ALEX
DATE OF ASSESSMENT: 13/03/18
BIRTHDAY: 07/02/10
AGE: 8

TEST SUPERVISED BY:
Marcos
HIGH RISK FOR ADHD
Alex’s Results

ASSESSMENT

SYMPTOMS

40/42
A significant risk for ADHD has been detected
No apparent risk range: 0-13
Score: 40

COGNITIVE RISKS

6/7
Weak cognitive skills associated with ADHD have been detected
No apparent risk range: 0-2
Score: 6

EVALUATED RISKS AND SYMPTOMS

<table>
<thead>
<tr>
<th></th>
<th>NO APPARENT RISK</th>
<th>ALEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inattention</td>
<td>0-3</td>
<td>7</td>
</tr>
<tr>
<td>Hyperactivity</td>
<td>0-4</td>
<td>10</td>
</tr>
<tr>
<td>Social relations</td>
<td>0-3</td>
<td>9</td>
</tr>
<tr>
<td>Learning and development</td>
<td>0-3</td>
<td>14</td>
</tr>
<tr>
<td>Cognitive risks</td>
<td>0-2</td>
<td>6</td>
</tr>
</tbody>
</table>

CONCLUSIONS

- We recommend that Alex complete the diagnosis with a clinical consultation.
- Stimulate the cognitive skills that Alex scored lowest in.
- Improving the cognitive functions altered by ADHD may help improve daily activities.

*This cognitive assessment is not designed to be a diagnostic tool, but rather an instrument to help evaluate and detect a person’s risk of having Attention Deficit Hyperactive Disorder or Attention Deficit Disorder (ADHD or ADD)*
DESCRIPTION OF ADHD ASSESSMENT BATTERY

Alex completed the ADHD assessment on 13/03/18 at 8 years of age. The detection questionnaire adapts to the main diagnostic symptoms and criteria for ADHD. The evaluation of the cognitive indices uses a normalized and validated scale for users 8 years-old.

The computerized ADHD assessment (CAB-ADHD) from CogniFit consists of a series of clinical questions followed by online tasks which takes a total of about 30-40 minutes. The CAB-ADHD is a scientific resource that makes it possible to assess a person's risk index for ADHD and their typology, evaluating the main neuropsychological factors identified in the scientific literature surrounding this attention disorder.

It is important to clarify that the results and scores that presented here represent Alex's performance at a specific time and day. Alex's results may vary depending on the time, comfort level, motivation, alertness, or a number of other factors. The results and data from this report do not represent a clinical diagnosis and must be reviewed and interpreted by a qualified healthcare or educational specialist (psychologist, psychiatrist, neuropsychologist, neurologist, etc.), and should be used as to complement a clinical or educational consultation.

The results of this assessment provide the basis for identifying supportive strategies or referring Alex to a health or education professional to make it possible to study the case in more detail. This cognitive screening has been conceived to provide valuable information to the different educational, psychological and neuropsychological factors of people with a possible ADHD diagnosis.

THE CAB-ADHD REPORT CONSISTS OF THREE PARTS:

1. SYMPTOMS

The answers from the questionnaire will be focused on the following areas:
- Inattention
- Hyperactivity
- Social Relations
- Learning and Development

2. COGNITIVE RISKS

In this section, you will see a circular diagram next to each evaluated area, which will indicate the user's score based on their percentile and normalized for their age and gender. For example, a score of 500 would be calculated depending on the user's age group. CogniFit's values are calculated in percentiles but are shown adjusted on a scale of 0-800. As such, the higher score, the better.

Green: Cognitive strengths
Yellow: Below-average cognitive skills
Red: Cognitive weaknesses

3. CONCLUSIONS

At the end of the report, you will find:
- A description of the risk index and the effects on cognitive profile and detected symptoms.
- Specific recommendations and personalized plan of action.
SYMPTOMS

ADHD stands for Attention Deficit Hyperactive Disorder. It is a neurobiological disorder that starts in childhood and is characterized by impulsiveness and/or hyperactivity.

ALEX’S SYMPTOMS THAT INDICATE A HIGH RISK FOR ADHD

INATTENTION
HIGH RISK
Attention is a main cognitive skill necessary for learning, like when one must pay attention to a stimulus, solve a problem, be careful not to make a mistake, or listen closely. ADHD causes a neurological deficit in the networks that regulate these important functions.

