

Conners CPT 3™, Conners CATA™, and Conners K-CPT 2™: Introduction and Application

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DISCLOSURE

I am employed by Multi-Health Systems (MHS) the publisher of the assessments we will discuss today.



Overview of Presentation

- What is a Continuous Performance Test (CPT)
- Benefits of CPTs
- Conners CPT-3 Overview & Demo
- Conners CATA Overview & Demo
- Standardization & Basic Psychometrics
- Case Study: Interpretation and Report Features
- Brief Overview of Conners K-CPT 2
- Questions



CONNERS
CPT 3
Conners Continuous
Performance Test 3rd Edition

CONNERS
CATA
Conners Continuous
Auditory Test of Attention

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What is a Continuous Performance Test (CPT)?

- Performance/Task based assessment that measures different areas of attention such as sustained attention, inattentiveness, impulsivity, and vigilance
- Provides **objective** information regarding an individual's attentional difficulties
- Clients presented with repetitive boring task and must maintain their focus over a period of time in order to respond to targets or inhibit response to non-targets

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Why should we be interested in utilizing the Conners CPT-3 and Conners CATA?

- Objective measure
- Performance based task: engages students/patients/clients and helps build rapport
- Helps pinpoint type of attention problem
- Increases diagnostic and classification accuracy when paired with other assessment measures



Why should I be interested in the CPT-3 and CATA?

Classification Statistic	Conners 3-P	Conners 3-P & Conners CATA	Conners 3-P & Conners CPT 3	Conners 3-P, Conners CPT 3 & Conners CATA
Overall Correct Classification (%)	83.9	88.4	88.4	93.8
Sensitivity (%)	86.0	91.2	89.5	94.7
Specificity (%)	81.8	85.5	87.3	92.7



Conners Continuous Performance Test 3rd Edition (Conners CPT 3™)

CONNERS
CPT 3
Conners Continuous
Performance Test 3rd Edition

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Conners CPT-3 Key Features

- Ages 8+; assesses attention related problems
- 14 minutes; in addition to 1 minute practice test
- Non-X paradigm: ignore X and respond to all other targets
- High proportion of targets to non-targets
- Varied time intervals between targets (1, 2, or 4 sec ISI)
- By-Block statistics (6 blocks with 60 trials each)
- Practice Test
- Can be part of a battery of assessments for ADHD and other disorders/neurological problems characterized by attention problems

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CPT 3
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What does the Conners CPT-3 measure?

- Assesses attention related problems
- Examines four dimensions of attention:
 1. Inattentiveness
 2. Impulsivity
 3. Sustained Attention
 4. Vigilance
- Validity Check
- Response Style Analysis:
 1. Liberal
 2. Conservative
 3. Balanced

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Conners Continuous Performance Test, 3rd Edition

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Conners Continuous Attention Test, 3rd Edition

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CPT 3 Scores

Variable	Description
C	Assesses Response Style
d'	Ability to discriminate between targets (non-X) and non-targets (X)
Omissions	Missed targets (non-X)
Commissions	Incorrect responses to non-targets (X)
Perseverations	Random, repetitive, or anticipatory responses (i.e., HRT < 100ms)
Hit Reaction Time (HRT)	Response Speed
HRT SD/Variability	Response Speed Consistency
HRT Block Change	Change in HRT across blocks of trials
HRT ISI Change	Change in HRT across ISIs

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CPT 3
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CPT-3 Scores

