

# **Instructions for use**







# MANUFACTURER

Sincrolab S.L.

C/ Prensa 7, 28033 Madrid, Spain

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## Indications for use

SEA OF HEROES: NEW WORLD is a digital therapy indicated to improve cognitive functions in children aged 8 to 12 years diagnosed with ADHD combined type.

<u>Expected clinical benefits for the patient</u>: SEA OF HEROES: NEW WORLD showed improvements in the cognitive functions of attention, inhibitory control, working memory and cognitive flexibility and in ADHD symptoms and impairments related to attention and behavior and general executive functioning.

Digital therapy with SEA OF HEROES: NEW WORLD should be directed by a healthcare professional and should be considered for use as part of a therapeutic programme that addresses the symptoms of the disorder as a whole.

#### **SIDE EFFECTS**

There were no serious adverse effects. Of the 41 patients participating in the SEA OF HEROES: NEW WORLD clinical trial, only one patient experienced a headache-related adverse event (0.18%). This event led to discontinuation of the device, and reported that the adverse event was transient and not long-lasting or irreversible after discontinuation.

#### **CAUTIONS**

If the patient experiences frustration, emotional reaction, dizziness, nausea, headache, eye strain, or joint pain while playing Sea of Heroes: New World, stop treatment. If the problem persists, contact the patient's healthcare professional. If the patient experiences a convulsion, stop treatment and contact the patient's healthcare professional.

#### LIMITATIONS AND/OR CONTRAINDICATIONS

Sea of Heroes: New World is not indicated for patients with photosensitive epilepsy, colour blindness, or physical limitations that restrict the use of a mobile device, and is not suitable for patients with functional anaphalbetism in reading and calculation skills. Parents should consult with the patient's healthcare professional if they have any questions or concerns.

#### **WARNINGS**

The app must be used exclusively by the patient. The use of the application by any user other than the patient limits the results of the treatment. It is recommended that the app be used in an environment free of distractions and noise. When a treatment session is completed, the patient should be sure to close the Sea of Heroes: New World app on their device.

If the patient experiences serious life-threatening harm due to the use of Sea of Heroes: New World he/she should immediately contact the manufacturer and/or notify the competent authority of the Member State in which the patient is established (In Spain the competent authority is the Agencia Española del Medicamento).

Malfunction of the Sea of Heroes: New World product cannot affect patient safety.

## **Product Description**

SEA OF HEROES: NEW WORLD is a digital, non-pharmacological treatment delivered through a serious game that has been shown to improve cognitive functions in children aged 8-12 years with combined ADHD.

The treatment programmed into the game is designed to challenge the patient's control of the three main cognitive domains (attention, memory and executive functions) during treatment sessions, which require concentration and flexibility to manage several tasks at the same time.

The SEA OF HEROES: NEW WORLD treatment consists of an application, which can be used on mobile devices: mobile and/or tablet (see page 15 for compatible devices).



SEA OF HEROES: NEW WORLD includes 14 games to be played by the patient throughout the treatment. The recommended schedule is three 15-minute sessions per week for a total of 12 sessions per month for three sessions. The first treatment session consists of a selection from among the 14 games, which will change over the course of the treatment to address the different cognitive functions. The results obtained in each treatment session are transmitted to an Adaptive Cognitive Management System (ACMS) which, by means of artificial intelligence algorithms, automatically adjusts the selection of games and their levels to continue the treatment.

SEA OF HEROES: NEW WORLD has been evaluated in 41 children with combined ADHD in a clinical study, where SEA OF HEROES: NEW WORLD was used during a 12-week treatment period (3 sessions per week for 15 minutes in each session) and improvements were observed in the cognitive functions of attention, inhibitory control, working memory and cognitive flexibility and in the symptoms and alterations of combined ADHD related to attention and behavior and general executive functioning.

## User manual for parents and caregivers

#### RECOMMENDATIONS BEFORE STARTING TREATMENT

It is recommended to store the mobile device password protected to reduce the risk of unauthorized access.

Ensure that the mobile device is fully charged before use and that the device's audio system is working properly and set to an appropriate level.

Ensure that app notifications are turned on to receive alerts about new treatments and app updates.

#### **HOW TO START TREATMENT**

The SEA OF HEROES: NEW WORLD treatment consists of 14 games that a patient should play throughout the treatment. The recommended treatment is three 15-minute sessions per week for a total of 12 sessions per month for three months.

It is recommended that each session be completed without interruption. Allow the patient enough uninterrupted time to complete each treatment session. Minimize distractions to the patient during each SEA OF HEROES: NEW WORLD treatment. For example, consider taking the patient into a room or using headphones and turning off other mobile devices and televisions.

Find a comfortable place where the patient can use SEA OF HEROES: NEW WORLD, ideally sitting upright in a well-lit room with minimal glare on the device.

It is best for the patient to adjust the field of view and avoid using the device too close to their eyes. It is recommended to turn on the blue light filter on the device if administered at night, but it is also recommended not to play just before bedtime to avoid the risk of a possible reduction in sleep quality.

#### How to start using Sea of Heroes: New World

Try to incorporate SEA OF HEROES: NEW WORLD into your family's routine and make it a habit. You can use the reminders in the game or any other tool to manage your family's schedule.

Encourage the patient to give their full attention and effort to each treatment with SEA OF HEROES: NEW WORLD to help ensure the best treatment outcomes.

Regularly discuss the treatment experience with the patient and let them know that, by design, SEA OF HEROES: NEW WORLD will be challenging to play.

During the treatment session, make sure the patient knows that it is okay to pause the treatment for a few minutes, if necessary, for example, to avoid fatigue or eye strain.

