

Julian: 31-year-old with OCD & addictions

By: Virginia Rojas-Albrieux Psychologist

What I see

An obese, untidy man, with pronounced tics, and a blunted, flat affect

Julian's Primary Concerns

- Anxiety
- Obsessive negative thoughts
- "Sexual Identity OCD" (Intrusive thoughts)
- Social phobia
- Smoking
- Poor concentration

Presenting Symptoms

- Dysregulated sleep cycle
- Difficulty falling asleep
- Nightmares
- Unmotivated
- Reading difficulty
- Difficulty organizing personal time and space
- Poor sustained attention
- Difficulty making decisions
- Distractibility
- Poor concentration

- Compulsive eating
- Addictive behavior
- Social phobia
- Anxiety
- Mood swings
- Depression
- Obsessive negative thoughts
- Sexual identity OCD
- Fatigue
- Generalized muscle pain

Other Symptoms

- Hallucinations
- Psychotic episodes
- Migraines
- Vagal attacks (?)
- Rhinitis

Developmental History

Information delivered by mom:

- Unwanted pregnancy
- Drinking husband
- Difficult relationship b/w parenting couple
- Anxious mom
- Very harsh w/kids
- Client: Crybaby/aggressive, oppositional, shy kid/rebel teenager
- Smoking marihuana (currently)

Information delivered by client:

- Shy, anxious as a child
- Bullied during school years
- Confused, socially "not fitting in", as a teenager
- Explosive episodes (rage)
- Started using marihuana, smoking, and drinking in teenage years
- Cutting when drunk
- Suicidal
- Denies to be currently smoking marihuana in interview

Living with mom and dad – No job, no life project

Treatment History

- 2 hospitalizations in psychiatric institutions due to psychotic episodes (last one November 2017)
- DX:
 - -Schizophrenia?
 - -OCD
- Current medications:
 - -Risperidone (atypical antipsychotic)
 - -Fluvoxamine (SSRI)
 - -Levomepromazine (antipsychotic)

Family History

 All immediate family members are anxious + have issues w/addictions (cigarettes, alcohol, recreational drugs)

• Aunt w/schizophrenia diagnosis

Uncle and cousin w/conduct problems

		INFORME EEG EXPE EJECUCIÓN CONTIN			Página 1
Iniciales: Edad en Test Género:	JGC 31.1 male	Sujeto: Test #: Notas del Test:	140187 1 - empty -	Fecha Test Hora Test	Feb. 12, 2018 17:07

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:



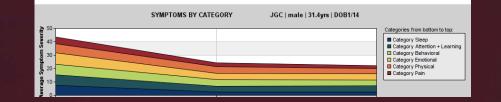
Scores significantly below average (<80) are printed in red. Scores significantly above average (>120) are printed in green.

Results	Data	Norm	Score	1
M31.1 Total Test	Measured Value	Median of Distribution	Standard Score	Percentile i
Omission Errors	10 errors	0.8 errors	68	1 %
Outlier Responses	5 errors	0.9 errors	84	14 %
Commission Errors	35 errors	4.5 errors	55	1.0 %
Response Time	325.5 ms	354 ms	111	77 %
Variability	69.1 ms	61 ms	103	59 %

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.

0	1 Disregulated Sleep Cycle	7
1	1 Difficulty Falling Asleep	7
2	1 Nightmares Or Vivid Dreams	8
3	2 Unmotivated	
4	2 Reading Difficulty	5
5	2 Difficulty Organizing Personal Time Or Space	9
6	2 Poor Sustained Attention	7
7	2 Difficulty Making Decisions	
8	2 Distractibility	5
9	2 Poor Concentration	10
10	4 Compulsive Eating	6
11	4 Addictive Behaviors	10
12	5 Anxiety	10
13	5 Mood Swings	
14	5 Depression	5
15	5 Obsessive Negative Thoughts	9
16	6 Fatigue	7
17	7 Muscle Pain	5
19	Social Phobia	9
20	Sexual Identity OCD	10

Symptom-Tracking Report Feb 07,2018



Total SUM Feb 07, 2018 158

Treatment Plan

Starting sites: T4-P4 and T3-T4 at 0.01

Why T4-P4?