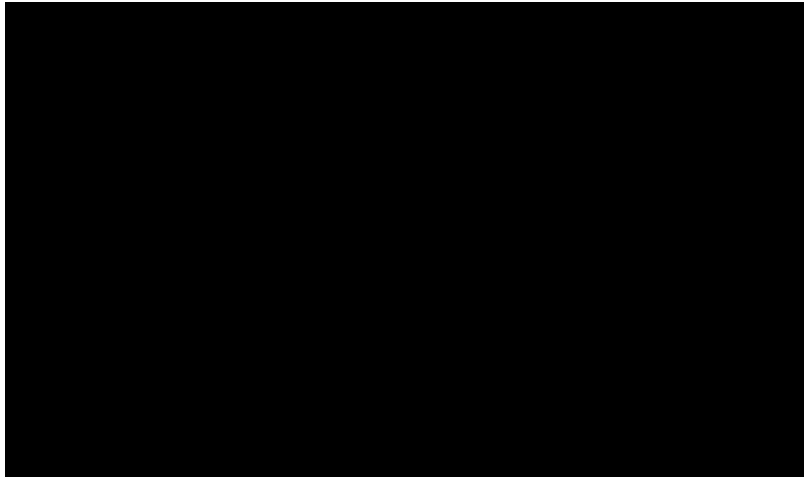
Dimension	Score	Description
Inattentiveness	Detectability (d')	Ability to discriminate between targets (non-X) and non-targets (X)
	Omissions	Missed targets
	Commissions	Incorrect responses to non-targets
	Hit Reaction Time (HRT)	Response speed
	HRT Standard Deviation (SD)	Response speed consistency
Impulsivity	Variability	Variability of response speed consistency
	HRT	Response speed
	Commissions	Incorrect responses to non-targets
Sustained Attention	Perseverations	Random or anticipatory responses (i.e., HRT < 100ms)
	HRT Block Change	Change in response speed across blocks of trials
	Omissions by block	Missed targets by block
Vigilance	Commissions by block	Incorrect responses to non-targets by block
	HRT Inter-Stimulus Interval (ISI) Change	Change in response speed at various ISIs
	Omissions by ISI	Missed targets by ISI
	Commissions by ISI	Incorrect responses to non-targets by ISI

Administration

Hardware and Software Requirements

- Intel Core i3 or equivalent performance (recommended)
- 2 GB Ram
- Windows XP or higher
- 1 available USB port
- 12" monitor or larger with minimum resolution of 1024 x768 pixels
- Wired mouse or keyboard

Demonstration of CPT-3



CONNERS
CPT3
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New Auditory Test of Attention

**Conners Continuous
Auditory Test of Attention
(Conners CATA™)**

CONNERS
CPT3
Conners Continuous
Performance Test 3rd Edition

CONNERS
CATA
Conners Continuous
Auditory Test of Attention

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CATA Key Features

- Ages 8+
- Assesses auditory attention and attention problems
- Can be used on its own or as a compliment to the CPT-3 in an assessment battery
- 14 minutes, 200 scored trials, divided into 4 blocks
- Consists of two basic sounds: a low tone and a high tone
- On 80 percent of the trials, the low tone is played first followed by a high tone (warned trial). High tones on warned trials are the targets (AX paradigm)

CATA-Key Features

- On remaining 20 percent of the trials, a high tone is played alone without the low tone (unwarned trial). High tones on unwarned trials are non-targets.
- On most warned trials, the two tones are played sequentially in same ear (non-switch trial)
- On some warned trials, the two tones are played in opposite ears (switch trials)

What does the Conners CATA measure?

- Assesses *auditory processing* and *attention-related* problems in individuals aged 8 years and older
- Examines three dimensions of attention:
 1. Inattentiveness
 2. Impulsivity
 3. Sustained Attention
- Examines two dimensions of auditory processing:
 1. Auditory Laterality
 2. Auditory Mobility
- Validity Check
- Response Style Analysis:
 1. Liberal
 2. Conservative
 3. Balanced

