Acid Lullabies | LSD Interactions with Chronic Pain & Insomnia, a Hypothesis

INTRODUCTION

From June 2022 to December 2024 I consumed approximately 57,000µg of LSD across approximately 123 dosing sessions, making for an average dose of ~500µg taken on average of every five days. This was, mostly, in an attempt to finally sleep for once in my life. This is the story of how I discovered LSD reverses my insomnia for a short period of time, but also how after extended use, it may have reversed it once and for all. The story of this discovery actually begins in May of 2019, but it all requires the preface of what brought me here in the first place.

MEDICAL HISTORY

I was born and raised in the Salt Lake Valley in February of 1989, making me 36 years old as of typing this. According to DNA tests I am a mixture of Northwestern European (French-German), British & Irish, Greek and Balkan, Macedonian, Albanian, and Scandinavian descents. I am six foot, typically around 170-180 pounds, dark hair, with blue/green eyes.

I had my first out-of body experience when I was one year old. Beginning around age five I began experiencing episodes of both derealization and depersonalization. Around age seven I began experiencing sleep disturbances, including trouble initially falling asleep often due to restlessness, vivid recurring dreams which were also out-of-body experiences, (these lasted until age eighteen), and sleep paralysis episodes. Additionally, around this age I began experiencing symptoms of what I have since come to know as Visual Snow Syndrome, but which had gone undiagnosed my entire life because I never reported it. I didn't think much of it was odd until I started taking psychedelics as an adult and all that seemed to be happening was a slightly more enhanced version of much of what I had already been experiencing and seeing naturally since age seven.

Since late-2003 I have been in widespread chronic pain from head to toe. This brought on chronic insomnia. It may be said that from the younger age I also suffered from insomnia due to the aforementioned disturbances, but it was certainly more of a transient insomnia then. For the chronic pain symptomology I have been tested for all variations of arthritic and osteo– concerns,

Lyme disease, Lupus, Multiple Sclerosis (only non-neurological symptomology testing), Crohn's disease, Marfan's Syndrome, and likely several others I don't recall. I have also been prescribed around two dozen different medications from SSRIs, SNRIs, Muscle Relaxers, and Opiates, probably other forms I don't recall, and a handful of physical or restorative therapies. So many options that I've joked for some time now that in the end I think the only thing I didn't ever try was acupuncture and a chiropractor. I have since discovered that a chiropractor is nice but not for my sort of needed pain management by any stretch, yet on the topic of stretching, a Thai Massage works wonders in comparison to a Swedish Massage.

After many doctors and medications the final assessment I was given was the inconclusive and enigmatic label of "juvenile fibromyalgia." It was odd to everyone that a thirteen to fifteen year old boy was reporting symptoms most often seen in women approximately aged 38–55, but it was the only answer we had. I passed the known pressure point and other physical exams which existed at the time. SSRIs, SNRIs, and Muscle Relaxers were a mixture of ineffective, or had worse side-effects. Opiates were nearly ineffective. The only one my body ever responded to, other than morphine via express-direct hospital delivery, was Percocet, but it began to fatigue and tire me, and I had to keep increasing the dose, so I stopped. I mostly accepted my fate and lived in the pain, trying things here and there as opportunity seemed hopeful or at least worth an attempt.

In 2008 I had a sleep paralysis episode which caused an intense 9-month spike in the level of the pain I experienced. This also brought about an eight year episode of Musicophilia. I still experience it on occasion, most often as I am waking up. My current medical provider speculates this could be related to something like Todd's paralysis, but I have yet to undergo those evaluations.

In 2018 I had an encounter with serotonin syndrome. A scary mixture of Ondansetron and Cannabis. I have avoided Ondansetron and any medications that could potentially lead to that again, because in 2017 I began using medical cannabis for the chronic pain, and it works better than anything with no ill side-effects as long as I have the correct prescription. It is likely that some combination of long-standing pain has caused central sensitization syndrome with a possible clinical endocannabinoid deficiency, making the consumption of cannabis a regulator and normalizer for that system rather than a high-amplifier.

