

Overnight Float – A Journey into Sleep (Case Study)

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On the 19th of September I slept in a Float Pod overnight. You may be wondering why I decided to sleep in a Pod, sounds a bit extreme right?

The simple answer is research! Plus, a whole bunch of people wanted to know what it was like doing an overnight and how it affected sleep and cognitive function.

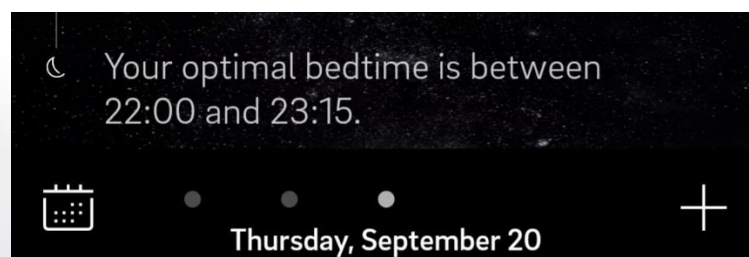


This was to be my 5th overnight float session, the last one was in 2016. I stayed in for 8hrs that time, that was the longest session. Previous sessions had been shorter periods of 2-4hrs a break then back in again.

This time I wanted to know if,

1. If I did sleep what was the quality of sleep
2. How it affected my wellbeing

I had bought the **Oura Ring** (world's most advanced wearable for getting more restorative sleep) to help me track my sleep and work out the optimal time for me to go to bed, based on my circadian rhythm. After 6 weeks of tracking my sleep & daily activities it worked out that my optimal time would be between 22:00 – 23:15. My readings over the 6 weeks of tracking were very accurate with regards to sleep, activity and predicting readiness. The next step was for me to test the ring during a float session, to get an accurate and realistic reading I decided to float overnight as the **Oura** is a sleep tracker after all (It is waterproof to 100m btw).



I had tried to record an overnight float session with the **Oura Ring** the previous night (18th September).

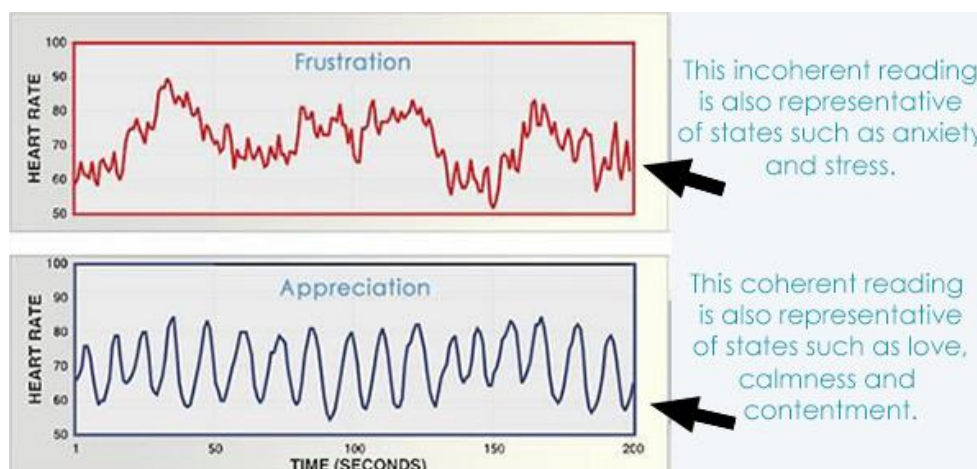
I went to bed in the pod around 11pm. There were two issues that arose, firstly it had been a while since I had attempted to float overnight & secondly the **Oura Ring** didn't record any data for sleep. I managed 4.5 hours in the pod, which was good but not ideal. I believe the ring may have had difficulty sensing any readings as I was sleeping in water, the water may have gotten between gaps between the sensors and my skin or the ring moved. The ring is designed to track sleep, just not in water (Who sleeps in water right?? Ahem...)

