CONNERS CPT 3™

Continuous Performance Test 3rd Edition™

C. Keith Conners, Ph.D.

Progress Report

Name/ID: Alexandra Sample
Gender: Female
Birth Date: February 16, 1998
Normative Option: Gender Specific norms

	Admin 1	Admin 2	Admin 3
Name/ID:	Alexandra Sample	Alexandra Sample	Alexandra Sample
Administration Date:	December 6, 2013	January 3, 2014	February 26, 2014
Age:	16 years	16 years	16 years
Grade:	11	11	11
Input Device:	Keyboard	Keyboard	Keyboard
Assessor's Name:	Dr. Smith	Dr. Smith	Dr. Smith
Medication/Notes:			

This Progress Report is intended for use by qualified assessors only, and is not to be shown or presented to the respondent or any other unqualified individuals or used as the sole basis for clinical diagnosis or intervention. Administrators are cautioned against drawing unsupported interpretations. To obtain a comprehensive view of the individual, information from this report should be combined with information gathered from other psychometric measures, interviews, observations, and available records. This report is based on an algorithm that produces the most common interpretations of the obtained scores. Additional interpretive information is found in the *Conners CPT 3 Manual* (published by MHS).

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P.O. Box 950, North Tonawanda, NY 14120-0950
3770 Victoria Park Ave., Toronto, ON M2H 3M6

Introduction

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The Conners Continuous Performance Test 3rd Edition (Conners CPT 3™) assesses attention-related problems in individuals aged 8 years and older. During the 14-minute, 360-trial administration, respondents are required to respond when any letter appears, except the non-target letter "X." By indexing the respondent's performance in areas of inattentiveness, impulsivity, sustained attention, and vigilance, the Conners CPT 3 can be a useful adjunct to the process of diagnosing Attention-Deficit/Hyperactivity Disorder (ADHD), as well as other psychological and neurological conditions related to attention. This report combines the results of up to four administrations to help the user interpret important changes that have occurred over time. Please note that this Progress Report is intended to provide an overview of how scores have changed over time. For detailed information about any given administration, please refer to the Conners CPT 3 Assessment Reports.

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.

Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)
Valid	Valid	Valid

There was no indication of any timing difficulties for Admin 1, Admin 2, and Admin 3.

Response Style Analysis

The variable ***C*** represents an individual's natural response style in tasks that involve a speed-accuracy trade-off. Alexandra's response style, and its influence on other Conners CPT 3 scores, should be taken into consideration throughout the interpretation process for each administration.

	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)
T-score (CI)	64 (58-70)	56 (50-62)	48 (42-54)
Classification	Conservative	Balanced	Balanced
Interpretation	Emphasizes accuracy over speed	Balanced response style between speed and accuracy	Balanced response style between speed and accuracy

Note. CI = Confidence Interval.

T-score Guidelines

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

Guidelines			
T-score	For Hit Reaction Time (HRT)	T-score	For all other variables
70+	**Atypically Slow**	70+	**Very Elevated**
60-69	**Slow**	60-69	**Elevated**
55-59	A Little Slow	55-59	High Average
45-54	Average	45-54	Average
40-44	**A Little Fast**	< 45	Low
< 40	**Atypically Fast**		

