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Telepractice and the WMS-IV

Wechsler Memory Scale, Fourth Edition (WMS-IV)

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The telepractice information in this document is intended to support psychologists in making informed, well-reasoned decisions around remote assessment. This information is not intended to be comprehensive regarding all considerations for assessment via telepractice. It should not be interpreted as a requirement or recommendation to conduct assessment via telepractice.

Psychologists should remain mindful to:

- Follow professional best practice recommendations and respective ethical codes
- Follow telepractice regulations and legal requirements from federal, state and local authorities, licensing boards, professional liability insurance providers, and payors
- Develop competence with assessment via telepractice through activities such as practicing, studying, consulting with other professionals, and engaging in professional development.

Psychologists should use their clinical judgment to determine if assessment via telepractice is appropriate for a particular examinee, referral question, and situation. There are circumstances where assessment via telepractice is not feasible and/or is contraindicated. Documentation of all considerations, procedures, and conclusions remains a professional responsibility.

Several professional organizations and experts have provided guidance on telepractice assessment (American Psychological Association Services [APA Services], 2020; Association of State and Provincial Psychology Boards, 2013; Grosch et al., 2011; Inter Organizational Practice Committee, 2020; Stolwyk et al., 2020) to assist psychologists in decision making and ethical and legal practice issues.

The *Wechsler Memory Scale-Fourth Edition* (WMS-IV; Wechsler, 2008) can be administered in a telepractice context by using digital tools from Q-global®, Pearson's secure online-testing and scoring platform. Specifically, Q-global digital assets (e.g., stimulus books) can be shown to the examinee in another location via the screen-sharing features of teleconference platforms. Details regarding Q-global and how it is used are provided on the [Q-global product page](#).

A spectrum of options is available for administering the WMS-IV via telepractice; however, it is important to consider the fact that the normative data were collected via face-to-face assessment. Telepractice is a deviation from the standardized administration. The methods and approaches to administering instruments via telepractice should be supported by research and practice guidelines when appropriate.

Providers engaging in telepractice assessment may train facilitators to work with them on a regular basis in order to provide greater coverage to underserved populations (e.g., only two providers within a 500-mile radius, shortage of school psychologists within a school district). If such a facilitator is well trained and in a professional role (i.e., a

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professional facilitator), they can present cards, grids, and response booklets as well as adjust audiovisual equipment. This approach yields the WMS-IV composite scores that are available in face-to-face assessments.

In times when social distancing is necessary (such as the COVID-19 pandemic), using a professional facilitator may not be safe or feasible. If testing must occur under these conditions, it is possible that the examinee may participate without the help of an onsite facilitator. If the examiner determines that no facilitator is required, the examinee can assist with technological and administrative tasks during testing and should be oriented to these responsibilities prior to, and again at the beginning of the session. An initial virtual meeting should occur in advance of the testing session to address numerous issues specific to testing via telepractice. This initial virtual meeting is described in the administrative and technological tasks portion of the Examiner Considerations section and referred to in various sections of this document. The examiner should consider best practice guidelines, the referral question, and the patient's condition, as well as telepractice equivalence study conditions to determine if this is possible and appropriate. *Independent examinee participation may not be possible or appropriate, for example, for examinees with low cognitive ability or with low levels of technological literacy and experience.*

If the examiner determines that the examinee cannot participate independently, and testing must occur under social distancing constraints, the only facilitator available may be someone in the examinee's home (e.g., a parent, guardian, or caretaker). If the onsite facilitator is a nonprofessional facilitator, they can assist with technological and administrative tasks during testing and should be oriented to these responsibilities in the initial virtual meeting and again at the beginning of the session.

Professional and nonprofessional facilitators typically do not remain in the room with the examinee throughout the testing session. The examiner should plan to minimize (as much as possible) the need for the facilitator to remain in the room. In rare cases when the facilitator must remain in the room, they should do so passively and unobtrusively, and merely to monitor and address the examinee's practical needs, as well as any technological or administrative issues as necessary. The facilitator's role should be defined clearly by the examiner. The facilitator should only perform those functions the examiner approves and deems necessary. In any case, if a facilitator is necessary it is preferred that the facilitator remain accessible.

