Overview of Advanced Clinical Solutions for WAIS-IV and WMS-IV

Introduction

Advanced Clinical Solutions for WAIS–IV and WMS–IV (ACS) is an individually administered array of tasks and procedures that enhance the clinical utility of the *Wechsler Adult Intelligence Scale–Fourth Edition* (WAIS–IV; Wechsler, 2008) and the *Wechsler Memory Scale–Fourth Edition* (WMS–IV; Wechsler, 2009). It is designed to address specific needs of clinical assessment, including those of diagnostic and forensic evaluations. The ACS contains tasks, procedures, and scores that yield additional information on the processes underlying performance on the WAIS–IV and WMS–IV. A new subtest and data on embedded measures in WAIS–IV and WMS–IV are provided to measure effort. New subtests designed to measure aspects of social cognition also are included. Procedures for adjusting WAIS–IV and WMS–IV normative scores for demographic variables, measuring change in scores across multiple administrations of the WAIS–IV or WMS–IV, and predicting premorbid cognitive and memory ability are included in the software.

The original WAIS–IV and WMS–IV publications include subtest, index, and contrast scores, and key process scores pertinent to a wide variety of clinical evaluations. The ACS yields several additional subtest- and index-level scores, and contrast scores. These scores provide information on the cognitive and memory processes measured with the two instruments, particularly memory processes involved in performance on the WMS–IV. The additional ACS scores are listed in chapter 2.

Special Applications of ACS

Many of the new ACS subtests and procedures were designed for specific types of evaluations, such as forensic evaluations, readministrations, and neuropsychological evaluations that require estimates of premorbid functioning.

Assessing Suboptimal Effort

Effort is frequently of concern in evaluations, particularly those in which poor performance may be beneficial to the examinee. Though you must always consider multiple sources of information in determining if an individual is giving suboptimal effort on a test, the ACS provides a new measure of effort and information on embedded measures of effort in the WAIS–IV and the WMS–IV.

The Word Choice subtest takes approximately 5 minutes to administer and provides information on chance performance by an examinee. Data is provided on performance within multiple clinical groups, including simulator and no stimulus groups (i.e.,

individuals who were never shown the stimulus). Performance by a specific individual can be compared to this data to determine if they are giving poorer performance than that observed in true clinical populations.

For examiners who complete the WAIS–IV and WMS–IV core subtests, several embedded effort scores can be calculated and compared to performance by clinical groups. The embedded effort measures for WAIS–IV and WMS–IV provided in the ACS are

WAIS-IV Reliable Digit Span,

WMS-IV Logical Memory II Recognition,

WMS-IV Verbal Paired Associates II Recognition, and

WMS-IV Visual Reproduction II Recognition.

Using Demographically Adjusted Norms

ACS enables you (the clinician) to refine your hypothesis about the degree to which a specific score is unexpected when compared to individuals of similar background characteristics (e.g., education level). These demographic adjustments to the standard age-adjusted WAIS–IV and WMS–IV scores have a specific application and should be used only to answer appropriate clinical questions.

Assessing Change in Performance

Individuals receiving treatment or intervention are frequently reevaluated with the same instruments over time. However, practice effects often result in improved performance on readministration, even if a real change in ability has not occurred. Reliable change scores are adjusted for the changes seen in retest scores in normally developing individuals and provide information on changes in performance that are due to real change in the individual. The ACS software provides regression-based reliable change scores for all WAIS–IV core and WMS–IV primary subtest and index scores.

Predicting Premorbid Abilities

In clinical settings, it is often necessary to estimate an individual's premorbid functioning in order to make diagnostic and treatment decisions. For example, individuals referred for an evaluation of potential cognitive decline need to have their current performance compared to previous levels of functioning. Poor performance on a current measure does not necessarily indicate a decline from the previous ability level. Estimations of premorbid functioning typically are based on performance on tasks that are not affected by cognitive change or on demographic comparisons.