In 2020 I received a test result from a lab associated with the Illinois College of Medicine at Chicago which was seeking to find indicators for those reporting diagnosis of fibromyalgia. They reported that I had a strongly confirmable case with an 89/100 score for fibromyalgia as according to their research criteria. The result involved the revelation of a Peripheral Blood Mononuclear Cell dysfunction wherein I struggle to produce normal quantities of chemokine's and cytokines. If this is true, I personally find this to be the likely reason for my overall underlying body ache, which makes it feel as if I always have the same aches and pains that often accompany having the flu—yet I rarely get the flu or similar sicknesses. When I do get a flu-like illness my pre-existing body ache is simply amplified. Either way, this doesn't seem to account for all the other aches and pains with which I struggle, which are things like a constant diffuse rib pain, and almost every pain sensation appearing literally anywhere in the body at random; sharp, shooting, burning, dull, pricking, neuropathic, sporadic numbness of digits and extremities, and rare occasions of pain sensitivity to fabric or another humans touch.

In 2022 I finally came to the realization, and it has since been made conclusive, that I have Celiac's disease. I either didn't report stomach discomfort when I was younger, or it wasn't often, nor dire enough to warrant much concern. Even now just two years since my diet change when I accidentally ingest gluten my response is more often a cluster headache or migraine with intensified body ache, and increased sporadic pain signaling randomly across my body—with maybe a later onset of stomach or intestinal discomfort. Abdominal discomforts definitely come after the ingestion of dairy, particularly butter and heavy creams. Lactose intolerance often accompanies Celiac's.

LSD INTERACTION

As I said in the beginning, the story really begins in May of 2019. One can imagine that after having been 15 years into living with chronic pain and chronic insomnia, (between 2008-2014 mostly operating on 2 hours), I had become deeply depressed. And even before the pain, since approximately age seven, I had that certain ideation… You all know the one. Chronic pain only made it worse. After years of all that, with no methods of medicine or therapy working, having entered an existential crisis for other epistemological grounds, I decided that, still, instead of calling it quits, I needed to try something else. I needed to try something drastic—That which I had been always told not to try.

So I took one tab of LSD.

I waited through the first hour, looking for any signs it was working. Nothing. Not uncommon, as things really pick up around hour two anyway. But hour two rolled around, and while I was beginning to feel some things I never had before, all I wanted to do was go lay down and take a nap about it. Not only have I had insomnia most of my life, I've never been the type of person to just lay down and take a nap. But, to my surprise, that is exactly what I did for my first peak experience of LSD; I took a nap. I awoke, I think about an hour later, feeling well rested, having had beautiful rainbow landscape dreams, and feeling as if I had only just started my experience. Second peak was life-changing, and I have written about it elsewhere. Needless to say I no longer carried around that suicidal ideation, and a certain weight had been lifted—a tension unwound. I wouldn't take LSD for another three years.

In May of 2022 I sought to experience LSD again, but this time I wanted to see if I could have the same experience as everyone else or if I would always just want to fall asleep. So I got a larger supply in order to test various doses. I began with one tab, and sure enough at first peak I wanted to go take a nap. At this point in my experimentation I did not know how much I was consuming in terms of actual micrograms, but eventually I had one of my largest supplies tested so I was able to determine what was happening when; more on that soon.

Through trial and error that spring and summer I would find that I could consistently fall asleep on one dose, two doses made me drowsy—I would still lay down, but the quality of sleep was disturbed, and it wasn't as long. It was three doses and beyond was the threshold to keep me awake the entire time. After a few times in late summer and into the Fall I began to notice that I had been having more good sleeping nights than bad nights in various ways. Whether it was sleeping through the night, or just better sleep quality regardless the amount of hours, or some other altered pattern, sleep was better. As I analyzed my experience the most noticeable pattern was that at times of consuming higher doses, the better-quality nights of sleep seemed to last for nearly two weeks before I would revert back to my usual insomnia ways in some sort of relapsing-remitting behavior. However, it wasn't an easy pattern to fall into at first, because after I successfully stayed awake all day on several doses I would then stay awake all night that same night, unable to sleep soundly. It wouldn't be until the following night when the results would

begin. So, I made a slight adjustment to my approach. I began taking doses late in the evening, usually around 10pm. This way I would be up all night, remain awake all the next day, and then falling asleep early and soundly that night 24 hours *after* ingestion.

