaluation, request that the defense

neuropsychologist provide the raw data from the evaluation. Obtaining the raw data from your client's neuropsychological examination is crucial: You must have access to it during depositions and trial when cross-examining defense experts. The raw data includes the actual test results and scoring summary, and many neuropsychologists object to turning over this information to anyone besides a neuropsychologist. They argue that they are protecting the sanctity of the testing, and some even claim that plaintiff attorneys privy to the raw data would coach a client on how to perform.²⁸

In some circumstances, defense neuropsychologists have technicians or students administer and even score the tests, which often leads to errors. This raises questions about the interpretation of the results and test administration. Once you obtain the testing data, send it to your neuropsychologist expert to rescore and reinterpret.²⁹

When the defense refuses to provide you with the raw data, immediately move to compel production. As specifically set forth in the APA's ethical guidelines, a neuropsychologist must turn over the raw data to a patient pursuant to a client/patient release or under a court order.³⁰ Since the defense neuropsychologist's opinion is based primarily on the interpretation of this raw data, you should argue that you cannot prepare to cross-examine the defense neuropsychologist without it.

The case of *State ex rel. Svejda v. Roldan* illustrates that a neuropsychologist cannot refuse to provide the neuropsychological test data in discovery.³¹ There, the plaintiff's treating psychologist refused to turn over the data, citing the ethical principles of psychologists that purportedly constrained him from doing so. The court originally ruled that the psychologist had to provide the data only to an expert named by the defendant. On reconsideration, the court modified

its decision, holding that because the raw test data was discoverable, the psychologist must provide this data directly to the defendant's attorneys.

When you are representing a client with a TBI, a neuropsychologist is a necessary member of your team of experts, even with the presence of new and sensitive neuroimaging. It could make or break your case. ■



