WEBVTT

NOTE duration:"01:22:52"

NOTE recognizability:0.772

NOTE language:en-us

NOTE Confidence: 0.815826652307692

 $00:00:00.000 \rightarrow 00:00:02.863$ Right. That was less difficulty with the

NOTE Confidence: 0.815826652307692

 $00:00:02.863 \rightarrow 00:00:05.198$ technical aspects than I was expecting.

NOTE Confidence: 0.815826652307692

 $00:00:05.200 \rightarrow 00:00:10.627$ So it's great to see everyone this is our.

NOTE Confidence: 0.815826652307692

 $00:00:10.630 \rightarrow 00:00:14.138$ Restarted sent monthly seminar

NOTE Confidence: 0.815826652307692

00:00:14.138 --> 00:00:16.769 in psychedelic science,

NOTE Confidence: 0.815826652307692

 $00{:}00{:}16.770 \dashrightarrow 00{:}00{:}20.249$ which we plan to continue to have

NOTE Confidence: 0.815826652307692

 $00:00:20.249 \longrightarrow 00:00:22.888$ every third Friday at 3:30 PM.

NOTE Confidence: 0.815826652307692

 $00:00:22.890 \dashrightarrow 00:00:24.820$ We're going to do it hybrid as we are today.

NOTE Confidence: 0.815826652307692

 $00:00:24.820 \rightarrow 00:00:26.932$ We've got a small number of people here

NOTE Confidence: 0.815826652307692

 $00{:}00{:}26.932 \dashrightarrow 00{:}00{:}29.124$ in the room and a lot more on zoom,

NOTE Confidence: 0.815826652307692

 $00:00:29.130 \longrightarrow 00:00:30.570$ so it's great to see such a large group,

NOTE Confidence: 0.815826652307692

 $00{:}00{:}30{.}570 \dashrightarrow 00{:}00{:}32{.}383$ and we'll continue to have it available

NOTE Confidence: 0.815826652307692

 $00{:}00{:}32.383 \dashrightarrow 00{:}00{:}34.194$ in both formats if we can continue

 $00:00:34.194 \rightarrow 00:00:35.664$ to make the technical stuff work.

NOTE Confidence: 0.815826652307692

 $00{:}00{:}35{.}670$ --> $00{:}00{:}36{.}936$ We do promise coffee and cookies

NOTE Confidence: 0.815826652307692

00:00:36.936 --> 00:00:39.292 if you come in person, so. Umm.

NOTE Confidence: 0.815826652307692

00:00:39.292 --> 00:00:43.289 So our presenter today is Lucy Berkovich,

NOTE Confidence: 0.815826652307692

 $00:00:43.290 \dashrightarrow 00:00:46.328$ who's a postdoc in Allen Antiche lab.

NOTE Confidence: 0.815826652307692

 $00:00:46.330 \longrightarrow 00:00:48.605$ And she's in the early stages of

NOTE Confidence: 0.815826652307692

 $00:00:48.605 \rightarrow 00:00:50.435$ putting together a very exciting

NOTE Confidence: 0.815826652307692

 $00:00:50.435 \dashrightarrow 00:00:52.805$ study looking at the brain effects

NOTE Confidence: 0.815826652307692

00:00:52.805 --> 00:00:54.489 of psilocybin and ketamine.

NOTE Confidence: 0.815826652307692

 $00:00:54.490 \longrightarrow 00:00:55.617$ But what I've asked you to do

NOTE Confidence: 0.815826652307692

 $00:00:55.617 \dashrightarrow 00:00:56.909$ is sort of a broader overview.

NOTE Confidence: 0.815826652307692

00:00:56.910 --> 00:00:58.030 I hope you'll talk about some of

NOTE Confidence: 0.815826652307692

00:00:58.030 --> 00:00:59.129 your own plans in your own work,

NOTE Confidence: 0.815826652307692

 $00{:}00{:}59{.}130 \dashrightarrow 00{:}01{:}01{.}418$ but also a broader overview of the effects

NOTE Confidence: 0.815826652307692

 $00:01:01.418 \rightarrow 00:01:03.538$ that the brain imaging literature and

NOTE Confidence: 0.815826652307692

 $00:01:03.538 \dashrightarrow 00:01:06.670$ the effects of these substances on the brain.

