

Dr Thomas Dannhauser PhD, MRCPsych MBChB

Consultant & Honorary Senior Lecturer in Psychiatry

Secretary: Rosie Bramley
T: 020 8819 3884
E: contact@drthomas.london
All correspondence to:
The Holly Private Hospital
High Road
Buckhurst Hill
Essex IG9 5HX

IVA-2 Detailed Report

Name: Jane Doe

Age: 37 Sex: F Report Date: 20/03/2023 Test Date: 20/03/2023 09:57 AM On Meds: U

OVERVIEW OF THE IVA-2 CPT AND GENERAL INTERPRETIVE GUIDELINES

This IVA-2 Detailed Report requires the test to be administered in accordance with the specified test guidelines under the supervision of a licensed health care professional who is qualified in the use and interpretation of psychological tests. The test is not to be used as a standalone diagnostic instrument. By itself, it does not identify the presence or absence of any clinical diagnosis. The function of the IVA-2 CPT is to aid examiners in making their diagnosis as part of a comprehensive evaluation of clients who present with ADHD-type symptoms. The relevant strengths and weaknesses for each of the Attention and Response Control Global Scales will be reviewed. Detailed descriptions of the test scales are included in this report.

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 main test lasts about twelve minutes.

In accordance with professional standards this confidential report is only to be distributed to others after it has been carefully reviewed, modified as needed, and signed by the examiner. The report provides interpretive suggestions and hypotheses for the examiner to consider, but it is not to be construed as prescriptive, definitive, or diagnostic. The clinical determinations that are indicated by the test results 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 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-2 TEST RESULTS

The IVA-2 test was taken on the Web. 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 Sensory/Motor 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. She 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 she was able to validly respond to both sensory modalities during the Warm-up and/or Cool-down phases, 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-2 GLOBAL SCALES

This individual's overall global quotient scale score for the **Full Scale Response Control** scale was 84 (PR=14). This score fell in the mildly impaired range. Her **Auditory Response Control** quotient scale score was 95 (PR=38). This global scale score fell in the average range. The **Visual Response Control** quotient scale score for this individual was 79 (PR=8). 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 61 (PR=1). This global scale score fell in the severely impaired range. Her **Auditory Attention** quotient scale score was 33 (PR=1), and this global scale score fell in the extremely impaired range. The **Visual Attention** quotient scale score for this individual was 105 (PR=62). This global scale score was classified as falling in the average range.

This individual's global quotient score on the **Combined Sustained Attention** scale was 49 (PR=1). This score fell in the extremely impaired range. Her global **Auditory Sustained Attention** quotient scale score was 0 (PR=1), and it fell in the extremely impaired range. The global **Visual Sustained Attention** quotient scale score for this individual was 99 (PR=46). This score was found to fall in the average 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 0 (PR=1), which falls in the extremely impaired range. This individual showed significant problems with her general auditory attentional functioning that are likely to have a major impact on her ability to perform successfully in many areas of her life.

This person's **Visual Vigilance** quotient scale score of 107 (PR=69) fell in the average range. This individual did not show any problems with her general visual attentional functioning.

Focus

This individual's **Auditory Focus** quotient scale score of 47 (PR=1) fell in the extremely impaired range. Frequent delays in her response times to auditory test stimuli were found. This is likely to significantly impact her ability to process information.

This person's **Visual Focus** quotient scale score of 90 (PR=24) fell in the average range. No problems were found for her with visual focus. During the IVA-2 test, her response times were not excessively variable. She demonstrated that she could cope well with both internal and external visual distractions and stay focused visually.

Speed

This individual's **Auditory Speed** quotient scale score of 113 (PR=82) falls in the above average range. This individual showed a strength in her overall auditory processing speed. Her recognition reaction time falls within the above average range. Her processing speed shows that she is above average with respect to her ability to perceive and respond to auditory stimuli.

She had an above average **Visual Speed** quotient scale score of 111 (PR=76). Her recognition reaction time falls within the above average range. Her processing speed shows that she is above average with respect to her ability to perceive and respond to visual stimuli. This represents a relative strength for her.

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 99 (PR=46) 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 67 (PR=1) fell in the severely impaired range. She clicked impulsively a significant number of times to the non-target visual stimuli. This weakness with response control indicates that this person is likely to be distracted by or over reactive to visual stimuli in her environment.

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 moderately to severely impaired in her ability to be consistent in her responses to auditory stimuli. Her **Auditory Consistency** quotient scale score was 71 (PR=3). Internal or external auditory distractions may impair her ability to maintain her optimal functioning and be able to listen well. Reducing the auditory distractions in her home and work environment may prove beneficial for her.

This individual's ability to be consistent in her responses to visual stimuli was average. The **Visual Consistency** quotient scale score for this individual was 94 (PR=34). Visual distractions are not generally a problem for this individual. She is able to be reliable and consistent in her responses to visual stimuli and can also ignore visual diversions.

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 120 (PR=90) fell in the superior range. This person's response time to auditory stimuli became faster over the course of the test. She was able to increase her mental processing speed in the auditory domain during the test.

She had an average **Visual Stamina** quotient scale score of 99 (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, 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 96 (PR=38). 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-2 test.

