



Parent STATEMENT EXCERPTS from Case Studies

Methodology and purpose for *Color Light Therapy In-Home ASD Case Study program*

Our Case Studies use a **Numerical Measurement States Scale** as a rating measurement tool. Case Study results will be used as a baseline in a protocol Case Study program within a CIHR framework.

In addition, information will be used in actual Statement Excerpts format to inform other parents on potential benefits of using this therapy for the benefit of their ASD children, themselves, and household overall. We continue to invite parents from selected areas to participate in our Case Study In-home program. We do have multiple therapists working with our Color Light Therapy technology as complementary to their own therapy programs in North America and Europe. In addition, we are working with multiple schools and academies participating in our Learning Disabilities Case Study program, with emphasis on ASD or similar disorders, in a classroom program which started beginning of 2016.

The technology we use and what it does

Patented 'Light Modulation' technology and the complex algorithms programmed in an ARM processor, as used in all our products, allows the embedding of soft light pulsations for specific interaction with various physiological rhythms, such as brainwaves, breath, and heartbeat. It has been developed with advanced technology from over 20 years research by renowned Quebec physicist and inventor, Anadi A. Martel, and used in Professional Sensora™ Multi-sensorial therapy system in multiple professional health therapy centers worldwide. We do have a clinical study based on the technology that was completed in 2013 and summary can be viewed on:

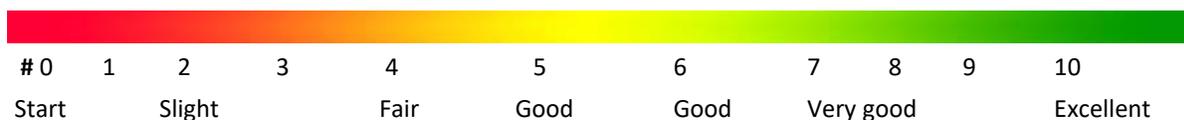
Pubmed: <http://www.ncbi.nlm.nih.gov/pubmed/24067320>

Statement: Parents are made aware that this therapy should not be considered as a medical device in any way. In addition, they are informed that results are different for all individuals due to the wide spectrum variances and levels of disorders under study. We always adhere to **strict confidentiality** for all individuals. It is always up to parents to draw their own conclusions on this therapy as it applies to their own children, since each parent may have different views based on their wide scope of observation interpretation. It is also strongly suggested that parents pay close attention to their own interface with this therapy, as it applies to them personally and their household overall. That is, in addition to experiencing the positive behavior benefits of their children.

Parent Observations During Color Light Therapy –

Each child (as ASD or similar disorders) in Case Study should include statements (details described) and personal interface to the therapy of both parents, all siblings and household overall. Progression Rating # and Date of observation.

Numerical Measurement Rating States: How you rate each relative behavior state over time



Frequency of taking measurements over Case Study period of 8-10 weeks: Your Start should define the behaviors or characteristics for each child in the study. Statements should be updated minimum of **30 days and 60 days including conclusion** which should state **date** and **Numerical Rating State Measurement #**. **All other Dates of**

noted changes can always be added for child and siblings including household overall. Include a photo or two of children that shows child with side or back view along with Therapy Light view for Case Study reference only. We respect all confidentiality.

Note: Each Case Study should include details of diagnosis level in your own words along with gender and age. You can add as many new observations you experience in any of the prime categories we show or new areas.

Tip: It is recommended you keep a note pad to be easily referenced from notable daily activity that will be incorporated in your periodic statements. Your notes should include statements from other individuals such as teachers, doctors, visiting friends of family and those of children. Each rating period should show your observation assessment including no change or same rating from last period.

Key areas to measure progress:

Hyperactivity: for child if applicable with details explained

Anxiety: for child if applicable with details

Social interface: with details of child, interface with parents, friends, other siblings and with adults if possible, including their teachers and therapists

Organization Skills: with details of child changes

Using own initiative: with details of child change of habits

Sleep: with details of sleeping habits and changes if applicable

Sensitivity to touch, sounds or smells: with details and observed changes

Calmness: with details of child and include parents personal, all siblings and household overall

Self-Regulation: with details on habits of child being observed that are not covered in above segments

Academic Ability: with details on improvement

Example: After 60 Days period statements

Jan 20th, 2018 (after 10 weeks of therapy in this example)