THE DATA

We can't make bricks without clay, right? Well, here's what data I was attuned enough to gather along the way as someone who was brought up in the humanities, and not the hard sciences. I wrote down nearly every date and dose, but I didn't necessarily track how long between doses before I would actually notice reverting back to old sleep patterns. This is for several reasons: For one, I was just happy to sleep for once, and initially I didn't consider that later on it may be of relevance; Number two I was also working out many other things in my life, which resulted in outputting on several creative projects, and so sometimes I would dose some days sooner than necessary for maintaining the quality sleep simply because I wanted to stay up all night working on projects, or doing various meditation practices. Because of this, I discovered that I can take the same dose as soon as three days later and in lieu of my experience being diminished due to tolerance, it is amplified, as if I took a larger dose; Third, when I wasn't taking LSD I was either away on vacation, or traveling for work, or trying various other means such as Psilocybin, MDMA, S-MDA, DMT, and the combination of LSD and DMT—which I label as DMSD, *Dimitri in the Sky with Diamonds.* I didn't have the same sleep pattern reset success with any other substance, so there wasn't anything to note in regards to sleep anyway. I slept well after MDMA, but I also felt like I was tripping for three days. DMSD only increased dream production for the few nights that followed, the rest of the sleep quality gain was just as if having only taken LSD. This is to say that the data is slightly skewed in that: I didn't always dose strictly for maintaining sleep schedule, meaning sometimes I ingested sooner than necessary; it wasn't consistent at times due to travel or other life circumstance; I randomly tried various other substances in place of LSD; and I am just a citizen scientist—"…I'm just a hooligan who's used to usin' hallucinogens…"

In December of 2023 I received a brand new supply in liquid form. This I had tested and it returned as 80µg per drop from my dropper. I ingested anywhere from 80–1,200µg on a rolling average of five days, with an average of ~560µg per trip.

One drop at 80µg had me sleepy like one tab at unknown dose; 160µg didn't make me drowsy as much as it made my eyes heavy and my body restless; 240–320µg was fine enough, it did my sleep well, but it was poor for motivation and creativity, and brought on a more flattened affect that was too tired to explore, rather than an excited or anticipatory emotion; 400-560µg was ideal all around, not too heavy in any aspect, best for sleep quality, reasonable for sanity; 640–720µg was a lot like 240–320µg but without the lethargy and flattened emotion; 800–1,200µg, while spectacular in their own right, are not necessary doses for maintaining quality sleep resets. Additionally, I'm already taking enough as it is.

Somewhere between October–December of 2024 I began to feel like I just really wasn't in the mood or up to the task of taking the LSD anymore, but I continued to do so to maintain the sleep, and because I was nearing the end of that supply anyway. My last dose was December 14. About three weeks had come and gone when I realized that I was still having more good sleep nights than bad, and then another week passed, and then another, and another, until I reached 8 weeks of more quality sleep in a row than I can ever remember attaining in my life. I did break that streak soon after, however, it appears as if there is something that is beginning to feel different overall. Time during my next experimental phase may tell the tale.

HYPOTHESIS

I am part of a population of patients who show evidence of low serum serotonin levels (Al-Nimer, M. S. M., et al 2018); low levels of serotonin may be responsible in part for chronic pain (Paredes, S., et al 2019; Häuser, W., et al 2013). I also shows classic signs of alterations in circadian cortisol rhythmicity found in patients with Chronic Insomnia (CI) (Vargas, I., et al 2018). The interactions in my personal study and qualitative analysis may be an indicative sign of an overshadowing deviant regulation of the hypothalamic–pituitary–adrenal (HPA) axis. This deviation could trickle down into the production of; low levels of serotonin, PBMC dysfunctions, abnormal levels or behaviors of cortisol, and other irregularities. It is hypothesized that LSD, with its unique receptor attachment behaviors (Wacker, D., et al 2017), acts as a stabilizer to receptor conformations which improve both endogenous serotonin substrate supplementation and receptor functionality for a short time in patients with decreased levels of serotonin and/or CI. While the association is bidirectional it is inconclusive whether a deviant HPA axis has a stronger impact on low serum serotonin levels than vice versa; regardless, I propose that in both

similarly affected groups and healthy groups serum tryptophan and serotonin levels are gathered accordingly to see if a dose of LSD could potentially disinhibit or modulate an otherwise dysfunctional serotonin pathway, temporarily mend sick or mutated receptors, or regulate a deviant HPA axis. Additionally, cortisol pulsatility data could be beneficial for determining the effect of LSD on circadian and ultradian cortisol rhythms in patients reporting CI.

