

Floatation Therapy and Multiple Sclerosis

A case study evaluating floatation therapy for Multiple Sclerosis

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Background

Multiple Sclerosis (“MS”) is a widespread but not very well known disease that involves an abnormal response of the body’s immune system directed against the central nervous system (CNS). The CNS includes the brain, spinal cord and optic nerves. Current medical explanations of MS center upon the premise of an overactive immune system, of which the resulting sequelae involve damage to myelin— the surrounding and insulating layer of all nerve fibers. This distorts and magnifies messages within the nervous system and may produce a variety of neurological symptoms that differs between individuals despite many symptom commonalities. Some people may be symptom free most of their lives, while others can have chronic symptoms that never cease.¹

While science can see how MS affects the body, the actual cause of MS is not known. Multiple sources indicate that MS is believed to involve a combination of genetic susceptibility, abnormalities in the immune system, viral overload such as Epstein Barr, gut health imbalance, environmental factors and heavy metal toxicity, all of which gets compounded by chronic stress and emotional burdens that appear to fuel the disease, through persistent and systemic inflammation.

Due to the complex nature of MS and its symptoms, there is no single medicine or set treatment plan to modify the disease course, treat relapses, and manage symptoms. It varies on a case-by-case basis continuing the uncertainty and uneven results which is frustrating for both medical providers and those suffering from this debilitating disease.

This case study may reveal that an integrated approach of medicine and alternative therapies that address root causes could be the most effective way to fight MS. Mainstream and alternative medical communities have recently been embracing new strategies that address stress, inflammation and neuroplasticity, or the ability of the brain to change/rewire itself through visualizations, thoughts and actions for the benefit of MS symptoms. A perfect example of this is floatation therapy. Floating is a natural, non-invasive, non-pharmacologic therapy that has been showing tremendous promise for MS.

¹ <https://www.nationalmssociety.org/What-is-MS>

Objective

The objective of this case study is to observe the effects of eight (8) weeks of floatation therapy upon the intensity and frequency of chronic physical, emotional, and functional disability with respect to multiple sclerosis.

A second objective is to see how long any perceived positive effects last, up to one month after the study, with no further intervention.

Method

This is a single subject study, with one female individual in her early 20's, who:

- (a) Was diagnosed with Multiple Sclerosis within the past year;
- (b) has no prior history of floating;
- (c) has been taking several medications for her MS symptoms for the past 6 months with no new medications or changes in the dosage or side effects;
- (d) has multiple symptoms including muscle spasm, numbness, burning, distorted pain sensations, fatigue, brain fog, sleep disturbance, anxiety and stress magnification, and other collateral issues, affecting her activities of daily living and sense of disability.

The intervention for this case study involved “floating” in a 9’ long x 5’ wide fiberglass tank with a hinged lid, shaped like a large egg and filled with 175 gallons (10” deep) of a salt solution. This solution contains 1000 pounds of medical grade Epsom salt, or magnesium sulfate (MgSO₄) and is maintained at skin temperature (approximately 94 degrees F). The tank is within a private room containing a shower. To “float” the individual disrobes, showers, inserts earplugs, turns off the overhead room light, then climbs inside the tank which has an internal light and music controls. The individual closes the float tank lid and then transitions onto a supine (face up) position and begins to float effortlessly.

The study lasted eight (8) weeks in duration where this participant floated once weekly for eight (8) weeks for a total of eight (8) float sessions.

A daily subjective survey was completed, using a numeric scale on a 0-10 continuum with descriptors. This two month long daily survey was initiated on day (1) one of the study, regardless of the day of the first float in week one (1).

For purposes of comparison, a baseline survey with the same questions was completed by the participant prior to the first float. In this baseline survey, the subject rated her level of dysfunction in all the areas tracked in the study at a 5 or greater, on a 0-10 scale, with 0=none or n/a and 10=worst pain/problem. Stress was the only baseline category that was below 5/10, which was 4/10.

There were a follow-up surveys completed after two (2) weeks and one (1) month after the study was complete.

There was minimal interaction with the participant during the course of the study, other than keeping her on track with the surveys and making sure there were no questions before and after floating. There was no cost for the participant and there was no financial gain from The Float Zone, where the case study took place. There are no other disclosures.