If a professional facilitator is not available, it impacts the workflow of the session, subtest selection, and the approach to deriving composite scores. For example, if a professional facilitator is not used, Designs and Spatial Addition are not feasible for telepractice. Neither of these subtests are included in the Older Adult battery so all the relevant composite scores for that battery may be derived. The Older Adult battery (ages 65–90) only requires the response booklet; no cards or grids are required for that battery. However, for the Adult battery, the omission of Designs and Spatial Addition impacts the ability to derive all composite scores, leaving Verbal Memory Index as the only index that can be derived using the standard norms.

Several composite scores based on different sets of WMS-IV subtests are available in the WMS-IV Flexible Approach (Wechsler, 2009). The WMS-IV Flexible Approach norms, however, can be used to derive the same index scores as are available in the Older Adult battery (Immediate Memory, Delayed Memory, Auditory Memory, Visual Memory). The Visual Working Memory Index can only be obtained remotely with the use of a professional facilitator. The WMS-IV Flexible Approach Alternate Indexes Worksheet is available in the Q-global Resource Library and can be used to derive these alternate index scores.

In addition, care needs to be taken with the Visual Reproduction response booklet to ensure the examinee is not re-exposed to stimuli through the response booklet.

Conducting Telepractice Assessment

Conducting a valid assessment in a telepractice service delivery model requires an understanding of the interplay of a number of complex issues. In addition to the general information on Pearson's [telepractice page](#), examiners should address five factors (Eichstadt et al., 2013) when planning to administer and score assessments via telepractice:

1. Telepractice Environment & Equipment

Computers and connectivity

Two computers with audio and video capability and stable internet connectivity—one for the examiner and one for the examinee—are required. A web camera, microphone, and speakers or headphones are required for both the examiner and the examinee. A second computer screen or split-screen format on a large computer monitor for the examiner is helpful to allow a view of the digital administration and scoring manual, but the examiner can also use the paper format manual or the Q-interactive® platform. The second computer or large screen also tends to make sharing test content more straightforward for the examiner.

Image/screen size

When items with visual stimuli are presented, the digital image of the visual stimuli on the examinee's screen should be *at least 9.7"* measured diagonally, similar to an iPad or iPad Air. Some teleconferencing platforms shrink the size of images, so the facilitator should verify the image size in the initial virtual meeting. It is recommended that computer screens used for teleconference assessment be at least 15" measured diagonally. Smaller screens, such as those of iPad minis, small tablet PCs, and smartphones, are not allowed for examinee-facing content, as these have not been examined empirically and may affect stimulus presentation, examinee response, and validity of the test results. Similarly, presenting stimuli on extremely large screens has not been examined, so the same precaution applies. At the beginning of the testing session, the examiner may ask the facilitator to aim a peripheral camera or device (as described later in this section) at the examinee's screen to ensure that the examinee's screen is displaying images in the correct aspect ratio and not stretching or obscuring the stimuli image.

Teleconference platform

A teleconference platform is required. Screensharing capability is required if anything other than items with verbal stimuli and responses are administered.

Video

High-quality video (HD preferred) is required during the administration. Make sure the full faces of the examiner and the examinee are seen using each respective web camera. The teleconference platform should allow all relevant visual stimuli to be fully visible to the examinee when providing instruction or completing items; the view of the examiner should not impede the examinee's view of visual test stimuli.

Screensharing digital components

Digital components are shared within the teleconferencing software as specified in [Table 1 \(PDF | 116.08 KB\)](#). There are two ways to view digital components in the Q-global Resource Library: through the pdf viewer in the browser window or full

screen in presentation mode. *Always use full screen (i.e., presentation) mode for digital components viewed by the examinee.* This provides the cleanest presentation of test content without onscreen distractions (e.g., extra toolbars). Refer to *Using Your Digital Assets on Q-global* in the Q-global Resource Library for complete directions on how to enter presentation mode.