To ensure the effectiveness of the treatment it is recommended to complete the proposed treatment session on the day. Each treatment session comprises all the islands that appear on the screen when starting the application. The patient will receive notifications on their device to run the treatment sessions on the pre-set days. If the patient does not complete the assigned treatment session on the day, the next day the patient will continue with the same session.



## **Download and launch**

To start the treatment, in the store of your mobile device, iOS or Android, search for and download "Sea of Heroes: New World".

The app icon in the stores is:



Once the download is complete, find and click on the application icon on your mobile device.

Follow the on-screen instructions to log in with the email address and password, which you have previously created with your healthcare professional. When finished, select "**Log in**".

If your session starts, the application is correctly installed. If not, select "Need help?" on the home screen.

To get help from Sincrolab Support before logging in, select on the home page: "Need help?" By inserting your email, you can send a message to Sincrolab Support online and you will receive a response within 48 hours.

SEA OF HEROES: NEW WORLD will send automatic, pre-activated notifications to your device on treatment days.



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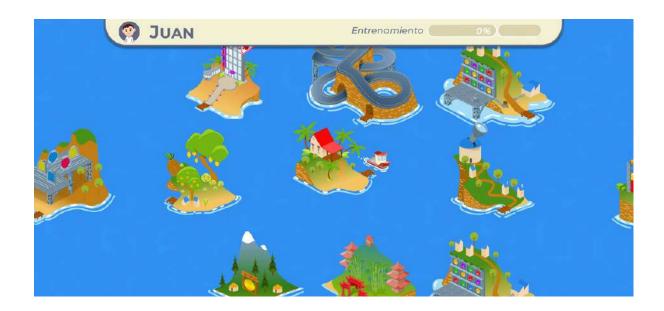
¿Necesitas ayuda?

If you can't remember your password, select "Forgotten your password?" and you will receive an email to update/change your password. Alternatively, speak to your healthcare professional.



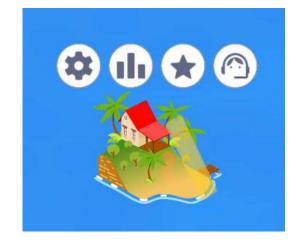
## Login

By selecting "Login", the map will appear with the islands selected in the treatment session to be worked.



The island in the center of the map represents the island "Home". Selecting it reveals 4 icons (from left to right):

- Settings Options
- Ranking
- Achievements
- Support



#### **Settings – Options**

Selecting the settings button will display your personal data (user name and email) and several options to select:

- Change language: you will be able to select the most suitable language among Spanish, English, Portuguese (from Portugal), Portuguese (from Brazil). Once chosen, select "Select language".
- **Science**: you will be able to read about studies that have proven the validity of SEA OF HEROES: NEW WORLD.
- About us: you will be able to read about Sincrolab and its team.
- Logout: will provide you with the option to close your user. If you log out, in order to log in again you will need to enter your email and password. It is recommended that you do not log out during the execution of treatment sessions.









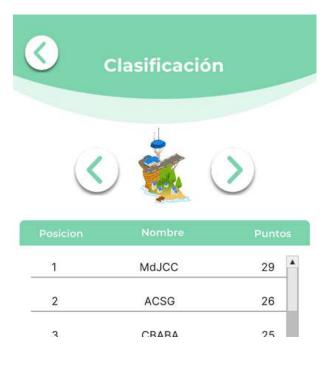
Ranking Achievements



## Login

## Ranking

Select the ranking button to see the points accumulated in each game and the ranking with respect to the other players.



#### **Achievements**

Select the achievements button to find out the achievements obtained in each game.



### **Support**

By selecting the support button, you will be redirected to the Support page and you will have the possibility to choose between two possibilities to receive support:

- Online support: you will directly send a message to Sincrolab online support and you will be attended within 48 hours
- **Correo electrónico**: you will be redirected to your email address to send an email to soporte@sincrolab.es



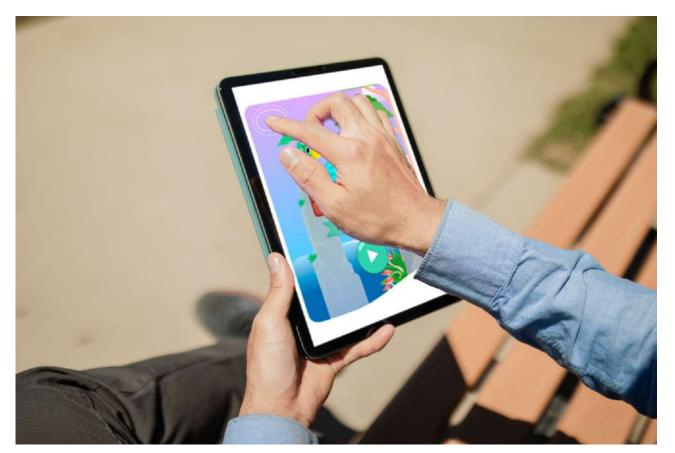


# **Device manipulation**

To play, Sea of Heroes: New World has 2 main actions: 1) Tap; 2) Don't tap.

To press a target, the patient must touch the screen of the mobile device or tablet with their finger.

Encourage the patient to use both hands.