Results

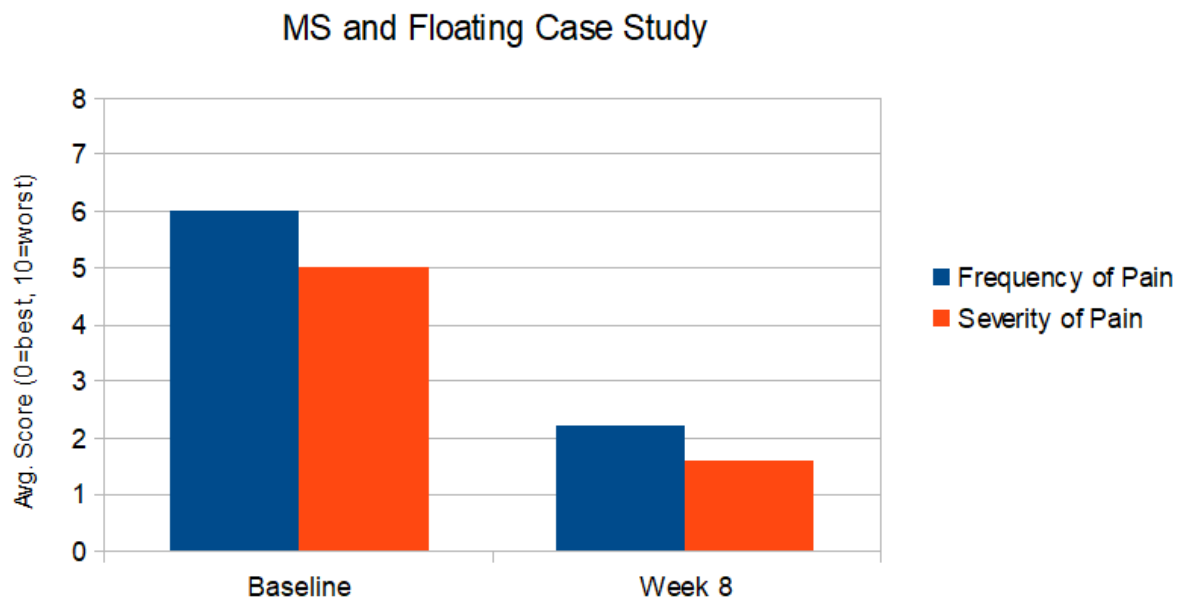
The subject filled out at least 5 of 7 daily surveys each week for 8 weeks, totaling 40 responses. The data from the week eight (8) averages were compared to the initial baseline values for nine (9) different categories, as seen below. Improvement in these categories ranged from 15% to 97%. There were no negative effects.

Severity of musculoskeletal pain(and spasticity): Improved 68%

Evaluating the intervention of floating on *severity of muscle/joint pain and spasticity*, there was an **improvement of 68%** representing a drop from a baseline average of 5/10 to a week 8 average of 1.6/10.

Frequency of musculoskeletal pain: Improved 63%

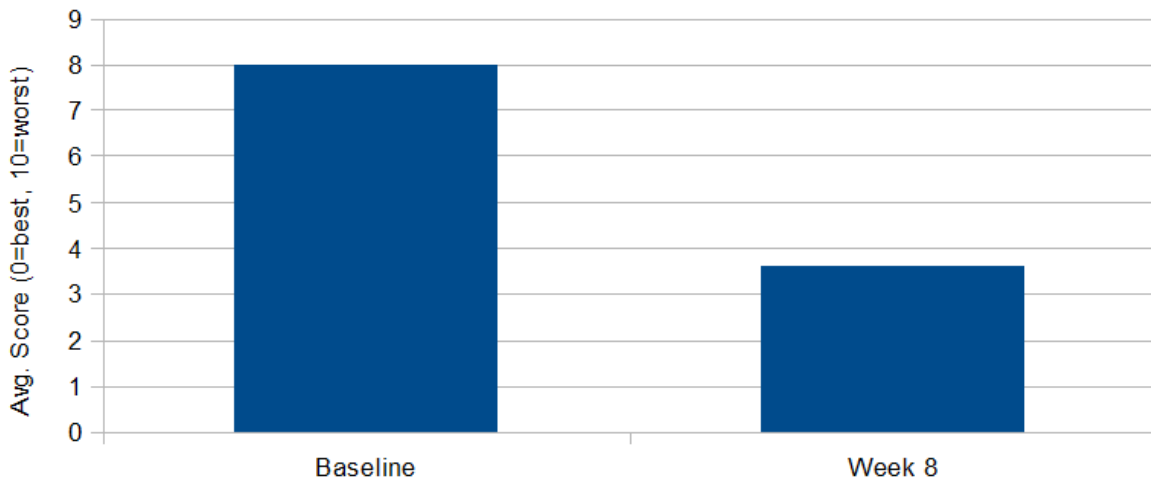
Evaluating the intervention of floating on *frequency of musculoskeletal pain*, there was an **improvement of 63%**, representing a drop from a baseline average of 6 /10 to a 4 week average of 2.2/10.



Frequency of “other symptoms”: Improved 55% (“other symptoms” is collectively a term to include bodily areas of numbness, burning, stabbing, sharp pains, gait, balance, distorted body sensations, heat/cold intolerance, as well as a cluster of symptoms such as brain fog, abnormal fatigue).

