

IVA-AE2 Detailed Report - Extended Test

Name: Case, Sample

Age: 21 Sex: F Report Date: 9/9/2015 Test Date: 8/17/2015 09:22 AM On Meds: N

Comment:

OVERVIEW OF THE IVA-AE2 CPT AND GENERAL INTERPRETIVE GUIDELINES

This IVA-AE2 Detailed Report was created in order to help the examiner interpret the IVA-AE2 test results. This report provides the essential information needed to help guide the clinician in formulating likely diagnoses for individuals who have ADHD-type symptoms. The IVA-AE2 CPT (Integrated Visual & Auditory Continuous Performance Test - Advanced Edition) in this Extended Test version is a test of attention that measures responses to 1000 intermixed auditory and visual stimuli spaced 1 second apart. The task is to only click the mouse when the target stimulus is a visual "3" or an auditory "5." A correct response is defined as exactly one click to a target stimulus. The individual taking the test must be able to discriminate between 3s and 5s, switch between sensory modalities, and maintain attention for about twenty minutes. The targets occur frequently during some sections of the test and rarely during other sections, thus testing attention under both high and low demand conditions.

This report is confidential and is only distributed for use in accordance with professional guidelines. The report provides possible suggestions and hypotheses for the examiner to consider, but it is not to be construed as prescriptive, definitive, or diagnostic. Only tentative possible diagnoses are indicated by the test results and are by no means conclusive. Examiners will need to exercise their clinical judgment in determining if the test is fully valid and to integrate it with other clinical data in preparing their signed interpretive report. If in the examiner's judgment, these IVA-AE2 test results are incongruent with the individual's clinical history and other test data, it is recommended that less weight be given to these test results in making a diagnosis. The authors and publisher of this test are not responsible for any inaccuracies or errors that may result from its usage.

VALIDITY OF IVA-AE2 TEST RESULTS

There are two separate validity checks for this test. First, during the Warm-up phase of the test, the individual must demonstrate comprehension of the test instructions by clicking correctly to simple visual and auditory test targets at least five times. Second, there is a validity check during the main section of the test that evaluates whether the individual's response pattern was erratic. This would indicate numerous random responses and a failure to respond in accordance with the test instructions.

The first validity check is based on whether or not this individual can adequately respond to the simple tests on which the Auditory and Visual Sensory/Motor scales are based. During the Warm-up phase of this test, this individual made valid responses to both auditory and visual stimuli. The quotient scores and simple reaction times for these scales are provided in the Standard Scale Analysis. Since she was able to validly respond to both sensory modalities during the Warm-up phase, the examiner can interpret the Sensory/Motor validity test as showing that she was able to adequately understand the basic instructions of this test.

The main test results were found to be valid. All global and primary test scale scores can be interpreted without reservation. This individual's response pattern did not reveal any apparent abnormalities in her responses to either visual or auditory test stimuli. The examiner can proceed in an interpretation of all visual and auditory test scores without reservation.

SUMMARY OF TEST RESULTS FOR THE IVA-AE2 GLOBAL SCALES

This individual's overall global quotient scale score for the **Full Scale Response Control** scale was 81 (PR=10). This score fell in the mildly impaired range. Her **Auditory Response Control** quotient scale score was 88 (PR=21). This global scale score fell in the slightly impaired range. The **Visual Response Control** quotient scale score for this individual was 77 (PR=7). This global scale score fell in the mildly to moderately impaired range.

This individual's overall quotient score on the **Full Scale Attention** scale was 70 (PR=2). This global scale score fell in the moderately to severely impaired range. Her **Auditory Attention** quotient scale score was 79 (PR=8), and this global scale score fell in the mildly to moderately impaired range. The **Visual Attention** quotient scale score for this individual was 67 (PR=1). This global scale score was classified as falling in the severely impaired range.

This individual's global quotient score on the **Combined Sustained Attention** scale was 75 (PR=4). This score fell in the moderately impaired range. Her global **Auditory Sustained Attention** quotient scale score was 85 (PR=16), and it fell in the slightly impaired range. The global **Visual Sustained Attention** quotient scale score for this individual was 71 (PR=3). This score was found to fall in the moderately to severely impaired range.