The Test of Premorbid Functioning (TOPF), a revision of the *Wechsler Test of Adult Reading* (WTAR; Wechsler, 2001), is used to estimate an individual's premorbid cognitive and memory functioning. Although TOPF is not impervious to the effects of cognitive dysfunction, it appears to be less affected than other measures of intellectual and memory functioning. The TOPF is based on a reading paradigm, requiring the reading and pronunciation of words that have irregular grapheme-to-phoneme translation. It does not require comprehension or knowledge of word meaning. It is similar in methodology to and shares some content with the *National Adult Reading Test* (NART; Nelson, 1982) and the North American counterparts of the NART, *American Version of the National Adult Reading Test* (AMNART; Grober & Sliwinski, 1991) and *North American Adult Reading Test* (NART; Blair & Spreen, 1989).

Demographic characteristics have been shown to relate to intellectual functioning and have been used to predict IQ without the use of measures of current cognitive functioning, such as the TOPF. (See chapter 4 in the ACS Clinical and Interpretive Manual for detailed information on the relationship between demographics and performance on intellectual and memory tests.) The use of demographic variables provides only a modest improvement in predicting performance in healthy examinees, but it buffers the effects of clinical status (i.e., dementia severity) in predicting premorbid cognitive functioning. Though the prediction of intellectual and memory functioning based on a combination of TOPF performance and demographic variables improves prediction and variance accounted for the actual improvement in predicted performance is relatively small.

Assessing Social Cognition

Social cognition skills are impaired in a number of neurological, psychiatric, and developmental conditions (e.g., Autistic Disorder, Schizophrenia). The deficits in social cognition can be specific or related to more general cognitive limitations. The social cognition subtests developed for ACS were designed to measure relevant components of social cognition, such as affect labeling, affect recognition from faces and prosody, identification of sarcasm, and the ability to verbalize intent of a speaker, and facial memory, such as face recognition and recall of names and pertinent information about a person from facial images. ACS has three subtests for measuring areas of social cognition: Social Perception, Faces, and Names. The subtests may be used independent of one another. Each subtest addresses different clinical questions regarding social cognition.

Social Perception measures skills associated with the comprehension of social communication. Social Perception items measure facial affect recognition and naming, affect recognition from prosody and facial expressions, and affect recognition from prosody and interacting pairs of people. Performance on Social Perception provides insight to an individual's deficits in social functioning. For Affect Naming, the examinee views photographs of faces and selects an emotion to describe the affect of the person in the photograph. For Prosody-Face Matching, the examinee selects a face that matches the emotion expressed by a speaker. For Prosody-Pair Matching, the examinee selects photographs of interacting pairs of individuals to match statements made by a speaker, and interprets the meaning of the speaker's statement in light of the emotional context.

The Faces subtest measures face discrimination and recognition with immediate learning and delayed recall conditions. This subtest measures learning of faces and encoding of features as well as spatial memory. The examiner shows the examinee a grid with photographs of faces for 10 seconds, and then removes it from view. The examinee then selects the faces from a set of cards and places the cards on a grid in the same places as previously shown. The examinee sees the same faces in three additional trials. A delayed-recall task measures long-term spatial and facial memory.

The Names subtest measures face-name association, face-activity association, and incidental recall for facial expression of emotion. This subtest measures the ability to recall proper names and semantic information when provided a visual cue. The examiner shows the examinee a series of photographs of children in a variety of affective states. The examiner tells the examinee the name of the child in the photograph and an activity in which the child engages. The examinee looks at the photograph and must recall the child's name and activity. A delayed-recall task measures incidental learning of affective states and long-term memory for proper names and semantic information.

Assessing Executive Functions with D–KEFS

Executive functions are frequently impaired in clinical populations. Impairments in executive functioning can have a dramatic impact on an individual's ability to function both cognitively and socially. The ACS includes the Trail Making and Verbal Fluency subtests (including Record Forms and Response Booklets) from the *Delis-Kaplan Executive Functioning System* (D–KEFS; Delis, Kaplan, & Kramer, 2001). Including measures of executive functioning in an evaluation with the WAIS–IV and WMS–IV enables you to perform a comprehensive evaluation of neuropsychological status.