Test item security in the audiovisual environment

The examiner is responsible for ensuring test item security is maintained, as outlined in the Terms and Conditions for test use. The examiner should address test security requirements with the examinee (and facilitator, if applicable) during the informed consent process. The examiner should make it clear that the video should not be captured, photos should not be taken, and stimuli should not be copied or recorded, as this is a copyright violation. The examinee must agree that they will not record (audio or visual) or take photos or screenshots of any portion of the test materials or testing session, and not permit anyone to observe the testing session or be in the testing room (except for a facilitator, when necessary). Any response booklets used in the testing session must be returned to the examiner (see Assessment Procedures & Materials section for more information).

Peripheral camera or device

A stand-alone peripheral camera at the examinee's location that can be positioned to provide a view of the session from another angle or a live view of the examinee's progress is helpful. Alternately, a separate device (e.g., a smartphone with a camera or another peripheral device) can be connected to the teleconference and set in a stable position to show the examinee's pointing or written responses. The device's audio should be silenced, and microphone should be muted to prevent feedback. The examiner should guide positioning of the peripheral camera/device before administering Visual Reproduction and subtests or conditions that elicit pointing or gestured responses (refer to [Table 1 \(PDF | 116.08 KB\)](#)) so that the examiner can see the examinee's real-time responses being captured.

In a typical telepractice session, it is more feasible to make a document or moveable camera available in the examinee's location. However, while social distancing is necessary, the only camera available may be a stationary camera integrated into the examinee's laptop or computer screen. It is unrealistic to expect examinees to have document cameras within their homes. It may be necessary for examiners to think creatively about how to use a smartphone in the examinee's location to gain a view of the examinee's progress in a response booklet or when pointing at a screen. Prior to attempting this with an examinee, the examiner should work to become fluid and competent at directing examinees in these methods, which can require extensive practice with varied individuals and types of smartphones. In addition, this requires planning and practice in the initial virtual meeting to prevent technical difficulties, and so the examinee feels confident doing this when it is time.

Online instructional videos (e.g., [here](#)) demonstrate how a smartphone may be used with common household objects (e.g., a tower or stack of books, paper weight, ruler, and rubber band or tape) to create an improvised document camera for use during tasks involving response booklets. Similarly, for multiple choice tasks, some examinees tend to point to responses rather than say the number or letter corresponding to their response, and other tasks (e.g., Symbol Span; see [Table 1 \(PDF | 116.08 KB\)](#)) require the examinee to point at the stimuli. In this situation, other everyday household objects (e.g., books) could be used to form an improvised stand upon which to position the device to provide a second-angle view of the examinee pointing at the screen. Typically, devices provide the best view of the examinee's screen and pointing responses when positioned in landscape format. While using a smartphone as the peripheral camera is not optimal or an optimal solution for telepractice, it can be functional if executed well.

Gesturing

When gesturing to the stimulus books or response booklets is necessary, the examiner should display them as digital assets onscreen and point using the mouse cursor. It is recommended that you change your display settings to enlarge the cursor for greater visibility. It may on occasion be necessary for the examiner to gesture to areas of a paper copy of a response booklet or to show how to respond to demonstration items (e.g., Symbol Span) on the examiner's camera. Refer to [Table 1 \(PDF | 116.08 KB\)](#) for specific instructions by subtest.

Capturing response booklet performance (if used)

The examiner may ask for the completed response booklet to be shown on camera immediately at the conclusion of a task, so that responses are not lost or modified. One successful approach to protecting test security uses sealed envelopes (i.e., the sealed envelope method) and is described as follows. The examiner gathers the response booklet pages and a self-addressed stamped envelope. The examiner places these materials in an envelope and signs it on the seal, then mails or delivers it to the testing location. Because the Visual Reproduction (VR) response booklet requires modification from the standard form for remote practice in order to prevent exposure to previous responses during later items or conditions, a Remote Administration Response Booklet is provided in the Q-global Resource Library. These pages should be printed single-sided and cut in half for administration. The facilitator or examinee does not open the sealed envelope containing the response booklet pages until the examiner asks. The response booklet pages are then placed in the provided self-addressed stamped envelope by the examinee after completion of each drawing to prevent continued viewing of the response, as this could impact recall of the images during the delayed conditions. At the **conclusion** of the delayed conditions, the examinee or facilitator should seal the envelope and sign across the seal on camera, and then mail or deliver to the examiner immediately following the testing session.