- Unwanted pregnancy, anxious, harsh mom, dysfunctional family, bullying... (trauma)
- Social phobia (chronic disorder)
- History of addictions, anxiety, conduct problems (chronic disorders)



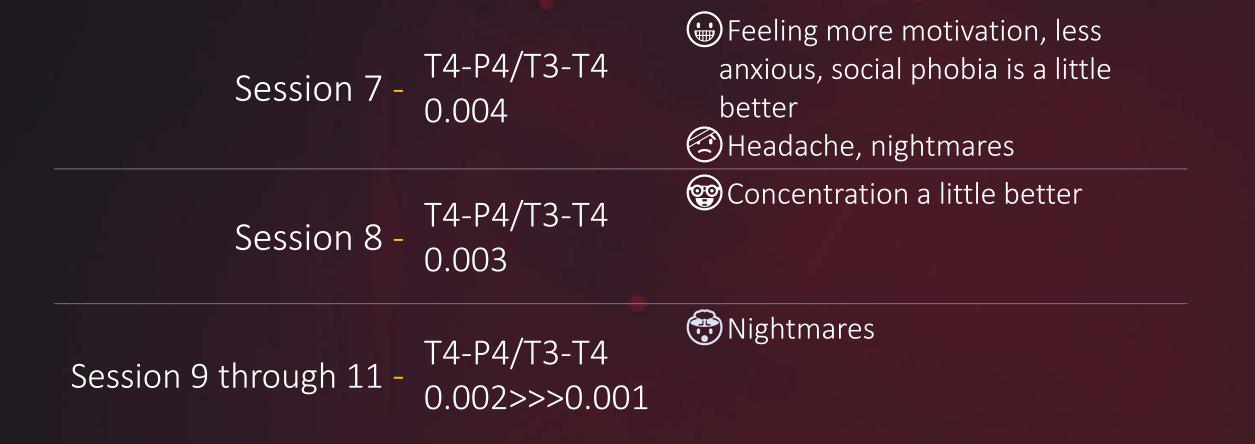
- Mood swings -Suicidal attempt?
- Addiction to marihuana
- Schizophrenia dx? + Schizophrenia in the family
- OCD
- History of hallucinations, vagal attacks?, headaches

Why start at 0.01?

• History of explosive behavior, suicidal, cutting

Not expecting much feedback

Session 1 through 3 -	T4-P4/T3-T4 0.01>>>0.008	Sleep and mood swings a little better
Session 4 -	T4-P4/T3-T4 0.007	Headache
Session 5 through 6 -	T4-P4/T3-T4 0.006>>>0.005	 Feeling more rested when waking up + agreed to go to the mall w/mom and dad (more calm) More active, uses public transportation to come to session (not too bad experience) Less tics



Session 12 - T4-P4/T3-T4 0.001	Less depressed, less intrusive thoughts, less obsessive negative thoughts
T4-P4/ <u>T4-FP2</u> Session 13 - /T3-T4 0.001	 A bit sad, mood swinging. Still anxious Intrusive and negative thoughts, and phobia are better but still there

Session 14 -	T4-P4/ + <u>T4-Fp2</u> T3-T4 0.001	 Anxiety better. Intrusive and negative thoughts better, but same as last session Still sad and dull Muscle tension is better. Tic has lessened Smoking less marihuana – Rethinking about pros and cons of consumption
	T4-P4/ T4-Fp2	

Session 16 -	T4-P4/ T4-Fp2 T3-T4 0.001 Back off from T3-Fp1	Intrusive thoughts flare up
Session 17 -	T4-P4/ T4-Fp2 T3-T4 0.001	 Practically no intrusive or obsessive thoughts. Relaxed mind. Decided to start a diet. Reflecting on how lonely he feels.