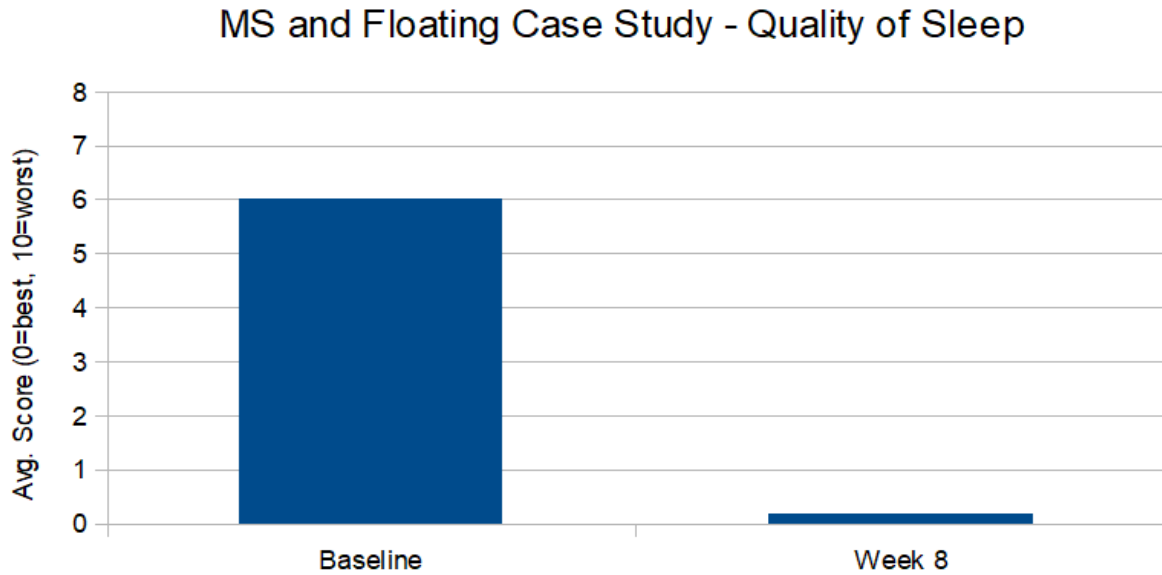
Evaluating the intervention of floating on *frequency of “other” symptoms*, there was an **improvement of 55%**, representing a drop from a baseline average of 8 /10 to a 4 week average of 3.6/10. These were the symptoms that initially led to the MS diagnosis and which created anxiety, stress and altered sleep due to excessive worry of the progression of the disease.

MS and Floating Case Study -
Frequency of Other Symptoms



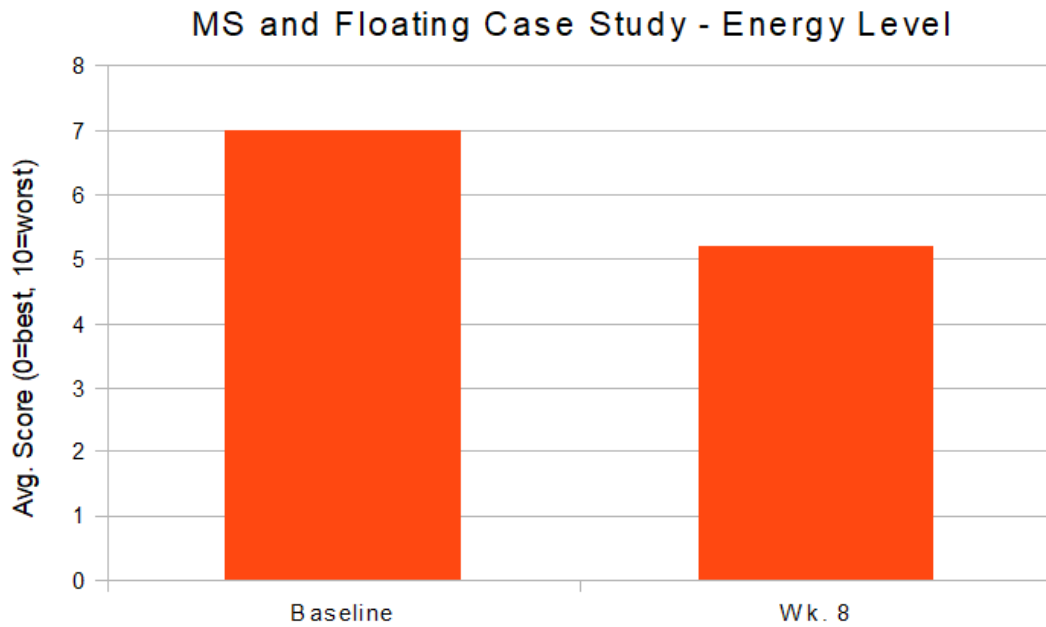
Quality of Sleep Last Night: Improved 97%

Evaluating the intervention of floating on *quality of sleep last night*, there was an **improvement of 97%**, representing a drop from a baseline average of 6/10 to a week 8 average of 0.2/10.



Overall Energy Level: Improved 26%

Evaluating the intervention of floating on *overall energy level*, there was an **improvement of 26%**, representing a drop from a baseline average of 7/10, to a week 8 average of 5.2/10.