Overview of Changes in Conners CPT 3 Scores

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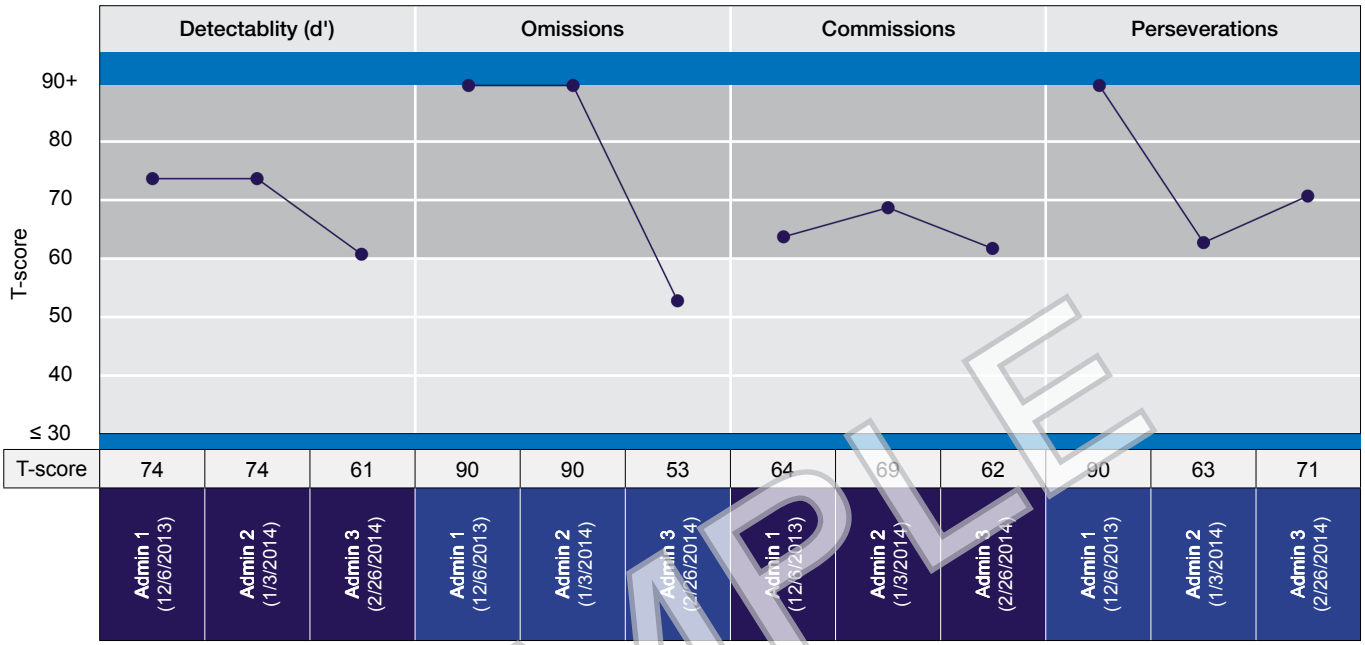
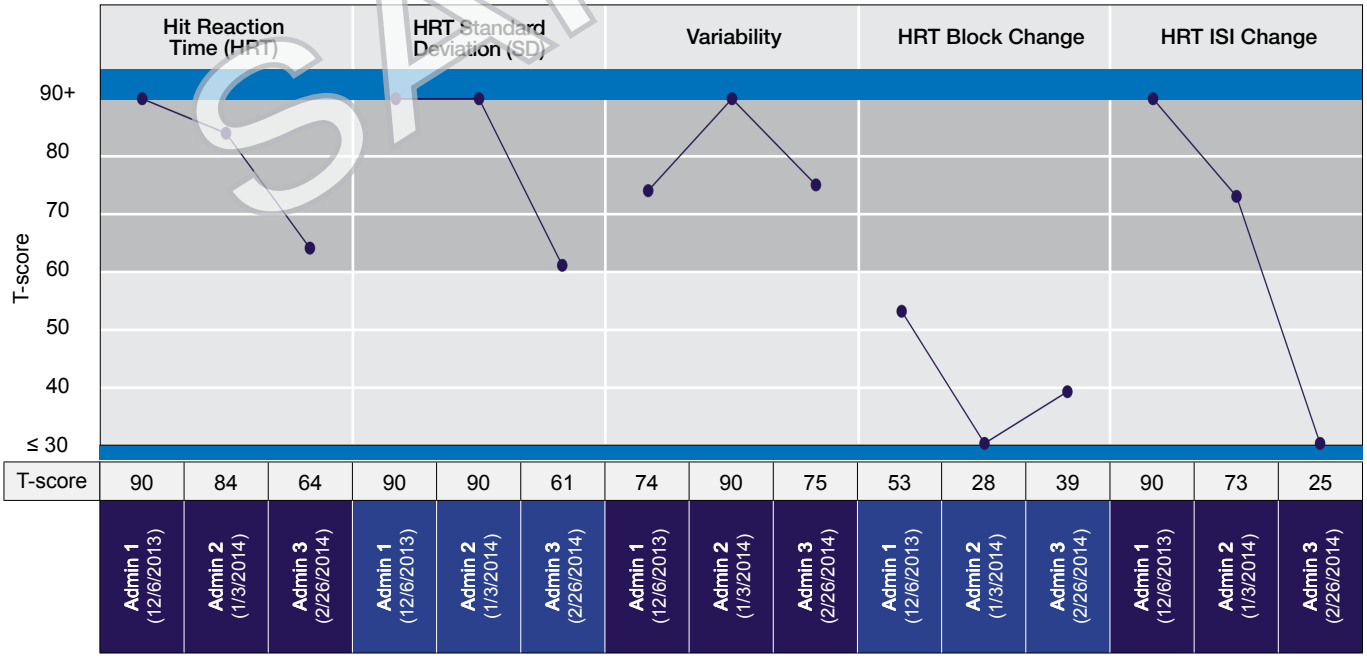
This section provides an overview of Alexandra's Conners CPT 3 scores across administrations.

Measures of Detectability and Errors



	Detectablity (d')			Omissions			Commissions			Perseverations		
T-score	74	74	61	90	90	53	64	69	62	90	63	71
	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)

Measures Involving Reaction Times



	Hit Reaction Time (HRT)			HRT Standard Deviation (SD)			Variability			HRT Block Change			HRT ISI Change		
T-score	90	84	64	90	90	61	74	90	75	53	28	39	90	73	25
	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)

Overview of Changes in Conners CPT 3 Scores

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Overview Summary

The following table summarizes the aspect(s) of attention Alexandra may have had problems with at each administration.

Area	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)
Inattentiveness Problems	Strong Indication	Strong Indication	Strong Indication
Impulsivity Problems	No Indication	No Indication	No Indication
Sustained Attention Problems	No Indication	No Indication	No Indication
Vigilance Problems	Strong Indication	Some Indication	Some Indication

The following tables summarize Alexandra's Conners CPT 3 scores across administrations. If a statistical difference is noted between a pair of administrations, then the difference reached statistical significance ($p < .10$) and/or was at least 10 T-score points (1 Standard Deviation) apart. Statistical significance is denoted with this symbol (°).
Notes. T = T-score; CI = 90% Confidence Interval; Guide = Guideline.

Measures of Detectability and Errors

Score	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Statistical Differences in T-scores		
				Overall (1 to 3)	Admin 1 to 2	Admin 2 to 3
Detectability (d'): Ability to differentiate targets from non-targets						
T (CI)	74 (70-78)	74 (70-78)	61 (57-65)	Increased ability°	No Change	Increased ability°
Percentile	99th	99th	85th			
Guide	Very Elevated	Very Elevated	Elevated			
Omissions: Rate of missed targets						
T (CI)	90 (90-93)	90 (89-95)	53 (50-56)	Decreased error rate°	No Change	Decreased error rate°
Percentile	99th	99th	78th			
Guide	Very Elevated	Very Elevated	Average			
Commissions: Rate of incorrect responses to non-targets						
T (CI)	64 (60-68)	69 (65-73)	62 (58-66)	No Change	No Change	No Change
Percentile	90th	96th	90th			
Guide	Elevated	Elevated	Elevated			
Perseverations: Rate of random, repetitive,or anticipatory responses						
T (CI)	90 (90-97)	63 (56-70)	71 (64-78)	Decreased error rate°	Decreased error rate°	No Change
Percentile	99th	88th	94th			
Guide	Very Elevated	Elevated	Very Elevated			

Caution: One or more T-scores have been truncated to 90; this may affect the assessment of significant change in T-scores. It may be of value to consider changes in raw scores in addition to T-score changes (See the *Conners CPT 3 Raw Scores* section of this report; the raw scores may need to be turned on in the report option preferences; see the *Conners CPT 3 Manual* for more information).

Overview of Changes in Conners CPT 3 Scores

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The following tables summarize Alexandra's Conners CPT 3 scores across administrations. If a statistical difference is noted between a pair of administrations, then the difference reached statistical significance ($p < .10$) and/or was at least 10 T-score points (1 Standard Deviation) apart. Statistical significance is denoted with this symbol (°).
Notes. T = T-score; CI = 90% Confidence Interval; Guide = Guideline.