After the first attempt I went home and slept on it (in a normal bed), the next day I decided I would try again. I would take the previous night as a practice run, this time I decided to use a neck pillow to support my hand during the float which would stop it from being submerged in the water. This time it worked! Hooray... The results were interesting as you will find out a bit later.

In the Beginning – Pre-Sleep Prep Time

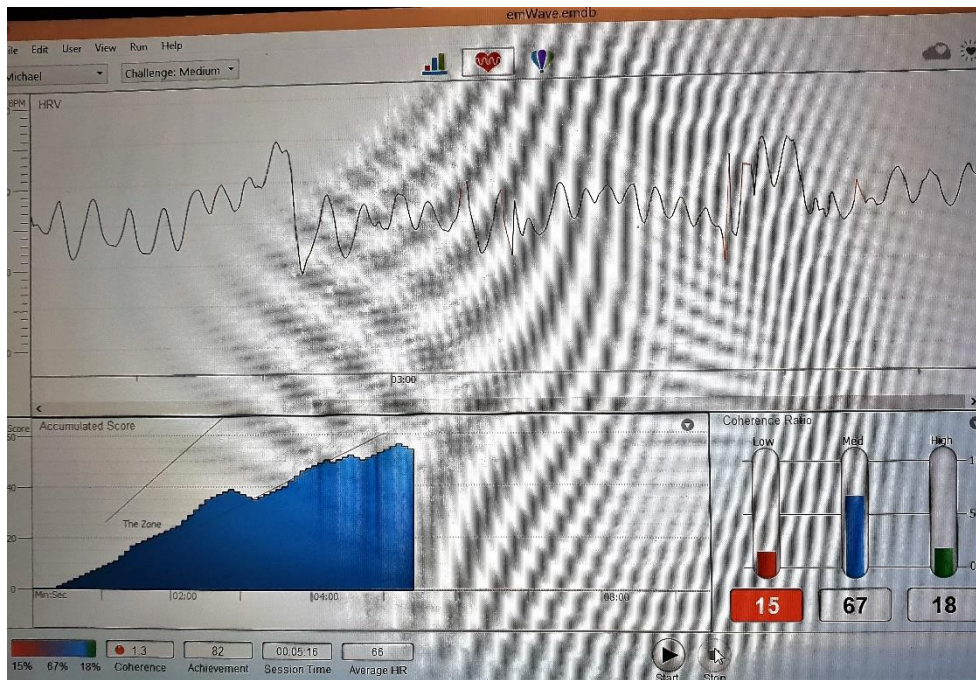
Preparation is key as they say and preparing for sleep is important, whether it is in a float pod or in a bed. Before preparing for the overnight I decided to take a 5 min reading using the **emWave Pro**, “This is a unique training system that objectively monitors your heart rhythms and displays the physiological level of coherence – an optimal state in which the heart, mind and emotions are operating in sync and in balance” * (**HeartMath** website)

‘Coherence’ is a state that occurs when an individual’s Heart Rate Variability (HRV) is rhythmic or balanced. This balance is linked to their nervous system that is associated with stress, and their emotional state. Coherence can be achieved by practising various breathing, visualisation or relaxation techniques. The **HeartMath** device used in this study calculated an individual’s coherent state by first measuring and storing the continuous stream of inter-beat-intervals (IBI), calculated from pulse data received from the ear sensor. The figure below illustrates the difference between emotions or states that may elicit coherent and incoherent readings through **HeartMath**: **



** (2017 Stress Management Study on the effects of floating mental wellbeing & stress)

You can see my results below from my pre-float HeartMath below,



You can see from the reading that my average heart rate was 66bpm, with my coherence ratio being 15 red (Low coherence), 67 blue (medium coherence) & 18 green (high coherence). You would see more green and blue if you had a higher level of coherence and be more balanced. As you can see from the reading I was fairly coherent considering I had a very busy day with clients. This also gave me the opportunity to have a baseline score to measure against post float.