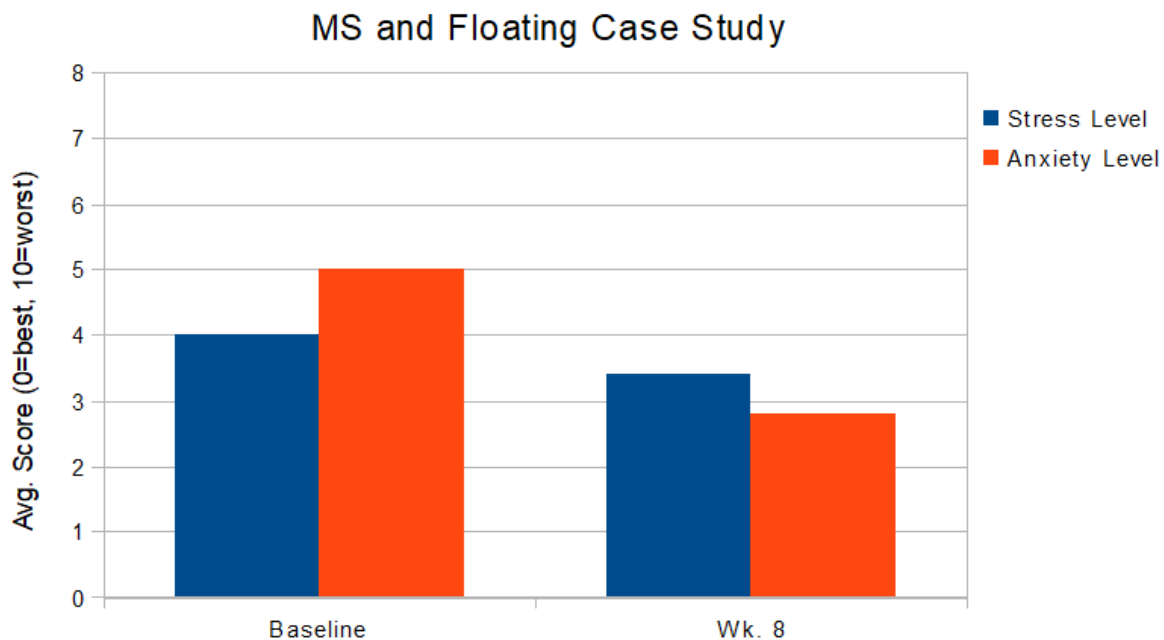
Stress Level: Improved 15%

Evaluating the intervention of floating on *stress level*, there was an **improvement of 15%**, representing a drop from a baseline average of 4/10 to a week 8 average of 3.4/10.

Stress was the category that improved the least, but was the lowest baseline number of all the categories, to begin. It is important to note that this was in the middle of the holiday season and school exams.

Anxiety Level: Improved 44%

Evaluating the intervention of floating on *anxiety level*, there was an **improvement of 44%**, representing a drop from a baseline average of 5/10 to a week 8 average of 2.8/10. Anxiety has been a relatively new issue since the MS diagnosis and has led to increased bodily symptoms, from emotional worry. The gains made here positively affected other gains.

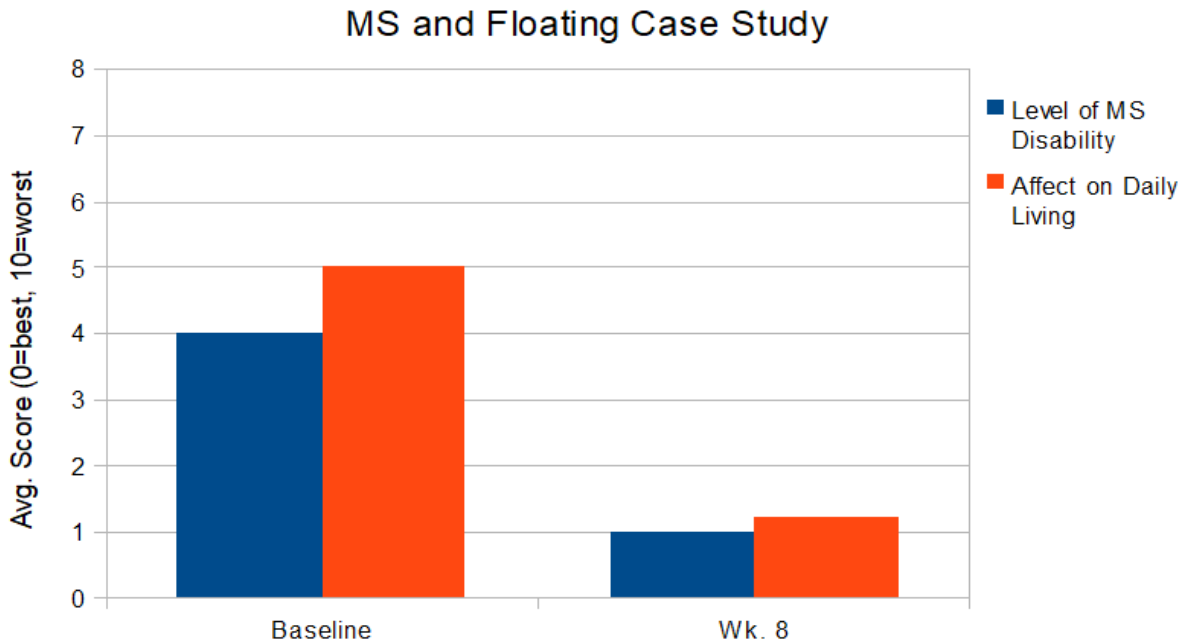


Affect on Activities of Daily Living: Improved 76%

Evaluating the intervention of floating on affect on activities of daily living, there was an **improvement of 76%**, representing a drop from a baseline average of 5/10 to a 8 week average of 1.2/10.

Overall Level of Disability: Improved 75%

Evaluating the intervention of floating on overall level of disability, there was an **improvement of 75%**, representing a drop from a baseline average of 4 /10 to a week 8 average of 1/10.