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NOTES

1. See Mild Traumatic Brain Injury Comm. of the Head Injury of the Interdisciplinary Special Interest Grp. of the Am. Cong. of Rehab. Med., *Definition of Mild Traumatic Brain Injury*, 8 J. Head Trauma Rehab. 86, 87 (1993), www.acrm.org/wp-content/uploads/pdf/TBIDef_English_10-10.pdf.
2. See Michael P. Alexander, *Mild Traumatic Brain Injury: Pathophysiology, Natural History, and Clinical Management*, 45 Neurology 1253 (1995); Martha E. Shenton et al., *A Review of Magnetic Resonance Imaging and Diffusion Tensor Imaging Findings in Mild Traumatic Brain Injury*, 6 Brain Imaging Behavior 137 (2012).
3. Diffusion tensor imaging can objectively document injury to the brain. See Shenton et al., *supra* note 2. However, there is almost always a *Daubert* or *Frye* challenge to its admissibility.
4. See generally Robert J. Sbordone, *Neuropsychology for the Attorney* (1995); see also Muriel D. Lezak et al., *Neuropsychological Assessment* (5th ed. 2012).
5. See Am. Bd. of Clinical Neuropsychology, *Important Announcements* (2015), www.theabcn.org/.
6. See Am. Bd. of Prof'l Neuropsychology, *Becoming a Diplomate* (2015), <http://abn-board.com/becoming-a-diplomate>.
7. See generally Ralph M. Reitan & Deborah Wolfson, *The Halstead-Reitan Neuropsychological Test Battery for Adults: Theoretical, Methodological, and Validation Bases*, in *Neuropsychological Assessment of Neuropsychiatric and Neuromedical Disorders* ch. 1, at 3 (Igor Grant & Kenneth M. Adams eds., 3d ed. 2009).
8. See Robert L. Kane, *Standardized and Flexible Batteries in Neuropsychology: An Assessment Update*, 2 Neuropsychology Rev. 281 (1991).
9. See Erin D. Bigler, *A Motion to Exclude and the 'Fixed' vs. 'Flexible' Battery in Forensic Neuropsychology: Challenges to the Practice of Clinical Neuropsychology*, 22 Archives Clinical Neuropsychology 45–51 (2007); Erin D. Bigler & Michael Brooks, *Traumatic Brain Injury and Forensic Neuropsychology*, 24 J. Head Trauma Rehab. 76 (2009); Glenn J. Larrabee, *Flexible, Fixed Batteries in Forensic Neuropsychological Assessment: Reply to Bigler and Hom*, 23 Archives Clinical Neuropsychology 763 (2008).
10. 949 A.2d 167, 185 (N.H. 2008).
11. *Claiborne v. Duff*, No. PC10-6330, at 12 (R.I. Super. Ct. June 23, 2015).
12. See, e.g., *Ross v. State*, 386 So. 2d 1191, 1195 (Fla. 1980); *Buckler v. Sinclair Refining Co.*, 216 N.E.2d 14, 19 (Ill. App. Ct. 5th Dist. 1966); *Madrid v. Univ. of Cal.*, 737 P.2d 74 (N.M. 1987); *Simmons v. Mullen*, 331 A.2d 892, 898 (Pa. Super. Ct. 1974).
13. See, e.g., *Fabianke v. Weaver ex rel. Weaver*, 527 So. 2d 1253, 1257 (Ala. 1988); *Hutchison v. Am. Fam. Mut. Ins. Co.*, 514 N.W.2d 882, 886–88 (Iowa 1994); *Dupaquier v. Barbera*, 490 So. 2d 354, 357 (La. Ct. App. 1st Cir. 1986); *Sanchez v. Derby*, 433 N.W. 2d 523, 525 (Neb. 1989) (per curiam); *Shilling v. Mobile Analytical Servs., Inc.*, 602 N.E.2d 1154, 1156 (Ohio 1992).
14. See *GIW S. Valve Co. v. Smith*, 471 So. 2d 81 (Fla. Dist. 2d Ct. App. 1985); *John v. Im*, 559 S.E.2d 694, 697 (Va. 2002). *Hutchinson*, 514 N.W.2d at 886–88, provides an excellent discussion of this issue. See also Bruce H. Stern, *Admissibility of Neuropsychological Testimony*, Stark & Stark (2015), <http://injury.stark-stark.com/admissibility-of-neuropsychological-testimony.html>.
15. 307 F.2d 637 (D.C. Cir. 1962).
16. *Id.* at 643–44.
17. 547 N.E.2d 1289, 1297–98 (Ill. App. Ct. 2d Dist. 1989).
18. 705 A.2d 402 (N.J. Super. Ct. App. Div. 1998).
19. *Id.* at 405.
20. See Am. Psychological Ass'n, Comm. on Psychological Tests & Assessment, *Statement on Third-Party Observers in Psychological Testing and Assessment: A Framework for Decision Making* (2007), www.apa.org/science/programs/testing/third-party-observers.pdf; Bradley Axelrod et al., *Presence of Third Party Observers During Neuropsychological Testing: Official Statement of the National Academy of Neuropsychology*, 15 Archives Clinical Neuropsychology 379 (2000); see also Robert J. McCaffrey et al., *Presence of Third Parties During Neuropsychological Evaluations: Who is Evaluating Whom?* 10 Clinical Neuropsychologist 435 (1996).
21. See generally Marios Constantinou et al., *Effects of Third Party Observer During Neuropsychological Assessment: When the Observer Is a Video Camera*, 4 J. Forensic Neuropsychology 39 (2005); Julie Lynch & Robert McCaffrey, *Neuropsychological Assessments in the Presence of Third Parties: Ethical Issues and Literature Review*, 16 N.Y. State Psychologist 25 (2004). But see John Blase, *Trained Third Party Observers Neuropsychological Tests: A Response to McCaffrey et al.*, Fla. Psychologist (Spring 2008).
22. For an excellent history of the research on social facilitation, see Linda S. Lindman, *The Effect of Observational Method and Task Complexity on Neuropsychological Test Performance* (2004), http://etd.lsu.edu/docs/available/etd-07072004-191224/unrestricted/Lindman_dis.pdf.
23. See *DeMarco v. Bd. of Educ.*, 1/12/90 N.Y.L.J. 22 (N.Y. Sup. Ct. N.Y. Cnty. Jan. 12, 1990) (on file with author).
24. See, e.g., Marios Constantinou et al., *When the Third Party Observer During Neuropsychological Evaluation Is an Audio-Recorder*, 16 Clinical Neuropsychologist 407 (2002); see also Constantinou et al., *supra* note 21.
25. *Day v. Valley Forge Ins. Co.*, No. 1229232 (La. 1st Dist. Ct., Parish of Livingston, Div. B, 2010) (on file with author).
26. See Lindman, *supra* note 22.
27. *Day v. Valley Forge Ins. Co.*, No. 1229232 (on file with author); see also *Jessica H. v. Spagnolo*, 839 N.Y.S.2d 638, 639 (N.Y. App. Div. 4th Dept. 2007) (permitted a third-party observer under the same conditions).
28. See Shane S. Bush & Thomas A. Martin, *The Ethical and Clinical Practice of Disclosing Raw Test Data: Addressing the Ongoing Debate*, 13 Applied Neuropsychology 115 (2006); Kenneth R. Morel, *Test Security in Medicolegal Cases: Proposed Guidelines for Attorneys Utilizing Neuropsychology Practice*, 24 Archives Clinical Neuropsychology 635 (2009).
29. Paul M. Kaufman, *Protecting Raw Data and Psychological Tests from Wrongful Disclosure: A Primer on the Wall and Other Persuasive Strategies*, 23 Clinical Neuropsychologist 1130 (2009); Daniel Tranel, *The Release of Psychological Data to Nonexperts: Ethical and Legal Considerations*, 25 Prof'l Psychology 33 (1994).
30. Am. Psychological Ass'n, *Ethical Principles of Psychologists and Code of Conduct*, 9.04 Release of Test Data (2010).
31. *State ex rel. Svejda v. Roldan*, 88 S.W.3d 531 (Mo. Ct. App. W. Dist. 2002).