Measures Involving Reaction Times

Score	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Statistical Differences in T-scores		
				Overall (1 to 3)	Admin 1 to 2	Admin 2 to 3
Hit Reaction Time (HRT): Mean response speed across the administration						
T (CI)	90 (90-92)	84 (82-86)	64 (62-66)	Faster°	No Change	Faster°
Percentile	99th	99th	91st			
Guide	Atypically Slow	Atypically Slow	Slow			
HRT Standard Deviation (SD): Reaction times consistency across the administration						
T (CI)	90 (90-94)	90 (88-96)	61 (57-65)	More Consistent°	No Change	More Consistent°
Percentile	99th	99th	88th			
Guide	Very Elevated	Very Elevated	Elevated			
Variability: Variability in reaction times consistency across the administration						
T (CI)	74 (66-82)	90 (85-101)	75 (67-83)	No Change	More Variability°	Less Variability°
Percentile	96th	99th	97th			
Guide	Very Elevated	Very Elevated	Very Elevated			
HRT Block Change: Change in average response speed across blocks						
T (CI)	53 (48-58)	28 (23-33)	39 (34-44)	Less slowing across blocks	Less slowing across blocks°	More slowing across blocks
Percentile	57th	1st	9th			
Guide	Average	Low	Low			
HRT Inter-Stimulus Interval (ISI) Change: Change in average response speed at various ISIs						
T (CI)	90 (90-96)	73 (67-79)	25 (19-31)	Less slowing at longer ISIs°	Less slowing at longer ISIs°	Less slowing at longer ISIs°
Percentile	99th	98th	1st			
Guide	Very Elevated	Very Elevated	Low			

Caution: One or more T-scores have been truncated to 90; this may affect the assessment of significant change in T-scores. It may be of value to consider changes in raw scores in addition to T-score changes (See the *Conners CPT 3 Raw Scores* section of this report; the raw scores may need to be turned on in the report option preferences; see the *Conners CPT 3 Manual* for more information).

Measures of Inattentiveness

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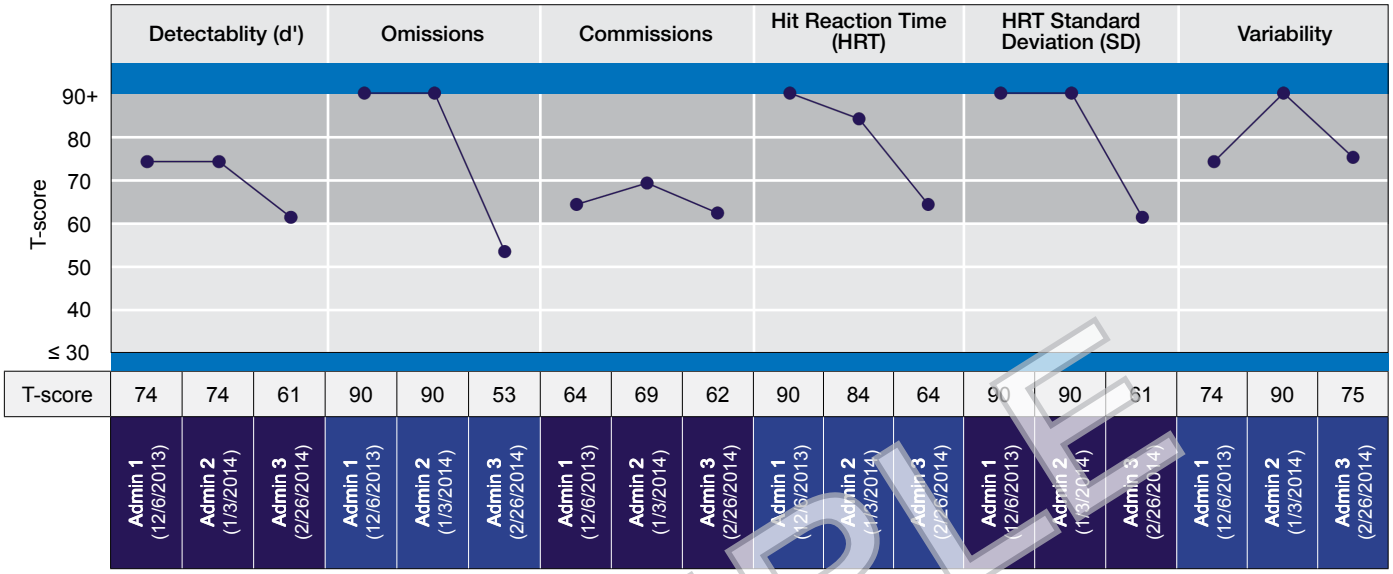
This section summarizes Alexandra's scores on the inattentiveness measures across administrations. If a statistical difference is noted between a pair of administrations, then the difference reached statistical significance ($p < .10$) and/or was at least 10 T-score points (1 Standard Deviation) apart. Statistical significance is denoted with this symbol (°).



	Detectablity (d')			Omissions			Commissions			Hit Reaction Time (HRT)			HRT Standard Deviation (SD)			Variability		
T-score	74	74	61	90	90	53	64	69	62	90	84	64	90	90	61	74	90	75
	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)

Detectability (d') measures the respondent's ability to differentiate non-targets (i.e., the letter X) from targets (i.e., all other letters). Higher T-scores indicate worse performance. The following T-scores were obtained: Admin 1 (T = 74; 90% CI = 70-78; 99th percentile; Very Elevated), Admin 2 (T = 74; 90% CI = 70-78; 99th percentile; Very Elevated), and Admin 3 (T = 61; 90% CI = 57-65; 85th percentile; Elevated). Scores on this variable statistically decreased across: Admin 1 to Admin 3° and Admin 2 to Admin 3°.

Omissions result from a failure to respond to targets. Higher T-scores indicate worse performance. The following T-scores were obtained: Admin 1 (T = 90; 90% CI = 90-93; 99th percentile; Very Elevated), Admin 2 (T = 90; 90% CI = 89-95; 99th percentile; Very Elevated), and Admin 3 (T = 53; 90% CI = 50-56; 78th percentile; Average). Scores on this variable statistically decreased across: Admin 1 to Admin 3° and Admin 2 to Admin 3°.