The above graph demonstrating the subjective rating of daily disability is probably the best overall summation of this floating and MS experiment. This is the ultimate example of how floating impacted a positive change in feeling to both mind and body.

Results Part 2: Lasting Improvement

Below are the associated graphs relative to the amount of **lasting improvement** without any float intervention for a month. With reference to these lasting improvements, the original baseline scores are compared to both the end of the study (8 weeks) and one month after the study (12 weeks from baseline).

All the improvements made at the conclusion of the study were substantially maintained a month later. None of the gains made during the course of the study returned even close to their original score after one month. No further longitudinal tendencies were studied after one month post intervention.

Severity of Pain:

One (1) month post intervention, 100% of the improvements in severity of pain had remained.

This represents a baseline to week 8 average of 68% improvement and a baseline to post-1 month average (no intervention) of 100% (continued to improve post study).

Frequency of Pain:

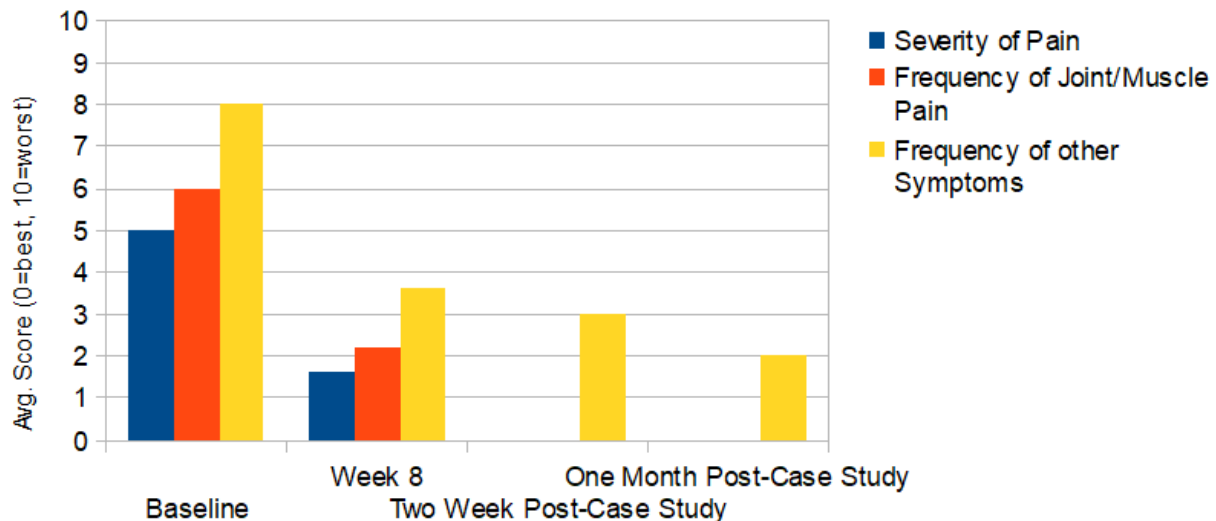
One (1) month post intervention, 100% of the improvements in frequency of pain, had remained. This represents a baseline to week 8 average of 63% improvement and a baseline to post-1 month average (no intervention), of 100% (continued to improve post study).

Frequency of “Other Symptoms”:

One (1) month post intervention, 100% of the improvements in frequency of “other symptoms,” had remained.

This represents a baseline to week 8 average of 55% improvement and a baseline to post-1 month average (no intervention) of 75% (continued to improve post study).

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Sleep Quality:

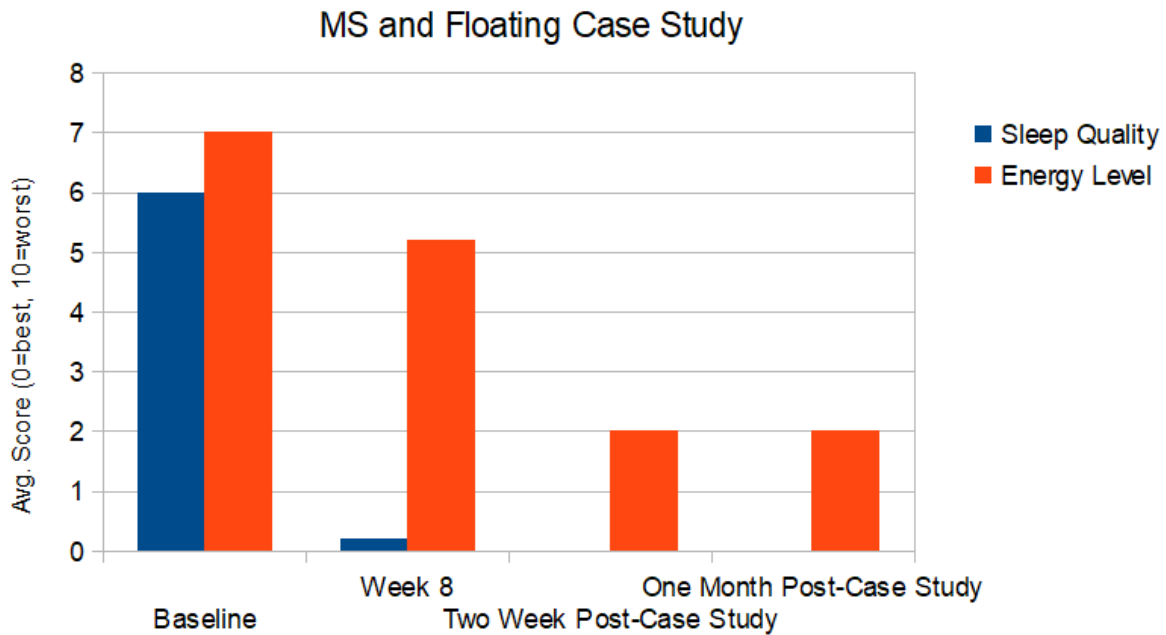
One (1) month post study, 100% of the improvements in sleep quality had remained.