The identified strengths, weaknesses, and interrelationships of the Auditory and Visual Response Control and Attention scales are reported and discussed below. The specific scales that comprise the Auditory and Visual Sustained Attention scales and their meanings are discussed in the sections related to the Primary Response Control and Attention scales. Also, a discussion is included in the sections below for the three Symptomatic scales: Comprehension, Stillness, and Sensory/Motor.

ATTENTION PRIMARY SCALES

Vigilance

Vigilance is a Primary scale that measures general attentional ability. Deficits in Vigilance result from errors of omission that occur under both high and low demand conditions.

This person's **Auditory Vigilance** quotient scale score was 83 (PR=14), which falls in the mildly impaired range. This individual showed some problems with her general auditory attentional functioning that is likely to occasionally impact her ability to perform successfully in some areas of her life.

This person's **Visual Vigilance** quotient scale score of 63 (PR=1) fell in the severely impaired range. Her general visual attentional functioning showed significant problems that are likely to have a major impact on her ability to perform successfully in many areas of her life.

Focus

This individual's **Auditory Focus** quotient scale score of 77 (PR=7) fell in the mildly to moderately impaired range. It was a challenge for her to stay focused on the task at hand when it involved a repetitive auditory attention exercise. Her occasional lapses in auditory attention are likely, at times, to impair her ability to perform in demanding situations or when stressed.

This person's **Visual Focus** quotient scale score of 72 (PR=3) fell in the moderately impaired range. This individual had problems staying focused to visual stimuli. These delays in processing visual test stimuli may have been due to deficits in her visual working memory or frequent momentary mental lapses.

Speed

This individual's **Auditory Speed** quotient scale score of 105 (PR=62) falls in the average range. This individual did not show any problems with her overall auditory processing speed. Her recognition reaction time falls within the average range. Her processing speed shows that she is able to perceive quickly and respond adequately to auditory stimuli.

She had an average **Visual Speed** quotient scale score of 97 (PR=42). No problems were found with her overall visual processing speed. Her recognition reaction time falls within the average range. Her processing speed shows that she is able to perceive quickly and respond adequately to visual stimuli.

RESPONSE CONTROL PRIMARY SCALES

Prudence

Prudence is a measure of impulsivity as defined by errors of commission. It is an important measure of performance related to response control and a Primary scale.

This individual's **Auditory Prudence** quotient scale score of 105 (PR=62) fell in the average range. This individual was found to be functioning in the average range with respect to her ability to inhibit responses to non-target auditory stimuli.

This person's **Visual Prudence** quotient scale score of 99 (PR=46) fell in the average range. No problems with inhibition to non-target visual stimuli were identified. This individual demonstrated an average ability to control her responses and inhibit appropriately to non-target visual stimuli.

Consistency

The Consistency scale is a general measure of an individual's ability to respond reliably based on her reaction time. Consistency is an important Primary scale for understanding and evaluating response control.

This individual was mildly to moderately impaired in her ability to be consistent in her responses to auditory stimuli. Her **Auditory Consistency** quotient scale score was 77 (PR=7). This individual will need to learn to ignore internal or external auditory distractions in order to improve her performance when sustained attention is required.

This individual's ability to be consistent in her responses to visual stimuli was extremely impaired. The **Visual Consistency** quotient scale score for this individual was

58 (PR=1). This individual's response times to visual stimuli were significantly inconsistent, reflecting her problems processing visual information.

Stamina

The Stamina scale is a measure of the individual's ability to sustain her speed of response time during the course of the test. This scale is a Primary scale and is an important measure of response control.

This individual's **Auditory Stamina** quotient scale score of 98 (PR=46) fell in the average range. This person's response time to auditory stimuli did not change significantly over the course of the test. She was able to maintain her mental processing speed in the auditory domain during the test. In a work setting, she is likely to be capable of meeting the demand to perform and to achieve goals in a timely manner. It would be rare for her not to get her work done unless other psychological or emotional factors are present that impair her functioning in other ways. Her work habits are likely to reflect the ability to persevere with respect to her auditory processing speed even when she is faced with challenging tasks.