This individual's **Auditory Comprehension** quotient scale score of 51 (PR=1) fell in the extremely impaired range. Severe problems were identified for this individual with respect to the **Auditory Comprehension** scale. She made a large number of idiopathic errors, showing significant trouble with test performance and difficulties in following the test rules.

This individual's **Visual Comprehension** quotient scale score of 85 (PR=16) fell in the slightly impaired range. Generally, she exhibited only slight problems with functioning adequately in terms of the Visual Comprehension scale. Overall, these problems indicate that she had some periods during the test when she did not completely follow the test rules and made a few "oddball" visual responses. Her response pattern indicates that she is not very likely to have difficulties related to visual comprehension unless she is stressed or significantly fatigued.

Persistence

This individual's **Auditory Persistence** quotient scale score of 76 (PR=5) fell in the mildly to moderately impaired range. She was slower in her auditory reaction time during the Cool-down as compared to the Warm-up period. This slower reaction time after the main section of the IVA-2 test indicates the possibility of some motor or mental fatigue for auditory stimuli.

This person's **Visual Persistence** quotient scale score of 100 (PR=50) fell in the average range. No significant difference was found in her visual reaction time during the Cool-down as compared to the Warm-up. Thus, her quotient score on the Persistence scale did not indicate any problems with her motivation that would impact her functioning on the IVA-2 test.

Sensory/Motor

This individual's **Auditory Sensory/Motor** quotient scale score of 118 (PR=88) fell in the above average range. This scale score was computed based on the mean of the three 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 107 (PR=69) was in the average range. The mean of her 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 her to be similar in performance to most other people her age.

IVA-2 DIAGNOSTIC CONSIDERATIONS

These test findings suggest that the examiner consider the diagnosis of **Attention-Deficit/Hyperactivity Disorder, combined presentation**, and this individual's pattern of responding was indicative of impairments likely to impact her 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 clinically 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. It will also be necessary

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



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.

Dr Thomas Dannhauser Ph.D, MRCPsych, MBChB
Consultant and Honorary Senior Lecturer in Psychiatry

Sample Report

IVA-2 Standard Scale Analysis

Name: Doe, Jane

Test Date: 20/03/2023 09:57

Age: 37

DOB: 25/05/1987

Sex: F

On Meds: U

Highest Education:

Examiner ID: Unknown

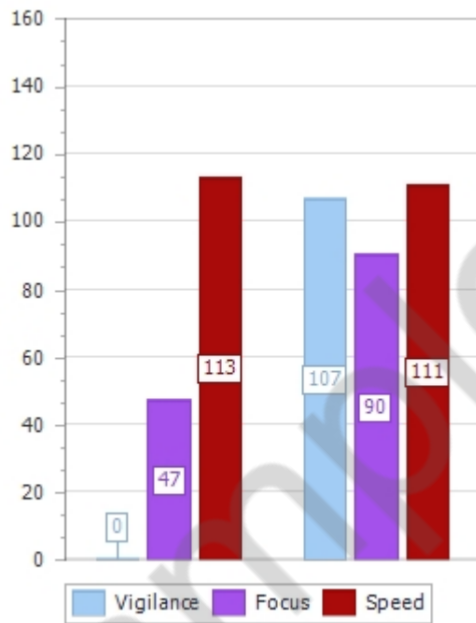
FS Attention Quotient = 61

Auditory

Visual

AQ = 33

AQ = 105



FS Response Control Quotient = 84

Auditory

Visual

RCQ = 95

RCQ = 79



Sustained Auditory Attention Quotient = 0

Sustained Visual Attention Quotient = 99

Auditory Response Validity Check: Valid

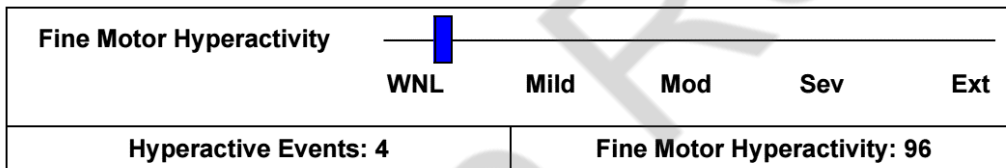
Visual Response Validity Check: Valid

Attention Factor: Positive

Impulsive Hyperactivity Factor: Positive

Auditory		ATTENTION		Visual
Raw	Quotient	Primary Scales	Quotient	Raw
88.9%	0	Vigilance	107	100.0%
58.6%	47	Focus	90	77.9%
514 ms	113	Speed	111	381 ms

Auditory		RESPONSE CONTROL		Visual
Raw	Quotient	Primary Scales	Quotient	Raw
97.3%	99	Prudence	67	90.8%
69.4%	71	Consistency	94	76.4%
107.6%	120	Stamina	99	97.9%



Symptomatic	Raw	Quotient	WNL	Mild	Mod	Sev	Ext
Comprehension (A)	96.2%	51					
Comprehension (V)	98.6%	85					
Persistence (A)	67.7%	76					
Persistence (V)	98.8%	100					
Sensory/Motor (A)	169 ms	118					
Sensory/Motor (V)	213 ms	107					

Test Version IVA-2 2020.1

Device: Web