

Remote Administration of Psychoeducational Assessments

A Research-based Solution Addresses a Persistent
Service Gap in Schools Nationwide

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01

The Challenge: A National Shortage of School Psychologists



The Challenge: A National Shortage of School Psychologists

Many educational organizations struggle to serve the special needs of their students—particularly providing timely evaluations to inform interventions or find students eligible for services through special education or Section 504. Whether caused by regional staffing shortages, growing volume, seasonal spikes in student referrals, or other complications schools face while managing their student support programs, the result is the same: despite best efforts, many students are not being evaluated in a timely manner and educators are not receiving the data they need to support educational planning.

Schools face a particular challenge regarding school psychologists. The National Association for School Psychologists (NASP) recommends one school psychologist for every 400–700 students while the reality is that there is typically one school psychologist for every 1,653 students, with some areas exceeding the recommended ratio by up to 10 times.

Prior to COVID-19, NASP projected that the national shortage of almost 9,000 school psychologists in 2010 would grow to 20,000 by 2020. While educational organizations want to provide all recommended services to their students, their school psychologists are simply overwhelmed by the demands for behavioral support, mental health services, and psychoeducational assessments.

In most states, there is an insufficient supply of certified or licensed school psychologists and many must spend most of their time assessing students in order to maintain compliance. The focus on assessment prevents them from using their full range of skills in counseling, data analysis, and systems change, as well as preventing bullying, suicide, and violence.

“The role gets way more narrow, and their skill set is not utilized as effectively,” says Eric Rossen, director of professional development and standards at the National Association of School Psychologists (NASP). “What’s concerning is that it is not a cost-effective model. Being able to apply prevention services will reduce the need for more intensive services later on.” Remote assessments help schools by redistributing the supply of fully credentialed school psychologists and providing an entry point for those who have left the traditional workforce. This frees schools’ existing resources to focus on counseling, crisis management, bullying prevention, and other important programs.

Common School Challenges

- Staffing shortages—open positions
- Staff covering multiple schools—scheduling and transportation issues
- Providing behavioral and mental health services
- Student absences
- Seasonal variations in referral volume that are too much for otherwise sufficient staff
- Acute crises that take precedence: behavioral issues, mental health crisis interventions, and so on
- Difficulty contacting parents and teachers to collect relevant student data

02

Does Remote
Assessment Work?





Does Remote Assessment Work?

Remote, online assessments conducted live by fully credentialed professionals is not a new concept. “Tele-assessment,” as it is often called, has been occurring in the world of speech-language and occupational therapy since 2009. The American Speech-Language-Hearing Association (ASHA) and the American Occupational Therapy Association (AOTA) both support this method of assessment when done with fidelity.

While remote assessments have become more common for speech-language and occupational therapy students, it has taken longer to include psychoeducational assessments, as these tend to be more sensitive to administrative and environmental variance. Could using online, remote administration be a viable solution for many schools?

Remotely delivered social-emotional and behavioral assessments—especially for students in virtual schools and in rural and remote locations—have become more prevalent over the last few years. Assessments that require rating scales and parent/teacher/caregiver interviews lend themselves nicely to the remote, online modality.

Remote assessments help schools address student needs by connecting students with a fully credentialed school psychologist. This means schools do not need to hire additional psychologists, but rather can take advantage of a distributed workforce to better manage efficiency. This further frees schools’ existing resources to focus on counseling, crisis management, bullying prevention, and other important programs.

NASP “Guidance for Delivery of School Psychological Telehealth Services”

In an August 2017 paper, NASP lists the following potential telehealth benefits:

- Improved access to remote students or underserved populations
- Expanded counseling services
- Reduced travel times for clinical personnel
- Flexible assessments capabilities
- Improved clinical consultation

While directly addressing tele-assessments, NASP states that “telehealth allows for assessments to be conducted in multiple locations in a single day. This provides school psychologists with scheduling flexibility and also the opportunity to provide assessment services to students who may not have access to a licensed school psychologist.” School psychologists providing telehealth services should:

- Adhere to all professional ethics, standards, policies, and positions
- Become knowledgeable of and follow licensure and certification requirements
- Ensure access to high-quality technology
- Obtain appropriate professional development to ensure their own competence in the delivery of telehealth services
- Select and use validated assessment tools and methods
- Maintain thorough documentation and legal/professional record-keeping practices
- Ensure high degrees of privacy, confidentiality, informed consent, and security
- Consider whether telehealth services are safe, effective, and appropriate
- Ensure they have appropriate licensure/certification—and, if needed, liability insurance—to cover telehealth services



03

Research Studies Demonstrate Equivalency: A Summary

Research Studies Demonstrate Equivalency: A Summary

The adoption of psychoeducational assessments has been slow because this type of assessment tends to be layered and complex. As a result, it can be harder for special education leaders, clinicians, and parents of students with special needs to envision how psychoeducational assessments can be conducted by a remote service provider.

In 2016, a researcher from Empire State College, SUNY was principal investigator for an equivalency study using the WJ[®] IV cognitive and achievement batteries. In 2020, before the pandemic, a WISC[®]-V equivalency study was conducted. In 2017, PAR conducted an equivalency study using the RIAS[™]-2 cognitive battery. These studies demonstrated equivalence to the in-person conducting of psychoeducational assessments.

Equivalency Study Designs

For each study, two groups of students of equal number—matched on age, gender, and other demographics—were created, with students randomly assigned to one of the two groups: either traditional (onsite) or online (remote). The sample sizes varied with 240 students in the WJ IV study (ages 5–16), 104 in the RIAS-2 study (ages 3–19), and 360 in the WISC-V study (ages 6–16).