Audio considerations

High-quality audio capabilities are required during the administration. An over the head, two-ear, stereo headset with attached boom microphone is recommended for both the examiner and examinee. Headphones with a microphone may be used if a headset is not available.

Audio check

The examiner should test the audio for both the examiner and examinee in the initial virtual meeting and at the beginning of the testing session to ensure a high-quality audio environment is present. This is especially critical for Incidental Recall, Logical Memory, and Verbal Paired Associates. Testing the audio should include an informal conversation prior to the administration where the examiner is listening for any clicks, pops, or breaks in the audio signal that distorts or interrupts the voice of the examinee. The examiner should also ask if there are any interruptions or distortions in the audio signal on the examinee's end. Any connectivity lapses, distractions, or intrusions that occurred during testing should be reported.

Manage audiovisual distractions

As with any testing session, the examiner should do everything possible to make sure the examinee's environment is free from audio and visual distractions. If the examiner is unfamiliar with the examinee's planned physical location, a visual tour of the intended testing room should be given during the initial virtual meeting. The examiner can then provide a list of issues to address to transform the environment into one suitable for testing. For example, remove distracting items, silence all electronics, and close doors. If you plan to administer the Brief Cognitive Status

Exam (BCSE) as part of the WMS-IV, ensure that any analog clocks are not in view of the examinee during this review of the testing room. The examiner should confirm that these issues have been addressed at the time of testing. If possible, the examinee should be positioned facing away from the door to ensure the examiner can verify through the examinee's camera that the door remains shut and can monitor any interruptions. The examiner should confirm that all other applications on the computer, laptop, or peripheral device are closed, the keyboard is moved aside or covered after the session is connected, and alerts and notifications are silenced on the peripheral device. Radios, televisions, other cellular phones, fax machines, smart speakers, printers, and equipment that emit noise must be silenced and/or removed from the room.

Lighting

Good overhead and facial lighting should be established for the examiner and examinee. Blinds or shades should be closed to reduce sun glare on faces and the computer screens.

Disruptions

The examiner should record any and all atypical events that occur during the testing session. This may include delayed audio or video, disruptions to connectivity, the examinee being distracted by external stimuli, and any other anomalies. These can be noted on the record form or in the Q-interactive® notes and should be considered during interpretation and described in the written report.

2. Assessment Procedures & Materials

Copyright

Permission must be obtained for access to copyrighted materials (e.g., stimulus books, response booklets) as appropriate. Pearson has provided a [letter of No Objection \(PDF | 75.02 KB\)](#) to permit use of copyrighted materials for telepractice via teleconferencing software and tools to assist in remote administration of assessment content during the COVID-19 pandemic.

Response booklet (if used)

The response booklet should be provided in advance of the testing session, and the plan for securing and forwarding/returning materials, real-time and after testing, should be communicated. Note that the VR response booklet requires modification from the standard form for remote practice in order to prevent exposure to previous responses during later items or conditions. Print out the Remote Administration Response Booklet on single sheets (i.e., do not print two-sided) from Q-global and cut the pages in half for administration. Note that the page numbers for the Remote Administration Response Booklet remain the same as those for the standard version. See the capturing response booklet performance portion of the Telepractice Environment & Equipment section for suggested procedures to facilitate immediate scoring and secure handling of response booklets.