Commissions are made when responses are given to non-targets. Higher T-scores indicate worse performance. The following T-scores were obtained: Admin 1 (T = 64; 90% CI = 60-68; 90th percentile; Elevated), Admin 2 (T = 69; 90% CI = 65-73; 96th percentile; Elevated), and Admin 3 (T = 62; 90% CI = 58-66; 90th percentile; Elevated). Scores did not statistically change across administrations.

HRT is the mean response speed of correct responses for the whole administration. Higher T-scores indicate slower responses. The following T-scores were obtained: Admin 1 (T = 90; 90% CI = 90-92; 99th percentile; Atypically Slow), Admin 2 (T = 84; 90% CI = 82-86; 99th percentile; Atypically Slow), and Admin 3 (T = 64; 90% CI = 62-66; 91st percentile; Slow). Scores on this variable statistically decreased across: Admin 1 to Admin 3° and Admin 2 to Admin 3°.

HRT SD is a measure of response speed consistency during the entire administration. Higher T-scores indicate less consistency. The following T-scores were obtained: Admin 1 (T = 90; 90% CI = 90-94; 99th percentile; Very Elevated), Admin 2 (T = 90; 90% CI = 88-96; 99th percentile; Very Elevated), and Admin 3 (T = 61; 90% CI = 57-65; 88th percentile; Elevated). Scores on this variable statistically decreased across: Admin 1 to Admin 3° and Admin 2 to Admin 3°.

Variability, like HRT SD, is a measure of response speed consistency; however, Variability is a "within respondent" measure; that is, the amount of variability the individual shows in 18 separate segments of the administration in relation to her own overall HRT SD. The following T-scores were obtained: Admin 1 (T = 74; 90% CI = 66-82; 96th percentile; Very Elevated), Admin 2 (T = 90; 90% CI = 85-101; 99th percentile; Very Elevated), and Admin 3 (T = 75; 90% CI = 67-83; 97th percentile; Very Elevated). Scores on this variable statistically increased across: Admin 1 to Admin 2°. Scores on this variable statistically decreased across: Admin 2 to Admin 3°.

Alexandra's profile of scores on the above measures strongly suggests that she may have had problems with inattentiveness during Admin 1, Admin 2, and Admin 3.

Measures of Impulsivity

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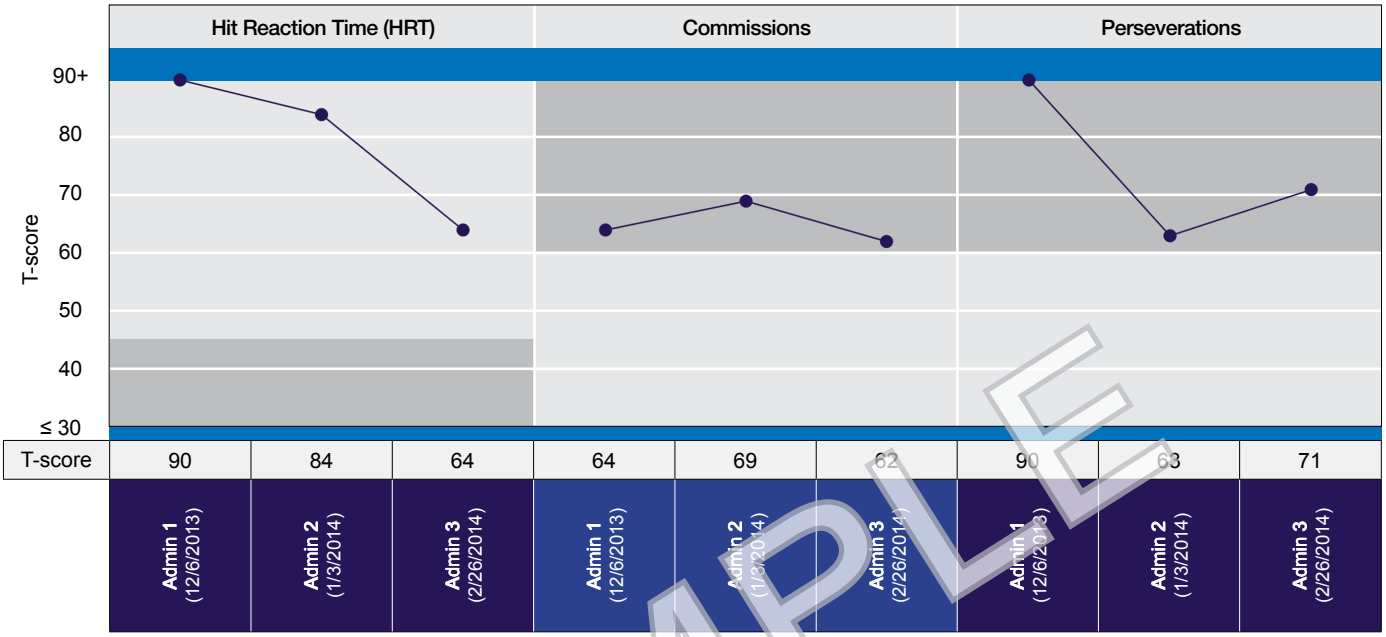
This section summarizes Alexandra's scores on the impulsivity measures across administrations. If a statistical difference is noted between a pair of administrations, then the difference reached statistical significance ($p < .10$) and/or was at least 10 T-score points (1 Standard Deviation) apart. Statistical significance is denoted with this symbol (°).



HRT is the mean response speed of correct responses for the whole administration. Lower T-scores indicate faster responses. The following T-scores were obtained: Admin 1 (T = 90; 90% CI = 90-92; 99th percentile; Atypically Slow), Admin 2 (T = 84; 90% CI = 82-86; 99th percentile; Atypically Slow), and Admin 3 (T = 64; 90% CI = 62-66; 91st percentile; Slow). Scores on this variable statistically decreased across: Admin 1 to Admin 3° and Admin 2 to Admin 3°.

Commissions are made when responses are given to non-targets. Higher T-scores indicate worse performance. The following T-scores were obtained: Admin 1 (T = 64; 90% CI = 60-68; 90th percentile; Elevated), Admin 2 (T = 69; 90% CI = 65-73; 96th percentile; Elevated), and Admin 3 (T = 62; 90% CI = 58-66; 90th percentile; Elevated). Scores did not statistically change across administrations.