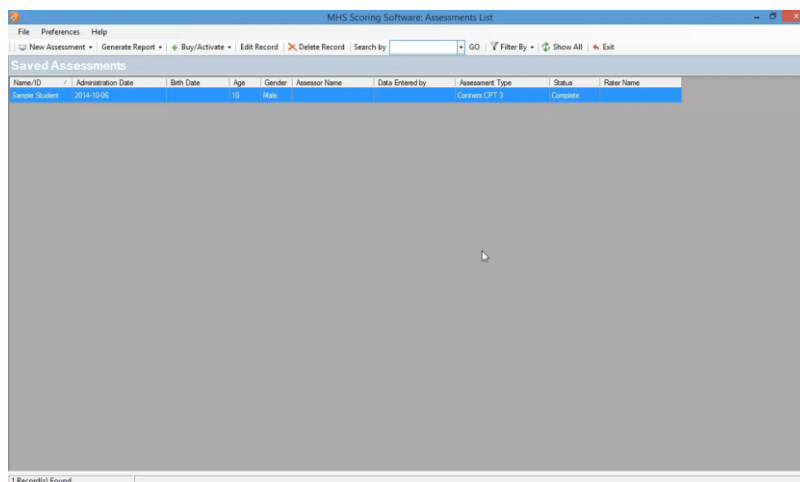
Conners CATA Scores

Variable	Description
C	Assesses Response Style
d'	Ability to discriminate targets (warned high tone) from non-targets (unwarned high tone)
Omissions	Missed targets (warned high tone)
Commissions	Responded to non-targets (unwarned high tone)
Perseverative Commissions	Responded to low sound/Responded before the high sound
HRT	Hit React Time
HRT SD	Response Speed Consistency
HRT Block Change	Change in HRT across blocks
Laterality	HRT & Hits % Left vs. Right Ear (Preference for left vs. right targets)
Mobility	HRT & Hits% on Switch vs. Non Switch Trials (Ability to switch attention from one ear to another)

CATA Scores

Dimension	Score	Description
Inattentiveness	Detectability (d')	Ability to discriminate targets (warned high tone) from non-targets (unwarned high tone)
	Omissions	Missed targets
	Commissions	Incorrect responses to non-targets
	Hit Reaction Time (HRT)	Response speed
	HRT Standard Deviation (SD)	Response speed consistency
Impulsivity	HRT	Response speed
	Commissions	Incorrect responses to non-targets
	Perseverative Commissions	Incorrect responses before targets
Sustained Attention	HRT Block Change	Change in response speed across blocks of trials
	Omissions by block	Missed targets by block
	Commissions by block	Incorrect responses to non-targets by block
Auditory Laterality	HRT & Hits% Left vs. Right Ear	Preference for left vs. right targets
Auditory Mobility	HRT & Hits% on Switch vs. Non Switch Trials	Ability to switch attention from one ear to the other

Demonstration of the CATA



Conners CPT 3 & Conners CATA

Standardization & Basic Psychometrics



Sample Descriptions

Conners CPT-3

- Normative Sample:
 - $N = 1,400$ (700 male, 700 female)
 - Spread across the ages
 - 2010 Census Match: Race, Region, (Parental) Education Level
- ADHD Sample:
 - 259 children, 97 adults
 - 62% male
 - 60% medicated

Conners CATA

- Normative Sample:
 - $N = 1,080$ (540 male, 540 female)
 - Spread across the ages
 - 2010 Census Match: Race, Region, (Parental) Education Level
- ADHD Sample:
 - 193 cases
 - 64% male
 - 63% children (age 8-17)



Conners CPT 3 Split-half Reliability

Variable Type	Measure	Normative		Clinical	
		Children	Adults	Children	Adults
		N = 775-800	N = 591-600	N = 314-349	N = 134-145
Detectability	d'	.95	.92	.95	.94
Error Type	Omissions	.94	.96	.97	.95
	Commissions	.94	.91	.92	.95
	Perseverations	.90	.73	.95	.90
Reaction Time Statistics	HRT	.99	.99	.98	.99
	HRT SD	.96	.95	.97	.97
	Variability	.80	.73	.85	.79
	Block Change	.90	.91	.80	.91
	ISI Change	.90	.93	.91	.93
Response Style	C	.87	.83	.89	.92

Conners CPT 3 Test-retest Reliability

Variable Type	Measure	Corr* N =120
Detectability	d'	.74**
Error Type	Omissions	.83**
	Commissions	.85**
	Perseverations	.48**
Reaction Time Statistics	HRT	.89**
	HRT SD	.68**
	Variability	.56**
	HRT Block Change	.12
	HRT ISI Change	.66**
Response Style	C	.63**

*Range restriction corrections applied

CATA Split-half Reliability

Variable Type	Measure	Normative		Clinical	
		Children	Adults	Children	Adults
		N = 565-600	N = 462-480	N = 109-122	N = 66-71
Detectability	d'	.97	.98	.96	.93
Error Type	Omissions	.93	.94	.98	.97
	Commissions	.99	.99	.93	.88
	Perseverations	.99	.99	.99	.99
Reaction Time Statistics	HRT	.91	.93	.98	.99
	HRT SD	.86	.90	.81	.95
	Block Change	.96	.95	.90	.92
Response Style	C	.90	.93	.91	.90