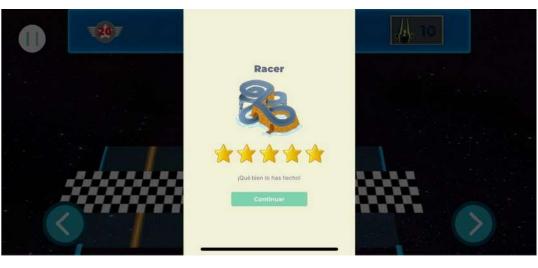




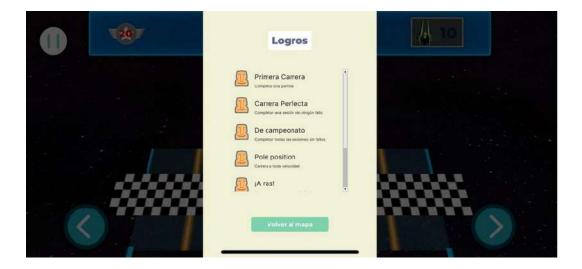
## **Dealing with Sea of Heroes: New World**



The objective of SEA OF HEROES: NEW WORLD is for the patient to successfully discover the islands that appear in each assigned treatment session. The number of islands that will appear depends on the time recommended by the health professional and the cognitive profile of the patient. The patient must select an island and follow the oral and written instructions provided by the application in order to train correctly. The patient will then play a test game to practice the interactions required by the game.



Each time an island is completed, its drawing will be blurred and cannot be selected again, until the next treatment session in which it is assigned. Upon completion of an island, the patient will receive a reward in the form of stars and a summary of achievements.



The daily treatment session ends when all the islands assigned for the session are blurred and none remain to be discovered until the next treatment day. This ensures that SEA OF HEROES: NEW WORLD is used consistently with the intended treatment schedule and prevents overuse.

Unlike an action video game, there is no way to "win" SEA OF HEROES: NEW WORLD. The game algorithm continues to challenge the patient to a specific and consistent level of difficulty throughout the treatment sessions. The multitasking rules become more complex as the treatment sessions progress based on the patient's performance. As long as the patient consistently plays as prescribed and tries his or her best, he or she is participating in the treatment as intended.



## **Pause**



Each treatment session can be stopped at any time by selecting the "Pause" button in the upper left corner of the screen.

Select to pause the treatment.



To return to the treatment select "continue".

To re-read/listen to the instructions and play a practice game select "Back to instructions".

## **Exit and end the treatment**

When a treatment session is completed, be sure to close the SEA OF HEROES: NEW WORLD app on your device. After you have completed the SEA OF HEROES: NEW WORLD treatment period recommended by your therapist, access to the treatment is deactivated.

To remove/uninstall the application follow the instructions of your mobile device manufacturer.

# Security of mobile devices and tablets

#### **DEVICE SAFETY RECOMMENDATIONS**

The SEA OF HEROES: NEW WORLD software has been designed with state-of-the-art cybersecurity measures in mind. For your mobile device, the following measures are recommended to maximize overall cybersecurity:

- Mobile devices should be stored password/pin protected to reduce the risk of unauthorized access.
- Mobile devices should be in automatic lock mode after a period of inactivity.
- Avoid using untrusted WiFi networks.
- The operating system (OS) of mobile devices must be updated to the latest available version.
- The mobile device has to be compatible with the use of the stores where the app is located (Apple Store and Play Store). For the case of Android, the list of compatible devices is available at: <a href="https://support.google.com/googleplay/answer/1727131?hl=es-419">https://support.google.com/googleplay/answer/1727131?hl=es-419</a>
- Please contact the manufacturer of your mobile device if you have any questions or doubts related to your device.



## **Application Maintenance**

The application must be updated to the latest available version. If you have automatic updates enabled, the application will be updated automatically. If you do not have automatic updates enabled, you will be prompted to update from the store.

## **Troubleshooting**

#### Q. The SEA OF HEROES: NEW WORLD application does not start correctly.

- Make sure the mobile device is connected to the WiFi network or has mobile data.
- Ensure that the mobile device meets the minimum specifications listed in the Supported Device List section.
- Ensure that there is enough free storage space on your device to download and use the application.

#### Q. My email/password is not accepted by the SEA OF HEROES: NEW WORLD app.

- Check that you have entered the text correctly.
- Make sure the mobile device is connected to WiFi or has mobile data during login, account registration or activation.

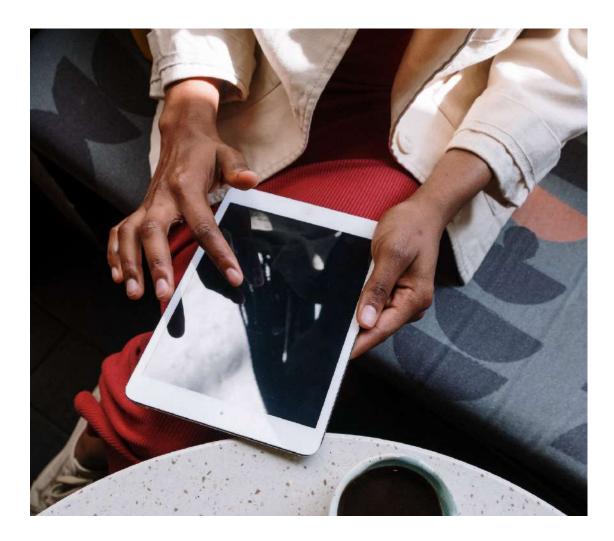
#### Q. The app does not show me the islands to play on.

• If you play close to midnight in your local time, the session might count for the next day (for example, if you start the game at 11.50pm and finish at 12.20am). This problem can be alleviated by completing the treatment session on the same calendar day.

#### Q. The application closes unexpectedly, stops responding, or fails to open.

• Follow your device manufacturer's instructions to force the app to close (and then open it again), restart your device, check for system updates or reinstall the app, if necessary.