Materials

The ACS kit materials include:

Administration and Scoring Manual

ACS Software: Scoring Assistant, Social Perception Audio, Test of Premorbid Functioning Audio, and Clinical and Interpretative Manual

Additional Scores Booklet

Word Choice Stimulus Book

Word Choice/Effort Record Form

Word Choice/Social Perception Emotion Card

Test of Premorbid Functioning Word Card

Test of Premorbid Functioning Record Form

Social Cognition Record Form

Social Cognition Stimulus Book

Faces Cards

Memory Grid

ACS D–KEFS Examiner's Manual for Trail Making and Verbal Fluency, Trail Making Response Booklets, D–KEFS Record Forms, and Verbal Fluency Card.

Depending on which tasks or procedures you are completing, you will need to furnish a

- stopwatch,
- pencil or pen, and a
- device to play the auditory stimulus for Social Perception that is included with the ACS Software.

Materials needed for each subtest are listed in the appropriate Stimulus Book and/or Record Form.

Manuals

The Administration and Scoring Manual is organized in five sections. Each section contains the respective administration, scoring, and normative data required for the subtests and procedures in that section. The five sections are Additional Scores for WAIS–IV and WMS–IV, Suboptimal Effort, Demographically Adjusted Norms and Reliable Change, Premorbid Functioning, and Social Cognition. Each section contains the subtests, scores, and/or procedures pertinent to that area of assessment. For example, the suboptimal effort section contains the instructions on administration of Word Choice and calculation of scores for Word Choice and the embedded effort measures in WAIS–IV and WMS–IV.

The Clinical and Interpretive Manual is included with the ACS Software and contains a description of the rationale behind the development of the various tasks contained within ACS, descriptions of the research and standardization phases of the project, and all the psychometric properties of the scales. In addition, caveats for the use of various scores and general interpretive guidelines are provided. The manual is divided in the same manner as the Administration and Scoring Manual to allow the user to see all the technical information for a specific area of assessment at one time.

Stimulus Books

The two Stimulus Books contain all of the directions and stimuli necessary to administer all test items for Word Choice, Social Perception, Faces, and Names. The subtests are easily identified by tabs that mark the beginning of each subtest. All subtests are administered with the Stimulus Book lying flat. This placement allows the examiner to see where an examinee points and control materials being utilized by the examinee more easily. All correct responses have been removed from the test pages and placed on the Record Forms to allow this placement of the Stimulus Books.

When setting up a Stimulus Book, make sure that the front cover faces you. The Stimulus Books contain examiner pages and examinee pages. The examiner pages for each subtest begin with the subtest name. Administration directions appear on the subsequent pages. The examinee will view either a stimulus item or a blank page. Note that not all recording and scoring information is included in the Stimulus Books. You will need to refer to the various chapters in this Manual for detailed recording and scoring information.

Faces Cards and Memory Grid

The Faces subtest requires the use of the Memory Grid and Faces cards. Practice administering this subtest before your first administration. You may have to practice this a few times to master administration, using the cards, grid, and recording responses. As you become more adept at handling the test materials and recording responses, administration time will decrease.

Record Forms and Additional Scores Booklet

Each Record Form is designed to allow easy administration of the included tasks. The Test of Premorbid Functioning Record Form contains all the administration directions as well as room for recording and scoring responses and overall performance. The Social Cognition and Word Choice/Effort Record Forms contain brief administration, recording, and scoring directions, and space for recording observations during the assessment.

The Additional Scores Booklet contains space for the calculation and derivation of all the WAIS–IV and WMS–IV Additional Scores. All scores are derived from responses recorded during administration of the WAIS–IV and WMS–IV. There are no additional tasks to be administered for the calculation of these scores.

Software

The ACS software provided in the kit includes the scoring software, the Clinical and Interpretive Manual, the audio required for administering Social Perception, and scoring of the Test of Premorbid Functioning. Many features of the ACS Software require the user to have the WAIS–IV and WMS–IV Scoring Assistants. The ACS software includes:

- Clinical and Interpretive Manual
- Audio required for administering Social Perception
- Scoring programs for effort measures, Test of Premorbid Functioning, Social Perception, Faces, and Names
- Test of Premorbid Functioning estimates and comparisons
- Demographically adjusted norms
- Reliable change scores

Purpose and Use of ACS

Age Range

With the exception of the effort scores, demographically adjusted norms, and the Names subtest, the age range for ACS is 16–90. The effort scores and Names subtest are available for ages 16–69 and the demographically adjusted norms are available for ages 20–90. It should be noted that the available additional scores for the WMS–IV vary

depending on whether the Adult or Older Adult battery was administered. Although the same age range applies to most tasks, the normative age bands vary across instruments and scores. Ensure you are using the correct normative table for each score.