CATA Test-retest Reliability

Variable Type	Measure	Corr* N =120
Detectability	d'	.74**
Error Type	Omissions	.65**
	Commissions	.72**
	Perseverations	.95**
Reaction Time Statistics	HRT	.56**
	HRT SD	.63**
	HRT Block Change	.12
Response Style	C	.14

*Range restriction corrections applied

Conners CPT 3 - Group Differences

ADHD vs General Population

Measure		ADHD	Matched Gen. Pop.	Cohen's <i>d</i>	<i>p</i>
		<i>N</i> = 341-346	<i>N</i> = 340-346		
d'	<i>M</i>	-1.9	-2.3	0.43	< .001
	<i>SD</i>	1.0	1.0		
Omissions	<i>M</i>	4.6	3.1	0.25	.001
	<i>SD</i>	6.2	6.2		
Commissions	<i>M</i>	50.1	43.0	0.35	< .001
	<i>SD</i>	20.3	20.3		
Perseverations	<i>M</i>	1.2	0.5	0.38	< .001
	<i>SD</i>	1.7	1.7		
HRT	<i>M</i>	418.7	410.6	0.10	.186
	<i>SD</i>	80.9	80.9		
HRT SD	<i>M</i>	0.305	0.258	0.49	< .001
	<i>SD</i>	0.095	0.095		
Variability	<i>M</i>	0.085	0.069	0.42	< .001
	<i>SD</i>	0.038	0.038		
HRT Block Change	<i>M</i>	0.008	0.003	0.21	.002
	<i>SD</i>	0.023	0.023		
HRT ISI Change	<i>M</i>	0.068	0.059	0.22	.004
	<i>SD</i>	0.042	0.042		






Conners CATA - Group Differences

ADHD vs General Population

Score		ADHD	Matched General Population	<i>F</i>	<i>p</i>	Cohen's <i>d</i>
		<i>N</i> = 183-193	<i>N</i> = 190-193			
d'	<i>M</i>	-2.4	-3.2	36.6	< .001	0.57
	<i>SD</i>	1.5	1.3			
Omissions	<i>M</i>	6.8	5.4	1.2	.274	0.10
	<i>SD</i>	13.1	12.1			
Commissions	<i>M</i>	19.0	8.2	43.9	< .001	0.63
	<i>SD</i>	17.9	16.5			
Perseverative Commissions	<i>M</i>	7.7	3.8	7.6	.006	0.26
	<i>SD</i>	15.5	14.3			
HRT	<i>M</i>	693.6	658.1	2.9	.089	0.16
	<i>SD</i>	230.7	212.6			
HRT SD	<i>M</i>	0.350	0.303	13.8	< .001	0.35
	<i>SD</i>	0.140	0.129			
HRT Block Change	<i>M</i>	0.017	0.007	1.8	.182	0.13
	<i>SD</i>	0.082	0.077			






7 Step Interpretation Process

Step 1: Determine Validity of the Administration

Step 2: Review Response Style Analysis

Step 3: Examine the Overview of Scores

Step 4: Review the Overall Summary and Clinical Likelihood

Step 5: Examine the Individual Dimensions of Attention

Step 6: Integrate Results with Multiple Sources

Step 7: Report Results



Case Study

- Grant S.
- 10-year-old boy
- Fell behind in school work
- Often seemed distracted and had problems remembering learned materials
- Some ADHD in family history
- Tested for attention deficits using CPT 3 and CATA



Assessment Plan

1. Clinician to review all available information
2. Obtain primary and differential diagnosis as well as to establish a general picture of Grant's mental and overall health status
3. Administer the following assessments: Conners CPT 3, Conners –March Developmental Questionnaire (CMDQ), Conners 3rd Edition (Conners 3-Parent, Teacher, Self), Conners CATA
4. Systematic clinical interview



Case Study

Introduction **MHS**

The Conners Continuous Performance Test 3rd Edition (Conners CPT 3rd) assesses attention-related problems in individuals aged 8 years and older. During the 14 minutes, 100 trial administration, respondents are required to respond when an item appears, except the non-target letter "X". The indexing the respondent's performance in areas of inattentiveness, impulsivity, sustained attention, and vigilance, the Conners CPT 3rd serves as a useful adjunct to the process of diagnosing Attention Deficit/Hyperactivity Disorder (ADHD), as well as other psychological and neurological conditions related to attention.