Sleep Prep Time!

Before we sleep it is a good idea to have time to unwind, I made sure that I went through the best routine for me. This meant no time watching TV or scrolling through my phone, I only used it to take pictures as evidence. I read some of **'Why We Sleep' by Matthew Walker** (you can see a theme here right?), took a few drops of **CBD Oil from Hempen** (produced locally in Whitchurch) just to help me chillout and take the edge off.



By this point I was feeling pretty relaxed, but I thought I would add in my other biohacks to aid me on my way to the land of nod. This was in the form of infrared light therapy from **Redlight Rising** whilst listening to binaural beats for 10 mins, both have great benefits for sleep. Red light helps you fall asleep and get a deeper, more restful night's sleep, whilst the binaural beats help to synchronise your brainwave pattern and guide you towards a theta state. In essence I was optimising myself for sleep as you can see below.



The Float Session

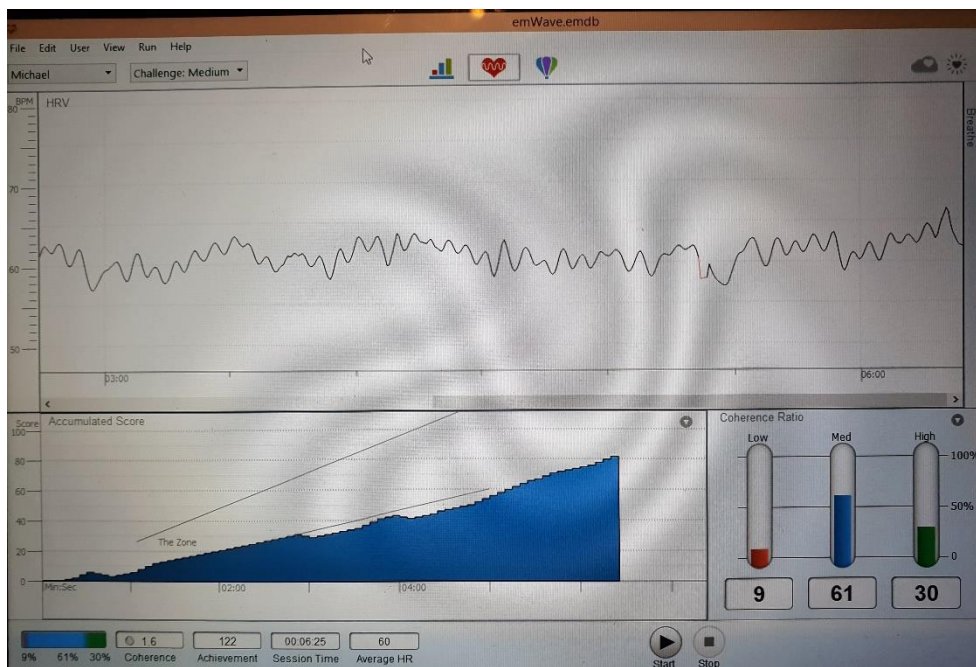
I chose to have music at the beginning and end to signal when the float was coming to an end and set the timer for 8 hours, I got in the pod at 23:07 and settled in. It took me a little while to settle in and get used to having my hand out of the water on a neck pillow. Eventually I drifted off, I know I didn't dream or if I did I had no recollection of it. I slowly woke up and got my bearings, I felt light and super chilled. Although I had a pretty great float and felt great physically and mentally.

I am not 100% sure why I woke up, maybe it was a subconscious act as I was sleeping in water? Was the water getting cooler faster? Did I have a **hypnic jerk** and was made aware of the temp of the water? I couldn't say either way, but I was interested in finding out what happened to me and my sleep during the float session. Which was the main reason for my overnight float.

The Results are in...

