Telepractice and the WMS–IV, TOPF, and ACS for WAIS-IV and WMS-IV

The telepractice information in this document is intended to support professionals 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.

Professionals 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.

Professionals 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 [ASPPB], 2013; Grosch et al., 2011; Inter Organizational Practice Committee [IOPC], 2020; Stolwyk et al., 2020) to assist professionals in decision making and ethical and legal practice issues.

The Wechsler Memory Scale–Fourth Edition (WMS–IV; Wechsler, 2008), Test of Premorbid Functioning (TOPF; Pearson, 2009), and Advanced Clinical Solutions for WAIS-IV and WMS-IV (ACS; Pearson, 2009) 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 teleconferencing software. 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 this assessment via telepractice; however, it is important to consider the fact that the normative data were collected via in-person assessment. Telepractice is a deviation from the standardized administration, and the methods and approaches to administering it via telepractice should be supported by research and practice guidelines when appropriate.

Professionals 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 professionals 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 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 in-person assessment mode.

In times when physical 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 on-site 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 before, 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 examinee'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 physical distancing constraints, the only facilitator available may be someone in the examinee's home (e.g., a parent, guardian, or caregiver). If the on-site facilitator is not in a professional role (i.e., 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; they should merely 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 used, 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. The Faces subtest from ACS is also not feasible for telepractice without the use of a professional facilitator.

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 composite scores that include the Faces subtest can also not be derived without 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

2. Assessment Materials & Procedures

3. Examinee Considerations

4. Examiner Considerations

5. Other Considerations

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 a Pearson-delivered digital manual or administration directions, but the examiner can also use the paper format manual or administration directions. The second computer screen 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®. Because some teleconferencing software shrinks the size of images, the image size should be verified 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 for a peripheral camera or device (as described later in this section) to be aimed 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.

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.

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. Testing the audio should include an informal conversation before the administration where the examiner is listening for any clicks, pops, or breaks in the audio signal that distort or interrupt 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.

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. 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.

Teleconferencing Software

Teleconferencing software is required. Screen-sharing 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 teleconferencing software 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.

Peripheral Camera or Device

A standalone peripheral camera can be used to provide a view of the session from another angle or a live view of the examinee's progress. 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) 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 physical 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 or other device in the examinee's location to gain a view of the examinee's progress in a response booklet or when pointing at a screen. Before 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 devices. 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) 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. A simple mirror behind the examinee has been used successfully to observe pointing responses. Typically, devices provide the best view of the examinee's screen and pointing responses when positioned in landscape orientation. While using additional cameras or devices/objects may not be an optimal solution for telepractice, it can be functional if executed well.

Screen–Sharing Digital Components

Digital components are shared within the teleconferencing software as specified in Table 1. 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 on-screen 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.

2. Assessment Materials & Procedures

Test Item Security

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 to the examinee/caregivers 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 test-related materials used in the testing session must be returned to the examiner.

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 notes section on Q-interactive, if applicable, and should be considered during interpretation and described in the written report. Refer to Other Considerations for guidance on report writing.

Response Booklets

The response booklets 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. The examiner may ask for the completed response booklet to be shown on camera immediately at the conclusion of a task, so that the examiner can score it immediately and so 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 response booklets 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. The examiner emphasizes that the sealed envelope containing the response booklets must not be opened until the examiner asks. The response booklets are then placed in the provided self-addressed stamped envelope after completion of each subtest, sealed at the conclusion and signed on the seal on camera, and then mailed or delivered to the examiner immediately following the testing session.

Manipulatives

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 in-person 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.

Gesturing

When gesturing to the stimulus books or response booklets is necessary, the examiner should display them as digital assets on-screen and point using the mouse cursor. 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 for specific instructions by subtest.

Content Considerations

Review Table 1 for the specific telepractice considerations for each subtest to be administered.

Table 1. Specific Telepractice Considerations

Subtest(s)	Considerations
Brief Cognitive Status Exam (BCSE)	• Professional facilitator can assist with telepractice administration of these subtests (e.g., managing response booklet). • Requires high-quality audio for examinee and examiner • Ensure any analog clocks are out of view of the examinee during administration of the BCSE. • You may repeat instructions or items as allowed in the Administration and Scoring Manual. • Examiner uses stopwatch. Examiner must ensure the examinee stops at the task time limit. • Peripheral camera/device should be placed in a stable position to show examinee's Clock Drawing.
Logical Memory I and II Verbal Paired Associates I and II	• Requires high-quality audio for examinee and examiner • Do not repeat any item except as allowed in the Administration and Scoring Manual, unless it was not heard due to technical problems. • Plan ahead to address repetitions in cases where a word or story was not heard due to technical problems. • Recognition items may be repeated as described in the Administration and Scoring Manual.