Validity of Administration

The Conners CPT 3rd performance validity checks, based on the number of hits and omission errors committed, as well as a self-reported check of the accuracy of the timing of each administration. If there is an invalid score number of hits to complete scores, and/or if the omission error rate exceeds 20%, then scores will be flagged. Also, the program will issue a warning message stating that the administration was invalid if a timing issue is detected.

There was no indication of any validity issues; the current administration should be considered valid.

Response Style Analysis

The results of response style analysis are used to identify response styles in tasks that involve a speed-accuracy trade-off. Based on his or her score on this analysis, a respondent can be classified as being one of the following three response styles: a conservative style (Conners CPT 3rd of responding that attention-related accuracy was good), a liberal style (Conners CPT 3rd of responding that attention-related accuracy was poor), or a balanced style (Conners CPT 3rd of responding that attention-related accuracy was good and average). Based on their response style, respondents are able to improve their performance accuracy over speed of error. For more information, see the manual. This response style is often associated with other machine scores, such as commission errors (failure to respond to targets), and error commission errors (commission responses to non-targets). The influence of Grant's conservative response style on other Conners CPT 3rd scores should be taken into consideration throughout the interpretation process.

T-score Guidelines

The guidelines in the following table apply to all T-scores in this report.

Range		For HI Response Time (part)	Guidelines	
75+	Very High	Very High	75+	Very Elevated
60-69	High	High	60-69	Elevated
55-59	A Little High	Average	55-59	High Average
45-54	Average	Average	45-54	Average
40-44	A Little Low	Low	<40	Low
<40	Very Low	Very Low	<40	Very Low

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Conners CPT 3 Report, Sheet 6



Case Study

- Step 1: Validity of Administration

Validity of Administration

The Conners CPT 3 performs a validity check based on the number of hits and omission errors committed, as well as a self-diagnostic check of the accuracy of the timing of each administration. If there is an insufficient number of hits to compute scores, and/or if the omission error rate exceeds 25%, these issues will be noted. Also, the program will issue a warning message noting that the administration was invalid if a timing issue is detected.

There was no indication of any validity issues; the current administration should be considered valid.

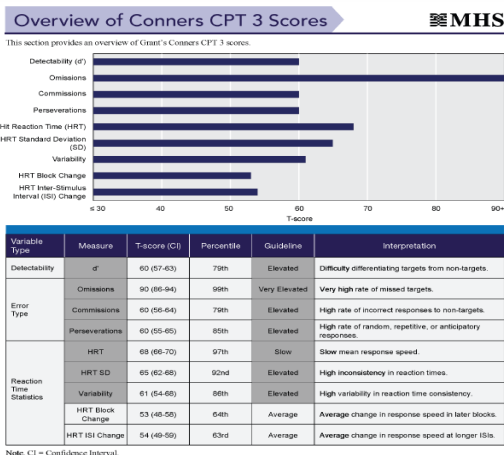
Case Study

- Step 2: Response Style Analysis

Response Style Analysis

The variable *C* represents an individual's natural response style in tasks that involve a speed-accuracy trade-off. Based on his or her score on this variable, a respondent can be classified as having one of the following three response styles: a **conservative** style (T-score ≥ 60) of responding that emphasizes accuracy over speed; a **liberal** style (T-score ≤ 40) of responding that emphasizes speed over accuracy; or a **balanced** style (T-score = 41-59) of responding that is sensitive to both speed and accuracy. Based on Grant's responses, **he has a conservative style of responding that emphasizes accuracy over speed (T-score = 60; 90% Confidence Interval = 54-66)**. This response style is often associated with slower reaction times, more omission errors (failure to respond to targets), and fewer commission errors (incorrect responses to non-targets). The influence of Grant's conservative response style on other Conners CPT 3 scores should be taken into consideration throughout the interpretation process.

Step 3: Examine the overall profile



Step 4: Clinical Likelihood Statement

Summary: Relative to the normative sample, Grant was less able to differentiate targets from non-targets, made more omission errors, made more commission errors, made more perseverative errors, responded more slowly, displayed less consistency in response speed and displayed more variability in response speed.