Appropriate Use of Demographically Adjusted Norms

You can use the WAIS–IV and WMS–IV demographically adjusted norms to compare an individual to a specific subgroup of the population. They are not, however, intended to replace the use of normative data obtained from a stratified sample of the general population. The application of demographically adjusted norms should be made for appropriate clinical reasons, as the sensitivity and psychometric properties of an instrument change with the application of different normative sets. The ACS user must be familiar with the pros and cons of demographically adjusted norms and their appropriate use in clinical and neuropsychological assessment.

The WAIS–IV and WMS–IV demographically adjusted norms are not intended for use in psychoeducational assessment, determination of intellectual disability, vocational assessment, or any other context in which the assessment goal is to determine absolute functional level (IQ or memory) in comparison to the general population. Demographically adjusted norms are best used for neurodiagnostic assessment to minimize the impact of confounding variables on the diagnosis of cognitive impairment. These adjusted norms should be used to infer strengths and weaknesses relative to a presumed premorbid standard.

Scores Provided

Four types of scores are provided in ACS: standard scores, contrast scores, cumulative percentages, and equated scores.

Standard Scores

Several types of age-corrected standard scores are utilized in ACS, including *t*-scores, scaled scores, and index scores. Many of the additional scores and the Social Perception, Faces, and Names subtest scores are presented as scaled scores, scaled to a metric with a mean of 10 and a standard deviation of 3. The additional WMS–IV Index scores are presented on a metric with a mean of 100 and a standard deviation of 15. Information on the interpretation of standard scores is provided in the Clinical and Interpretive Manual.

Demographically Adjusted T-Scores

Demographically adjusted *t*-scores are included in ACS for all WAIS–IV and WMS–IV subtest and index scores. The *t*-scores are scaled to a metric with a mean of 50 and a standard deviation of 10. A *t*-score of 50 reflects the average performance of a given age group. Scores of 40 and 60 are 1 standard deviation below and above the mean, respectively.

Two variations of the demographic norms are provided: Education Adjusted norms and Full Demographically Adjusted norms. The Education Adjusted norms adjust WAIS–IV and WMS–IV subtest and index scores for age (20–90) and education (≤ 8 to >18 years).

The Full Demographically Adjusted norms adjust WAIS–IV and WMS–IV subtest and index scores for age (20–90 years), education (≤ 8 to >18 years), race/ethnicity (White, African-American, Hispanic, and Asian, only) and gender. Both the Education Adjusted norms and the Full Demographically Adjusted norms are derived using the ACS Software. Detailed information on the derivation of the demographically adjusted norms is provided in the Clinical and Interpretive Manual.

Combined Scores

Combined scores are a special type of standard score. Combined scores are scores made by combining two measures. For example, a combined scaled score is derived for the Auditory Recognition Index by combining cumulative percentages for Logical Memory II Recognition and Verbal Paired Associates II Recognition. Using the age-corrected scores rather than raw scores controls for differences in score range and other variance that can differentially weight performance towards one variable over the other. Combined scores are used to create a sum of scaled scores for the additional WMS–IV Index scores utilizing cumulative percentages.

Contrast Scores

Most WMS–IV primary subtests offer contrast scaled scores, particularly those with immediate and delayed conditions or recall and recognition tasks. Additional subtest and index-level contrast scaled scores are included in ACS. The contrast scaled scores are designed to allow the examiner to compare higher- to lower-level cognitive functions (e.g., recall versus recognition) or to differentiate statistically between modalities of presentation (e.g., oral versus visual).