She had an average **Visual Stamina** quotient scale score of 98 (PR=46). This person's response time to visual stimuli did not change significantly over the course of the test. She was able to maintain her mental processing speed in the visual domain during the test.

Fine Motor Hyperactivity

The Fine Motor Hyperactivity Quotient measures off-task, spurious, impulsive, and inappropriate fine motor activity using the mouse input device. Errors on this Primary scale are considered reflective of problems with fine motor self-control but do not reflect gross motor hyperactivity (i.e., "out of seat" behavior). A person who is squirmy, restless, or who doodles or fiddles with small objects may score low on this scale. These kinds of response tendencies may be described as fidgetiness and restlessness. Generally, high incidences of these behaviors are atypical. Quotient scores above the average range are considered reflective of better controlled and more self-regulated responses.

This person's **Fine Motor Hyperactivity** quotient scale score was 94 (PR=34). Her score fell in the average range.

SYMPTOMATIC SCALES

Comprehension

The Comprehension scale is a measure of idiopathic errors both of commission and omission occurring under both low and high demand conditions. It is one of the three Symptomatic scales and is useful in identifying factors that may impact performance or possibly reflect the test-taker's motivation toward taking and understanding the IVA-AE2 test.

This individual's **Auditory Comprehension** quotient scale score of 82 (PR=12) fell in the mildly impaired range. Some problems with functioning and performing adequately on the IVA-AE2 test were found for the Comprehension scale. These difficulties led to a mild degree of idiopathic errors during the test. Her response pattern suggests that she has some problems related to comprehension that may possibly affect her.

This individual's **Visual Comprehension** quotient scale score of 58 (PR=1) fell in the extremely impaired range. Severe problems were identified for this individual with respect

to the **Visual Comprehension scale**. She made a large number of idiopathic errors, showing significant trouble with test performance and difficulties in following the test rules.

Stillness

The Stillness Quotient measures the number of times the individual does not move the mouse input device during the main test section.

This person's **Stillness** quotient scale score was 109 (PR=73). Her score fell in the average range.

Sensory/Motor

This individual's **Auditory Sensory/Motor** quotient scale score of 110 (PR=76) fell in the above average range. This scale score was computed based on the mean of the five fastest reaction times of her auditory responses during the Warm-up test period. Her auditory simple reaction time was faster than most peers her age. This above average score on the Sensory/Motor scale indicates that she is likely to be able to process and respond quickly to auditory stimuli.

This person's **Visual Sensory/Motor** quotient scale score of 109 (PR=73) was in the average range. The mean of her five fastest visual reaction times during the Warm-up test period was used in determining this scale score. This individual's visual simple reaction time revealed her to be similar in performance to most other people her age.

IVA-AE2 WORKING DIAGNOSIS

These test findings suggest that the examiner consider the possible diagnosis of **Attention-Deficit/Hyperactivity Disorder, predominantly inattentive presentation**. This individual's pattern of responding was indicative of impairments likely to impact her functioning in the home and work settings. The Parent Rating Scales identified a significant number of inattentive and hyperactive/impulsive symptoms. The IVA-AE2 test results, combined with the rating scale data, suggest that the clinician consider the alternative diagnosis of **Attention-Deficit/Hyperactivity Disorder, combined presentation**. In making this diagnosis, the examiner will need to assess the validity of the hyperactive/impulsive behaviors identified by the Parent Rating scales, because the IVA-AE2 test results did not show impairments in response control.

In addition, it is necessary to determine the occurrence of several inattentive or hyperactive/impulsive symptoms before the age of twelve in order to diagnose ADHD for adolescents or adults. Since the examiner did not identify whether this individual had ADHD symptoms when she was a child, it is essential that the examiner clarify this individual's clinical history in order to make a definitive diagnosis.

Her global Attention quotient scale score fell in the moderately to severely impaired range. Her global Response Control quotient scale score indicated a mild impairment. However, she was not identified as making an excessive number of impulsive errors during the test. These IVA-AE2 findings provide support for the above possible diagnosis.

I have reviewed this interpretive report and have modified it as necessary in accordance with my comprehensive evaluation, the client's history and other relevant clinical data.

Signature John A. Smith, Ph.D.

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Title Clinical Psychologist