Overall, Grant has a total of 7 atypical T-scores, which is associated with a high likelihood of having a disorder characterized by attention deficits, such as ADHD. Note that other psychological and/or neurological conditions with symptoms of impaired attention can also lead to atypical scores on the Conners CPT 3.

Grant's profile of scores and response pattern indicates that he may have issues related to:

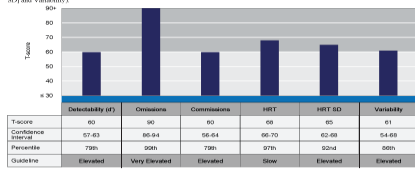
- **Inattentiveness (Strong Indication)**

Step 5: Examine the Individual Dimensions of Attention

Measures of Inattentiveness



This section summarizes Grant's scores on the inattentiveness measures and provides information about how he compares to the normative group. Indicators of inattentiveness on the Conners CPT 3 are poor Detectability (d'), a high percentage of Omissions and Commissions, a slow Hit Reaction Time (HRT), as well as high levels of inconsistency in response speed (Hit Reaction Time Standard Deviation [HRT SD] and Variability).



Detectability (d') measures the respondent's ability to differentiate non-targets (i.e., the letter X) from targets (i.e., all other letters). Grant's T-score is 60 (95% CI = 57-63), which is ranked at the 79th percentile, and falls in the Elevated range. This result means that his ability to discriminate non-targets from targets was poor when compared to the normative group. Poor ability to differentiate non-targets from targets is an indicator of inattentiveness.

Omissions result from a failure to respond to targets. Grant's T-score is 90 (95% CI = 86-94), which is ranked at the 99th percentile, and falls in the Very Elevated range. This result means that he missed a much higher percentage of targets when compared to the normative group. Failure to respond to targets is an indicator of inattentiveness.

Commissions are made when responses are given to non-targets. Grant's T-score is 60 (95% CI = 56-64), which is ranked at the 79th percentile, and falls in the Elevated range. This result means that he responded to a higher percentage of non-targets when compared to the normative group. A high level of commission errors may be related to inattentiveness and/or impulsivity. The combination of Grant's slow response times (see HRT, below) and high commission errors is an indicator of inattentiveness.

HRT is the mean response speed of correct responses for the whole administration. Grant's T-score is 68 (95% CI = 66-70), which is ranked at the 97th percentile, and falls in the Slow range. This result means that his response speed was slower than the normative group's response speed. This may indicate that Grant was not processing targets efficiently. Note that HRT may also be affected by response style. Grant's conservative response style may have contributed to the slower response speed. See the Response Style Analysis section of this report for more interpretive information.

HRT SD is a measure of response speed consistency during the entire administration. Grant's T-score is 65 (95% CI = 62-68), which is ranked at the 92nd percentile, and falls in the Elevated range. This result means that his response speed was less consistent than the normative group. This suggests that Grant was more inattentive and processed stimuli less efficiently during some portions of the administration.

Variability, like HRT SD, is a measure of response speed consistency; however, Variability is a "within respondent" measure, that is, the amount of variability that Grant showed in his response speed across the administration. Grant's T-score is 61 (95% CI = 54-68), which is ranked at the 86th percentile, and falls in the Elevated range. This result means his response speed variability was higher when compared to the normative group. High response speed variability indicates that Grant's attention and information processing efficiency varied throughout the administration.

Grant's scores on these measures strongly suggest that he may have problems with inattentiveness.

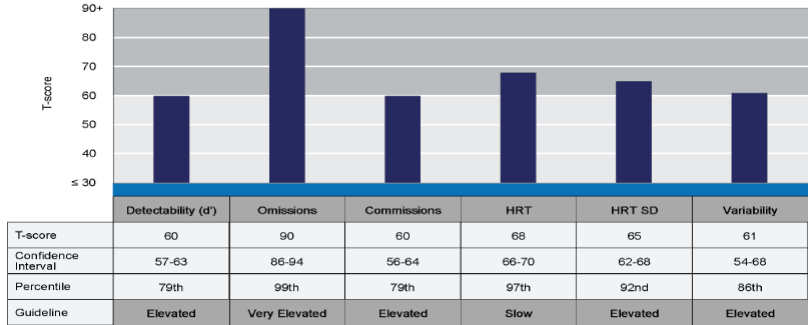


Step 5: Examine the Individual Dimensions of Attention

Measures of Inattentiveness



This section summarizes Grant's scores on the inattentiveness measures and provides information about how he compares to the normative group. Indicators of inattentiveness on the Conners CPT 3 are poor Detectability (d'), a high percentage of Omissions and Commissions, a slow Hit Reaction Time (HRT), as well as high levels of inconsistency in response speed (Hit Reaction Time Standard Deviation [HRT SD] and Variability).