Hyperactivity: (describe examples of changes) Improved. Date and Rating state #6

Anxiety: Never had anxiety as an issue

Social Interface: (describe examples of changes) Date and Rating state #6

Organization Skills: (describe examples of changes) Date and Rating state #2

Using own initiative: (describe examples of changes) Date and Rating state #4

Sleep: longer sleep times (describe examples of changes) Date and Rating state - #6

Sensitivity: child sensitivity to loud noises (describe examples) Date and Rating state #2

Self-Regulation: (describe examples of changes) Date and Rating state #4

Calmness: (describe examples of changes) for child, household and both parents. Date and Rating state #8

PARENT EXCERPTS

Derived from In-home ASD Case Study program

Boy age 9 has difficulty focusing following through with tasks, as well as restlessness and impulsivity

- **Apr 22, 2016** - The child did not resist the **SensoSphere** sessions and was able to follow through on his tasks which mostly happened to be homework. There were less meltdowns and more focus on his work. In terms of his writing, his dictations improved but writing from his head (not memorizing words) did not improve. On the other hand, I found his reading in French significantly improved as did his English reading. I did try the energy mode a few times and found that it only elevated the child's excitement and did not help him with the focus.
- The boy says he feels he is doing better at school and he has been given more work at his own grade level. Before he was doing reading at a lower grade level.
- **Oct 16, 2016** - Reading has improved, writing dictations have improved (therefore memory) and concentration levels have improved during the designated homework time.

Boy age 5 diagnosed ASD in classroom of 11 students in private school

- **Apr 12th, 2017** - Over the past few months I have seen a lot of changes in the Kindergarten boy with ASD whom I was observing. He is very happy and seems a lot more present and aware. He is improving academically and providing relevant contributions to our class discussions. Socially (only within the classroom setting) he is better able to interact and converse socially with his peers and teachers, most of the time. There have been a handful of incidents where frustration could have got the better of him (ie. not getting a turn...), but with some support he was able to calm down quickly and the situation did not escalate.
- **Apr 7th, 2017 – Teacher requested parent provide a letter based on her child's performance.**

Dear Sir or Madam,

This is a letter concerning the Sensosphere that was used in my son's classroom for the most part of the school year. I was asked to write a few words on whether I have seen any improvements in my son's development and learning as a result of the Sensosphere.

This year my son has progressed tremendously. His speech improved significantly, he is reading, his attention span has greatly improved, etc. The problem I have is that I don't really attribute these changes with the Sensosphere. I think that all these improvements are a direct result of Shia's teacher and the smaller classroom size.

If the Sensosphere did help my son in any way, I'd like to say thank you for providing it for him.

Thank you,

- **May 30, 2017** - Students are very calm and productive. I rarely have to intervene regarding behaviour or work production. Students seem to enjoy the lamp. Personally, I find I am able to remain focused for longer periods of time with the lamp in my room. I especially notice this when I have to read long or complex texts.

Boy aged 10 diagnosed with ASD and ADHD (10 weeks of therapy completed)

(distraction rather than hyperactivity) and high functioning in mainstream classroom. With intensive ABA therapy has overcome most of the typical features of Autism. His remaining challenges are that he is disorganized, easily distracted, forgetful and doesn't quite use his own initiative.

