

# **SAMPLE IVA-2 Detailed Report**

Name: Case, Sample

Age: 31 Sex: M Report Date: 11/5/2014 Test Date: 11/3/2014 03:10 PM On Meds: N

## **OVERVIEW OF THE IVA-2 CPT AND GENERAL INTERPRETIVE GUIDELINES**

This IVA-2 Detailed Report was created in order to help the examiner interpret the IVA-2 test results. The Detailed Report provides important information needed to help guide the clinician in formulating likely diagnoses for individuals who have ADHD-type symptoms. Detailed descriptions of the test scales are provided in this report. Suggested recommendations based on identified strengths and deficits are also provided that may prove helpful for this individual.

The IVA-2 CPT (Integrated Visual & Auditory 2 Continuous Performance Test) is a test of attention and impulsivity that measures responses to 500 intermixed auditory and visual stimuli spaced 1.5 seconds apart. The task is to click the mouse to the target stimuli which is either an auditory or visual "1" and to refrain from clicking when the foil stimulus (i.e., an auditory or visual "2") is presented. The quotient scores for all of the IVA-2 scales are reported as standard scores (Mean = 100, SD = 15). The percentile ranks for the standard scores are also reported. The test lasts about fifteen minutes.

This interpretive report is designed to aid qualified healthcare professionals in their diagnostic decision making process. It 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. These psychological test results and the interpretive guidelines provided can to be used by examiners in formulating possible diagnoses, but 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-2 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 the determination of 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-2 TEST RESULTS**

There are two separate validity checks for this test. First, during the Warm-up and Cool-down phases of the test, the individual must demonstrate comprehension of the test instructions by clicking correctly to simple visual and auditory test targets at least three 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 both the Warm-up and Cool-down phases of this test,

this individual made valid responses to auditory stimuli. He also made valid responses to visual stimuli during the Warm-up and Cool-down phases. The quotient scores and simple reaction times for these scales are provided in the Standard Scale Analysis. Since he was able to validly respond to both sensory modalities during the Warm-up and/or Cool-down phases, the

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 his responses to either visual or auditory test stimuli. The examiner can proceed in an interpretation of all visual and auditory test scores without reservation.

## **IVA-2 INTERPRETIVE GUIDELINES**

### **MALINGERING EVALUATION**

In respect to the IVA-2, malingering is defined as deliberately making test responses that feign impairments of attention or response control for personal gain. Published research has found that individuals who malingering on this test produce extreme quotient scale scores. Such intentionally impaired scores result from an excessive number of omission, commission, or idiopathic response errors. This pattern of response errors is rarely observed for individuals who have been diagnosed as having ADHD, unless they have severe to extreme ADHD symptoms or other significant cognitive deficits. Nevertheless, the determination of malingering requires that a clinical decision be made by the examiner. In most cases, additional tests of malingering will need to be administered in order to accurately identify its occurrence. Neither the Visual nor the Auditory Malingering Indicators identified this individual as malingering on the IVA-2.

### **SUMMARY OF TEST RESULTS FOR THE IVA-2 GLOBAL SCALES**

This individual's overall global quotient scale score for the **Full Scale Response Control** scale was 112 (PR=79). This score fell in the above average range. His **Auditory Response Control** quotient scale score was 97 (PR=42). This global scale score fell in the average range. The **Visual Response Control** quotient scale score for this individual was 122 (PR=93). This global scale score fell in the superior range. This individual's overall quotient score on the **Full Scale Attention** scale was 83 (PR=14). This global scale score fell in the mildly impaired range. His **Auditory Attention** quotient scale score was 102 (PR=54), and this global scale score fell in the average 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 88 (PR=21). This score fell in the slightly impaired range. His global **Auditory Sustained Attention** quotient scale score was 123 (PR=93), and it fell in the superior range. The global **Visual Sustained Attention** quotient scale score for this individual was 51 (PR=1). This score was found to fall in the extremely 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, Persistence, 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 105 (PR=62), which falls in the average range. This individual did not show any problems with his general auditory attentional functioning. This person's **Visual Vigilance** quotient scale score of 36 (PR=1) fell in the extremely impaired range. His general visual attentional functioning showed significant problems that are likely to have a major impact on his ability to perform successfully in many areas of his life.

### Focus

This individual's **Auditory Focus** quotient scale score of 70 (PR=2) fell in the moderately to severely impaired range. At times this individual showed difficulty due to delays and variability in his response time to auditory test stimuli. His pattern of responding indicated that his attention frequently "drifted off." This problem may be due to deficits in auditory working memory or to difficulty in maintaining focus to auditory stimuli during the test. This person's **Visual Focus** quotient scale score of 89 (PR=24) fell in the slightly impaired range. Most of the time this individual is able to process and stay focused on visual stimuli. Infrequent lapses in visual response times were found. These lapses in visual processing may be due to slight fatigue or to a preoccupation with distracting thoughts.