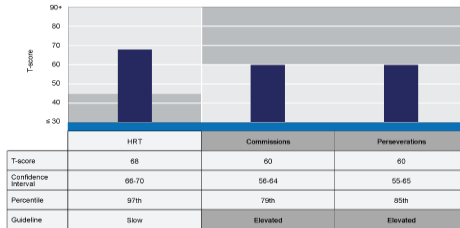


Step 5: Examine the Individual Dimensions of Attention

Measures of Impulsivity



This section summarizes Grant's scores on the impulsivity measures and provides information about how he compares to the normative group. Indicators of impulsivity on the Conners CPT 3 include a faster than normal Hit Reaction Time (HRT) in addition to a higher than average rate of Commissions and/or Perseverations.



HRT is the mean response speed of correct responses for the whole administration. Grant's T-score is 68 (90% CI = 66-70), which is ranked at the 97th percentile, and falls in the Slow range. This result means that his response speed was slower than the normative group's response speed. This may indicate that Grant was not processing targets efficiently. A slower than normal HRT is often related to inattentiveness rather than impulsivity. See the *Interpretation* section of this report for more interpretative information.

Commissions are made when responses are given to non-targets. Grant's T-score is 60 (90% CI = 56-64), which is ranked at the 70th percentile, and falls in the Elevated range. This result means that he responded to a higher percentage of non-targets when compared to the normative group. Commission errors may be related to impulsivity and/or inattentiveness. The combination of Grant's slow response times (see HRT, above) and high commission errors is an indicator of inattentiveness rather than impulsivity.

Perseverations are random or anticipatory responses. Grant's T-score is 60 (90% CI = 55-65), which is ranked at the 85th percentile, and falls in the Elevated range. This result means that he made more perseverative errors when compared to the normative group. Because Grant's response speed (see HRT, above) was slow, his perseverations are unlikely to be related to impulsivity.

Grant's scores on these measures do not indicate a problem with impulsivity.

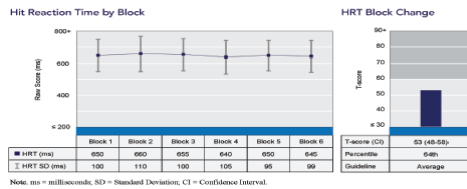


Step 5: Examine the Individual Dimensions of Attention

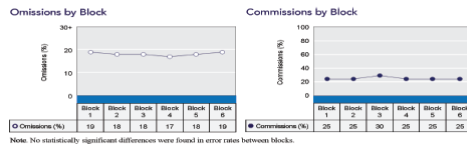
Measures of Sustained Attention



This section summarizes Grant's scores on the sustained attention measures. Sustained attention is defined as the respondent's ability to maintain attention as the administration progresses. A decrease in sustained attention across time is captured by atypical slowing in the respondent's Hit Reaction Times (HRT, as indicated by the variable HRT Block Change), as well as by increases in Omissions and Commissions in later blocks of the administration.



Note: ms = milliseconds, SD = Standard Deviation, CI = Confidence Interval.



Note: No statistically significant differences were found in error rates between blocks.

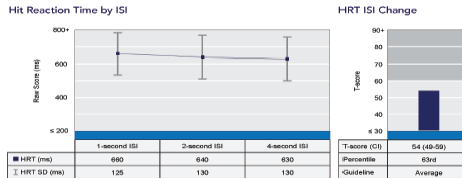
HRT Block Change indicates the change in mean response speed across blocks. Grant's T-score is 52 (90% CI = 48-56), which is ranked at the 64th percentile, and falls in the Average range. This result means that he had an average reduction in response speed in later blocks. In terms of error rates, Grant's omission and commission errors did not increase significantly across multiple adjacent blocks. Grant's profile of scores on these measures does not indicate a problem with sustained attention.



