EEG EXPERT REPORT ON QIK CPT - Visual Test

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Initials: PP Subject: 2001 Test Date Mar. 22, 2018

Age at Test 42.6 Test #: 2 Test Time 11:34

Gender: female Test Note: - empty -

Description of Test: Qik CPT is a computerized visual continuous performance test developed for assessing attention and impulse control. The EEG Expert Report on Qik CPT is specifically intended for use by neurofeedback clinicians for assessment and monitoring the effects of EEG training. A simple visual target or non-target is presented once every two seconds. During the 21-minute test, the subject must press a button to respond to each target and not press for each non-target.

Results Summary:





98.9% Correct Response Rate

female 42.6

Performance Index reflects speed and consistency of response, which are continuous variables.

Accuracy Index reflects sustained attention and impulse control, which involve discrete errors.

Sustained Attention is determined by omission errors and outliers.

Impulse Control is determined by commission errors and anticipatory errors.

All indices are presented as standard scores. The range of scores is limited from 55 to 145.

Results are with reference to the 2014 population-based QIKnorm for the specific age and gender group. Scores significantly below average (<80) are printed in red. Scores significantly above average (>120) are printed in green.

Equivalent Age is the hypothetical age for which the specific result would be normal; it is displayed only if the calculation is mathematically possible and for ages up to 20

The symbol ">" is used to indicate a range of scores in cases of zero error, for which data resolution does not allow greater precision in the assignment of scores.

Results	Data	Norm	Score		
F42.6 Total Test	Measured Value	Median of Distribution	Standard Score	Percentile	
Omission Errors	0 errors	0.8 errors	>108	max	
Outlier Responses	0 errors	0.9 errors	>109	max	
Commission Errors	3 errors	3.6 errors	103	58.0 %	
Response Time	368.0 ms	375 ms	105	62 %	
Variability	56.0 ms	61 ms	114	81 %	

Omission Errors occur when the subject does not respond correctly to a target

Outliers are correct responses with very long response times.

Commission Errors occur when the subject responds incorrectly to a non-target.

Response Time is the mean of all correct reaction times to a target.

Variability is the standard deviation of correct response times.

RAW DATA	1 Sect. 1 Low	2 Sect. 1 Low	Period 3 Sect. 2 High Demand	4 Sect. 2 High	5 Sect. 3 Low		Sect. 2	Sect 3	Total
Omissions(#)	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0
Commissions(#)	0	1	0	2	0	1	2	0	3
Response time(ms)	433	439	346	332	435	436	339	435	368
Variability(ms)	51	46	68	50	65	49	60	65	56

STANDARD SCORES	Period 1	Period 2	Period 3	Period 4	Period 5	Section s1	Section s2	Section s3	Total
Omission Errors	102	102	104	104	103	103	106	103	108
Outliers	102	102	105	106	103	104	108	103	109
Commission Errors	105	84	115	99	104	93	106	104	103
Response Time	95	96	106	108	97	95	109	97	105
Variability	107	113	109	119	98	119	110	98	114

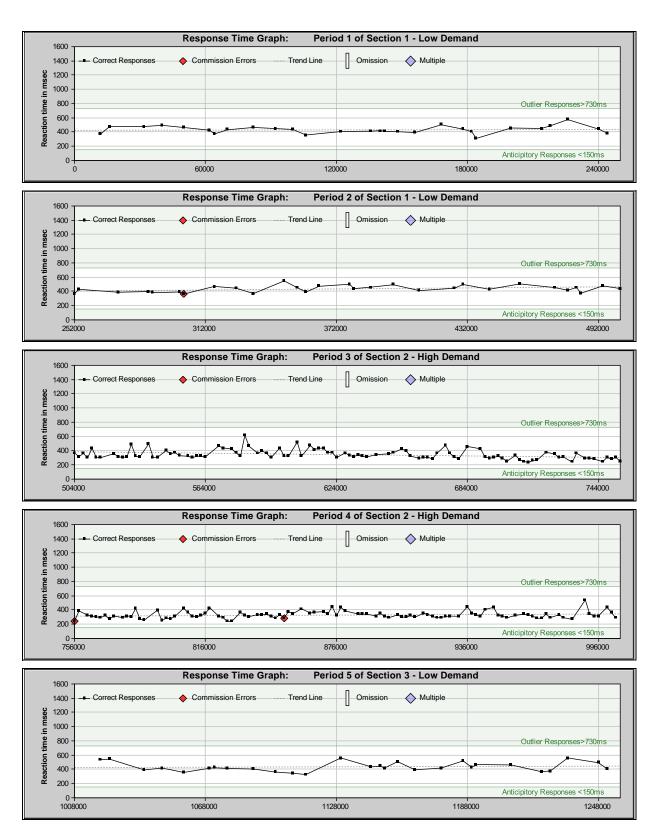
OTHER RESPONSES	Period 1	Period 2	Period 3	Period 4	Period 5	Section s1	Section s2	Section s3	Total
Anticipatory Resp. (#)	0	0	0	0	0	0	0	0	0
Multiple Responses (#)	0	0	0	0	0	0	0	0	0

Section 1 (periods 1 and 2) and section 3 (period 5) represent the target-infrequent or low-demand task. Section 2 (periods 3 and 4) represents the target-frequent or high-demand task.