This represents a baseline to week 8 average of 97% improvement and a baseline to post-1 month average (no intervention) of 100% (continued to improve post study).

Overall Energy:

One (1) month post study, 100% of the improvements in overall energy had remained.

This represents a baseline to week 8 average of 26% improvement and a baseline to post-1 month average (no intervention) of 71% (continued to improve post study).

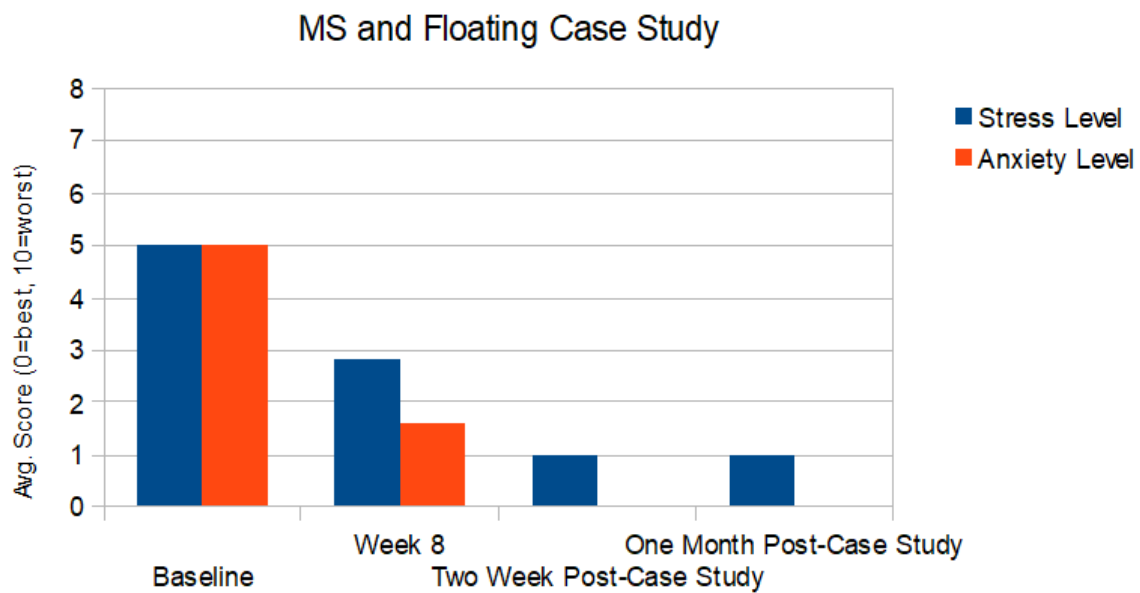


Stress Level:

One (1) month post study, 100% of the improvements in stress level had remained.
This represents a baseline to week 8 average of 15% improvement and a baseline to post-1 month average (no intervention) of 50% (continued to improve post study).

Anxiety Level:

One (1) month post study, 100 % of the improvements in anxiety levels had remained.
This represents a baseline to week 8 average of 44% improvement and a baseline to post-1 month average (no intervention), of 80% (continued to improve post study).



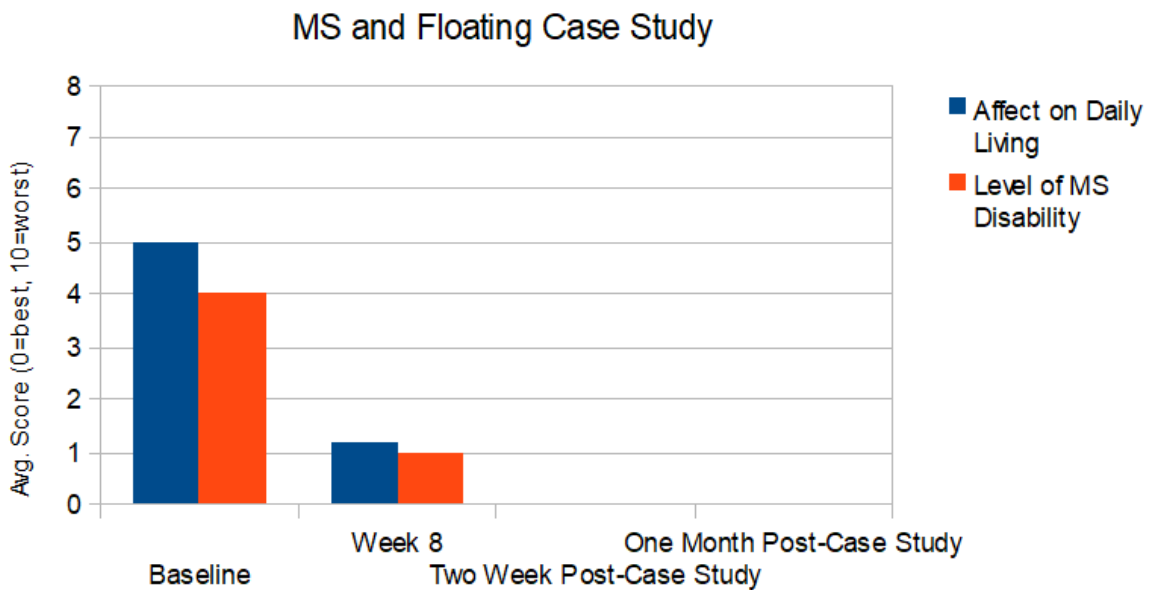
Affect on ADL's and Exercise:

One (1) month post study, 100% of the improvements in Affect on ADL'S, had remained. This represents a baseline to week 8 average of 76% improvement and a baseline to post-1 month average (no intervention) of 100% - the subject continued to improve post study.

Perceived Level of MS Disability:

One (1) month post study, 100% of the improvements in perceived level of disability, had remained.

This represents a baseline to week 8 average of 75% improvement and a baseline to post-1 month average (no intervention) of 100%. The subject continued to improve post-study to the point where she was basically pre-“flare-up” status, with some minor exception.



Conclusion

Float therapy, otherwise known as floatation therapy, or floating, has a direct, positive, and lasting effect on the many areas affected by Multiple Sclerosis - pain, spasticity, stress, emotional state, sleep, energy, perceived level of disability, and activities of daily living. Float therapy, as demonstrated from the data and the subject's own observations, appeared to improve both the subject's physical and emotional states of wellness.

All of the the positive effects gained throughout the study were fully maintained one (1) full month post-study and without further intervention.

Patients, medical professionals and alternative health care providers should consider floatation therapy by itself or in tandem with other mind/body approaches to manage the serial effects of Multiple Sclerosis.

Discussion

Multiple Sclerosis is a frustrating, unpredictable disease with lifelong consequences. Within the MS community, there is an overwhelming consensus that exacerbations and relapses are directly related to both the amount of physical and emotional stress in one's life and the way in which the individual copes with that stress. The very nature of the disease is stressful and quite obviously an example of how the mind plays tricks on the body and how the body plays tricks on the mind. Finding ways to calm the mind goes a long way to calming the body. Finding ways to calm the body goes a long way to calming the mind. In this case study, the subject reported floating accomplished both.

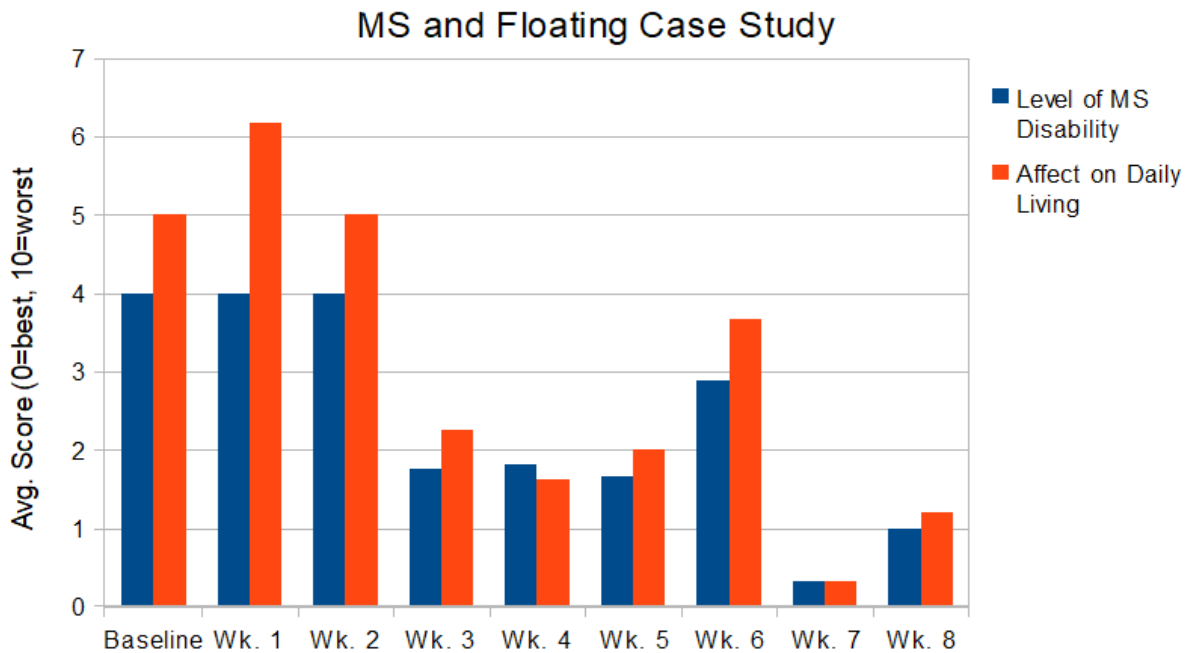
As part of the constellation of the MS disease with its unpredictable severity and frequency of symptoms, it often establishes a compounded problem condition called vagal overdrive. This is where the Vagus nerve (a cranial nerve that communicates from the brain to other parts of the overall nervous system), can become abnormally stuck in a negative feedback loop. This creates a chronic "fight or flight" physiology, establishing other collateral issues such as chronic constipation, sleep and digestive issues, weight gain, chronic anxiety and depression and the continuance of odd bodily symptoms. Of course the overdrive also complicates the already compromised immune system which can present as intermittent/regular bouts of disabling fatigue or flu-like symptoms. Thus, finding appropriate and effective ways to combat stress is one of the keystones to less nervous system and physical malfunction.