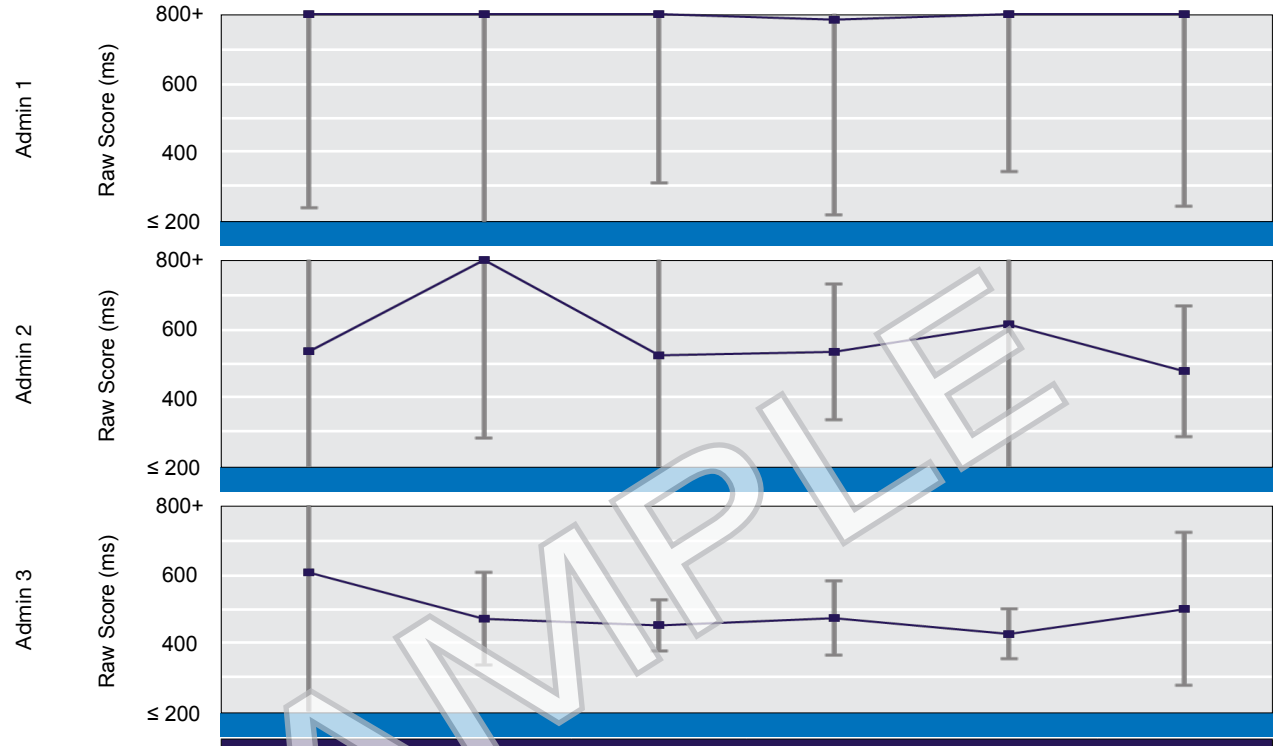
Perseverations are random or anticipatory responses. Higher T-scores indicate worse performance. The following T-scores were obtained: Admin 1 (T = 90; 90% CI = 90-97; 99th percentile; Very Elevated), Admin 2 (T = 63; 90% CI = 56-70; 88th percentile; Elevated), and Admin 3 (T = 71; 90% CI = 64-78; 94th percentile; Very Elevated). Scores on this variable statistically decreased across: Admin 1 to Admin 3° and Admin 1 to Admin 2°.

Alexandra's profile of scores did not indicate impulsivity during Admin 1, Admin 2, and Admin 3.

Measures of Sustained Attention

This section summarizes Alexandra's scores on the sustained attention measures across administrations. For Hit Reaction Time (HRT) Block Change, if a statistical difference is noted, then the difference reached statistical significance ($p < .10$) and/or was at least 10 T-score points (1 Standard Deviation) apart. Statistical significance is denoted with this symbol (°).

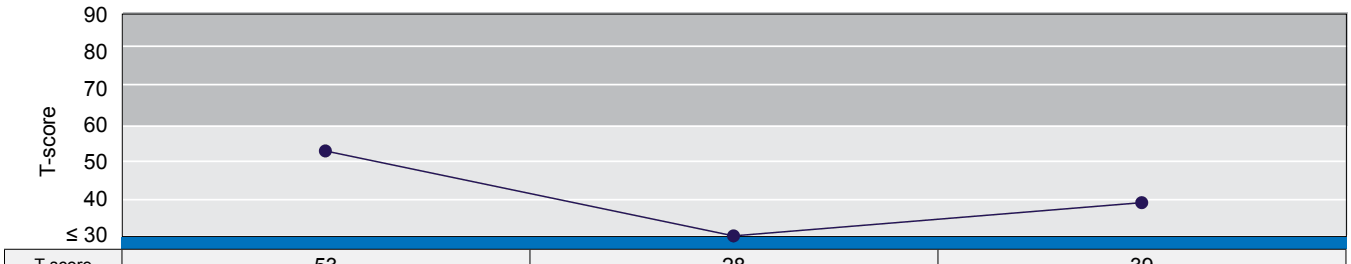
Hit Reaction Time by Block



	HRT (SD)					
	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
Admin 1 (12/6/2013)	905 (664)	925 (763)	938 (625)	784 (564)	966 (621)	906 (661)
Admin 2 (1/3/2014)	535 (408)	1129 (844)	524 (466)	534 (196)	613 (461)	478 (189)
Admin 3 (2/26/2014)	605 (424)	470 (135)	451 (74)	472 (109)	426 (73)	498 (223)

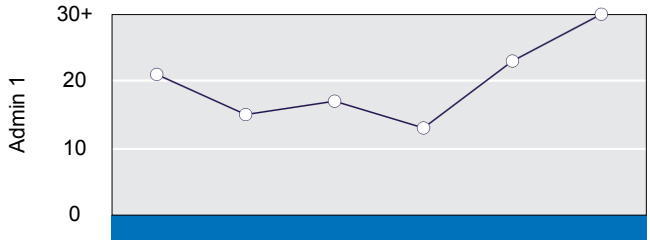
Note. ms = milliseconds; SD = Standard Deviation.