Memory Grid and Cards

Designs and Spatial Addition may only be administered when a professional facilitator is present. The materials should be provided to the professional facilitator before the testing session. *It is not recommended to allow a parent/guardian/caretaker to present cards for Designs or Spatial Addition, nor to attempt to have the examinee administer their own materials.*

Digital assets

The examiner should practice using the digital assets until the use of the materials is as smooth as a face-to-face administration. It is not recommended that the examiner display items from paper stimulus books on a camera. For Spatial Addition, each item requires exposure of two grids. A blank page has been inserted between the two grids in each item to reduce the visual trace that is enhanced in digital display. A similar blank is used in the Q-interactive presentation of Spatial Addition items.

Considerations

Review [Table 1 \(PDF | 116.08 KB\)](#) for the specific telepractice considerations for each subtest to be administered.

Input and output requirements and equivalence evidence

The examiner should consider the input and output requirements for each task, and the evidence available for telepractice equivalence for the specific task type.

Telepractice Versus Face-to-Face Administration

Preliminary research has compared results obtained in telepractice and face-to-face administration modes. Several tasks drawn from the Wechsler scales have produced evidence of equivalence in telepractice and face-to-face modes for examinees with a variety of clinical conditions (Cullum et al., 2006, 2014; Galusha-Glasscock et al., 2016; Grosch, et al., 2011; Hildebrand, et al., 2004; Ragbeer et al., 2016; Stain et al., 2011; Temple et al., 2010; Wadsworth, Dhima, et al., 2018; Wadsworth, Galusha-Glasscock, et al., 2016). A similar study conducted on speech-language tests provided similar results (Sutherland et al., 2017). Other studies support equivalence of tasks that are similar to some of the WMS-IV subtests with nonclinical examinees using telepractice compared with face-to-face administration and scoring (Galusha-Glasscock et al., 2016; Wright, 2018a, 2018b). In addition, a meta-analysis of telepractice studies provides support for telepractice and face-to-face mode equivalence across a variety of neuropsychological tests (Brearly, et al., 2017).

While equivalence data on similar measures are relevant, practitioners should be mindful that more research is needed to establish equivalence in all ages and for all tasks on the WMS-IV. Additional caveats and cautions are described in Grosch et al. (2011). Also, most telepractice-based studies were conducted with volunteer subjects in controlled environments. When social distancing is key (such as during the COVID-19 pandemic) some examinations may need to occur in patients' homes, and it should be noted that very little research has been done about remote assessment in private homes.

It is important to consider the conditions under which equivalence studies of telepractice and face-to-face assessment modes were conducted and attempt to reproduce these as closely as possible if testing via telepractice. Typical telepractice studies that support telepractice and face-to-face equivalence involve the examiner becoming very familiar with the teleconference platform by using it for its intended purpose for several hours and administering tests (even those that are familiar in face-to-face mode) multiple times to "practice examinees." Some studies that have established telepractice and face-to-face mode equivalence involve a professional facilitator. However, preliminary research conducted and described by Lana Harder in *Teleneuropsychology (TeleNP) in response to COVID-19* (Stolwyk et al., 2020) had parents serve as in-home facilitators who managed audiovisual needs and response booklets, and found no significant differences across modes. Finally, the examinee is typically in an office- or school-based setting. Therefore, if in-home assessment is taking place, it is advisable to prepare a similar environment as much as possible as described in the Telepractice Environment & Equipment section.

Digital Versus Traditional Format

Telepractice involves the use of technology in assessment as well as viewing onscreen stimuli. For these reasons, studies that investigate assessment in digital versus traditional formats are also relevant.

A number of investigations of the Wechsler scales have produced evidence of equivalence when administered and scored via digital or traditional formats to examinees without clinical conditions (Daniel, 2012a, 2012b; Daniel et al., 2014; Raiford, Zhang, et al., 2016). In addition, equivalence has been demonstrated for examinees with clinical conditions, such as intellectual giftedness or intellectual disability (Raiford et al., 2014; Raiford, Zhang, et al., 2016), attention-deficit/hyperactivity disorder or autism spectrum disorder (Raiford, Drozdick, et al., 2015; Raiford, Zhang, et al., 2016), or specific learning disorders in reading or mathematics (Raiford, Drozdick, et al., 2016; Raiford, Zhang, et al., 2016). However, it is important to note that these studies were not conducted remotely or via video conference.