Session 18 -	<u>+ Synchrony 10</u> <u>Hz</u> / T4-P4/T4- Fp2/ T3-T4 0.001	 Loved Synchrony! Thinking a lot about what he has missed all this years No job, no friends Smoking a lot these days. Having difficulties to feeling calm. Intrusive and obsessive thoughts come and go. Overall he feels he has improved dramatically.
Session 19 -	Synchrony 10 Hz/T4-P4/T4- Fp2/T3-T4 0.001	 EVERYTHING IS BETTER. Thinking about quitting smoking (Been smoking for 16)!

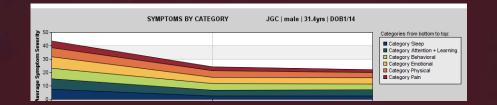
Synchrony 10 Hz T4-P4/T4-Fp2/T3-T4 0.001 + Trying again T3-Fp1 0.002 (6 min)

Thinking about future>Makes him anxious.
 Tic is much better but persists.

Reevaluation

0	1 Disregulated Sleep Cycle	7	2
1	1 Difficulty Falling Asleep	7	2
2	1 Nightmares Or Vivid Dreams	8	3
3	2 Unmotivated	• 10	4
4	2 Reading Difficulty	5	5
5	2 Difficulty Organizing Personal Time Or Space	9	4
6	2 Poor Sustained Attention	7	5
7	2 Difficulty Making Decisions	9	6
8	2 Distractibility	5	4
9	2 Poor Concentration	10	3
10	4 Compulsive Eating	6	4
11	4 Addictive Behaviors	10	6
12	5 Anxiety	10	5
13	5 Mood Swings	10	4
14	5 Depression	5	4
15	5 Obsessive Negative Thoughts	9	5
16	6 Fatigue	7	5
17	7 Muscle Pain	5	3
19	Social Phobia		4
20	Sexual Identity OCD		4

Symptom-Tracking Report April 26,2018



 Total SUM

 Feb 07, 2018
 Apr 26, 2018

 158
 82



Results	Data	Norm	Score	
M31.1 Total Test	Measured Value	Median of Distribution i	Standard Score i	Percentile i
Omission Errors	10 errors	0.8 errors	68	1 %
Outlier Responses	5 errors	0.9 errors	84	14 %
Commission Errors	35 errors	4.5 errors	55	1.0 %
Response Time	325.5 ms	354 ms	111	77 %
Variability	69.1 ms	61 ms	103	59 %

110 Performance Index (0. 80 100 120 100	64 Accuracy Index
(Speed and Consistency of Response)	(Attention and Impulse Control)
111 Speed of Response 103 Consistency of Response	77 Sustained Attention (Omission Errors + Outliers) 55 Impulse Control (Commission + Anticipatory Errors)
83.9% Correct F	a de la comptencia de la c

Results	Data	Norm	Score	
M31.3 Total Test	Measured Value	Median of Distribution I	Standard Score	Percentile i
Omission Errors	1 error	0.8 errors	97	42 %
Outlier Responses	0 errors	0.9 errors	>110	max i
Commission Errors	7 errors	4.5 errors	94	35.7 %
Response Time	331.3 ms	354 ms	107	68 %
Variability	50.6 ms	61 ms	112	79 %

Apr 26, 2018

Session 21 -	Synchrony 10 Hz/T4-P4/T4- Fp2/T3-T4 0.001 <u>Back off from T3-</u> <u>Fp1</u>	 Had a cold and quit smoking cigarettes!!! Intrusive thoughts flaring up again. Nightmares
Session 22 and 23 -	Synchrony 10Hz/T4-P4/T3- T4/T3-Fp1/T4-Fp2 0.001 Reincorporating T3-Fp1, but changing order	 Marihuana only once a day (at night)!!! Intrusive thoughts still showing up. Mood is not so great. Social phobia is OK, but still feels like simple things are hard for him to perform: asking a question in the street, running an errand

Session 2	4 - <u>Alpha-Theta 2</u> <u>Channel</u>	 He loved Alpha Theta !!! EVERYTHING IS BETTER. He is much more awake and active than usual!!! Conversation on marihuana: "I don't feel like I need it, but I have been addicted to something for so many years I think I need to hold on to something"
Session 25 and 2	26 - Synchrony 10Hz/T4-P4/T3- T4/T3-Fp1/T4-Fp2 0.001	Mood was great for next 3 days and then crashed