According to the **Oura Ring** I managed to sleep for 6hrs 28mins approximately, I will come to the sleep results shortly. Before the float I took a **HeartMath** reading which showed my coherence score as average I would say, heart rate was 65bpm, with my coherence ratio being 15 red (low coherence), 67 blue (medium coherence) & 18 green (high coherence). I took another reading about 15 mins after the float, needed to take a shower first.

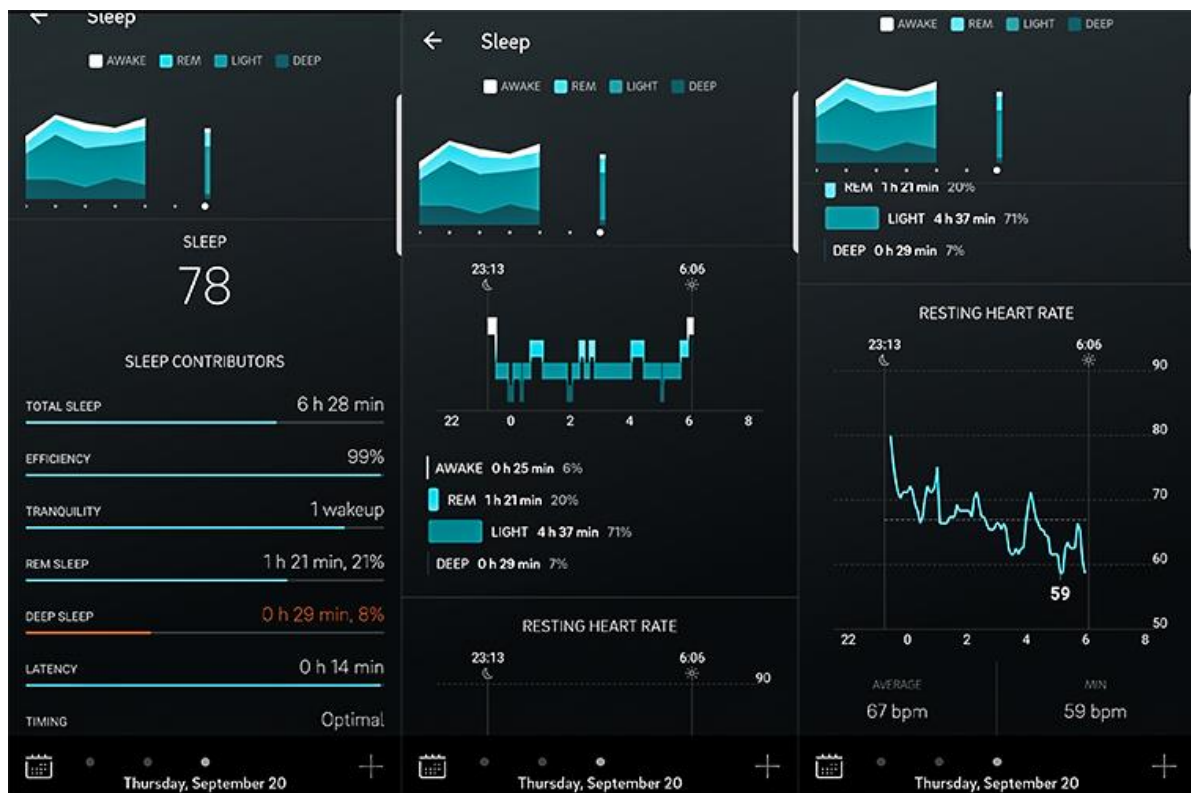
As you can see post float my coherence improved, with my heartrate at 60bpm. This was a slight increase from my heart rate during the float which at its lowest was 59bpm. My coherence ratio was now 9 red (low coherence), 61 blue (medium coherence) & 30 green (high coherence).



You can see the clear positive effects of floating on my mind and body from the reading, I definitely felt more relaxed and calmer. This matches with the **study** we did in 2017 with the Stress Management Society which showed the positive impact 1hr of floating once a week over a 4-week period has on our wellbeing, health and confidence.

Drum Roll Please....