Contrast scores apply a scaled score metric to score comparisons within or between subtests or indexes, providing information on the performance of a higher-level skill or ability while controlling for a lower-level or more basic skill. For example, one ACS contrast scaled score reflects an examinee's ability to recall a list of word-pairs after their fourth presentation, dependent upon his or her ability to learn the information after a single presentation (i.e., VPA I Recall A vs. Recall D Contrast Scaled Score).

Scores that fall between 8 and 12 do not indicate a statistically significant difference between the variables. Interpretation for scores from 1 to 7 and 13 to 19 is provided in the Clinical and Interpretive Manual.

Cumulative Percentages

For measures with highly skewed, non-normal distributions, it was not possible to develop scaled scores. These scores, which include many of the additional WMS–IV scores, are reported as cumulative percentage bands: ≤ 2 , 3–9, 10–16, 17–25, 26–50, 51–75, and >75.

Equated Scores

Equated WAIS–IV and WMS–IV index scores are used for premorbid prediction comparisons in the Test of Premorbid Functioning. The WAIS–IV and WMS–IV Index scores are equated to the TOPF Standard Score. Detailed information on the derivation and use of the equated scores is provided in the Clinical and Interpretive Manual.

User Responsibilities and Test Security

Because of the complexities of test administration, interpretation, and diagnosis, users of ACS should have graduate-level training and experience in the administration and interpretation of standardized clinical instruments. Such training should consist of an overview of assessment principles, including establishing and maintaining rapport, eliciting optimum performance, following standardized administration procedures, understanding psychometric statistics, scoring and interpreting tests, and maintaining test security. Although a trained technician or a research assistant can administer the subtests and score the responses under supervision, the test results should always be *interpreted* only by those who have appropriate graduate or professional training in assessment. Examiners should also have experience with or training in testing examinees whose ages; linguistic backgrounds; and clinical, cultural, or educational histories are similar to individuals they will be evaluating.

When ACS is to be used for a neuropsychological assessment, the examiner should have appropriate training in neuropsychology and neuropsychological assessment. Examiners should be familiar with the *Standards for Educational and Psychological Testing Standards* (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999).

It is also the responsibility of the test user to ensure that the test materials, including the Record Forms, remain secure and are released only with written permission to professionals who will safeguard their proper use. Although review of test results with the examinee and/or their parent(s)/guardian(s) is appropriate, this review should not include disclosure or copying of test items, protocols, or other test materials that would compromise the security, validity, or value of ACS as a measurement tool. Under no circumstance should test materials be resold or displayed in locations where unqualified individuals can purchase or view partial or complete portions of the test. This restriction includes personal and educational Internet websites and Internet auction sites. Because all test items, norms, and other testing materials are copyrighted, the copyright owner Pearson must approve, in writing, the copying or reproduction of any test materials. The only exception to this requirement is copying a completed Record Form for the purpose of conveying an examinee's records to another qualified professional. These user responsibilities, copyright restrictions, and test security issues are consistent with the guidelines set forth in the *Standards*.

Testing Guidelines

Standard Procedures

The directions for each subtest are designed to elicit optimal levels of performance. The ideal degree of flexibility and latitude is indicated in the instructions for each subtest. It is important to follow the instructions carefully to obtain results that can be interpreted according to national norms. Deviations from the standard procedures, including changing the presentation of an item, altering the instructions, repeating examples more than recommended, or teaching concepts not presented in the teaching examples can reduce the validity of the results.

Adherence to the standard procedures includes using a natural, conversational tone of voice, encouraging interest in the tasks, and reinforcing the examinee's efforts. This manner of presentation contributes to creating a supportive testing environment and to the development of a sense of competence in the examinee rather than a sense of failure. To administer the subtests in a rigid or detached manner would be contrary to standard procedures. If it is necessary to depart from the standard procedures, be sure to note this on the appropriate Record Form and interpret results with caution.

Many of the subtests follow traditional administration procedures, but some require practice to become proficient at administering and scoring the items and recording responses. It is essential to be familiar with the materials and task demands of the subtests so that standard procedures can be followed and the assessment can proceed without undue delay between subtests. Social Perception and Faces require practice before they are administered.