Session 27 -	<u>Synchrony</u> <u>0.05Hz</u> /T4-P4/ T3-T4/T3-Fp1/ T4-Fp2 0.001	
Sessions 28 trough 31-	Synchrony 0.05 Alpha-Theta 2 Channel	 I notice tic is completely gone. His mood is great. Moments of joy. Feels he is in control of intrusive and negative thoughts. Still smoking marihuana every night.
Session 32 -		Improvements keep up. One day without marihuana.



113	Performance Index 60 80 100 120 140	99 Accuracy Index et al. 100	120 14
	Speed and Consistency of Response)	(Attention and Impulse Control)	
107 Speed o	f Response 112 Consistency of Response	106 Sustained Attention 95 Impulse Control	

Results	Data	Norm	Score		
M31.1 Total Test	Measured Value	Median of Distribution i	Standard Score	Percentile i	
Omission Errors	10 errors	0.8 errors	68	1 %	
Outlier Responses	5 errors	0.9 errors	84	14 %	
Commission Errors	35 errors	4.5 errors	55	1.0 %	
Response Time	325.5 ms	354 ms	111	77 %	
Variability	69.1 ms	61 ms	103	59 %	



Results	Data	Norm	Score		
M31.3 Total Test	Measured Value	Median of Distribution I	Standard Score	Percentile	
Omission Errors	1 error	0.8 errors	97	42 %	
Outlier Responses	0 errors	0.9 errors	>110	max i	
Commission Errors	7 errors	4.5 errors	94	35.7 %	
Response Time	331.3 ms	354 ms	107	68 %	
Variability	50.6 ms	61 ms	112	79 %	

June 7, 2018

124 Performance Index	103 Accuracy Index 60 80 100 120 10
(Speed and Consistency of Response)	(Attention and Impulse Control)
115 Speed of Response 140 Consistency of Response	>114 Sustained Attention (Omission Errors + Outliers) I Gommission + Anticipatory Errors

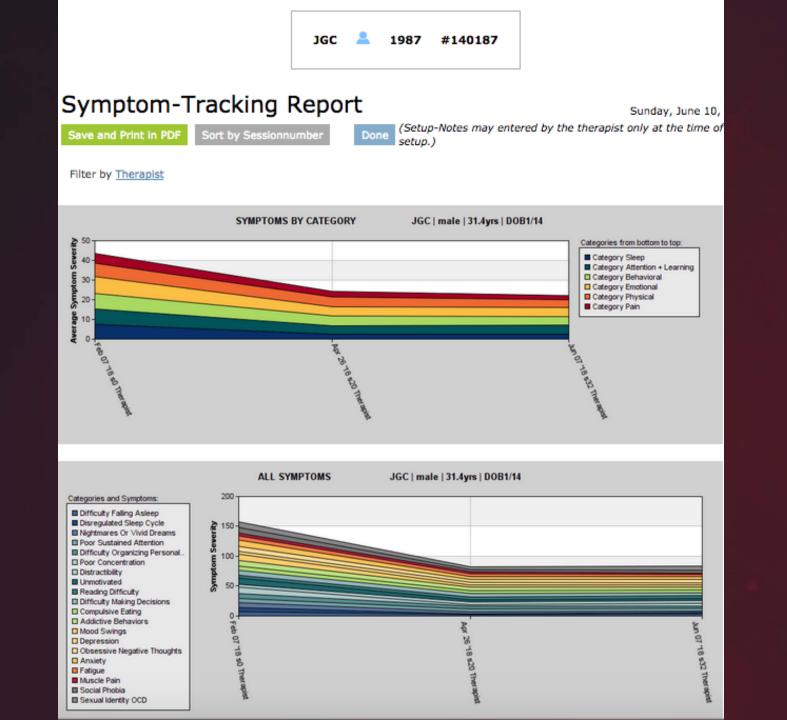
Results	Data	Norm	Score		
M31.4 Total Test	Measured Value	Median of Distribution i	Standard Score	Percentile i	
Omission Errors	0 errors	0.8 errors	>108	max i	
Outlier Responses	0 errors	0.9 errors	>110	max i	
Commission Errors	6 errors	4.5 errors	96	40.3 %	
Response Time	314.9 ms	354 ms	115	83 %	
Variability	38.7 ms	61 ms	140	max	