HYPERACTIVITY
HIGH RISK
Controlling one’s movement, planning a behavior or action, waiting, or knowing how to inhibit actions are generally deficient in people with ADHD. The brain has specific structures and synaptic networks that are in charge of these functions.

SOCIAL RELATIONS
HIGH RISK
ADHD causes learning difficulties that can lead to frustration, insecurity, social isolation, and general unhappiness due to these difficulties.

LEARNING AND DEVELOPMENT
HIGH RISK
Different neurobiological development factors make up ADHD’s main problems, causing difficulty, poor academic performance, and affecting childhood development.
ALEX’S COMPLETE SYMPTOM REPORT

According to the results of the questionnaire, Alex presents symptoms that indicate a significant risk of Attention Deficit Hyperactive Disorder (ADHD) in the areas of inattention, hyperactivity, social relations and learning and development. As such, it is possible that Alex suffers from some degree of ADHD. If Alex has trouble at school, at home, or with friends, it may be due to ADHD.

IMPORTANT These results are not a diagnosis. This information cannot substitute a formal diagnosis given by a professional, but it can serve as a complementary tool to help make a comprehensive diagnosis.
IN DETAIL: SYMPTOMS RELATED TO ADHD

**INATTENTION**

**HIGH RISK**

Alex has significant alert signs in the area of inattention. Different research shows that ADHD is made up of a deficit in the neural networks associated with attention and concentration. Significant signs associated with ADHD have been detected, which may cause academic difficulty and problems with daily activities.

The answers from the questionnaire related to inattention that indicate that Alex has a significant risk of having ADHD are:

- Often has trouble paying attention.
- Doesn't always pay close attention to details and often makes mistakes.
- Doesn't always complete tasks alone.
- Often seems like they're not paying attention.
- Often forget to do everyday tasks like making the bed, brushing teeth, etc.
- Often loses things, like books, notebooks, pencils, or toys.
- Avoids tasks that require a lot of mental effort for a long period of time.

**HYPERACTIVITY**

**HIGH RISK**

Alex shows significant warning signs in the area of hyperactivity and impulsiveness. Children with ADHD often have alterations in the areas related to regulating impulses and planning behaviors.

The answers from the questionnaire related to hyperactivity and impulsiveness that indicate that Alex has a significant risk of ADHD are:

- Responds before the question has been asked completely.
- Has trouble sitting for periods of time.
- Runs, skips, jumps or moves excessively.
- Seems fidgety and always moving.
- Often has trouble with calm or quiet recreational activities.
- Talks excessively.
- Interrupts others.
- Is impulsive.
- Is irritable.
- Fidgets and constantly moves their hands or feet and has difficulty sitting still in a chair.
SOCIAL RELATIONS

HIGH RISK

Alex shows significant warning signs in the area of social relationships. The learning difficulties that ADHD may cause may lead to negative feelings, low self-esteem, sadness, or social isolation caused to them feeling “different from everyone else” or like they have to “work much harder”.

Interpersonal Relations (with others):
- Often irritable or easily upset.
- Sensitive to jokes or comments.
- Is unorganized.
- Seems distracted.

Intrapersonal Relations (with oneself):
- People usually say that they are "lazy".
- Has trouble making friends and keeping relationships.
- Often avoids being with friends or going to social events.

Motivation:
-Feels overwhelmed when doing homework or taking exams.
- Doesn’t seem to like school and doesn’t show enthusiasm to go.

The answers from the questionnaire related to social relationships that indicate that Alex has significant difficulty with social relationships are:

- INTERPERSONAL RELATIONS (WITH OTHERS) HIGH RISK
- INTRAPERSONAL RELATIONS (WITH ONESELF) HIGH RISK
- MOTIVATION HIGH RISK
LEARNING AND DEVELOPMENT

HIGH RISK

Alex presents significant warning signs in the area of learning and development. The learning difficulties that ADHD can cause may be the origin of academic difficulty or failure and may be the cause of the difficulty learning academic concepts. Both problem during childhood development, as well as family history, may be a risk factor.