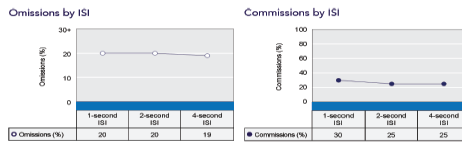
Step 5: Examine the Individual Dimensions of Attention

Measures of Vigilance MHS

This section summarizes Grant's scores on the vigilance measures. Vigilance refers to the respondent's performance at varying levels of stimulus frequency (inter-stimulus intervals, ISIs), and is defined by the respondent's ability to maintain performance level even when the task rate is slow. This construct is captured by changes in the respondent's Hit Reaction Times (HRT), as indicated by the variable HRT ISI Change, as well as the observed pattern of Omissions and Commissions at various ISIs.



Note: ms = milliseconds, SD = Standard Deviation, CI = Confidence Interval.



Note: No statistically significant differences were found in error rates between ISIs.

HRT ISI Change indicates the change in mean response speed at various ISIs. Grant's T-score is 54 (95% CI = 49-59), which is ranked at the 63rd percentile, and falls in the Average range. This result means that he had an average reduction in response speeds at longer ISIs. There was no statistically significant increase in error rates across all three ISI levels. Grant's profile of scores on these measures does not indicate a problem with maintaining vigilance at varying levels of stimulus frequency.

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Step 6: Integrate Results from Multiple Sources

- **CPT3:** problems with inattentiveness
- **CMDQ:** Grant's Uncle diagnosed with ADHD.
- **Conner 3 (P, T, S):** Results suggest problems with inattention. Impairment items related to schoolwork/grades were endorsed.
- **Connors CATA:** problems with inattentiveness
- **Interview:** difficult to get Grant to conduct homework, careless when following instructions. Described Grant as shy and anxious in some situations.
- **Observations:** Observations during assessment corroborated reports.
- **Diagnosis:** Utilizing this combined information to guide diagnosis, the clinician decided that Grant met criteria for a primary diagnosis of ADHD Predominantly Inattentive Presentation.



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Progress Monitoring

Table 4.9. Conners CPT 3 Pre- and Post-Treatment Scores for Grant S.

Conners CPT 3 Scores	Pre-treatment Evaluation (Time 1)		Post-treatment Evaluation (Time 2)		Statistical Change
	T-score	Classification	T-score	Classification	
<i>d'</i>	62	Elevated	58	High Average	Time 1 = Time 2
Omissions	74	Very Elevated	58	High Average	Time 1 > Time 2*
Commissions	72	Very Elevated	61	Elevated	Time 1 > Time 2*
Perseverations	65	Very Elevated	54	Average	Time 1 > Time 2
HRT	68	Slow	58	A Little Slow	Time 1 > Time 2*
HRT SD	71	Very Elevated	61	Elevated	Time 1 > Time 2
Variability	65	Elevated	60	Elevated	Time 1 = Time 2
HRT Block Change	52	Average	62	Elevated	Time 1 < Time 2
HRT ISI Change	52	Average	63	Elevated	Time 1 < Time 2

Note. The "<" and ">" symbols indicate scores that are statistically significant ($p < .10$) and/or at least 10 T-score points apart. Statistically significant changes are denoted by the * symbol.



CATA Report

- Very similar structure to the CPT 3 report
- Offers additional information about auditory laterality and mobility



K-CPT 2

- For age 4-7
- 7.5 minutes; 200 trials + 1 dummy trial
- Pictures of objects familiar to young children.
- 75% targets (everything except soccer ball)
- Presentation speed (Inter Stimulus Interval) can vary: 1.5 or 3.0 seconds
- Results can be broken down into blocks: 5 blocks with 40 trials each
- Dimensions of Attention Measured:
 - 1) Inattentiveness
 - 2) Impulsivity
 - 3) Sustained Attention (new)
 - 4) Vigilance (new)

Old K-CPT: Black Background



K-CPT 2: White background



K-CPT 2 vs. CPT 3

	K-CPT 2	CPT 3
Admin Time	7.5 minutes	14 minutes
Stimuli	Pictures of common objects	letters
ISIs	1.5 & 3 seconds	1, 2, & 4 seconds
Stimuli Display Time	500ms	250ms

Feel free to contact me at
anytime with questions at
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Thank you!

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