<p>Anxiety: Jan 9th Rated #2 - his anxiety had greatly diminished in the past couple of years, before we got the lamp, but I do see a continued improvement.</p>
<p>Social Interface: Jan 9th, Rated #4 - His participation in conversations at home has improved, both with us his parents, his siblings, and with friends who visit, both our friends and his friends.</p> <p>Feb 1st Rated #6 - I see a big improvement in his interaction with us, his family. He participates more in conversations, and uses a lot of humour, irony and sarcasm in proper context.</p>
<p>Interacting with teacher: Feb 1st, Rated #4 – In the past few weeks, I've noticed 2 incidences where my Son approached his teacher using his own initiative. Firstly, he asked his teacher for a second copy of a comprehension he had lost. Whenever I asked him to do this and in the past he would not have, and I would have had to write a note to his teacher myself to get the comprehension. Secondly, he asked his teacher if he could go to the lost and found to find his gloves. He did this completely off his own initiative, I hadn't asked him to do this.</p>
<p>Interacting with other adults friends of the family, doctor, etc.: Jan 9th, Rated #2 – I've noticed he will now stay in the room when we have friends over, he likes to stay on the periphery of the conversation and join in from time to time. He showed more manners and age appropriate interaction with his doctor during his last visit in November.</p>
<p>Organizational Skills: Jan 9th, Rated #4 - he has begun to get his things ready for school, he now needs no prompting to put on his winter gear for going outside, or to hang it up to dry when he comes in. This continues to improve.</p>
<p>Using own Initiative: Feb 1st, Rated #4 - I've noticed when its time to do homework, he is more able to remember what homework he has to do, find his homework sheet and start his homework by himself. I am always available to help him, because Grade 5 homework and projects are challenging, but more and more I'm just supporting.</p>
<p>Standing up for himself: Jan 9th, Rated #2 – he reports standing up to other kids in school who are insulting - he doesn't quite know how or what to say but he is trying, and showing courage to do so.</p>
<p>Standing up for friends and his brother: Jan 9th, Rated #4 – he seems to be better at standing up for his friends than for himself, and today (Jan 8th) probably for the first time ever, I saw him stand up for his brother!</p>
<p>Calmness: Jan 9th, Rated #6 - Our household has been very calm since we started using the lamp. This is the most noticeable improvement. Boy and his sibling are getting along better and arguing less, although they still argue a bit. When Son is asked to do something, he is generally more willing to do it now than before E.g. get dressed, do homework, come for his dinner, play outside with his brother.</p>
<p>Self-Regulation: Distracted: Jan 9th, Rated #2 - slight improvement</p>
<p>Forgetful: Feb 1st, Rated #4 – usually tied in with distraction. One thing that stands out for me this week is that he was able to memorize a short story in French, which he wrote and has to present to his class this week. The story is 2 pages long, with dialogue. I've never seen him be able to memorize like this before.</p>
<p>Physical Affection: Jan 9th, Rated #2 – I've noticed a slight improvement in his willingness to be touched affectionately, he will let me rub his back or his cheek for a short period (before he would pull away from affection, or squirm). Recently a family friend was rubbing his back and she asked him if he would like her to continue and he said 'yes', this is a big improvement, though it was a once-off so I can't say yet if it's a permanent change</p>
<p>Academic Ability: Feb 1st, Rated #4 - I've noticed a big improvement in his Math ability while I'm helping him with his homework. I've also noticed his written English has improved, for example his story-writing has become more structured with proper sentences and recording of events in sequence. His stories are now making more sense!</p>
<p>Mother Statement on personal effects: Jan 9th - I work from home, and I have been placing the lamp in my atelier during the day when I am working. I've noticed big improvement in my stress levels, and ability to prioritize a very</p>

busy schedule. I've found myself able to think more clearly, to make better decisions, and to focus on tasks I undertake.

Conclusion: Feb 26th - In conclusion, we are very happy that we've had a chance to use the lamp. The gradual changes have made a difference to my son, and to our household.

As my son had already overcome many of his challenges before we started to use the lamp, I knew the changes in him would be subtle. But even subtle changes to a parent of a child with ASD are always welcome and a reason for positivity.

And over time the subtle improvements have amounted to quite a big change in some areas, for example, participating in social conversations, using humour and even sarcasm in context, and just his overall confidence and reduced anxiety.

In our household, we are a calmer, more cohesive family, and despite the many stressors of everyday life, juggling work, school, activities, etc. I feel that we cope better and, find solutions more easily.

Boy age 7 diagnosed as ASD – (10 weeks of therapy completed)

He is Hyperactive and High Functioning

Hyperactivity: Jan 11th, Rated #4 - He is a bit hyper and especially rushing to get his things done both at home and school. He competes with his peers in the classroom according to his teachers

Social Interface: Jan 11th, Rating #6 - His participation in conversations at home has greatly improved, both with us, with his grandparents, his brother, his cousins and relatives even neighbors etc.

Interacting with teacher: Jan 11th, Rated #8 - Lately we have noticed, as did his teachers, that he was more forthcoming with questions, in volunteering answers, in participating, and in asking the teacher for things he needed, he also observes other students and reports to the teacher their status, for example who is in today, who is absent, who is laughing and who is crying etc.

Interacting with other adults friends of the family, doctor, etc.: Jan 11th, Rated #6 - We have noticed he will now stay in the room when we have friends over, he likes to stay on the periphery of the conversation and join in from time to time. He hugs families, his peers and even the people he meets first time.