Childhood development

- There were complications during pregnancy.
- There were complications during birth.
- Wasn’t born at full-term.
- Weighed less than 2.5 kg (5.5 lbs).
- Has a visual, auditory, or intellectual handicap or has had some neurological damage.
- Has received extra help at school (speech therapy, psychotherapy, cognitive stimulation, etc.).

Family background

- Family history of learning disorders or reading difficulties.
- Family history of academic difficulty.
- Family history of giftedness.

Adademic competences

- Often makes mistakes when doing homework and has a hard time passing exams.
- Academic performance is below the average for their age.
- Problems became more apparent after entering elementary school.
- Has trouble doing math and has difficulty understanding numbers and what they mean.
- Has difficulty understanding mathematical problems.

The answers from the questionnaire related to learning and development that indicate that Alex has a significant risk for ADHD are:

- CHILDHOOD DEVELOPMENT HIGH RISK
- FAMILY BACKGROUND HIGH RISK
- ADACEMIC COMPETENCES HIGH RISK
COGNITIVE RISKS

In this section, you will see a circular diagram next to each evaluated area, which will indicate the user's score based on their percentile and normalized for their age and gender. For example, a score of 500 would be calculated depending on the user's age group. CogniFit's values are calculated in percentiles but are shown adjusted on a scale of 0-800. As such, the higher score, the better.

ALEX'S COGNITIVE PROFILE INDICATES A SIGNIFICANT RISK FOR ADHD

REASONING
240/800
Ability to efficiently use (organize, relate, etc.) acquired information.

MEMORY
52/800
Ability to retain and manipulate new information and recover past memories.

ATTENTION
8/800
The ability to filter distractions and concentrate on relevant information.

COORDINATION
38/800
The ability to efficiently and precisely carry out organized movements.

PERCEPTION
8/800
Ability to interpret stimuli from the environment.
Alex's cognitive profile indicated a significant risk for ADHD. The results from the different tasks suggest that reasoning, memory, attention, coordination and perception are Alex's areas of improvement. As such, it is likely that Alex has some degree of ADHD. We recommend using this information to help make a more precise diagnosis.

**IMPORTANT** These results are not a diagnosis. This information cannot substitute a formal diagnosis given by a professional but it can serve as a complementary tool to help make a comprehensive diagnosis.
IN DETAIL: COGNITIVE DOMAINS ASSOCIATED WITH ADHD

**REASONING**

240/800

**PLANNING**

Score Received: 240

Alex received scores below age-average in the area of planning, which means that it may be an indicator of ADHD. Planning is the ability to mentally organize the best way to reach a goal, like when you plan how you’re going to tell a story to friends. People with ADHD generally present alterations in planning, which is why it is more difficult to plan behaviors, plans, tasks, and time.

**MEMORY**

52/800

**SHORT-TERM MEMORY**

Score Received: 16

Alex has received scores in short-term memory compatible with a possible alteration in this skill. It is important to keep in mind that an alteration in short-term memory may be a strong indicator of ADHD. Short-term memory is the ability that makes it possible to remember a small amount of information over a short period of time, like when we remember the beginning of a sentence to understand the whole idea. The latest research in ADHD suggests that children with ADHD had lower performance than the control group when remembering sentences, numbers, and letters.

**WORKING MEMORY**

Score Received: 88

Alex has received scores in the area of working memory compatible with a possible alteration in this skill. It is important to keep in mind that poor working memory may be a strong indicator of ADHD. Working memory is the ability to retain and use the information necessary to complete complex cognitive tasks, like language comprehension, learning, and reasoning. Many studies refer to the working memory of children or adults with ADHD as immature or inefficient.
FOCUSED ATTENTION
Score Received: 8
Alex has received scores that indicate that the area of focused attention is compatible with a possible alteration in this skill. Focused attention can be a strong indicator of ADHD. Focused attention is the brain's ability to focus attention on a stimulus, independent of how long attention is held. Focused attention is a type of attention that makes it possible to quickly detect relevant stimuli.

INHIBITION
Score Received: 8
Alex has received scores in the area of inhibition that are compatible with a possible alteration in this skill. Inhibition or inhibitory control could be defined as the human ability to inhibit or control impulsive (or automatic) responses and generate appropriate responses with the help of attention and reasoning. Inhibition helps stop automatic or inappropriate responses, substituting them for more appropriate responses.

