

Float Therapy for Improved Sleep

A case study demonstrating the value of floatation therapy upon sleep quality

Dr. David A. Berv, CCSP, Dipl.Ac.

Ally Charleston, University Of Richmond undergraduate

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Background

The phrase “you snooze, you lose” has been memorialized in our fast-paced, production-based culture, lauding sleep deprivation as a badge of honor. The reality is that lack of sleep has profound and lasting effects upon both physical and emotional health. Sleep studies have shown that two weeks of only 6 hours of sleep per night has the same effect as 24 hours without sleep. 24 hours without sleep is equivalent to a blood alcohol content of (.1), which is more than legally drunk.

Sleep is a monumental health and wellness issue, only compounded by anxiety and stress. According to Arianna Huffington’s book *The Sleep Revolution*, in 2014, 55 million prescriptions were written for sleeping pills and \$58 billion was spent on sleep aid products worldwide. Sleep is often the first thing to sacrifice when confronted with daily pressures - deadlines and schedules. This is especially true for college students, who pull all-nighters, write last minute papers and deal with the complexities of academic life.

Finding safe and effective ways to improve quality of sleep is both an urgent personal and worldwide need. One option that has been showing tremendous promise is that of float therapy, otherwise known as floatation therapy, floatation or floating. The following case study is part of a growing investigation into the connection between float therapy and quality of sleep.

Objective

The objective of this case study is to observe any positive or negative effects of three (3) weeks of float therapy upon the quality of sleep, and related effects of stress, anxiety, and academic focus in a group of college students.

Method

Participants were sought through an online screening process based on the following criteria:

- (a) Currently a student;
- (b) no prior history of floating;
- (c) not taking sleep medications or melatonin;
- (d) goes to sleep about the same time each night;
- (e) sleeps at least 5 or more hours per night;
- (f) has a level of fatigue of greater than 4/10 (0-10 scale, with 0=amazing energy, 10=extreme exhaustion);
- (g) has a quality of sleep of greater than 5/10 (0-10 scale, with 0=excellent, 10=terrible);
- (h) has a sense of feeling refreshed in am at greater than 3/10 (0=feel amazing,10=exhaustion).

Out of 37 applicants, 13 fit the above criteria and were accepted into the study. Of those, six (6) elected to participate. There were 5 females and 1 male. They were all part of one group study, where they each floated one (1) time/week, for three (3) consecutive weeks.

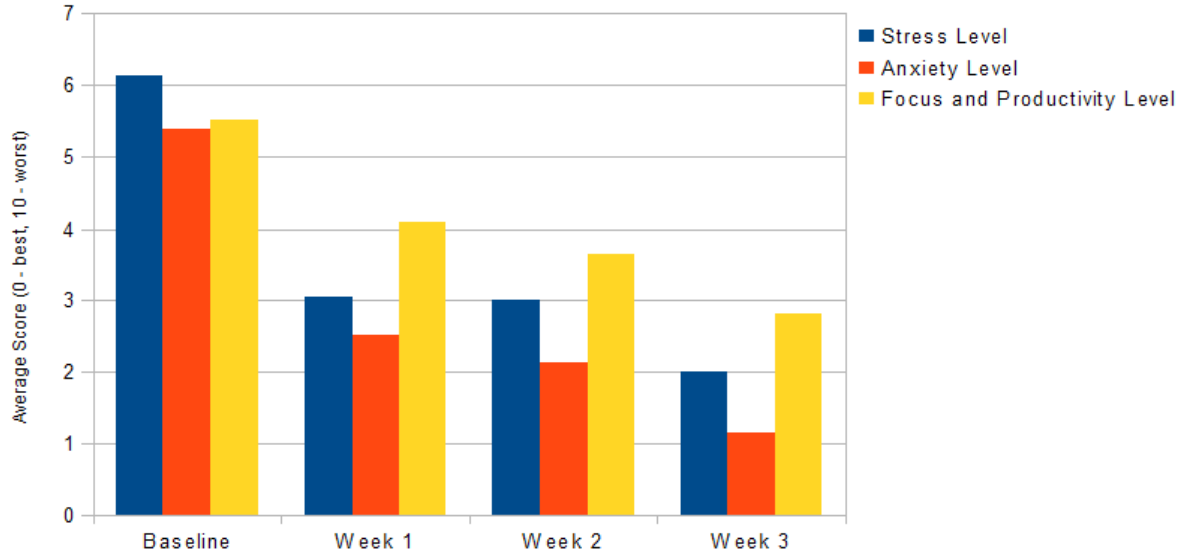
The intervention for this case study involved “floating” in a 9’ long x 5’ wide fiberglass tank with a hinged lid, shaped like a large egg and filled with 175 gallons (10” deep) of a salt solution. This solution contains 1000 pounds of medical grade Epsom salt, or magnesium sulfate (MgSO₄) and is maintained 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 three (3) weeks in duration and involved one groupings of these six participants. Each person floated once a week for three weeks for a total of 3 floats. A daily subjective survey was completed by each individual, using a numeric scale on a 0-10 continuum with descriptors. This three (3) week daily survey was initiated on day one (1) of the study, regardless of the day of their first float in week one (1). For purposes of comparison, a baseline survey with the same questions was completed by the participants prior to the initiation of the study.