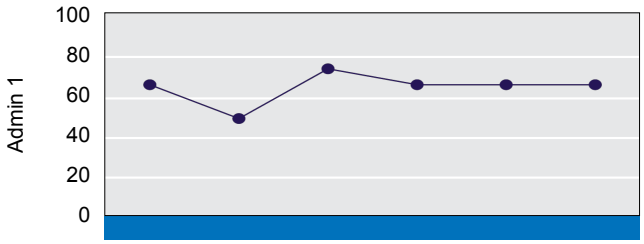
HRT Block Change

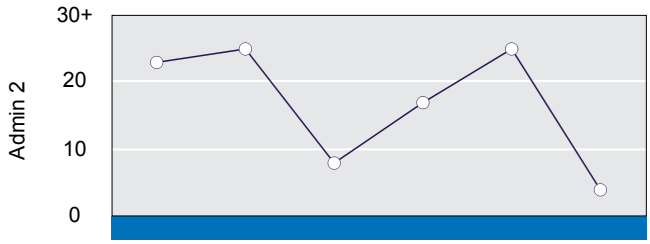


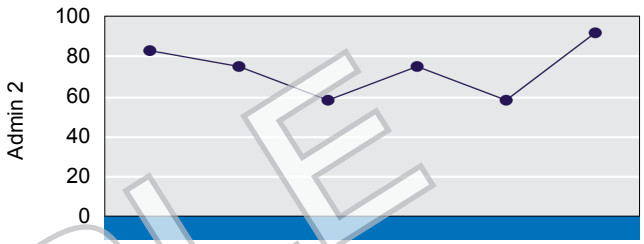
T-score	53	28	39
	Admin 1 (12/6/2013)	**Admin 2** (1/3/2014)	**Admin 3** (2/26/2014)

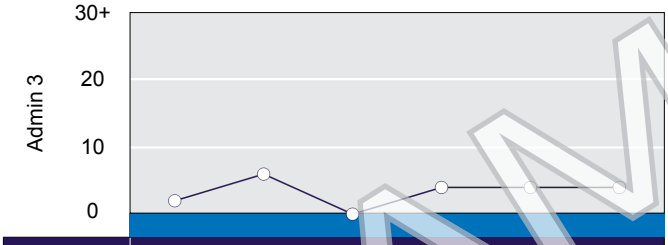
Omissions and Commissions by Block

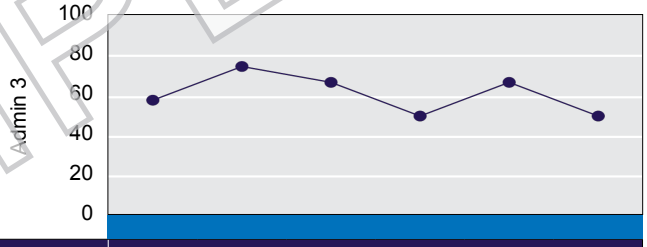












Admin	Omissions (%) By Block					
	1	2	3	4	5	6
1 (12/6/2013)	21	15	17	13	23	33
2 (1/3/2014)	23	25	8	17	25	4
3 (2/26/2014)	2	6	0	4	4	4

Admin	Commissions (%) By Block					
	1	2	3	4	5	6
1 (12/6/2013)	67	50	75	67	67	67
2 (1/3/2014)	83	75	58	75	58	< 92
3 (2/26/2014)	58	75	67	50	67	50

Note. The < symbol indicates that the error rate of the later block is significantly ($p < .10$) higher than the error rate of the previous block.

HRT Block Change indicates the change in mean response speed across blocks. Higher T-scores indicate more slowing across blocks. The following T-scores were obtained: Admin 1 (T = 53; 90% CI = 48-58; 57th percentile; Average), Admin 2 (T = 28; 90% CI = 23-33; 1st percentile; Low), and Admin 3 (T = 39; 90% CI = 34-44; 9th percentile; Low). Scores on this variable statistically increased across: Admin 2 to Admin 3. Scores on this variable statistically decreased across: Admin 1 to Admin 3 and Admin 1 to Admin 2°.

Alexandra's profile of scores did not indicate a problem with sustained attention during Admin 1, Admin 2, and Admin 3.

Measures of Vigilance

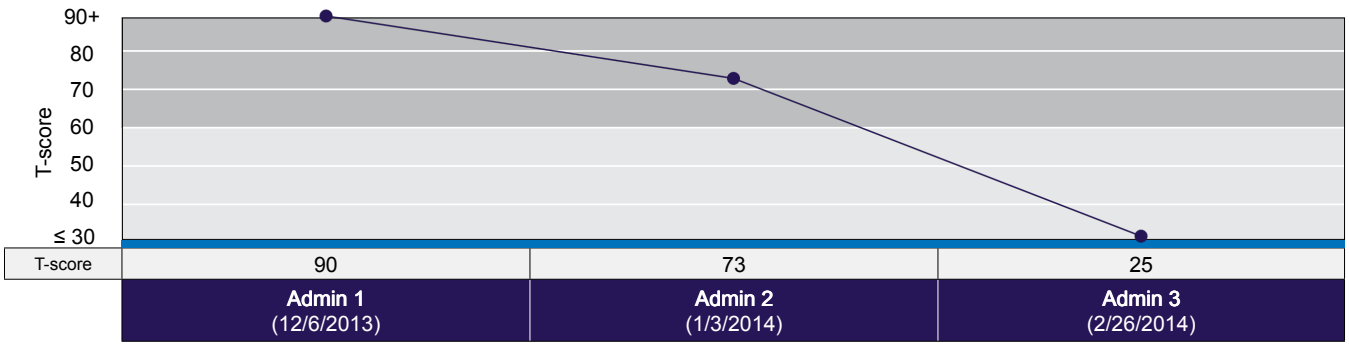
This section summarizes Alexandra's scores on the vigilance measures across administrations. For Hit Reaction Time Inter-Stimulus Interval Change (HRT ISI Change), if a statistical difference is noted, then the difference reached statistical significance ($p < .10$) and/or was at least 10 T-score points (1 Standard Deviation) apart. Statistical significance is denoted with this symbol (°).