Evidence by Subtest

[Table 2 \(PDF | 111.76 KB\)](#) lists each WMS-IV subtest, the input and output requirements, the direct evidence of subtest equivalence in telepractice-face-to-face and digital-traditional investigations, and the evidence for similar tasks. The abbreviations in the Input and Output columns correspond to the various input and output requirements of each subtest, and a key appears at the bottom of the table. For example, brief spoken directions as an input requirement is abbreviated as *BSD*. The numbers in the evidence columns correspond to the studies in the reference list, which is organized alphabetically in telepractice and digital sections. For clarity, each study is denoted either *T* or *D*, with *T* indicating the study investigated telepractice-face-to-face mode, and *D* indicating the study addressed digital-traditional format.

3. Examinee Considerations

Appropriateness

The examiner should first ensure that a telepractice administration is appropriate for the examinee and for the purpose of the assessment. Clinical judgment, best practice guidance for telepractice (e.g., APA Services, 2020; ASPPB, 2013; IOPC, 2020), information from professional organizations and other professional entities (e.g., licensing boards, legal resources, professional liability insurance providers, payors), consultation with other knowledgeable psychologists, existing research, and any available federal or state regulations should be considered in the decision-making process. Consideration should be given to whether the necessary administrative and technological tasks involved in a telepractice session can be accomplished without influencing results.

Preparedness

Before initiating test administration, the examiner should ensure that the examinee is well-rested, able, prepared, and ready to appropriately and fully participate in the testing session.

Facilitator role

If using a facilitator, the role of the facilitator must be explained to the examinee so participation and actions are understood.

Headset

It may not be appropriate or feasible for some examinees to use a headset due to behavior, positioning, physical needs, or tactile sensitivities, or if a headset is not available. Clinical judgement on the appropriate use of a headset in these situations should be used. If a headset is not utilized, the examiner's and examinee's microphones and speakers should be turned up to a comfortable volume.

Mouse

On some teleconference platforms, the examiner can pass control of the mouse to allow the examinee to point to indicate responses; this is an option if it is within the capabilities of the examinee. However, best practice guidelines provide cautions about this. For example, the IOPC guidelines suggest examiners be alert throughout administration, return control of the screen once the task is finished, and never leave the computer unattended while the examinee has control over the examiner's computer (IOPC, 2020).

4. Examiner Considerations

Practice

During the telepractice setup, and before administering to any actual examinee, the examiner should rehearse the mechanics and workflow of every item in the entire test using the selected teleconference platform so that the examiner is familiar with the administration procedures. For example, a colleague could be used as a practice examinee.

Standardized procedures

The examiner must follow the administration procedures of face-to-face administration as much as possible. For example, if a spoken stimulus cannot be said more than once in face-to-face administration, the examiner must not say it more than once in a telepractice administration unless a technical difficulty precluded the examinee from hearing the stimulus.

Administrative and technological tasks

In order to conduct a smooth telepractice session, audiovisual needs and materials must be managed appropriately. The initial virtual meeting involves the examiner, examinee, and/or the facilitator (if used), and is the opportunity for the examiner to provide information about the audiovisual needs and materials. During the initial virtual meeting, the examiner should provide training in troubleshooting audiovisual needs that arise during the testing session, including camera angle, lighting, and audio checks. The examiner should provide verbal feedback to guide camera adjustment, checking the onscreen video shown by the peripheral camera/device to provide information about how to reposition it until the proper view is shown. The examiner should emphasize that no materials should be opened until the examiner provides instructions to do so, if applicable. The examiner should also expect to provide verbal guidance about these issues during the testing session. Refer to the Telepractice Environment & Equipment section and to [Table 1 \(PDF | 116.08 KB\)](#) for specific subtest telepractice considerations.

If used, the facilitator is to assist with administrative and technological tasks and not to manage rapport, engagement, or attention during the testing session. The examiner should direct them not to interfere with the examinee's performance or

responses. Any other roles and responsibilities for which an examiner needs support, such as behavior management, should be outlined and trained prior to the beginning of the testing session. The examiner is responsible for documenting all behaviors of the facilitator during test administration and taking these into consideration when reporting scores and performance.