- NOTE Confidence: 0.815826652307692
- 00:01:06.670 --> 00:01:07.510 So Lucy,
- NOTE Confidence: 0.815826652307692
- $00{:}01{:}07{.}510 \dashrightarrow 00{:}01{:}08{.}665$ thank you so much for being here.
- NOTE Confidence: 0.815826652307692
- 00:01:08.670 -> 00:01:10.174 It's great to have you join us and
- NOTE Confidence: 0.815826652307692
- $00:01:10.174 \longrightarrow 00:01:11.249$ really looking forward to learn.
- NOTE Confidence: 0.894377060769231
- 00:01:12.670 --> 00:01:14.693 Hi. Yeah, I'm very, I'm very glad
- NOTE Confidence: 0.894377060769231
- $00:01:14.693 \longrightarrow 00:01:16.640$ to have been invited and I'm,
- NOTE Confidence: 0.894377060769231
- 00:01:16.640 --> 00:01:19.286 I'm really happy in fact to
- NOTE Confidence: 0.894377060769231
- $00:01:19.286 \longrightarrow 00:01:21.840$ to give this presentation. So
- NOTE Confidence: 0.76030082
- 00:01:21.910 --> 00:01:24.346 I'm sorry, I did just realize,
- NOTE Confidence: 0.76030082
- $00:01:24.350 \rightarrow 00:01:26.390$ so just two housekeeping things.
- NOTE Confidence: 0.76030082
- $00:01:26.390 \longrightarrow 00:01:28.100$ First of all, this is being
- NOTE Confidence: 0.76030082
- $00{:}01{:}28{.}100 \dashrightarrow 00{:}01{:}29{.}240$ recorded and eventually our
- NOTE Confidence: 0.76030082
- $00{:}01{:}29{.}299 \dashrightarrow 00{:}01{:}30{.}909$ plan is to post on the website.
- NOTE Confidence: 0.76030082
- 00:01:30.910 --> 00:01:33.014 So just be aware that that this
- NOTE Confidence: 0.76030082
- 00:01:33.014 --> 00:01:35.187 is being recorded and second of all,
- NOTE Confidence: 0.76030082

 $00:01:35.190 \rightarrow 00:01:37.031$ in order to avoid the feedback we've

NOTE Confidence: 0.76030082

 $00{:}01{:}37{.}031 \dashrightarrow 00{:}01{:}39{.}482$ turned off the speakers, which means

NOTE Confidence: 0.76030082

 $00:01:39.482 \dashrightarrow 00:01:42.556$ we cannot hear people who are here.

NOTE Confidence: 0.76030082

 $00:01:42.556 \longrightarrow 00:01:43.866$ With this virtually we can

NOTE Confidence: 0.76030082

 $00:01:43.866 \rightarrow 00:01:45.450$ try to figure out how to,

NOTE Confidence: 0.76030082

00:01:45.450 --> 00:01:46.577 I'll see if I can figure out

NOTE Confidence: 0.76030082

00:01:46.577 -> 00:01:47.788 how to make that work better.

NOTE Confidence: 0.76030082

00:01:47.790 --> 00:01:49.338 But yeah, if you're here virtually

NOTE Confidence: 0.76030082

 $00{:}01{:}49{.}338 \dashrightarrow 00{:}01{:}50{.}990$ and you want to contribute,

NOTE Confidence: 0.76030082

 $00{:}01{:}50{.}990 \dashrightarrow 00{:}01{:}52{.}630$ please raise your hand and

NOTE Confidence: 0.76030082

 $00:01:52.630 \longrightarrow 00:01:53.942$ or right into that.

NOTE Confidence: 0.76030082

00:01:53.950 - 00:01:55.390 And I will try to keep an eye on the

NOTE Confidence: 0.76030082

 $00:01:55.430 \longrightarrow 00:01:56.949$ chat as the conference is going along.

NOTE Confidence: 0.76030082

00:01:56.950 --> 00:01:57.946 But if you just call out,

NOTE Confidence: 0.76030082

 $00:01:57.950 \dashrightarrow 00:02:00.110$ I don't think we're going to hear you.

NOTE Confidence: 0.76030082

 $00:02:00.110 \longrightarrow 00:02:00.518$ All right.

 $00:02:00.518 \dashrightarrow 00:02:02.150$ That's the last house keeping I can think of.

NOTE Confidence: 0.76030082

 $00:02:02.150 \longrightarrow 00:02:02.978$ So go ahead.

NOTE Confidence: 0.843554086

 $00:02:04.950 \longrightarrow 00:02:06.786$ Well, so yes, so thank you

NOTE Confidence: 0.843554086

 $00:02:06.786 \longrightarrow 00:02:08.010$ for for this invitation.

NOTE Confidence: 0.843554086

 $00:02:08.010 \longrightarrow 00:02:10.402$ So in fact, I really try to provide

NOTE Confidence: 0.843554086

 $00:02:10.402 \rightarrow 00:02:12.569$ an overview of the neuroimaging

NOTE Confidence: 0.843554086

 $00:02:12.569 \rightarrow 00:02:14.066$ studies about psychedelics.