# **Compatible devices**



The application can only be used on mobile devices with access to the Apple and/or Android stores. The platform uses secure and encrypted communications between the apps and the server. Specifically, it uses HTTPS encrypted communications. Access control is performed through authentication and authorization protocols to the services, ensuring access to information.

Therefore, it can connect to any WiFi or Mobile Data network.

#### MINIMUM IOS DEVICE REQUIREMENTS

iOS Version	11 and above		
Hardware	16 GB - At least 500 MB free		
Chip	1.3 Ghz dual-core CPU chip with 64-bit architecture		
Memory size	1 GB		
Network Infrastructure	Wifi or Mobile Data		

#### MINIMUM ANDROID OS DEVICE REQUIREMENTS

Versión iOS	9 and above			
Hardware	16 GB - At least 200 MB free			
Chip	1.5 GHz quad-core CPU chip with 64-bit architecture			
Tamaño de la memoria	1 GB			
Infraestructura de Red	Wifi or Mobile Data			

## **Sincrolab Support**

Sincrolab Support is available for questions related to the use of SEA OF HEROES: NEW WORLD, technical assistance and requests for paper copies of this instruction manual.

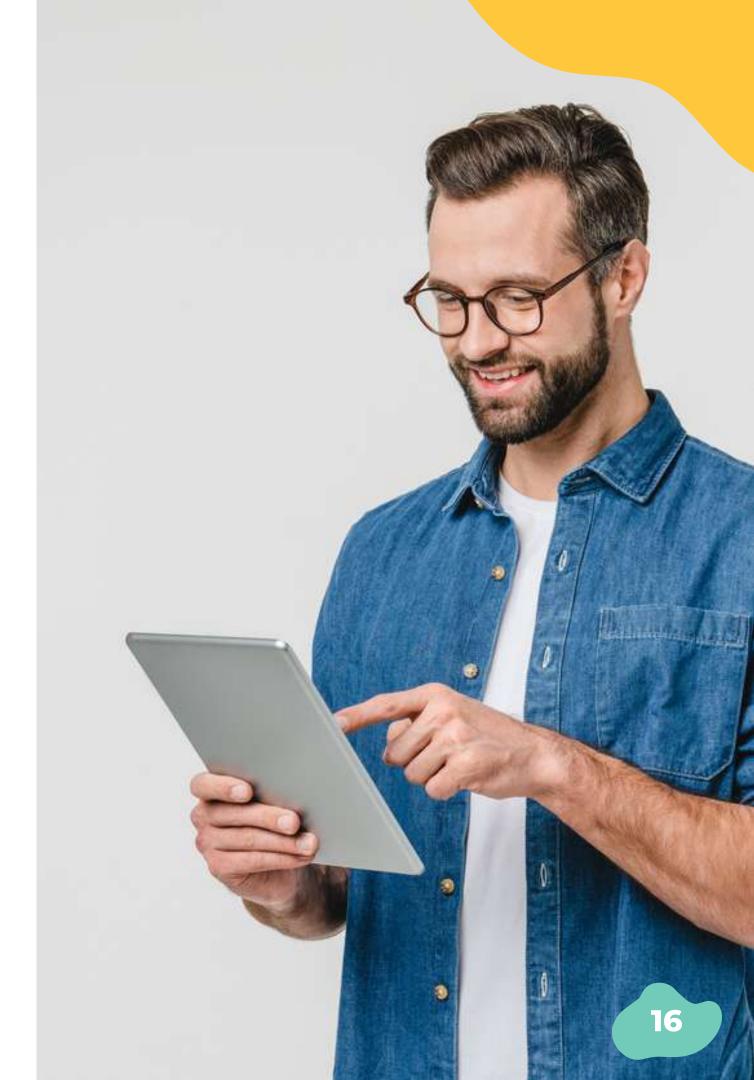
Hours of operation: Monday to Friday from 9:00 am to 6:00 pm (except national holidays).

Website: www.sincrolab.es

Phone/Whatsapp: +34 622 216 481

The instructions for use are also available for download at:

https://www.seaofheroes.com/static/usermanual/



# Clinical Research Supporting Sea of Heroes: New World

For healthcare professionals

#### **INTRODUCTION**

Sea of Heroes: New World (KAD\_SCL\_01) has been evaluated in 29 children with ADHD combined in a clinical study.

#### **STUDY DESIGN**

A 12-week randomized, double-blind, parallel-group, controlled trial (KAD\_SCL\_01) in 8-12-year-old children with ADHD, conducted at 1 center in Spain (Hospital San Carlos, Madrid). Forty-one subjects were randomly assigned to receive KAD\_SCL\_01 (n=18) or control (n=22) for approximately 15 minutes, 3 days a week, for 12 weeks. From the initial group of 41 subjects, 40 were randomly assigned to one of the two trial conditions (experimental or non-experimental). Of these, 28% (n=11) dropped out during the intervention period (control=8, experimental=3). Final statistical analyses were performed on 29 subjects (experimental N=15; controls N=14).