The moment you have all been waiting for, the Oura Ring results! I will mainly be focusing on the sleep aspect of the data and touch upon the readiness score as well.

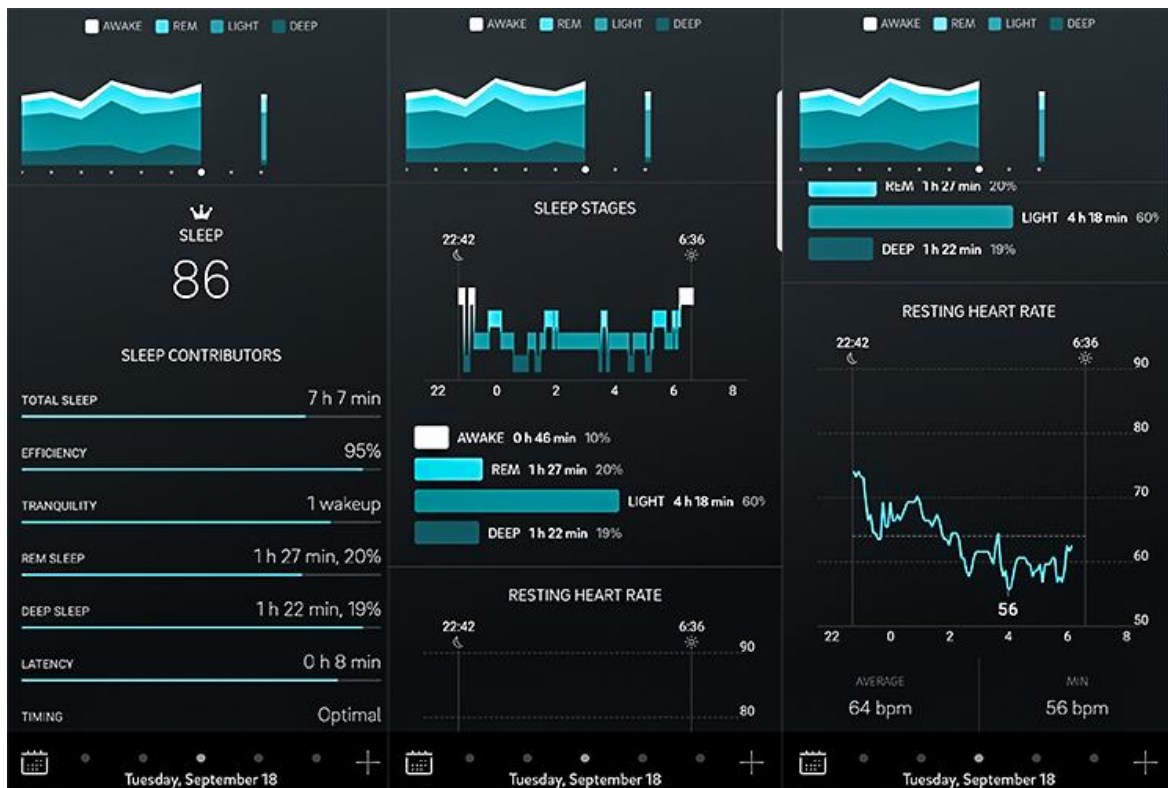


Here are the results from my overnight Float session, it shows my total sleep as 6 h 28 min with my total bedtime of 6 h 53 mins. My sleep score was 78/100. This is not that far off my monthly sleep score average of 84/100. Sleep efficiency is great at 99%, which means I had quality sleep. It appears it took me longer than 20 mins to get to sleep though, understandable as it is not my usual place to sleep.

My REM sleep was slightly less than normal 1 h 21 min, on average REM sleep counts for 20 – 25% of total sleep time for adults. Even though mine reads 21% it is in relation to the number of hours slept, I normally sleep for 7.5 – 8hrs every day. Most adults need 7 – 9 hours to perform well and stay healthy.