Subtest(s)	Considerations
Designs Spatial Addition Faces	• Professional facilitator should assist with telepractice administration of these subtests. • Train new professional facilitators until the facilitator's presentation of the materials during instructions and items is performed according to the directions in the Administration and Scoring Manual. • It is not recommended to allow a nonprofessional facilitator to present the materials nor to attempt to have the examinee setup or administer the materials. • Requires a print stimulus book in the examinee's location or the digital stimulus book on a tablet approximately 9.7" diagonally • Train the professional facilitator to present the stimulus book or tablet in the correct direction, as the items can easily become rotated 180°, and to not allow the examinee to rotate the stimuli. • Examiner or facilitator uses stopwatch to ensure appropriate exposure time for each item; ensure accurate exposure time as computer lag time can influence length of exposure and impact recall of stimuli. • Requires high-quality video for examinee and examiner • Peripheral camera/device should be placed in a stable position to show examinee's constructions. • Professional facilitator should show the examiner the back side of the grid upon completion of each item for recording responses. Practice this recording to ensure the grid responses are recorded in the correct orientation as described in the Administration and Scoring Manual.
Symbol Span	• Requires high-quality video for examinee and examiner • Examiner points to stimuli on-screen using mouse. • Peripheral camera/device should be placed in a stable position that shows examinee's screen and provides a view of choices made nonverbally (e.g., pointing). • Examinee can use mouse or touchpad to point at choices if teleconference platform allows examiner to pass control of the mouse. • Examinee can state the letters affiliated with each design if pointing is not feasible. • Examiner uses stopwatch to ensure appropriate exposure time for each item; ensure connectivity allows accurate exposure time as computer lag time can influence length of exposure and impact recall of stimuli.

Subtest(s)	Considerations
Visual Reproduction	• Requires high-quality video for examinee and examiner • Peripheral camera/device should be placed in a stable position that shows examinee's response booklet and provides the examiner a view of examinee's written responses. • Examiner points to stimuli on-screen (if this ability exists in the teleconference platform). • Requires the examiner to print out the Remote Administration Response Booklet on single sheets (i.e., do not print two-sided) from Q-global and to 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*. • Ask the facilitator or examinee to place each Response Booklet page into the envelope (if using this method) or out of site of the examinee at the conclusion of each drawing.
TOPF	• Requires high-quality audio and video for examinee and examiner • Video should allow face to face (examiner can see examinee's mouth, examinee can see examiner's). • Examiner points to stimuli on-screen (if this ability exists in the teleconference platform).
Word Choice	• Requires high-quality audio and video for examinee and examiner • Video should allow face to face (examiner can see examinee's mouth, examinee can see examiner's). • Examiner points to stimuli on-screen (if this ability exists in the teleconference platform). • Do not repeat any item except as allowed in the Administration and Scoring Manual, unless it was not heard due to technical problems. • Plan ahead to address repetitions in cases where a word or story was not heard due to technical problems.

Subtest(s)	Considerations
Social Perception	• Requires high-quality video and audio for examinee and examiner • Examiner points to stimuli on-screen using mouse. • For items with oral stimuli, requires examiner to stream audio and then read directions aloud. • Peripheral camera/device should be placed in a stable position that shows examinee's screen and provides a view of choices made nonverbally (e.g., pointing). • Examinee can use mouse or touchpad to point at choices if teleconference platform allows examiner to pass control of the mouse. • Examinee can state the letters affiliated with each design if pointing is not feasible. • Examiner uses stopwatch to ensure appropriate exposure time for each item; ensure connectivity allows accurate exposure time as computer lag time can influence length of exposure and impact recall of stimuli.
Names	• Requires high-quality audio and video for examinee and examiner • Examiner points to stimuli on-screen using mouse. • Do not repeat any item except as allowed in the Administration and Scoring Manual, unless it was not heard due to technical problems. • Examiner uses stopwatch to ensure appropriate exposure time for each item; ensure connectivity allows accurate exposure time as computer lag time can influence length of exposure and impact recall of stimuli.