0	1 Disregulated Sleep Cycle	7	2	3
1	1 Difficulty Falling Asleep	7	2	3
2	1 Nightmares Or Vivid Dreams		3	2
3	2 Unmotivated		4	4
4	2 Reading Difficulty	5	5	4
5	2 Difficulty Organizing Personal Time Or Space		4	4
6	2 Poor Sustained Attention	7	5	5
7	2 Difficulty Making Decisions	9	6	5
8	2 Distractibility	5	4	5
9	2 Poor Concentration	10	3	4
10	4 Compulsive Eating	6	4	4
11	4 Addictive Behaviors		6	5
12	5 Anxiety		5	5
13			4	4
14	5 Depression	5	4	3
15			5	6
16	6 Fatigue	7	5	4
17	7 Muscle Pain	5	3	2
19			4	5
20			4	6

Symptom-Tracking Report April 26,2018



	Total SUM	
Feb 07, 2018	Apr 26, 2018	June 7, 2018
158	82	83



EEG EXPERT REPORT ON QIK CPT - Visual Test

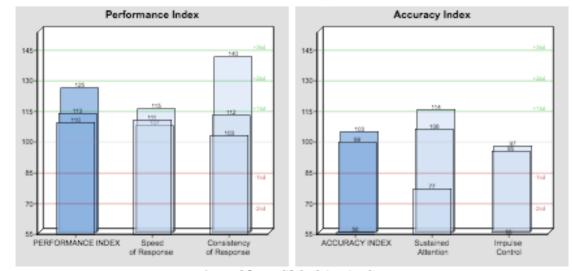
Initials: JGC, #140187

Test Date: Jun. 7, 2018

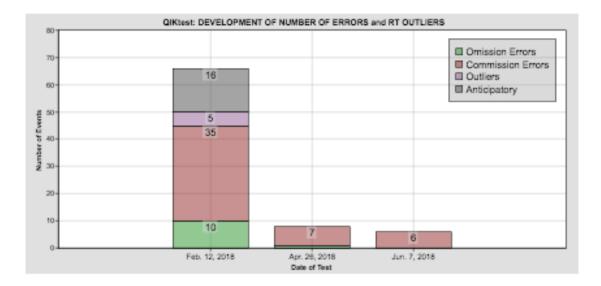
Page 5

Test #3

Pre-Post Graphs

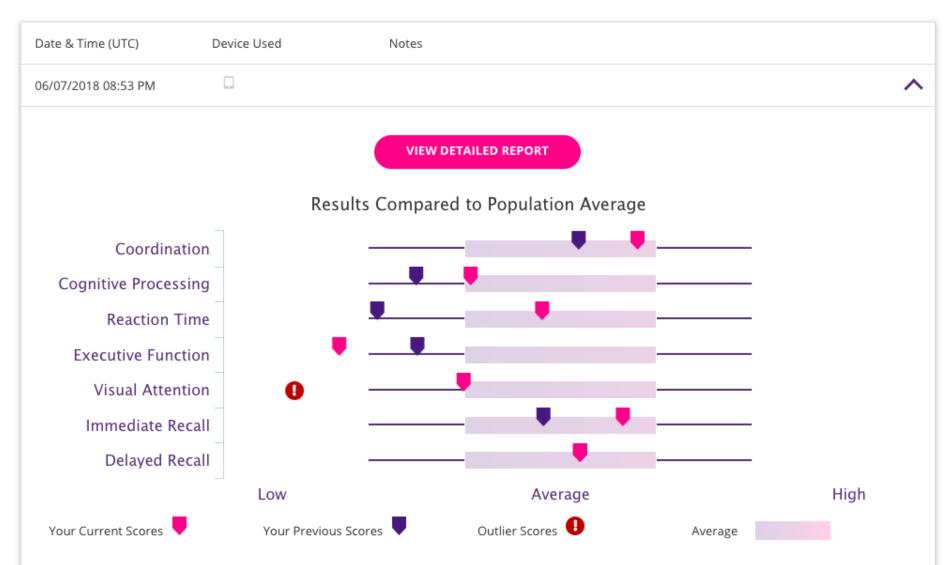


Legend for multiple datasets above: rear row is newest... : QIKtest on Jun7,2018 : QIKtest on Apr26,2018 : QIKtest on Feb12,2018



Julian Guillermo Cote

DOB: 1987-01-14 | Group(s): Primary Group | Total tests taken: 2



The information in this application is not intended as a substitute for professional medical advice, diagnosis, or treatment. Immediately call 911 for events associated with a loss of consciousness. Refer to our Terms of Use for a complete disclaimer concerning use of this application.

INFORME EEG EXPERT SOBRE TEST DE Página 2 **EJECUCIÓN CONTINUA QIK - Test Visual** Iniciales: JGC, #140187 Test#1 Fecha Test: Feb. 12, 2018