Digitally Formatted Test Content

The publishers of each assessment permitted the digitization of the contents of the stimulus books, except for Block Design from the WISC-V, which were still presented as a booklet on the student desktop. For the WJ IV, audio files were embedded into a secure online testing environment to ensure high audio quality and ease of use by the examiner. Student booklets were retained in their hard copy format and sent to each student.

Technology Setup

Each remote assessment used an internet-connected computer with two high-resolution digital cameras: a computer-mounted web camera focused on the student throughout the test, and a computer-connected document camera located beside the student to enable remote examiners' real-time observation of student work in the response book (writing, pencil grip, etc.).

The Procedure

Each student participant was randomly assigned to either the traditional, in-person test format or the remote, online administration test format—with the requirement that the cases within each age-by-gender "cell" be divided equally between the formats. In the case of the RIAS-2, students were also matched on cognitive functioning, utilizing many pairs of twins. All WJ IV cases occurred in the school setting on a Saturday when the school was empty of students. RIAS-2 cases occurred in a mix of student homes, examiner homes, examiner offices, and school settings. The WISC-V cases primarily occurred in student homes with examiner homes being a close second.

The Results Demonstrate Equivalence

Woodcock-Johnson[®] IV

No index or test had either a significant (at the $p < .05$ level) difference between administrations, or an effect size of administration format that exceeded the pre-established criterion of 0.20. Therefore, there does not seem to be a statistically significant effect of the online, remote administration format on the scores of children.

Both significance tests (p values of t -tests) and Cohen's d were calculated to determine equivalence. The standards of $p \geq .05$ and $d < 0.2$ were used as the standard for equivalence. Cohen's d is calculated as the difference between mean scores on the two different administration formats, divided by the pooled standard deviation of scores.

Reynolds Intellectual Assessment Scales™ 2nd Edition

For the four core RIAS-2 subtests (which constitute the CIX) and the memory subtests (which constitute the CMX), there was no significant effect for administration procedure. As such, the formats are generally equivalent, and the same norms can be used. Across all ages, for school psychologists who only administer the core four subtests or those plus the memory subtests, the administration procedures can be used interchangeably.

For the speeded tasks, there was a significant method effect, such that students evaluated in the traditional format performed significantly better than those evaluated via the online, remote platform. The two administration methods are not equivalent across the age span. Upon further analysis, this only held true for students under the age of seven (7). As such, it is not recommended to use the speeded processing subtests in the remote, online format for children less than seven years old.

For those children aged seven and older, the two administration methods did not exhibit significant differences for the speeded processing tasks. As with the other subtests on the RIAS-2, for children aged seven and older, the two administration procedures are comparable and the original norms can be used. The present study suggests that the test—when given in the remote, online format (in the specified, faithful procedure specifically evaluated in this study)—is generally considered equivalent and can use the norms of the traditional test. However, it is recommended that for children under seven years of age, the speeded tasks (which are supplemental) should not be administered in this format.

Wechsler Intelligence Scale for Children® 5th Edition

The equivalency study concluded the difference between administration formats was not clinically significant. All of the indices' confidence intervals fall within the threshold for equivalence ($-4.5, 4.5$), demonstrating no significant effects of the difference in administration on scores.

04

What This Means for Schools



What This Means for Schools

These studies have identified a very specific set of protocols for delivering remote, online administration of cognitive and achievement test batteries. The generalization of any findings should be limited to trained test administrators who follow the specific protocol examined. Following is a list of criteria necessary to reproduce the procedure with fidelity.

Digital Platform Requirements

- The assessment content must be properly licensed from the publisher for digital use and presented via a secure, online testing environment (as opposed to holding test pages/materials up to a digital camera or some other process).
- Any audio portions of a test must run through the platform to ensure clarity and quality, as opposed to playing audio on the remote examiner's side and having a microphone pick it up for the student to hear.
- The video platform should correctly present any images so materials held up for the student to review are not seen backwards.
- The student should have a screen at least 15" wide to correctly render some subtests of the RIAS-2. A smaller screen is acceptable for the WJ IV and WISC-V. The computer display must have at least 800 x 600 pixels of resolution quality on both monitors; optimally, resolution quality should be at least 1920 x 1080. PresenceLearning provides complete specifications and technical support for equipment set-up.

05

When Done with Fidelity,
Tele-Assessment Offers
Schools Expanded Capacity for
Psychoeducational Evaluation

When Done with Fidelity, Tele-Assessment Offers Schools Expanded Capacity for Psychoeducational Evaluation

What do the results of these studies mean for schools? Based on the results of these equivalency studies, the remote administration of cognitive ability and academic achievement assessments by remote examiners—utilizing the study methodology—is a viable way for all schools to expand their psychoeducational assessment capacity. This modality is used to address problems from staffing shortages to referral spikes to medical/family leaves to simply optimizing school psychologist capacity, providing schools with options previously unavailable to them.

The field of remote assessments will continue to expand as more publishers, different types of assessments, and various administration methods follow these equivalency studies.

Too many students receive delayed services, too many school psychologists burn out from endless testing, and too many schools need more options for evaluating students. Remote, online administration of psychoeducational assessments can help today's students achieve their academic goals—and succeed in life.



About Presence

Presence is the leading provider of online therapy solutions for children with diverse needs. We connect speech-language pathologists, occupational therapists, and mental health counseling professionals with students so that they can deliver services from anywhere and we empower clinicians to easily access resources with our modern therapy platform, Kanga. We have delivered more than 5 million teletherapy sessions to hundreds of K-12 schools and districts across the U.S. with our network of more than 2,200 certified clinicians and our best-in-class technology.



About the Author

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