Hit Reaction Time by ISI

	HRT (SD)		
	1-second ISI	2-second ISI	4-second ISI
Admin 1 (12/6/2013)	526 (270)	867 (478)	1145 (820)
Admin 2 (1/3/2014)	456 (138)	561 (336)	818 (737)
Admin 3 (2/26/2014)	488 (116)	497 (240)	477 (272)

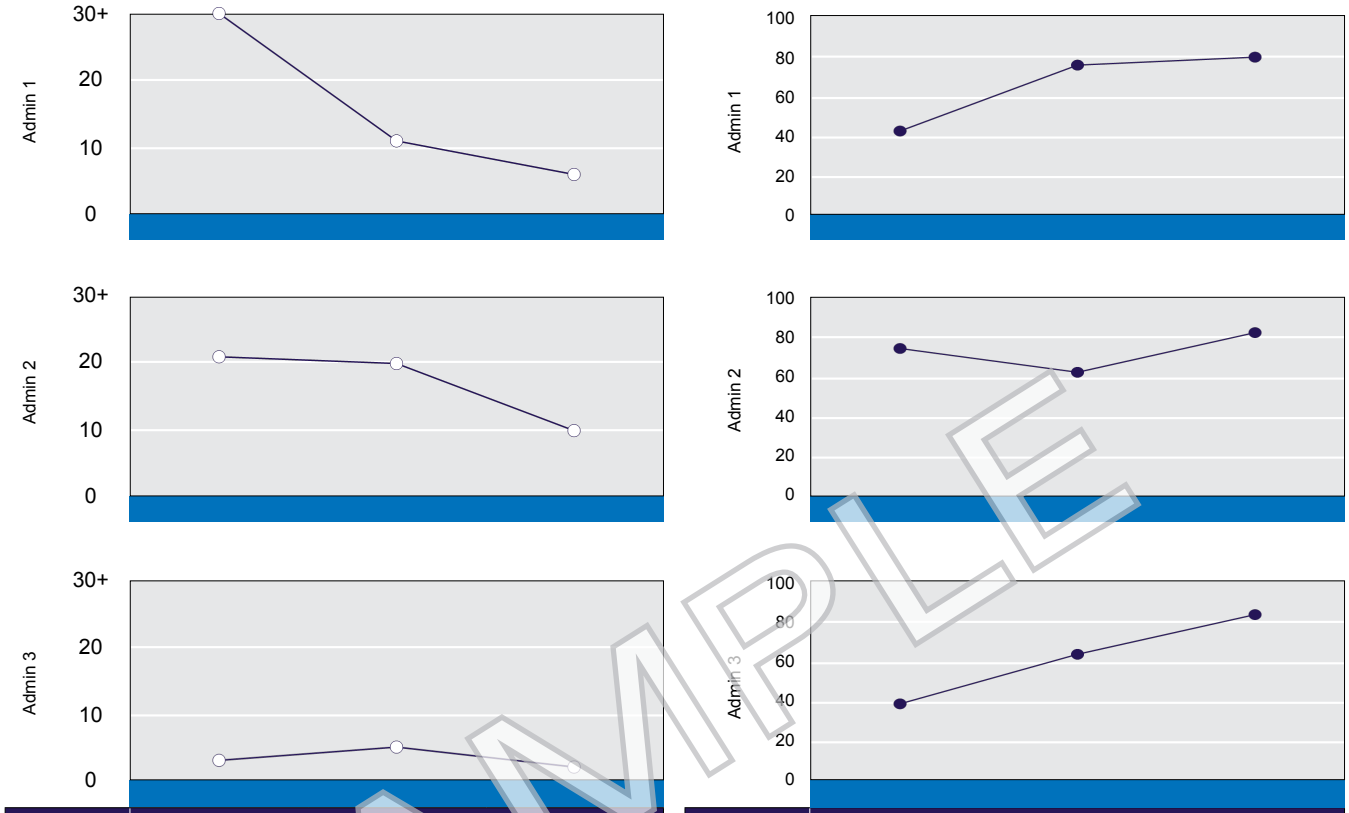
Note. ms = milliseconds; SD = Standard Deviation.

HRT ISI Change



T-score	90	73	25
	Admin 1 (12/6/2013)	**Admin 2** (1/3/2014)	**Admin 3** (2/26/2014)

Omissions and Commissions by ISI



Admin	Omissions (%) By ISI		
	1-second ISI	2-second ISI	4-second ISI
1 (12/6/2013)	43	11	6
2 (1/3/2014)	21	20	10
3 (2/26/2014)	3	5	2

Admin	Commissions (%) By ISI				
	1-second ISI		2-second ISI		4-second ISI
1 (12/6/2013)	42	<	75		79*
2 (1/3/2014)	75		63		83
3 (2/26/2014)	38	<	63		83*

Note. The < symbol indicates that the error rate of the longer ISI is significantly ($p < .10$) higher than the error rate of the shorter ISI. The * symbol indicates that the error rate in the 4-second ISI is statistically significantly ($p < .10$) higher than the error rate in 1-second ISI.

HRT ISI Change reflects change in response speed across ISIs. Higher T-scores indicate more slowing across on trials with longer ISIs. The following T-scores were obtained: Admin 1 (T = 90; 90% CI = 90-96; 99th percentile; Very Elevated), Admin 2 (T = 73; 90% CI = 67-79; 98th percentile; Very Elevated), and Admin 3 (T = 25; 90% CI = 19-31; 1st percentile; Low). Scores on this variable statistically decreased across: Admin 1 to Admin 3°, Admin 1 to Admin 2°, and Admin 2 to Admin 3°.

Alexandra's profile of scores on the above measures strongly suggests that she may have had problems with vigilance during Admin 1. Alexandra's profile of scores on the above measures suggests that she may have had problems with vigilance during Admin 2 and Admin 3.