### Speed

This individual's **Auditory Speed** quotient scale score of 130 (PR=98) falls in the exceptional range. This individual showed a strength in his overall auditory processing speed. His recognition reaction time falls within the exceptional range. His processing speed shows that he is exceptional with respect to his ability to perceive and respond to auditory stimuli. He had an above average **Visual Speed** quotient scale score of 110 (PR=76). His recognition reaction time falls within the above average range. His processing speed shows that he is above average with respect to his ability to perceive and respond to visual stimuli. This represents a relative strength for him.

## 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 his ability to inhibit responses to non-target auditory stimuli. This person's **Visual Prudence** quotient scale score of

95 (PR=38) fell in the average range. No problems with inhibition to non-target visual stimuli were identified. This individual demonstrated an average ability to control his 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 his reaction time. Consistency is an important Primary scale for understanding and evaluating response control. This individual was mildly impaired in his ability to be consistent in his responses to auditory stimuli. His **Auditory Consistency** quotient scale score was 80 (PR=10). This individual will need to learn to ignore internal or external auditory distractions in order to improve his performance when sustained attention is required. This individual's ability to be consistent in his responses to visual stimuli was exceptional. The **Visual Consistency** quotient scale score for this individual was 133 (PR=99). Even under distracting conditions or when stressed, this individual is likely to be consistent in his reaction time to visual stimuli. Working memory and the ability to sustain internal attention are indicated as areas of strength.

### **Stamina**

The Stamina scale is a measure of the individual's ability to sustain his 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 110 (PR=76) fell in the above average range. This person's response time to auditory stimuli became faster over the course of the test. He was able to increase his mental processing speed in the auditory domain during the test. He had an above average **Visual Stamina** quotient scale score of 114 (PR=82). He was able to increase his 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, except for children age 13 and under and individuals over age 55. 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 108 (PR=69). His 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-2 test. This individual's **Auditory Comprehension** quotient scale score of 106 (PR=66) fell in the average range. No major problems with functioning and performing adequately on the IVA-2 test were found for the Auditory Comprehension scale. Overall, he performed well with respect to his ability to follow the test rules. He did not demonstrate any significant problems with respect to the Auditory Comprehension scale that would impact his life. This individual's **Visual Comprehension** quotient scale score of 101 (PR=54) fell in the average range. His Visual Comprehension scale did not indicate any major problems. Overall, he performed well with respect to his ability to follow the test rules. No significant impacts in his life should be expected with respect to Visual Comprehension.

### **Persistence**

This individual's **Auditory Persistence** quotient scale score of 92 (PR=31) fell in the average range. There was no significant difference in his auditory reaction time during the Cool-down as compared to the Warm-up. Thus, his quotient score on the Persistence scale did not indicate any problems with his motivation that would impair his functioning on the IVA-2 test. This person's **Visual Persistence** quotient scale score of 104 (PR=62) fell in the average range. No significant difference was found in his visual reaction time during the Cool-down as compared to the Warm-up. Thus, his quotient score on the Persistence scale did not indicate any problems with his motivation that would impact his functioning on the IVA-2 test.

### **Sensory/Motor**

This individual's **Auditory Sensory/Motor** quotient scale score of 119 (PR=90) fell in the above average range. This scale score was computed based on the mean of the three fastest reaction times of his auditory responses during the Warm-up test period. His auditory simple reaction time was faster than most peers his age. This above average score on the Sensory/Motor scale indicates that he is likely to be able to process and respond quickly to auditory stimuli. This person's **Visual Sensory/Motor** quotient scale score of 106 (PR=66) was in the average range. The mean of his three 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 him to be similar in performance to most other people his age.

## **IVA-2 CLINICAL INTERPRETATION**

These test findings suggest that the examiner consider a possible diagnosis of **Attention-Deficit/Hyperactivity Disorder, predominantly inattentive presentation**. This individual's pattern of responding was indicative of impairments likely to impact his functioning in the home and work settings. However, 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 he was a child, it is essential that the examiner clarify this individual's clinical history in order to make a definitive diagnosis. It will also be necessary for the examiner to rule

out **Mild neurocognitive disorder** and other mental disorders as possible underlying causes for this individual's ADHD symptoms.

His global Full Scale Attention quotient scale score indicated a mild impairment that supported the above possible diagnosis. Even though this individual's global Full Scale Response Control quotient scale score did not indicate a significant impairment in functioning, his global Sustained Visual Attention quotient scale score did reveal an extreme impairment. While a problem was identified for this individual in respect to his Sustained Visual Attention quotient scale score, his Sustained Auditory Attention quotient scale score was not found to be impaired and fell in the superior range. He was also not identified as making an excessive number of impulsive errors during the test. In summary, these IVA-2 findings identified relevant impairments in functioning that provide support for the above diagnosis under consideration.

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