Evaluating Equivalence Evidence

Examiners should review the current research available on equivalence between different modes of administration before proceeding to use remote administration of a standardized assessment with normative data collected via in-person assessment. When reviewing the literature, the examiner should consider the input and output requirements for each task, and the evidence available for telepractice equivalence for the specific task type. Direct evidence of equivalence for a specific task may be available because the task was researched in a study with results indicating no significant difference between telepractice and in-person assessment. Indirect evidence may also be reported in the literature for a task that is similar in construct and input/output demands to the standardized assessment being considered for remote administration and may help determine the examiner's level of confidence in applying the norms. For instance, a study demonstrating direct evidence for the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS) Picture Naming subtest also demonstrates valuable indirect evidence for the WISC-V Vocabulary and CLQT+ Confrontation Naming subtests because Picture Naming, Vocabulary, and Confrontation Naming all require brief spoken directions with pictorial stimuli inputs with open-ended spoken response outputs. Examiners can have more confidence that the normative scores are valid when tasks have direct evidence showing equivalency between modes.

In reviewing the literature of telepractice–in-person and digital–traditional investigations, professionals should also be mindful of the age range and population (e.g., clinical group) of the research study to consider relevancy for the examinee. Greater caution is recommended when only indirect evidence of equivalency is available for a task, or when equivalence has not been established for a particular examinee's age range and clinical condition. However, it can be informative to consider any such available evidence when considering impact of remote administration on results and interpretation. Pearson Clinical Assessment is tracking and aggregating the relevant equivalence evidence for our assessments, including the age range, population, direct evidence, and indirect evidence (see Evidence for Remote Assessment).

Table 2 lists the input and output requirements of each task. The abbreviations in the Input and Output column correspond to the various input and output requirements of each task, and a key appears at the bottom of the table. For example, brief spoken directions as an input requirement is abbreviated as BSD.

Table 2. Input and Output Requirements

Task	Input[a]	Output[b]
BCSE– Orientation	BSD	OE, BSR
BCSE–Time Estimation	BSD, SS	OE, BSR
BCSE–Mental Control	BSD, SS	OE, SPR
BCSE–Clock Drawing	BSD, RB	WFR
BCSE–Incidental Recall	BSD, SS	OE, SPR
BCSE–Inhibition	BSD, GD, PS, SP	SPR, TT
BCSE–Verbal Production	BSD	SPR, OE, TT
Visual Reproduction I & II (VR I & II)	BSD, PS, RB, SP, TS	IT, WFR, MC
Logical Memory I & II (LM I & II)	BSD, SS	SPR, OE, MC
Spatial Addition (SA)	BSD, CC, MD, PM, PS, TP	GMR
Verbal Paired Associates (VPA I & II)	BSD, SS	BSR, OE, IT, MC
Designs I & II	BSD, MD, PM, PS, TP	GMR, MC
Symbol Span	BSD, GD, SP, TP	PR
TOPF	BSD, WP	BSR, OE
Word Choice	BSD, WP	BSR, OE, MC
Social Perception	BSD, CC, PS, ARS	MC, OE, PR, SPR
Names	BSD, PS, SS, TP	BSR, MC, PR, SPR

Task	Input[a]	Output[b]
Faces	BSD, MD, PM, PS, TP	IT, GMR, MC

Note. [a]Input abbreviations are: ARS = Audio recorded stimuli; BSD = Brief spoken directions, CC = Color critical items, GD = Gestured directions, MD = Motor demonstration, PM = Physical manipulatives, PS = Pictorial stimuli, RB = Paper response booklet, SP = Letters, digits, or symbols in print, SS = Spoken stimuli, TP = Timed presentation; WP = Words in Print

[b]Output abbreviations are: BSR = Brief spoken response, GMR = Gross motor response, IT = Item-level time limit, MC = Multiple choice; OE = Open ended, PR = Pointing response, SPR = Spoken response, TT = Task-level time limit, WFR = Written or fine motor response

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 professionals, 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 judgment 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 teleconferencing software, 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, resume 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 teleconferencing software 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 in-person administration as much as possible. For example, if a spoken stimulus cannot be said more than once in in-person 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.

Real-Time Troubleshooting

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 on-screen 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 for specific subtest telepractice considerations.

Collaborating With Facilitators

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 before 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. The

professional should also make a clinical judgment, similar to an in-person 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). 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.

An example of a written report might include:

> "*The WMS–IV was administered via remote telepractice using digital stimulus materials on Pearson's Q-global system, and a facilitator monitored the administration on-site using a printed response booklet during the live video connection using the [name of telepractice system, e.g., Zoom] platform. 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*."

Notes may be recorded about any testing issues on the record form or in the notes section on Q-interactive.

Conclusion

This test 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)

- WMS–IV via a Pearson-licensed telepractice provider/platform

Any other use of this test 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.

References

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