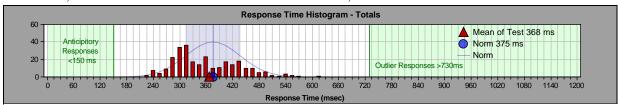
Anticipatory Responses occur within 150 milliseconds of any stimulus (target or non-target).

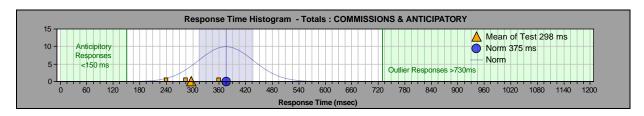
Multiple Responses reflect more than one response to a stimulus

Scores significantly below average are printed in red. Scores significantly above average are printed in green.

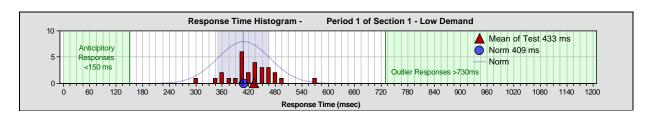


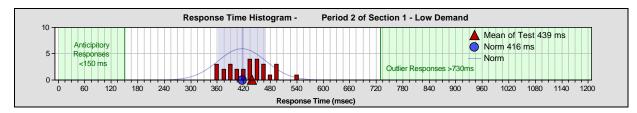
X-Axis for all charts: time into QIKtest in msec, with vertical gridlines of 1 minute

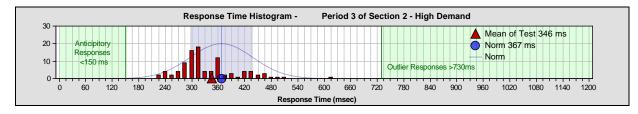


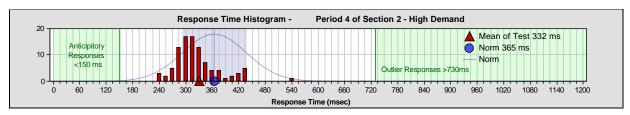


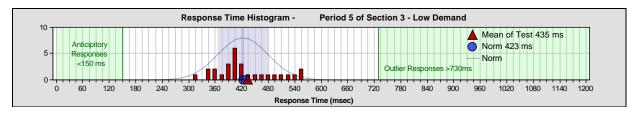
Norms: the blue line represents a normal distribution of reaction times for this age and group: compare by form and position to your data in red. The light blue area represents 68.2% (or $\pm 1\sigma$) of a normal distribution.



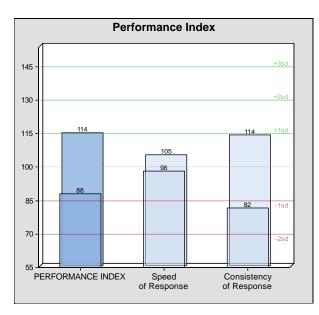


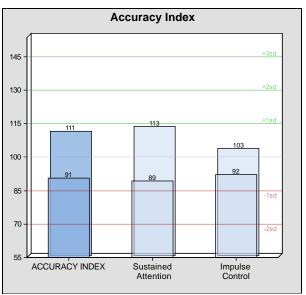






Pre-Post Graphs



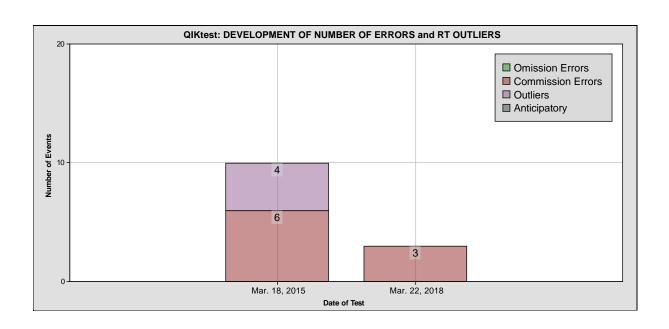


Legend for multiple datasets above:

rear row is newest...

J QIKtest on Mar22,2018

☐ QIKtest on Mar18,2015



INTERPRETATION

- → Performance Index is within normal range.
- → Accuracy Index is within normal range.

I. TOTAL SCORES:

→ All total scores are within the normal range.

II. SCORES BY SECTION

- \rightarrow All scores by section are within the normal range.
- →Commission Errors and Response Time: Standard scores are significantly worse in the first section than the second section. The first section is the low demand task (target-infrequent condition). Lower scores in the first section indicate greater difficulty maintaining attention and control in a boring situation.
- \rightarrow Variability of Response Time Standard scores are significantly worse in the second section than the first section.

The second section is the high demand task (target-frequent condition). Lower scores in the second section indicate greater difficulty maintaining attention and control when performing under pressure.

III. SCORES BY PERIOD

- → **Standard scores for** *Commission Errors* are significantly worse in period 2 than period 1. Period 2 is a continuation of the same low demand task as period 1. Scoring worse in period 2 indicates increasing difficulty maintaining attention and control under boring conditions.
- → **Standard scores for** *Commission Errors* are significantly worse in period 4 than period 3. Period 4 is a continuation of the same high demand task as period 3. Scoring worse in period 4 indicates increasing difficulty maintaining attention and control under continued pressure.
- → **Standard scores for** *Variability of Response Time* are significantly worse in period 3 than period 4.

Periods 3 and 4 represent the same high demand (stimulus frequent) task. Scoring worse in period 3 indicates relative difficulty changing task compared to maintaining performance of a known task.