Latency was good, according to Oura falling asleep shouldn't take more than 15 – 20 mins. This shows that I was ready to sleep, and it didn't take me long to settle in. I also made sure that I slept during my optimal bedtime between 22:00 & 23:15, which I do every day & definitely helped me get to sleep faster.

If you look at the breakdown of the amount REM, light and Deep sleep I had it is not dissimilar to an average night's sleep apart from the amount of sleep. (See example below of an average night's sleep as a comparison, sleep data is from Mon 17th September). On both occasions my heart rate drops by 8 bpm, which I find interesting.



Now we have seen from the data that with regards to sleeping in the pod or a bed it had little effect on the type of sleep I normally have, apart from the quantity of sleep and the amount of deep sleep. I was a little surprised that I managed any deep sleep. Previous overnight floaters who have floated with us at the centre said they felt that they had rest but not deep sleep (Floating for between 4 – 6 hours straight).

We need to bear in mind that I did float for 4.5 hours the previous night so was better prepared, I have also been floating for several years and racked up close to 300 hours of floating which would have an impact as well. I am used to being in the pod, floating around and letting the float take me where it feels I need to go. I learnt to let go and trust the water after my third overnight float.

The benefits the following day were noticeable, I physically felt loose and relaxed, my mind was clearer as I sat writing this post, it gave me clarity and a focus on what I love Floating and it's many wonderful and mysterious ways. Even my wife said I sound different on the phone, in a positive way of course. Working 60+ hours a week for your passion is hard if not managed correctly, I believe the two overnights helped to reset and re-balance my mind.

Are we ready?

My readiness score of 77 for the following day was reasonable considering I only had 6 hrs 28 min sleep! As you can see from the data below my body temperature was - 0.1 from my baseline temperature, this was taken when I first set up the ring. My respiration rate of 14.9 breaths per minute is within standard range. The only thing that stands out for me is my low night time HRV, this is something I am going to investigate further as a low score is not always bad, but it has highlighted an issue than needs addressing.

I felt rested the following day and was well prepared to deal with clients and a longer day, I am in from 8am – 9pm on Thursdays. I can say that this study has been useful and has highlighted a few things for me regarding my own health.



Final Thoughts

The initial purpose of doing an overnight float session and recording it using **HeartMath** & the **Oura Ring** was to see if I did sleep, what the quality of the sleep was and to see how it affected my overall wellbeing the following day.

Firstly, the difference on **HeartMath** pre and post float was markedly different. This shows the positive effect of the float session and the impact of regular floating on my overall coherence. I never used to be this way, if you met before floating I was a totally different person. Highly anxious, stressed and super defensive, floating helped me in a huge way.

Secondly, the following day my cognitive function had improved. Normally I would find it hard to focus for long periods on a task, but I wrote this post in around 2hrs between clients. Once I started writing I couldn't stop, I was in the zone as they say. This is what

they refer to as flow state, I wasn't conscious of time and was so engaged with the task. Time literally flew by and I was not aware of it.

Thirdly, I now know what happens to my body and mind during an overnight float session. I wondered if you could actually sleep in the pods, as during a standard float you can enter an NREM state or Theta state similar to deep meditation. Although it was only 6.5 hours long I still managed to get into REM & deep sleep albeit for a short time. I feel as though the float enhanced my sleep and switched on a part of my brain that has been stuck for the last couple of months. The oil to loosen the stiff hinges on the door to creativity. I highly recommend the **Oura Ring** for tracking sleep, it is really accurate and allowed me to track my sleep in a pod which was not possible before.

Finally, the importance of a good sleep practice. Even though I have a pretty good routine I feel as though I have taken it for granted, the combination of infrared light, binaural beats, CBD Oil, eating in good time and no screen time an hour before bed is important. But, most importantly of all getting to bed on time and getting adequate sleep time is fundamental to our physical and mental health. Sleep well....

'Sometimes the most productive thing one can do is to sleep'