#### **AIMS**

The primary endpoint was to assess the mean change in clinical measures from before to after the intervention (baseline and at 12 weeks). The primary clinical measure was the commission's score on the Continuous Performance Test® (CPT-III). The secondary clinical measures were the other indices on the Continuous Performance Test® (CPT-III). attention, and executive functioning), on the Corsi® Block Tapping Test (visuospatial short-term working memory) and on the Neuropsychological Evaluation of Development-II® (NEPSY-II): from this test battery the following subtests were administered: a) auditory attention and cognitive flexibility test; b) verbal fluency test; c) letter sorting test to measure cognitive flexibility; and d) inhibition test; and in the Wechsler Intelligence Scales for Children-IV® (WISC-IV): from this test battery the following subtests were administered: a) Digit Span Test to measure verbal short-term memory and working memory; b) Symbol Search Test to measure processing speed and visuospatial attention; c) Numerical Symbol Substitution Test to measure processing speed, working memory, visuospatial processing and attention. In addition, clinical questionnaires on behavioural symptoms of ADHD and executive functioning in everyday activities make up the section of secondary clinical measures: a) Attention Deficit Hyperactivity Disorder (ADHD) assessment: This questionnaire is a Spanish adaptation of the Conners' Rating Scales with reliable psychometric properties. Its aim is to measure the paediatric symptomatology of ADHD (inattention, hyperactivity, conduct disorders). The scores of the subscales of Hyperactivity, Attention Deficit, Conduct Disorder and Global were used. b) Behavioural Rating Inventory of Executive Function, parent version (BRIEF): The BRIEF is an 86-item questionnaire that assesses executive functioning in daily life. It rates from 1 to 3, according to their frequency, different behaviours related to executive function disorders and is widely used in the assessment of ADHD. F

Secondary endpoints were mean changes in brain activations through the use of magnetoencephalography (MEG) before and after the Sea of Heroes: New World intervention and their significant relationships with cognitive functions

#### **RESULTS**

The primary endpoint was met, the mean change from baseline in CPT-III was statistically significant in the Sea of Heroes: New World group (KAD\_SCL\_01) versus the control group (p=0.04; Figure 1).

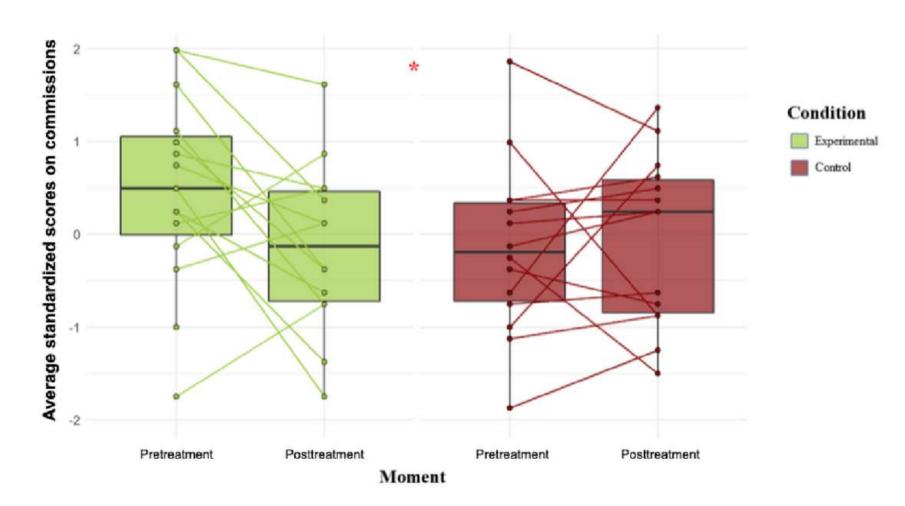


Figure 1. Main efficacy outcome: individual and mean change in CPT-III commission errors by condition.

In addition, significant pre- and post-Sea of Heroes: New World differences were also found on secondary clinical measures of visuospatial short-term working memory (p=0.034), cognitive flexibility (p=0.022), working memory and short-term memory (p=0.029), and attention (p=0.037), as well as results on the parent version of the BRIEF questionnaire showed statistically significant pre-post mean differences of the Sea of Heroes: New World intervention participants on the flexibility score (p=0.03), working memory score (p=0.02), the behavioural composite index (p=0.02) and the overall executive composite index (p=0.01). Finally, the experimental group (intervention KAD\_SCL\_01) showed statistically significant pre-post differences in all ADHD measures (hyperactivity score p=0.05), inattention score (p=0.001), conduct disorder score (p=0.001) and global score (p=0.001).

Regarding the secondary endpoint, significant clustering (P=0.04) was found in the frequency interval (11.67-13.33 Hz) comprising mainly the posterior brain regions (see Figure 2A). The power ratio at all frequencies in this interval was negatively correlated with CPT-III in the whole sample ( $\rho$ =-0.562; P=0.003). The maximum cluster size was found at 12-12.33 Hz (51 nodes). The cluster size ranged from a minimum of 50 nodes at the beginning of the frequency range to 16 at the end of that frequency range (see Figure 2B).

In addition, 12 Hz showed the highest correlation among all nodes in the cluster ( $\rho$ = -0.547). The correlation between the CPT commission coefficient and the power ratio (11.67-13.33 Hz) in the interval within the cluster generated in the previous step remained significant for the experimental group ( $\rho$ =-0.783; P=0.004; Figure 2C) but not for the control group ( $\rho$ =-0.358; P=0.21; Figure 2C). These results suggest that the improvements produced in the experimental group are strongly associated with plasticity phenomena and neuromodulation.