CPT 3 Conners Raw Scores

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		Raw Scores		
Variable Type	Measure	Admin 1 (12/6/2013)	Admin 2 (1/3/2014)	Admin 3 (2/26/2014)
Detectability	d'	-0.31	-0.31	-1.44
Error Type	Omissions	20%	17%	3%
	Commissions	65%	74%	61%
	Perseverations	5%	1%	1%
Reaction Time Statistics	Hit Reaction Time (HRT)	901.22	620.89	487.04
	HRT Standard Deviation (SD)	654.39 (0.764)	512.30 (0.531)	219.84 (0.311)
	Variability	229.08 (0.156)	284.50 (0.229)	145.66 (0.162)
	HRT Block Change	-0.65 (0.013)	-52.08 (-0.045)	-18.47 (-0.020)
	HRT Inter-Stimulous Interval (ISI) Change	196.74 (0.209)	121.73 (0.121)	-4.52 (-0.025)

Note. The values in parentheses in the Raw Score column are based on the natural logarithm of the Hit Reaction Times. These logged values were used in the computations of the T-scores. For d', HRT Block Change, and HRT ISI change, negative raw score values are possible. See the *Conners CPT 3 Manual* for more information.

Response Style

C is a signal detection statistic that measures an individual's natural response style in tasks involving a speed-versus-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 that emphasizes accuracy over speed; a *liberal* style that emphasizes speed over accuracy; or a *balanced* style that is biased neither to speed nor accuracy. Response style can affect scores such as Commissions and Hit Reaction Time (HRT), and should be taken into consideration during interpretation.

Detectability (*d'*)

d-prime (*d'*) is a measure of how well the respondent discriminates non-targets (i.e., the letter X) from targets (i.e., all other letters). This variable is also a signal detection statistic that measures the difference between the signal (targets) and noise (non-targets) distributions. In general, the greater the difference between the signal and noise distributions, the better the ability to distinguish non-targets and targets. On the Conners CPT 3, *d'* is reverse-scored so that higher raw score and *T*-score values indicate worse performance (i.e., poorer discrimination).

Omissions (%)

Omissions are missed targets. High omission error rates indicate that the respondent was not responding to the target stimuli due to a specific reason (e.g., difficulty focusing). Omission errors are generally an indicator of inattentiveness.

Commissions (%)

Commissions are incorrect responses to non-targets. Depending on the respondent's HRT, high commission error rates may indicate either inattentiveness or impulsivity. If high commission error rates are coupled with slow reaction times, then the respondent was likely inattentive to the stimulus type being presented and thus responded to a high rate of non-targets. If high commission error rates are combined with fast reaction times, the respondent was likely rushing to respond and failed to control his or her impulses when responding to the non-targets. In the latter case, high commission error rates would reflect impulsivity rather than inattentiveness.

Perseverations (%)

Perseverations are responses that are made in less than 100 milliseconds following the presentation of a stimulus. Normal expectations of physiological ability to respond make it virtually impossible for a respondent to perceive and react to a stimulus so quickly. Perseverations are usually either slow responses to a preceding stimulus, a random response, an anticipatory response, or a repeated response without consideration of the task requirements. Perseverations may be related to impulsivity or an extremely liberal response style. Perseverations are, therefore, likely the result of anticipatory, repetitive, or impulsive responding.

Hit Reaction Time (HRT)

HRT is the mean response speed, measured in milliseconds, for all non-perseverative responses made during the entire administration. An atypically slow HRT may indicate inattentiveness (especially when error rates are high), but it may also be the results of a very conservative response style. Alternatively, a very fast HRT, when combined with high commission error rates, may indicate impulsivity.

Hit Reaction Time Standard Deviation (HRT SD)

HRT SD measures the consistency of response speed to targets for the entire administration. A high HRT SD indicates greater inconsistency in response speed. Response speed inconsistency is sometimes indicative of inattentiveness, suggesting that the respondent was less engaged and processed stimuli less efficiently during some parts of the administration.

Variability

Variability, like HRT SD, is a measure of response speed consistency; however, Variability is a "within respondent" measure (i.e., the amount of variability the respondent showed in 18 separate sub-blocks of the administration in relation to his or her overall HRT SD score). Although Variability is a different measure than HRT SD, the two measures typically produce comparable results and are both related to inattentiveness. High response speed variability indicates that the respondent's attention and processing efficiency varied throughout the administration.

Hit Reaction Time Block Change (HRT Block Change)

HRT Block Change is the slope of change in HRT across the six blocks of the administration. A positive slope indicates decelerating reaction times as the administration progressed, while a negative slope indicates accelerating reaction times. If reaction times slow down, as indicated by a higher HRT Block Change score, the respondent's information processing efficiency declines, and a loss of sustained attention is indicated.

Omissions by Block

Omissions by Block (raw score only) is the rate of the respondent's missed targets in each of the six blocks. An increase in omission error rate in later blocks indicates a loss of sustained attention.

Commissions by Block

Commissions by Block (raw score only) is the rate of the respondent's incorrect responses to non-targets in each of the six blocks. An increase in commission error rate in later blocks indicates a loss of sustained attention.

Hit Reaction Time Inter-Stimulus Intervals Change (HRT ISI Change)

HRT ISI Change is the slope of change in reaction time across the three ISIs (1, 2, and 4 seconds). A positive slope indicates decelerating HRT at longer intervals; whereas, a negative slope indicates accelerating HRT at longer intervals. A higher HRT ISI Change score means that the respondent's information processing efficiency declined with longer pauses between stimuli, and a loss of vigilance is indicated. A significant change in response speed at the different ISIs may indicate that the respondent was having trouble adjusting to changing task demands. Sometimes, this finding relates to activation/arousal needs; some respondents may be more efficient in a busier/more stimulating environment (e.g., during the 1-second ISI) than in a less active environment where the stimuli are presented less frequently (e.g., during the 4-second ISI), or vice-versa.

Omissions by ISI

Omissions by ISI (raw score only) is the rate of missed targets in each of the three ISI trial types. An increase in omission error rate on trials with longer ISIs indicates a loss of vigilance.

Commissions by ISI

Commissions by ISI (raw score only) is the rate of incorrect responses to non-targets in each of the three ISI trial types. An increase in commission error rates on trials with longer ISI indicates a loss of vigilance.