Physical Environment

To provide an ideal testing environment, you should administer the test in a well-lit, quiet room that is free from distractions and interruptions (e.g., an office or clinical treatment room). External distractions must be minimized to focus the examinee's attention on the tasks presented. If possible, position the examinee to face away from any windows. In addition, steps should be taken to minimize the examinee's access to test materials not in use.

Seating arrangements are important for efficient test administration. A clear view of the Stimulus Books is necessary to read instructions and to observe responses. Sit directly across from the examinee so that you can fully observe his or her behavior and responses. Potential distractions or interruptions should be minimized. In general, no one other than you and the examinee should be in the room during the testing session. Test materials not in use should be placed out of the examinee's view but within easy reach for you. To make this possible, a chair or shelf nearby may be used to arrange materials. The Record Form may be attached to a clipboard if preferred, but you should avoid any obvious efforts to conceal materials as such behavior may make the examinee uncomfortable.

Establishing and Maintaining Rapport

Establishing and maintaining rapport with the examinee is critical to eliciting optimal performance. Each examinee should be approached differently, depending upon the purpose of the testing, the setting in which the testing is done, the examinee's familiarity with the examiner and testing situations, and other related factors. Maintaining rapport requires your full attention during test administration. Prior to test administration, you must master the mechanical aspects of giving directions, handling materials, and timing and recording responses. Mastering these details will enable you to read the instructions to the examinee with ease, record responses without awkward pauses, and give as much attention as possible to the examinee. Establishing and maintaining rapport ensures the examinee's interest and cooperation throughout the assessment.

Use your experience and common sense to determine the most effective way of establishing rapport with each examinee. Begin the test session by putting the examinee at ease, perhaps with some informal conversation about the examinee's activities or interests. The time needed for introductory rapport building depends on the examinee's needs. When you believe an acceptable level of rapport has been established, proceed with administration.

Maintain a steady pace of administration but always be alert for changes in the examinee's mood, activity level, or cooperativeness. If the examinee appears fatigued, bored, or excessively anxious, brief conversations between subtests, in addition to the standard transition statements, may rekindle interest or reduce apprehension. If a brief rest period is needed, make sure to take it at the completion, not in the middle, of a subtest. When administering Faces and Names subtests, be careful to plan breaks around immediate and delayed conditions so as to not exceed the maximum elapsed time.

Demonstrate enthusiasm and interest by praising the examinee's effort. Such statements as, "You're working hard." or "Way to work" are acceptable statements. Do not reinforce the examinee's performance by saying "good" or "right" after a correct response unless it is indicated in the verbatim instructions to the examinee. If the examinee says he or she cannot perform a task or answer a question, provide encouragement by saying, Just try your best. If the examinee asks for help or says "You do it," say, "I want to see how well you can do it yourself."

Some examinees may try to take control of the testing situation by turning the pages of the Stimulus Books, beginning to work before they are told to do so, or continuing to work after being told to stop. A reasonable amount of flexibility is permitted in the interest of maintaining rapport, but you must exercise a degree of control to ensure adherence to standard test administration procedures.

Administration

Start Points and Discontinue Rules

For all subtests contained within ACS, examinees begin with Item 1. On the TOPF, the examinee stops after five incorrect responses. On all other subtests, the examinees complete all items. These administration rules are described in the subtest directions in the Stimulus Books and on the Record Forms and are indicated by the following icons.



Start Points

Administration of all subtests begins with the first item. Many subtests include demonstration items that are administered to all examinees prior to the administration of the first item. Always administer these items prior to administering the actual test items.

Discontinue Rules

Discontinue rules describe when to stop subtest administration and are designed to maintain rapport and minimize testing time. Only the Test of Premorbid Functioning has a discontinue rule. For the Test of Premorbid Functioning, examiners should stop administering the subtest once the examinee obtains five consecutive scores of 0. If you are unsure of a score, continue to administer items until you are sure the discontinue criterion has been met. If, on review, you determine the examinee was given items beyond the point at which testing should have been discontinued, award no points for those items beyond the correct discontinue point, even if the examinee's responses ordinarily would have earned credit.

