

Neuropsychology: When is the right time to adopt test revisions?

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Trainees often ask when they should switch to a new version of a test. With the introduction of the WISC-V two years ago, this question seems particularly apropos. The APA Ethics Code stresses in Standard 9 (Assessment) that psychologists should base their opinions on information and techniques that are sufficient to substantiate their findings. This includes utilizing methods with demonstrated psychometric properties, diagnostic sensitivity and specificity, and the ability to differentiate profiles between clinical populations. Modifications to psychometric properties, such as raising ceilings or lowering floors, may be influenced by demographic changes; some cognitive domains may be more susceptible to these changes than others. Clinicians should also be aware of the reference population in which a new test is measured and appreciate how culture impacts test performance. New measures that have been translated into another language should have evidence to support that they complied with all the standards of translation.

Standard 9 also stresses that psychologists not base their decisions and recommendations on measures that are obsolete. But what constitutes obsolete? Test publishers recommend that new tests be purchased within a year of their publication; however, publishing companies also have a vested interest in marketing and selling new materials and some companies are more transparent than others in the information they provide about the research that has been done prior to release. School psychologists have had different timeframes presented to them ranging from 6 months to 2 years depending on the source. Neuropsychological societies such as NAN or INS have not written position statements to this question and there are no timeframes that are explicitly supported by our ethics code. The American Academy of Clinical Neuropsychology in their 2007 Practice Guidelines for Neuropsychological Assessment and Consultation does stress certain standards for measures, including psychometric adequacy and sample size considerations. They state that 'provisional' tests may be utilized if they complement an existing battery and that neuropsychologists be aware of the substance that these tests may offer. However, provisional here suggests that these tests do not meet a certain standard and there are no guidelines to suggest when this standard is met.

In addition to improved psychometrics, tests get revised for a myriad of other reasons including, but certainly not limited to, ease of administration, the introduc-

tion of new testing constructs, content and test items, and removal of outdated stimuli - all of which makes the idea of switching to a newer version appealing. The fact that many of our current test items are available on the internet, with some websites advertising actual test items, also expedites the need to create new items after test security has been broken. There are often practical considerations including initial cost, time spent in training, and overall implementation of the newer product (e.g., purchase of software, compatibility with existing hardware), but these logistical issues do not appear to outweigh the benefits of a new and improved version of an assessment measure. The International Test Commission (2015) on its Guidelines for Practitioner Use of Test Revisions, Obsolete Tests and Test Disposal describes in detail several considerations when choosing tests such as those described above; however, in reference to the question of when to switch, they state this decision follows a careful consideration of practice setting and client variables taken together with research and diagnostic criteria. To make matters more complicated, remember that field trials for new tests often enroll individuals with classic presentations of a disorder, and these individuals may have a clearer diagnostic picture than the individuals we see in clinical practice (Adams, 2000).

Some neuropsychologists question if the time between tests is sufficient to justify the transition, while others follow a community standard (i.e., if other practitioners in their region have made the switch). Personal preference also plays a large role in test selection as I have heard dozens of times how colleagues and supervisors favor an older version over a new one with very little evidence to support this decision. Ultimately, the answer should depend more on scope of the revisions, clinical utility, and available research than an uninformed switching point or shared consensus. In a seminal paper, Bush (2010) recommends that neuropsychologists act as advocates and caution is warranted of any new test before it has demonstrated an improved ability to "make diagnostic determinations, facilitate treatments, and/or assess change over time." Strauss, Spreen and Hunter (2000) recommend these eight different considerations: 1) use of a revised version when there is evidence of a normative shift, 2) use when a test has succeeded in measuring new and important constructs, 3) use when new norms should be utilized in interpretation, 4) avoidance of the new measure

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when serial testing, 5) avoidance of decisions rules based on different versions of the same test, 6) restrict comparing components that are equivalent on both versions, 7) utilization of multiple measures of the same construct, and 8) avoidance of adapting new versions without the appropriate research in a given population.

Although a newer version of a measure may provide additional opportunities to us as diagnosticians, we need to be cognizant of the research that supports its use in the specific clinical population we are testing. The switch to new tests also offers different implications when training others; however, it provides a great opportunity to model the importance of balancing all of the necessary factors in making a switch.

Further Reading

For a very detailed description of the foundations, operation and application of educational and psychological tests, readers are encouraged to review the 2014 edition of the Standards for Educational and Psychological

Testing, a product of the American Educational Research Association (AERA), the American Psychological Association (APA), and the National Council on Measurement in Education (NCME).

Adams, K.M. (2000). Practical and Ethical Issues Pertaining to Test Revisions. *Psychological Assessment*, 12 (3), 281-286. *American Psychological Association (APA) Ethical Principles of Psychologists and Code of Conduct*.

Board of Directors (2007). American Academy of Clinical Neuropsychology (AACN) Practice Guidelines for Neuropsychological Assessment and Consultation. *The Clinical Neuropsychologist*, 21 (2), 209-231.

Bush, S. (2010). Determining Whether or When to Adopt New Versions of Psychological and Neuropsychological Test: Ethical and Professional Considerations. *The Clinical Neuropsychologist*, 24 (1), 7-16.

International Test Commission (2015) Guidelines for Practitioner Use of Test Revisions, Obsolete Tests and Test Disposal.

Strauss, E., Spren, O., & Hunter (2000). Implications of Test Revision for Research. *Psychological Assessment*, 12 (3), 237-244.