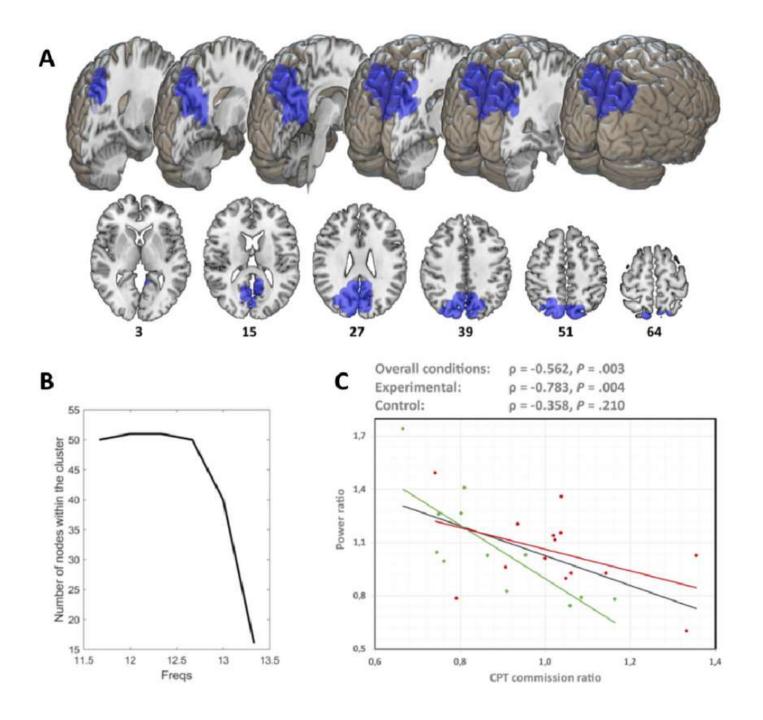


Figure 2. Brain region whose magnetoencephalography alpha power (11.67-13.33 Hz) was found to be significantly correlated with the CPT commission ratio. (A) Brain regions within the significant cluster (represented in blue). (B) Evolution of cluster size across different frequency steps (maximum size at 11.75 Hz). (C) Scatter plot showing the Spearman correlation coefficient between the cluster mean power ratio and the CPT commission ratio and each subgroup of the sample. CPT: continuous performance test; Freqs: frequency steps.

In addition, the power ratio was used to determine the brain region with a significant difference between both groups considering the information from both MEG recordings. The result showed a significant cluster (CBPT P-value=0.0310, cluster-mass statistic =443.8), comprising mainly posterior brain regions (Figure 3A), with a significantly higher power ratio in the experimental participants compared to the control group. The mean node strength in the occipital alpha power showed in the experimental group (p=0.0004), an increase over time in these patients (see Figures 3B and 3C). In contrast, control patients showed a decrease in occipital alpha power over time (see Figures B and D). Significant differences were found between sessions for both groups: pre- versus post within the experimental group (p=0.0093) and pre-versus post within the control group (p=0.0052).

Finally, the mean value of the alpha power ratio was used for further correlation analyses in both subgroups. The alpha power ratio in the posterior brain regions correlated with the visuospatial working memory cognitive performance ratio measure in the overall sample ( $\rho$ =0.63, P=0.001) and, in the Sham control ( $\rho$ =0.69, P= 0.006). The Attention Deficit Hyperactivity Disorder Assessment Attention Deficit Symptom Index was also correlated in the experimental group ( $\rho$ =-0.58, P=0.043). In addition, flexibility was correlated in the overall sample ( $\rho$ =0.45, P=0.025).

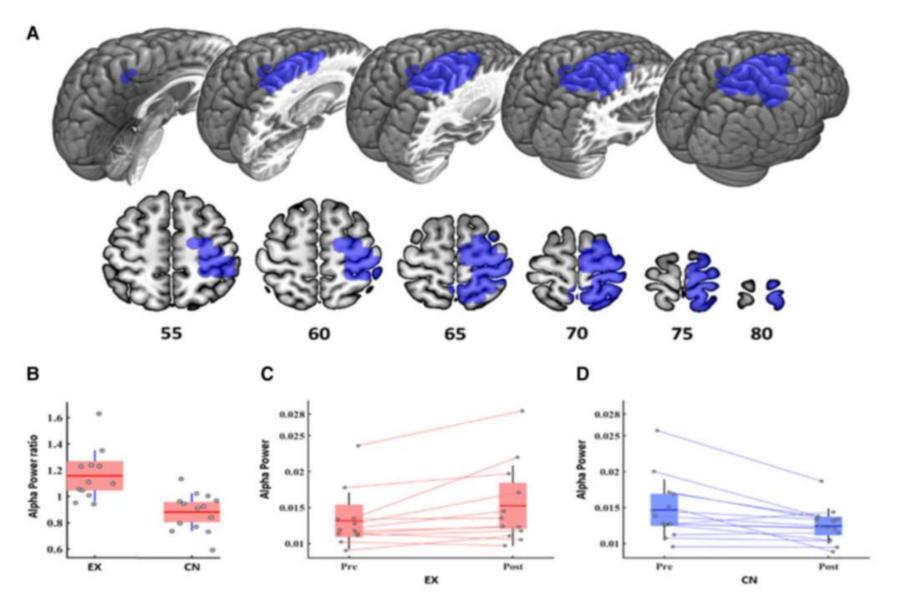


Figure 3. Between-group changes in power ratio (post/pre) in the alpha band. (A) Regions composing the significant cluster (CBPT statistic; cluster mass statistic=443.8; P-value=0.0310) in the alpha power band (8-12 Hz): right postcentral gyrus, right precentral gyrus, right superior frontal gyrus, right superior parietal gyrus, right precuneus, right supplementary motor area and right paracentral lobe. (B) Descriptive boxplot of mean power ratio of clusters (post/pre) in Experimental and Control group [ANCOVA test between groups with age (P value=0.0004, F statistic=17.5)]. (C and D) Pre and post alpha power values by intervention group: Wilcoxon test between conditions for the EX group (P value=0.0093, statistic with sign=7) and for the CN group (P value=0.0052, statistic with sign=95).