Período Período Período Período Período 1 2 3 4 5 Sección. Sección Total DATOS Sect. 1 Sect. 1 Sect. 2 Sect. 2 Sect. 3 BRUTOS - 1 Low High High Low Low Demand Demand Demand Demand 7 2 0 10 Omisiones(#) 0 0 0 5 0 0 5 Outliers 0 0 0 0 24 2 30 2 35 3 Comisiones(#) 6 Tiempo de 377 400 300 280 409 388 292 409 326 Respuesta (ms) Variabilidad (ms 60 58 74 92 63 60 82 63 69

PUNTUACIONES ESTÁNDAR	Período 1	Período 2	Período 3	Período 4	Período 5	Sección s1	Sección s2	Sección s3	Total
Errores por Omisión	101	81	76	62	103	84	64	103	69
Outliers	102	102	105	72	104	103	79	104	.84
Commission Errors	67	103	81	40	78	72	40	78	40
Response Time	102	99	112	117	99	100	115	99	111
Variability	105	104	99	84	99	106	92	99	103

OTHER RESPONSES	Período 1	Período 2	Período 3	Período 4	Período 5	Sección s1	Sección s2	Sección s3	Total
Respuestas Anticipatorias (#)	0	0	0	16	0	0	16	0	16
Respuestas Múltiples (#)	0	0	2	7	0	0	9	0	9

s períodos 1 y 2 (en la sección 1) y período 5 (en la sección 3) representan la condición de aburrimiento o de gets infrecuentes.

s períodos 3 y 4 (en la sección 2) representan la tarea de alta demanda de respuesta o de estímulos frecuentes. ticipatory Responses occur within 150 milliseconds of any stimulus (target or non-target).

spuestas Múltiples reflejan más de una respuesta a un estímulo

ntuaciones si gnificativamente por debajo del promedio están impresos en rojo. Puntuaciones nificativamente por encima del promedio están impresos en verde.

INFORME EEG EXPERT SOBRE TEST DE EJECUCIÓN CONTINUA QIK - Test Visual

High

0

4

311

48

5

Low

0

0

0

362

41

0

0

0

359

50

106

116

Iniciales: JGC, #140187 Fecha Test: Apr. 26, 2018

Low

0

0

0

356

52

105

113

DATOS

BRUTOS

Omisiones(#)

Outliers

Comisiones(#)

Tiempo de

Respuesta (ms)

Variabilidad (ms)