HAND-EYE COORDINATION
Score Received: 38
Alex received scores that are compatible with a possible alteration in hand-eye coordination. It is important to remember that alterations in this skill may be a strong indicator of ADHD. Children with ADHD don't tend to show a delay in the development of primary motor skills but do often show delays in intentional movements, whether it be with the extremities or voluntary eye movement. Visual and motor skills are essential to quick and efficient reading and writing. If these skills are not acquired as children, adults with ADHD may have difficulty writing and with fine motor skills that require hand-eye coordination.
VISUAL PERCEPTION
Score Received: 8

Alex has received scores in visual perception that are compatible with a possible alteration in this skill. It is important to keep in mind that poor visual perception can be a strong indicator of ADHD. Visual perception is the ability to interpret the information that our eyes receive from the visible light in the environment. Perceptive skills are currently being studied in both children and adults with ADHD, as it seems to be inefficient in people with this attention disorder. Stimuli that sparkle, shine, make noise, move, or are large in size are more likely to capture attention, which is why it’s important to take the proper functioning of all of these perceptive processes into account.
EXECUTIVE FUNCTIONS AND ADHD

Attention Deficit Disorder or Attention Deficit Hyperactive Disorder affect a series of deficits in a number of other, more sophisticated skills, like executive functions. Executive functions are a set of cognitive skills that make it possible to regulate behavior in order to direct it toward a specific goal. ADHD often affects at least one executive function, which is why it is important to assess the cognitive abilities that make up this set of functions, like focused attention, planning, inhibition, and working memory. An alteration in these skills, along with slow development in the cortical areas, explains the difficulties that children with ADHD face, in both their attention skills as well as regulating their behavior.

IT IS POSSIBLE THAT ALEX:

WORKING MEMORY
- Has significant difficulty remember information if abbreviations and acronyms aren’t used.
- Isn’t able to remember what was being said after being interrupted.

FOCUSED ATTENTION
- Has problems paying attention and is easily distracted.
- Does things quickly or carelessly or slowly and incomplete.

PLANNING
- Has trouble calculating how long a task will take to complete.
- Has trouble knowing how to start a task.

INHIBITION
- Needs significant help regulating behavior. Isn’t able to inhibit an action or activity when asked.
- Has trouble staying calm and quiet.
Alex has received some scores in executive functions that suggest a possible alteration in these skills, which would indicate a risk for ADHD. The areas of executive functions that Alex most needs to improve are working memory, planning, focused attention and inhibition. This is why we recommend that you use this information to help make a more precise diagnosis.

**IMPORTANT** These results are not a diagnosis. This information cannot substitute a formal diagnosis given by a professional, but it can serve as a complementary tool to help make a comprehensive diagnosis.
CONCLUSIONS

Alex shows significant risk for ADHD in Clinical symptoms and Cognitive risks. This means that there may be an important ADHD alteration. Predominant hyperactivity/impulsiveness: Alex shows more symptoms of hyperactivity and impulsiveness than of inattention. Symptoms of hyperactivity are often present and make one feel the need to move constantly. People with this subtype generally have difficulty with impulse control and attention difficulties are not as significant. Some signs of this may be: difficulty sitting in class, nail-biting, controlling behavior, jumping, and constant moving.

In addition to the interpretation of symptoms and cognitive profile assessed, the following criteria should be taken into account to ensure the validity of the diagnosis by a qualified professional:

**General criteria from the questionnaire that Alex responded YES to:**
- Frequently uses a computer mouse.
- This lack of concentration, impulsiveness, or restlessness is constant.
- Is right-handed.
- Their body is free from substances (medicine or drugs) that may cause these cognitive changes and/or difficulties.
- Frequently uses a tablet or touchscreen.

**General criteria from the questionnaire that Alex responded NO to:**
- Uses glasses or contact lenses.
- Uses hearing aids.

See a professional to make an official ADHD diagnosis as the results from these tests have indicated a high probability of ADHD.

Do cognitive training as it can help improve the symptoms and cognitive skills. CogniFit offers a series of scientifically validated brain games to train executive functions and other cognitive skills affected by ADHD, helping to improve attention, concentration, and impulse control.

*Please make sure that all of the questions have been answered carefully and correctly and that the assessment was completed in a quiet room free from distractions, as this may alter results. The data in this report corresponds to a specific time in Alex's life and may vary over time.*