Timing and Time Guidelines

It is essential to administer the immediate and delayed conditions of Faces and Names in the same session. Space is provided on the Record Form to record the time that administration of the immediate condition ends for these subtests. Recording the stop time helps you track the 10–15 minute elapsed time before administering the delayed condition. Subtract the stop time of the immediate condition from the beginning time of administration of the delayed condition. Ensure that adequate time passes between completing the immediate condition and beginning the delayed condition.

The following icon appears in the Stimulus Books and Record Forms when accurate timing is required.



Faces and Names have strict exposure time for visual stimuli. In Faces I and Names I, you show the stimulus for only 6 and 10 seconds, respectively, before removing them. Do not show the stimuli for longer than the designated exposure time.

Many of the ACS subtests are untimed. A general timing guideline is recommended, however, so that you can maintain an even administration pace and avoid causing any undue distress when an examinee does not respond or appears unwilling to attempt an item. The general rule is to proceed to the next item if the examinee has not responded within approximately 10 seconds. Keep the stopwatch within easy view and reach throughout testing so that its presence will not be a distraction when timing is required.

Teaching and Practice

Some of the ACS subtests, such as Social Perception and Faces, provide demonstration items to ensure that the examinee understands the task prior to administration of scored items. Demonstration items are designed to show key aspects of a task to the examinee and are completed by the examiner.

Administer all demonstration items in the prescribed manner. Unless otherwise specified, demonstrations may be repeated at least once, and the examinee may practice as much as needed. This helps familiarize the examinee with novel tasks and ensures comprehension of the task. Providing additional help beyond repetition of the demonstration items is inconsistent with standard administration procedures and may result in inaccurate or invalid scores. All instructions for demonstration items appear in the Stimulus Books.

If the examinee has physical constraints due to disability, trauma, or illness this requires you to modify standard procedures, note the modifications and the reason for them on the Record Form. Scores obtained from non-standard test administrations should be interpreted with caution.

Providing Prompts and Repetitions

Prompts and repetitions are designed to remind the examinee of the subtest task and to maximize his or her performance. Because the guidelines governing the use of prompts and repetitions vary, it is imperative that you become familiar with the requirements for each subtest.

Prompts

If the examinee refuses to respond to an item or hesitates while responding, prompt him or her by saying, **Just try it once more**, or **Try it just a little longer**, or **I think you can do it**.

If the examinee asks for help, tell him or her, **I want to see how well you can do it yourself.** If an examinee's response is ambiguous or incomplete, ask him or her to clarify by saying, **Explain what you mean,** or **Tell me more about that.** Whenever you provide a prompt, record (**P**) followed by the examinee's response to make it clear that the additional response was not spontaneous. If, after a prompt, the examinee does not respond or continues to hesitate, say, **Let's go on.** Then proceed to the next subtest or item.

Repetitions

Repeating instructions often redirects the examinee's attention and ensures his or her understanding of an item or the subtest task. Most subtests have restrictions regarding what can be repeated; for example, you should not repeat the words in the learning trials of Names. If the examinee asks or indicates in some way either the need for repetition (e.g., says "huh?") or a lack of understanding (e.g., has a puzzled look), note the request on the Record Form and the instructions you repeated (if permitted for that subtest). Do this so that problems, such as attention lapses, do not interfere with the assessment of another ability, such as memory. *Note: Test items cannot be repeated*.

Recording Responses

Specific directions for recording information for each subtest are provided in the Stimulus Books and in this manual.

When you are uncertain about scoring a response, record enough information about it so that you can evaluate it later. For Social Cognition subtests, you may prefer to record the examinee's response verbatim and evaluate it after the testing session to ensure accurate scoring. It is important to note any unusual responses for all subtests. This will help you to ensure accurate scoring and enable you to evaluate the examinee's test-session behavior. It is also important to record responses unobtrusively so that you avoid distracting the examinee. The list of standard abbreviations for the response notations are as follows.

P (Prompt)	A prompt was used to elicit the examinee's response.
R (Repetition)	Directions or an item were repeated at the examinee's request.
SC (Self Correct)	The examinee gave an incorrect response but corrected the response without prompting.
DK (Don't know)	The examinee indicated by shaking his or her head or by saying, "I don't know."
NR (No response)	The examinee made no response to an item, either verbal or gestural.