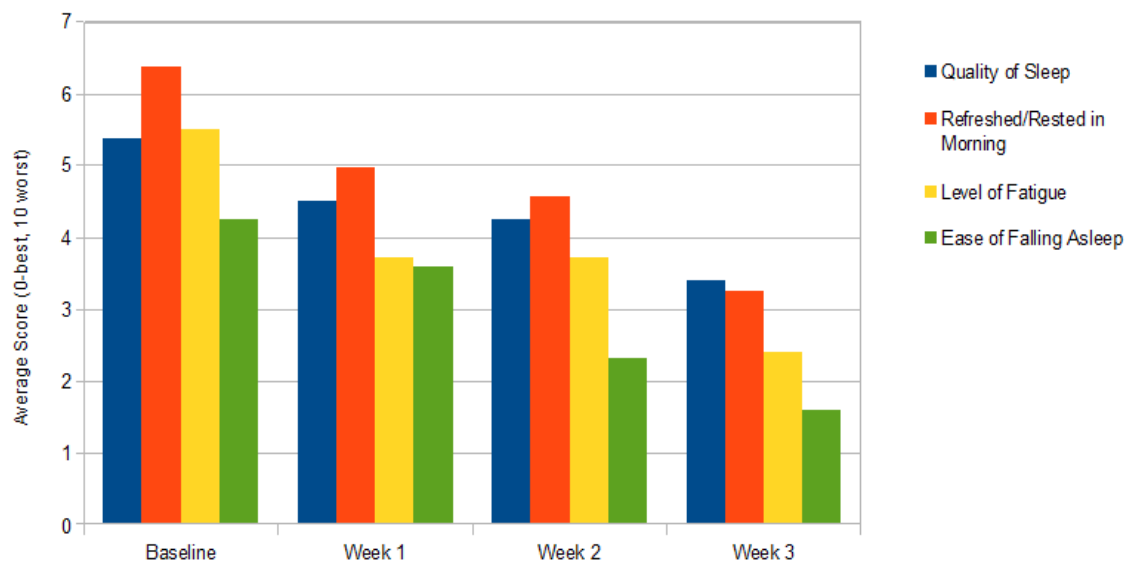
There was minimal interaction with the participants during the course of the study, other than reminders to fill out daily surveys. There was no cost for the participants and there was no financial gain from The Float Zone, where the case study took place. There are no other disclosures.

Results

Floating and Sleep Case Study



Floating and Sleep Case Study



Quality of Sleep: Improved 37%

Evaluating the intervention of floating on quality of sleep the group **improved 37%**.

This represents a drop from a baseline average of 5.4/10 to a week 3 average of 3.4/10.
For reference, the rating scale is 0 = “excellent” and 10 = “terrible.”

Sense of feeling refreshed in morning: Improved 49%

Evaluating the intervention of floating on the sense of feeling refreshed in the morning, the group **improved 49%**. **This represents a drop from a baseline average of 6.4/10 to a week 3 average of 3.2/10.**

This is considering a rating scale of 0 = “feel amazing” and 10 = “exhausted.”