Variability

Test # Initials: JGC, #140187

Página

Sección. Sección. Sección Total

0

7

319

57

119

0

0

0

362

41

0

331

51

112

116

Test Date: Jun. 7, 2018

EEG EXPERT REPORT ON OIK CPT - Visual Test

Page 2 Test #3

RAW DATA	Period 1 Sect. 1 Low Demand	Period 2 Sect. 1 Low Demand	Period 3 Sect. 2 High Demand	Period 4 Sect. 2 High Demand	Period 5 Sect. 3 Low Demand	Sect. 1	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	0	2	4	0	0	6	0	6
Response time(ms)	334	352	315	291	344	343	303	344	315
Variability(ms)	28	36	50	50	31	33	51	31	39

STANDARD SCORES	Period 1	Period 2	Period 3	Period 4	Period 5	Section s1	Section s2	Section s3	Total
Omission Errors	101	102	103	104	103	103	105	103	108
Outliers	102	102	105	105	104	103	108	104	110
Commission Errors	105	103	101	92	104	107	94	104	97
Response Time	115	111	109	113	116	114	112	116	115
Variability	140	124	128	128	126	133	119	126	140

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

Los períodos 1 y 2 (en la sección 1) y período 5 (en la sección 3) representan la condición de aburrimiento targets infrecuentes.

Anticipatory Responses occur within 150 milliseconds of any stimulus (target or non-target). Respuestas Múltiples reflejan más de una respuesta a un estímulo

Puntuaciones significativamente por debajo del promedio están impresos en rojo. Puntuaciones significativamente por encima del promedio están impresos en verde.

Los períodos 3 y 4 (en la sección 2) representan la tarea de alta demanda de respuesta o de estímulos frecusection 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.

PUNTUACIONES ESTÁNDAR	Período 1	Período 2	Período 3	Período 4	Período 5	Sección s1	Sección s2	Sección s3	Total
Errores por Omisión	101	102	103	88	103	103	92	103	97
Outliers	102	102	105	105	104	103	108	104	110
Commission Errors	105	103	94	92	104	107	92	104	95
Response Time	109	108	105	106	110	109	108	110	107

106

OTHER RESPONSES	Período 1	Período 2	Período 3	Período 4	Período 5	Sección s1	Sección s2	Sección s3	Total
Respuestas Anticipatorias (#)	0	0	0	0	0	0	0	0	0
Respuestas Múltiples (#)	0	0	0	0	0	0	0	0	0

128

Período Período Período Período

Low

0

0

0

362

48

3

Sect.1 Sect.1 Sect.2 Sect.2 Sect.3

High

Demand Demand Demand Demand

0

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3

327

63

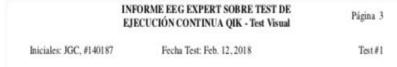
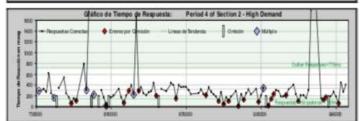


Gráfico de Tiempo de Respuesta: Period 1 of Section 1 - Low Demand etus Corectas 🛛 🗧 Ereres por Coreixón 🛛 Lineas de Tendenda 🗍 Oreacón 🔕 Múltiple 100 80 Date Press 100 100









Eje X para todos los gráficos: tiempo de QIKtest en mseg, con cuadrículas verticales de 1 minuto

INFORME EEG EXPERT SOBRE TEST DE EJECUCIÓN CONTINUA QIK - Test Visual

Iniciales: JGC, #140187

3 1200

120

1000

10

- 40

120

140

100

1000

- 80

- 60

- 40

Fecha Test: Apr. 26, 2018

Gráfico de Tiempo de Respuesta: Period 1 of Section 1 - Low Demand

Gráfico de Tiempo de Respuesta: Period 2 of Section 1 - Low Demand

Gráfico de Tiempo de Respuesta: Period 3 of Section 2 - High Demand

Gráfico de Tiempo de Respuesta: Period 4 of Section 2 - High Demand

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Gráfico de Tiempo de Respuesta: Period 5 of Section 3 - Low Demand

•-Respuestas Cometas 🔶 Errones por Camieión - Liveas de Tendencia 🛛 Onixión 🚫 Mattple

🛥 Respuestas Correctas 🛛 🔶 Errores por Comisión 🛛 Lineas de Tendencia 🖉 Onitacio 🚫 Mültiple