5. Other Considerations

There are special considerations for written reports describing testing that takes place via telepractice.

The professional completing the written report should state in the report that the test was administered via telepractice, and briefly describe the method of telepractice used. For example, *“The WMS-IV was administered via remote telepractice using digital stimulus materials on Pearson’s Q-global system, and a facilitator monitored the administration onsite using a printed response booklet during the live video connection using the [name of telepractice system, e.g., Zoom] platform.”*

The professional should also make a clinical judgment, similar to a face-to-face session, about whether or not the examiner was able to obtain the examinee’s best performance. Clinical decisions should be explained in the report, including comments on the factors that led to the decision to conduct testing via telepractice and to report all (or not to report suspect) scores. In addition, it is recommended that the report include a record of any and all atypical events during the testing session (e.g., delayed video or audio, disruptions to connectivity, extraneous noises such as phone ringing or loud dog barking, person or animal unexpectedly walking into room, the examinee responding to other external stimuli). Notes may be recorded about these issues on the record form or in the notes section on Q-interactive. List and describe these anomalies as is typical for reporting behavioral observations in the written report, as well as any observed or perceived impact on the testing sessions and/or results, and consider these in the interpretation of results. For example, *“The remote testing environment appeared free of distractions, adequate rapport was established with the examinee via video/audio, and the examinee appeared appropriately engaged in the task throughout the session. No significant technological problems or distractions were noted during administration. Modifications to the standardization procedure included: [list]. The WMS-IV subtests, or similar tasks, have received initial validation in several samples for remote telepractice and digital format administration, and the results are considered a valid description of the examinee’s skills and abilities.”*

Conclusion

The WMS-IV was not standardized in a telepractice mode, and this should be taken into consideration when utilizing this test via telepractice and interpreting results. For example, the examiner should consider relying on convergence of multiple data sources and/or being tentative about conclusions. Provided that the examiner has thoroughly considered and addressed the factors and the specific considerations as listed above, the examiner should be prepared to observe and comment about the reliable and valid delivery of the test via telepractice. Materials may be used via telepractice without additional permission from Pearson in the following published contexts:

WMS-IV manuals, digital stimulus books, and response booklets via Q-global

WMS-IV via Q-interactive (requires advanced technology skills and mirroring software)

Any other use of the WMS-IV via telepractice is not currently recommended. This includes, but is not limited to, scanning the paper stimulus books, digitizing the paper record forms, holding the stimulus books physically up in the camera's viewing area, or uploading a manual onto a shared drive or site.

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Telepractice–Face-to-Face Mode

See [Table 1 \(PDF | 116.08 KB\)](#)

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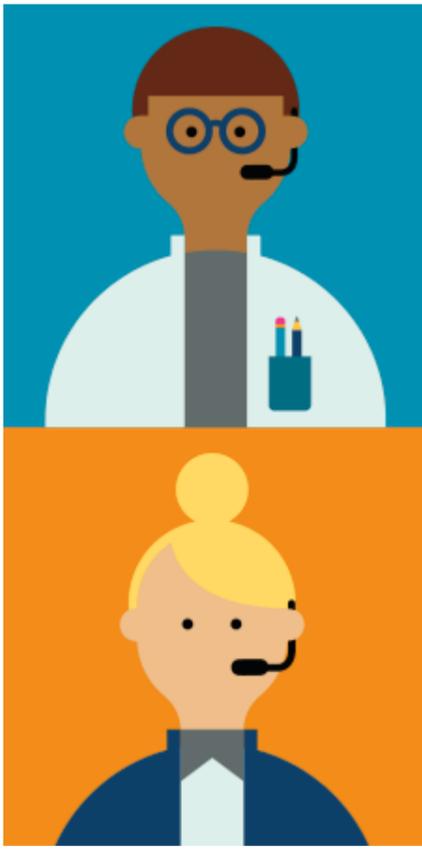
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