Medina, R., Bouhaben, J., de Ramón, I., Cuesta, P., Antón-Toro, L., Pacios, J., ... & Maestú, F. (2021). Electrophysiological brain changes associated with cognitive improvement in a pediatric attention deficit hyperactivity disorder digital artificial intelligence-driven intervention: Randomized controlled trial. Journal of medical Internet research, 23(11), e25466.

#### INTRODUCTION

Sea of Heroes: New World (KAD\_SCL\_01) has been evaluated in 41 children with ADHD combined in a clinical study.

#### STUDY DESIGN AND OBJECTIVES

The same study protocol and objectives of KAD\_SCL\_01: Part one were maintained. In this second part of the trial, 20 additional subjects were recruited, for a total of 49 subjects. Of the 49 participants, N=3 subjects did not take the magnetoencephalography (MEG) post-test because they did not complete the treatment protocol and N=5 were dropped from the analysis due to the quality of the MEG recording. The final sample of N= 41 subjects underwent final pre- and post-intervention assessment including MEG recordings, neuropsychological batteries and clinical questionnaires: 20 in experimental condition (male= 16, female =4; Age = 9.41 years, SD = 1.22) and 21 in control condition (male= 19, female =2; Age = 9.38 years, SD = 1.21).

#### **RESULTS**

Regarding the primary endpoint, the main outcome measure showed no deviation from normality in any of the study periods. Table 1 and Figure 1 depict the skewness and kurtosis statistics of the main outcome measure CPT-C. The Shapiro-Wilk test for normality indicates that the distribution of CPT-C throughout the study does not differ significantly from a normal distribution (p-value>0.05).

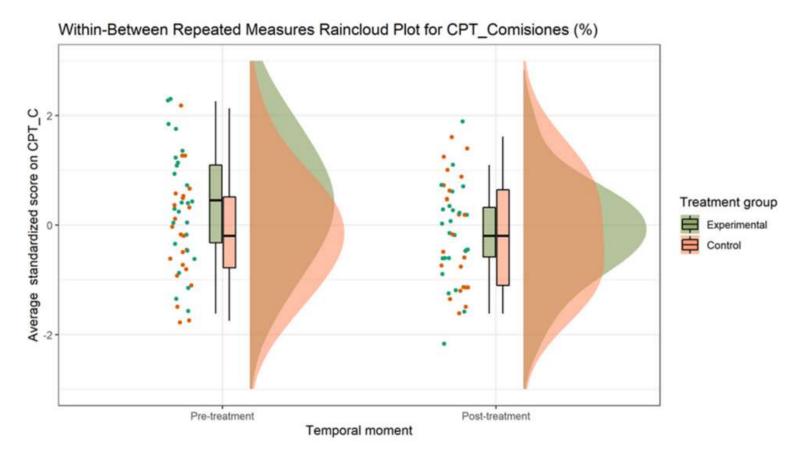


Figure 1. Individual and mean scores for errors of commission in the Conners continuous performance test by condition (treatment vs. control) and stage (pre vs. post).

Group	Moment	Mean	SD	Asymmetry	Kurtosis	Shapiro-Wilk test of normality p- value
Control	PRE	47,5217	1,5866	0,2257	-0,5393	0,904
	POST	47,4783	1,6101	0,1188	-1,4289	0,2061
Experimental	PRE	51,64	1,6622	-0,0234	-0,9191	0,8793
	POST	47,24	1,3544	-0,0635	-0,0124	0,9505

Table 1. Descriptive statistics for the main outcome measure: commission score on the Conners Continuous Performance Test (CPT-III).

In addition, improvements in inhibitory control were also demonstrated using the NEPSY-II inhibition test. With respect to attention, the trial demonstrated improvements in sustained and selective attention, which is associated with inhibitory control, as well as in cognitive flexibility using two tests: the card sorting test and the CPT-III. In addition, an improvement in visuospatial working memory skills also associated with sustained attention was demonstrated (Figure 2).

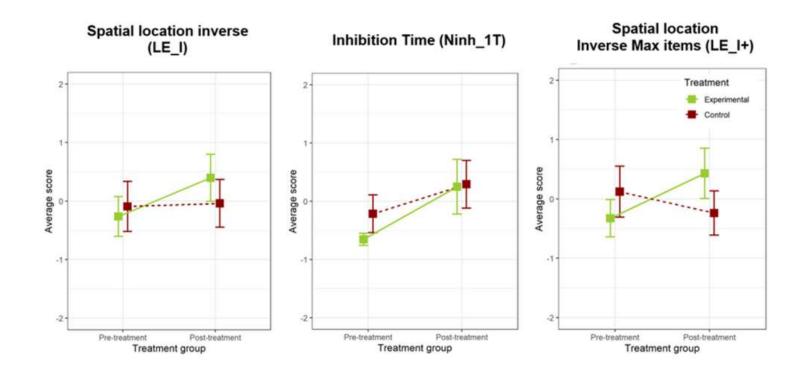


Figure 2. Bar charts of standardised measures with statistically significant condition-momentum interaction effect. Bar charts of standardised measures with statistically significant condition-momentum interaction effect.