One of the main takeaways of this study is how stress and emotional state responded so favorably to the regular float schedule. It was apparent that the emotional improvement had overlapping influence. The participant stated "I've never been in a state of such low stress and anxiety." She reports she is sleeping longer and deeper and feeling more rested. Her anxiety is significantly less. Her reactions to stress are less intense. "I don't instantly freak out anymore". Incidentally, she also comments that she never had issues with anxiety before being diagnosed with MS. Because of the diagnosis itself, nobody to talk to about it, feeling like she was alone, being uncertain, led to a high anxiety level that persisted and led to physical symptoms like stabbing in the chest. This only fed into her psyche due to the mystery of the symptom(s), and the cycle continued.

She mentioned that she has been living with 12 people due to housing relatives devastated by a hurricane. She stated that it is hard to get away and be alone and this found its way into her daily emotional and physical body. Additionally, the study took place during the holiday season of November and December which are typically more stressful months. This was also a time of school exams which carry obvious overtones of stress. Floating remarkably helped her to cope with these circumstances.

This was also a time when she increased her physical stresses through more strength training. The floats minimized her muscular soreness, which further enabled a sense of greater physical activity and ability. Essentially, floating became a place where she found the solitude and reflection to recuperate and the needed stress reduction to quell her symptoms.

Observe the 8-week graph below. You will see that it was not until week 3, or the third float, that significant effects were noted with regard to less disability. This showed true for all other categories, as well. Some areas improved after the first float, but it was truly after the third float that the differences were seen, and remained. The subject reinforced this concept in the accompanying video testimonial. She reported that the effects of the first 3 floats lasted 3-4 days, then floats 4-8 lasted almost 7 days each time, which was then time for her next float. This concept of 3 floats is consistent with other float case studies performed at The Float Zone. Look at the high level of perceived disability/affect on daily living at the beginning of the 2 month study, compared to the end of the study. Despite a tough week in the latter part of the study just before Christmas and during exams, floating got her back on track and she continued to improve without further exacerbation. With this in mind, the perception of ability and disability with MS is a constant thought. You feel better, then have a bad day or a bad week and it affects the psyche. Floating helps to mitigate or avoid a negative cascade of emotional and physical events. To feel like you are getting back to “pre-flare up status” and to associate yourself with a strong, able body is priceless. This happened during the study, evidenced by the data and graphs in the Results section and was coincidental with her getting a follow up MRI of her brain, only to find that her MS condition had stabilized.



There is a commonality to this case study subject and all of those with MS, who have varying constellations of symptoms including local and regional pain/dysfunction, low daily energy, poor sleep quality, digestive issues, anxiety, depression, and bodily areas of numbness, burning, stabbing, sharp pains, gait coordination, balance, distorted body sensations, heat/cold intolerance, as well as a cluster of symptoms such as brain fog, abnormal fatigue, and a host of others. These symptoms as tracked by the subject improved during the case study but similar to the above graph, spiked in week 6 due to the already discussed timing and personal factors. This frequency of “other symptoms,” instead of rising or remaining at peak levels, decreased in weeks 7 and 8,

as reflected in the related graph in the Results section. Coupled with a perception of less disability as seen in the graph above, this spike and subsequent reduction of a spike speaks volumes as to the takeaways and implications of this study.

Perhaps one of the most significant single improvements relates to sleep. Sleep is a problem for many, not just those with MS or illness. Sleep science is advancing and we are learning that sleep is way more important than we ever thought. Sleep is where brain rewiring and repairing happens. It cleans out waste products and inflammation. The brain transforms during sleep and we repair ourselves. Restful sleep contributes to the stabilization of conditions like MS. The subject mentions how profoundly floating positively helped her sleep and she felt that this had cascading effects upon everything, from her mood to her physical capabilities and even her general symptoms. By week 8, there was a complete reset in her sleep cycles. Improvements in sleep like this are similarly seen in The Float Zone's numerous case studies on floating.²

Obviously, this was a single subject, non-controlled study. While the observations noted may not be as scientifically useful as a group, controlled or peer reviewed study, the results still demonstrate that floating can be part of any MS treatment to mitigate symptoms and to calm the body and mind. Moreover, this case study can easily be extrapolated to other autoimmune conditions, and other imbalances related to dysfunctions in sleep cycles, increased stress loads and accompanying anxiety or depression.

2 Visit www.myfloatzone.com/casestudy to see sleep results in various case studies including a sleep study of local college students.