For further and better understanding of LSD response to circadian and ultradian rhythms it is proposed that further research be put into studying the effects of LSD on biological systems of low complexity such as dandelion inflorescences (Lehman, H.E., et al 1960), or as I would suggest, sunflower inflorescences; where panicles show their symmetrical time courses, capitulum offer a view into a dynamic rhythmicity that may be of much more value here.

An additional layer to this hypothesis may involve the role of neuroimmune signaling and its interaction with both serotonergic pathways and the HPA axis. Long-standing untreated Celiac Disease, in conjunction with the observed Peripheral Blood Mononuclear Cell (PBMC) dysfunction, may have contributed to a persistent state of low-grade systemic inflammation. Over time, such inflammatory signaling is known to activate central nervous system immune cells (microglia), which can alter pain processing, disrupt sleep architecture, and modulate neurotransmitter systems, including serotonin.

This raises the possibility that my chronic pain and insomnia are not solely disorders of neurotransmitter deficiency or endocrine dysregulation, but rather manifestations of a broader central sensitization process—where the nervous system becomes entrained into a state of heightened reactivity through prolonged immune activation. Within this, altered cytokine signaling may contribute to both HPA-axis irregularities and downstream serotonergic dysfunction, suggesting a bidirectional and possibly self-reinforcing loop.

Additionally, the endocannabinoid system, which plays a regulatory role in immune modulation, pain perception, and sleep stability, may be functionally impaired in such conditions. My strong therapeutic response to inhaled cannabis, contrasted with atypical metabolism of orally ingested cannabinoids, may indicate both receptor-level sensitivity and metabolic irregularity within this system. This raises the possibility of a relative endocannabinoid deficiency or dysregulation contributing to the persistence of symptoms.

Within this expanded model, LSD may exert effects not only through serotonergic receptor activity, but also through indirect modulation of neuroimmune signaling and downstream

inflammatory tone. By altering receptor dynamics, network connectivity, and possibly microglial activation states, LSD may transiently reduce central sensitization and restore more normalized signaling across serotonergic, endocrine, and immune axes. The observed improvements in sleep may therefore reflect not only receptor-level changes, but a temporary recalibration of a broader dysregulated system.

CONCLUSION

My journey through the labyrinth of chronic pain and insomnia—marked by decades of failed treatments and unanswered questions—culminated in an unlikely conductor: LSD.

This anecdotal data may suggest that LSD temporarily "overclocks" serotonin pathways and HPA axis dynamics, creating a window for neural reorganization. Lower doses induced sedation, while higher ones maintained wakefulness's creating a bidirectional effect revealing a contextual polarity which may indicate that LSD toggles, or expands and contracts between amplifying and dampening modes in neural networks. Additionally, the sustained benefits post-discontinuation suggest psychedelics might "teach" biological systems new attractor states. This aligns with fibromyalgia research implicating maladaptive plasticity in chronic pain.

This broader interpretation suggests that the observed effects may not be limited to serotonergic modulation alone, but rather reflect a temporary reorganization of a complex, interdependent system involving the nervous, immune, and endocrine domains. Chronic pain conditions such as Fibromyalgia are increasingly understood as disorders of central sensitization and maladaptive neuroplasticity, often influenced by long-term immune activation. In this context, psychedelics may function less as direct pharmacological treatments and more as system-level perturbation tools—capable of destabilizing entrenched pathological patterns and allowing the emergence of new functional equilibria.

The persistence of improved sleep following discontinuation may therefore represent more than a residual pharmacological effect but might reflect a shift in the underlying regulatory points governing circadian rhythm, stress response, and sensory processing. This suggests that repeated psychedelic exposure, under certain conditions, may not simply mask dysfunction, but instead, facilitate the transition toward a more stable physiological attractor state—one in which previously dysregulated systems regain partial coherence.

The true mystery lies in the lingering effects—the eight weeks of restored sleep following discontinuation. This, a sort of informational hysteresis, where intense resonance leaves imprints that persist beyond the initial stimulus. Like a lake retaining the memory of a stone's impact, my nervous system appears to have absorbed patterns of coherence from repeated psychedelic sessions.