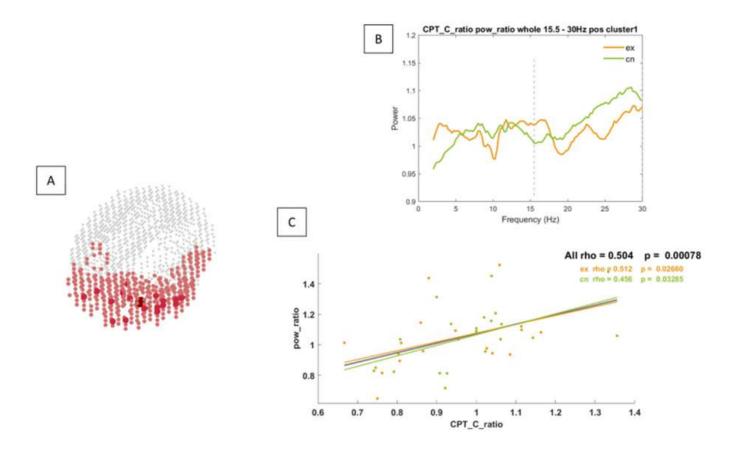


Figure 3. Positive correlation group of power ratio with CPT-C ratio.

Regarding the secondary endpoint, a positive correlation was observed between the power ratio and the CPT-C ratio in the beta frequency band. The power ratio at all frequencies in this range is higher in the treatment group compared to the control and shows a positive correlation with the CPT ratio in the whole sample ( $\rho$ =-0.504; P=.00078) (see Fig 3C below). Nodes with a statistically significant correlation with the CPT-C ratio are grouped in a cluster (see Fig 3A) close to significance (P=.0639> .05) in the frequency interval (15.5-30Hz) (see Fig 3B). Figure 3A shows how this cluster is mainly located in the right temporo-occipital region of the brain.

Correlation analysis of the power ratio with the clinical outcome measure EDAH-H ratio in the treatment group reveals a positive correlation in the alpha frequency band [7-14 Hz] ( $\rho$ =-0.846; P=.00001) (see Fig. 4A). Nodes with a statistically significant correlation with the EDAH-H ratio are grouped in a statistically significant cluster (P-value=0.004< 0.05) in the frequency interval (10.5-15 Hz) (see Fig 4C). Figure 4A shows how this cluster is mainly located in the bilateral temporo-parietal region of the brain.

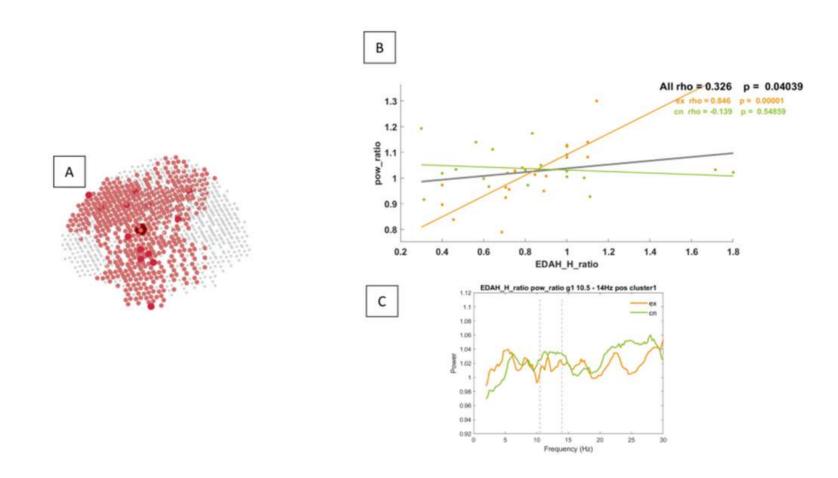


Figure 4. Group positive correlation of power ratio with ADHD-Hyperactivity (ADHD-H) in the treatment group.

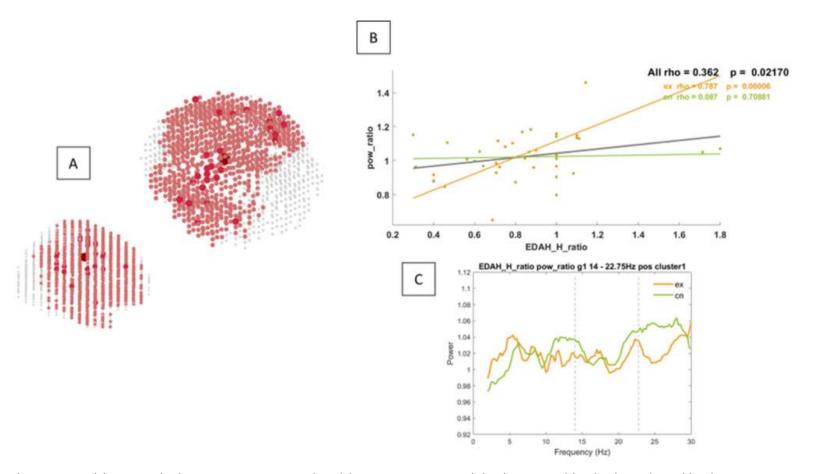


Figure 5. Positive correlation group power ratio with ADHD-Hyperactivity (ADHD-H) in the beta band in the treatment group.

Finally, figure 5 shows a positive correlation in the treatment group of the power ratio with the EDAH-H index in the beta frequency band ( $\rho$ =-0.787; P=.00006). The nodes with a statistically significant correlation with the EDAH-H index are grouped in a statistically significant cluster (P-value=0.006< 0.05) in the frequency range (14-22.7Hz) (see Fig. 5C). Figure 5A shows how this cluster is mainly located in the bilateral fronto-temporo-parietal regions of the brain.

# **Safety and compliance**

Safety and compliance 1 (0.18%) clinical trial subject experienced a device-related adverse event (AE). The device-related AE was headache of mild severity. This event led to discontinuation of device use. Patient compliance was more than 80% of the 36 planned treatment sessions per patient.

## Label



# SEA OF HEROES: NEW WORLD Version 2.0.1

REF

DTAI1







Sincrolab S.L c/Prensa 7 28033 Madrid (Spain)







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# **Symbols**