-Respuestas Correctas 🔶 Errores por Cambién — Lineas de Tendencia 🛛 Onixión 🚫 M21 pre

🔺 Respuestas Correctas 🛛 🔶 Errores por Consisión 🛛 Lineas de Tendencia 🔹 Onisión 🚫 Máltyle

espuestas Correctas 🔶 Errones por Carnialón — Lineas de Tendencia Ornisión 🚫 M21 ple

Initials: JGC, #140187

Outlin Responses*

interestion Anticipatorium

10000

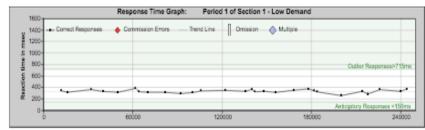
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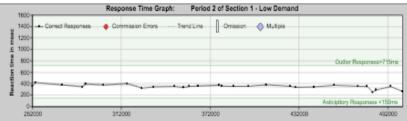
110000

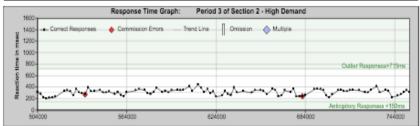
EEG EXPERT REPORT ON QIK CPT - Visual Test

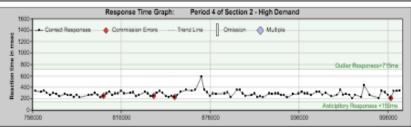
Test Date: Jun. 7, 2018

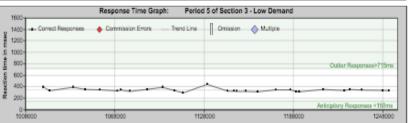
Page 3 Test #3











Eje X para todos los gráficos: tiempo de QIKtest en mseg, con cuadrículas verticales de 1

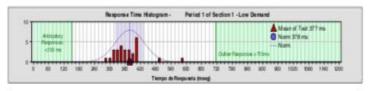
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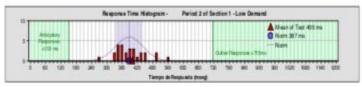
X-Axis for all charts: time into QIKtest in msec, with vertical gridlines of 1 minute

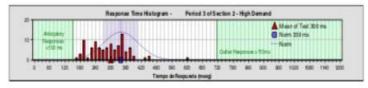


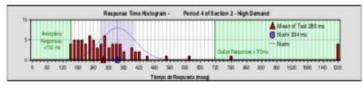


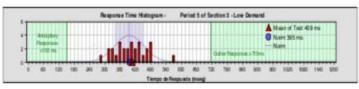
Nems: for Modilize represents a methal distribution of maction times for this age and group compare by them and position to your data in red. The light blue area represent 98/275 for the of a need databasis



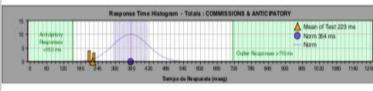




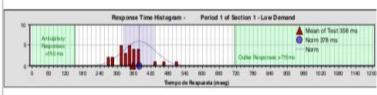


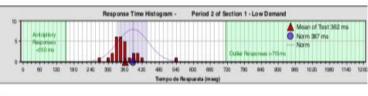


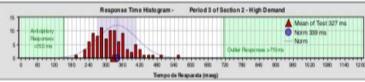


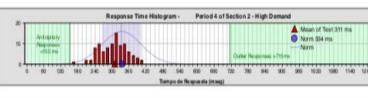


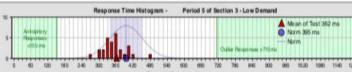
Norms: the blue line represents accornal distribution of reaction times for this age and group: compare by firm and position to your data in red. The light blue are a represent (or ±1 m of a normal distribution



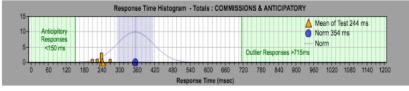












Norms: the blue line represents a normal distribution of reaction times for this age and group: compare by form and position to your data in red. The light blue area represents 68.2% (or $\pm 1\sigma$) of a normal distribution.