Level of daily fatigue: Improved 56%

Evaluating the intervention of floating on the level of daily fatigue, the group **improved 56%**. **This represents a drop from a baseline average of 5.5/10 to a week 3 average of 2.4/10.**

The rating scale is 0 = “none” and 10 = “extreme fatigue.”

Ease of falling asleep last night: Improved 63%

Evaluating the intervention of floating the ease of falling asleep at night, the group **improved 63%**, **representing a drop from a baseline average of 4.3/10 to a 3 week average of 1.6/10.**

This is considering a rating scale of 0 = “extremely easy/fall asleep immediately” and 10 = “very difficult /more than 60 minutes”.

Stress level: Improved 67%

Evaluating the intervention of floating on stress level, the group **improved 67%**, **representing a drop from a baseline average of 6.1 to a 3 week average of 2/10.**

This is considering a rating scale of 0 = “not an issue/no stress” and 10 = “undeniable and quite serious stress”.

Anxiety: Improved 78%

Evaluating the intervention of floating on anxiety, the group **improved 78%**, **representing a drop from a baseline average of 5.4/10 to a week 3 average of 1.2/10.**

This is considering a rating scale of 0 = “not an issue / no anxiety” and 10 = “undeniable and quite serious anxiety.”

Affect on productivity and focus: Improved 49%

Evaluating the intervention of floating on productivity and focus, the group **improved 49%**, representing a drop from a baseline average of 5.5/10 to a week 3 average of 2.8/10.

This is considering a rating scale of 0 = “laser focused and extremely productive” and 10 = “completely unfocused and unproductive”.

Number of hours of sleep: Unchanged

Evaluating the intervention of floating on the number of hours of sleep, the group **remained unchanged**, representing a baseline and week 3 average of 6.8 hours of sleep per night.

Conclusion

Float therapy improves quality of sleep in college students. Improved quality of sleep includes an ability to fall asleep easier, feeling more refreshed after waking, less daily fatigue and an increased ability to focus and be productive. Floating once weekly for three weeks in succession also led to significant decreases in both stress and anxiety levels. There were no negative effects.

Students as well as adults, medical professionals and alternative health care providers should consider floatation therapy by itself and in tandem with other mind/body approaches to improve quality of sleep.

Discussion

The duration of three (3) weeks and the frequency of one (1) float weekly was easily able to fit into a busy academic schedule. Considering only several floats over several weeks, improvements ranging from 37% (quality of sleep) to 78% (anxiety), is remarkable. To see such immediate and drastic results indicates that this intervention can be of significant value both situationally and long-term throughout the college semester. This is especially relevant in that it only took one float to make immediate and lasting differences.

A relevant and associated finding from this study was the profound impact upon stress and anxiety. Anything that can safely, measurably and predictably reduce stress and anxiety is worthy of consideration. The significance of improvement in stress and anxiety is that it is intimately connected to sleep quality. The value of sleep quality cannot be underestimated as to its value for brain health, including emotions, immunity, inflammation and overall wellness.

There was a one (1) and two (2) week follow-up survey after the conclusion of the study, to determine the degree of retention of the positive gains made, focusing on two (2) specific parameters. The week one (1) survey was completed by 67% of the participants. This demonstrated that on average, the maintained gains for sleep quality was rated as a 7/10, (0 = no maintenance of gains, 1-2 is negligible, 3-4 is some, 5-6 is good maintenance, 7-8 is very good to excellent, 9-10 is as good as it gets). Using the same parameters, emotional state was rated as a 6.8/10 regarding the maintenance of gains. Similarly a two (2) week follow-up survey was

completed with a similar completion rate. The scores were 6.7/10 for sleep quality and 6.7/10 for emotional state. Thus, two weeks after the end of the study, during the stressful weeks of finals and the end of school, improvements in sleep and emotional state were still being appreciated.

The positive outcomes for sleep measures and collateral emotional categories, echo other float therapy case studies that have been performed for chronic neck pain, chronic low back pain, chronic headaches and traumatic brain injury.

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