Organizational Skills: Jan 11th, Rated #6 – He has been learning to get his things ready for school, his school bag, lunch box and water bottle etc. he now only needs us to push a bit to put on his winter gear for going outside, or take them off and put them at the place where they usually are when he comes in. I have seen him opening his lunch box and checking on what's for lunch and snacks prior to leaving the house

Using own Initiative: Jan 11th, Rated #2 - He is showing more responsibility for his own things, getting himself ready. When it comes to things he's passionate about, for example his IPAD, or food, drinks and snacks etc. he shows plenty of initiative and focus.

Impulsive behavior: Jan 11th, Rated #6 – we see improvement on the impulsive behavior such as he no longer insist on moving recycling bin and garbage bin all by himself, no one else was allowed, now he is loosening up on that.

Standing up for himself: Jan 11th, Rated #2 - not sure this is the other way to say willing sharing with other people or not. He protects his own stuff especially his favorite toys, snacks

Sleep: Dec 06th, Rating # 4 - Son's sleeping has improved as well, three nights in a row he didn't wake up until 5:50am.

Calmness: Dec 04th, Rating # 4 - Son is now feeling very comfortable sitting beside the lights and if the lights are not on he will try to turn it on, meanwhile he is getting calmer and keeps improving overall per his ABA therapist.

<p>Jan 11th, Rated #6 - Our household has been very calm since we started using the lights. This is the most noticeable improvement. He likes staying under the lights meanwhile playing with his toys or watching his IPAD.</p> <p>Feb 12th, - My son can sit longer playing or watching his IPAD with the lamp on. Sometimes he lies on the couch watching IPAD he can stay for about half an hour without moving around. This usually happens during the evenings. Believe it has something to do with the lamp combined with his activities during the day (his tiredness)</p>
<p>Self-Regulation: Distracted: Jan 11th, Rated #2 - slight improvement</p>
<p>Forgetful Jan 11th, Rated #2 – usually tied in with distraction</p>
<p>Physical Affection: Jan 11th, Rated #8 - I've noticed great improvement in his willingness to be touched affectionately by families and friends of ours. He started hugging everyone in the house before he goes to bed every night and he demands us his parents comes to his bedroom with him and we three will have a "group hug " together and kissing each other on the cheeks</p>
<p>Mother Statement on personal effects: Jan 11th, (Parents + brother): When the families and I sit on the couch beside the light. We have noticed big improvement in stress levels; feel peaceful, quiet and able to think more clearly, to make better decisions, and to focus on tasks I undertake.</p> <p>Feb 1st, Both my husband I when we are feeling tired, depressed, unfocused we turn on the lamp. We feel that the color-changing illumination have positive effect on regulating our sleep cycles, boosting productivity, and beyond. We eventually reach a state of <i>serenity</i>, our minds are still and perfectly calm. We are rested, focused and happy</p>
<p>Academic Improvement: Feb 12th – My son now memorizes more words and tries to come up with longer sentences to express himself.</p>

Boy age 10 diagnosed in Grade 5 public school – Year 2 using Color Light Therapy for 30-60 minutes daily

Mother statement Feb 8th, 2018 –

He loves to read and reads approximately 30-60 minutes daily outside of school which amazes us.

He is still not at his reading level (still around 1 and half years behind) but he read his first novel this past month on his own initiative. He still prefers to read comics in both French and English as he is drawn to the drawings being highly artistic himself. Another change in my son is that he has become self-motivated to do his homework on his own without being reminded.

As for my sons writing we are happy to report that it has improved significantly. Included please find a note from my sons reading and writing teacher I received:

"I am so impressed with your sons progress in SFA (Success for All Program). His notebook and printing are very neat. I can read everything, even if he has spelling errors. You have one fantastic hard worker. It's so exciting to see his growth!"

This is a big change for my son. He already had the ability to write neatly but now he **chooses** to write neatly all the time. Also, before nobody could make out the spelling of the words he was writing. He couldn't either. Now, both the teacher, my son and myself can read the words even if they are still somewhat incorrect. There are some set words that he now spells correctly every time.

I believe the sensosphere aids my son in his concentration and relaxation. Around the sensosphere he appears to read longer and is able to stay on task to finish his homework on his own without reminders. In addition, he definitely shows less signs of anxiety, stress, nervousness, fatigue and anger. My son starts the day very early (6:00a.m.) and despite his long day, he is still able to do his homework, chores and activities after school without meltdowns like before.

In summary, I think the sensosphere supports my son in getting through his days and work with more calm and ease. I will continue keeping the sensosphere on for 30 minutes a day or more after school for my son. I look forward to seeing more positive results!