NOTE Confidence: 0.843554086

00:02:14.070 --> 00:02:16.158 So I decided not to focus

NOTE Confidence: 0.843554086

 $00:02:16.158 \longrightarrow 00:02:17.550$ on on psychedelic process.

NOTE Confidence: 0.843554086

00:02:17.550 --> 00:02:19.167 So I will not really address the

NOTE Confidence: 0.843554086

00:02:19.167 -> 00:02:20.390 ketamine aspect, but I would be

NOTE Confidence: 0.843554086

 $00:02:20.390 \dashrightarrow 00:02:21.750$ really happy to talk about it too.

NOTE Confidence: 0.843554086

00:02:21.750 $\operatorname{-->}$ 00:02:23.559 And and I mean I can have a couple

NOTE Confidence: 0.843554086

 $00{:}02{:}23.559 \dashrightarrow 00{:}02{:}25.567$ of slides on that also if you need.

NOTE Confidence: 0.843554086

00:02:25.570 --> 00:02:28.606 So just to provide like first,

 $00:02:28.610 \rightarrow 00:02:31.088$ first of all maybe a few definitions,

NOTE Confidence: 0.843554086

 $00{:}02{:}31.090 \dashrightarrow 00{:}02{:}33.568$ so every body here I guess I

NOTE Confidence: 0.843554086

 $00:02:33.568 \longrightarrow 00:02:35.220$ know what it's like.

NOTE Confidence: 0.843554086

00:02:35.220 --> 00:02:35.838 But anyway,

NOTE Confidence: 0.843554086

 $00{:}02{:}35{.}838 \dashrightarrow 00{:}02{:}38{.}310$ So what what I will talk about is

NOTE Confidence: 0.843554086

 $00{:}02{:}38{.}382 \dashrightarrow 00{:}02{:}41{.}119$ uh psylocybe which is the the active

NOTE Confidence: 0.843554086

00:02:41.119 --> 00:02:43.470 compound of matching magic mushrooms,

NOTE Confidence: 0.843554086

 $00:02:43.470 \longrightarrow 00:02:47.022$ LSD DMT which is one of the chemical

NOTE Confidence: 0.843554086

 $00{:}02{:}47.022 \dashrightarrow 00{:}02{:}50.318$ compound of iasca and also mescaline.

NOTE Confidence: 0.843554086

 $00:02:50.320 \longrightarrow 00:02:51.454$ But you will see that there

NOTE Confidence: 0.843554086

00:02:51.454 --> 00:02:52.849 is not in fact many studies,

NOTE Confidence: 0.843554086

 $00:02:52.850 \rightarrow 00:02:56.196$ many neural imaging study about the Muslim.

NOTE Confidence: 0.843554086

 $00{:}02{:}56{.}200 \dashrightarrow 00{:}02{:}59{.}840$ So all these molecules are

NOTE Confidence: 0.843554086

00:02:59.840 --> 00:03:01.296 serotonergic agonists,

NOTE Confidence: 0.843554086

 $00{:}03{:}01{.}300 \dashrightarrow 00{:}03{:}03{.}185$ in particular in the vestibular

NOTE Confidence: 0.843554086

00:03:03.185 --> 00:03:04.693 receptors of the serotonin,

- NOTE Confidence: 0.843554086
- $00{:}03{:}04.700 \dashrightarrow 00{:}03{:}07.580$ but also on other receptors.
- NOTE Confidence: 0.843554086
- $00:03:07.580 \rightarrow 00:03:10.118$ And they have several subjective effects.
- NOTE Confidence: 0.843554086
- $00:03:10.120 \rightarrow 00:03:12.730$ And in fact This is why they are famous.
- NOTE Confidence: 0.843554086
- $00:03:12.730 \longrightarrow 00:03:15.808$ And in particular they give a
- NOTE Confidence: 0.843554086
- $00{:}03{:}15{.}808 \dashrightarrow 00{:}03{:}18{.}361$ visual distortion that like you
- NOTE Confidence: 0.843554086
- $00:03:18.361 \rightarrow 00:03:21.196$ can see that are kind of moving,
- NOTE Confidence: 0.843554086
- $00:03:21.200 \rightarrow 00:03:23.390$ moving distortion or the impression
- NOTE Confidence: 0.843554086
- $00{:}03{:}23{.}390 \dashrightarrow 00{:}03{:}25{.}580$ that things are breathing or
- NOTE Confidence: 0.843554086
- $00:03:25.655 \longrightarrow 00:03:27.299$ volute things like that.
- NOTE Confidence: 0.843554086
- $00:03:27.300 \longrightarrow 00:03:29.625$ There is also time and
- NOTE Confidence: 0.843554086
- 00:03:29.625 --> 00:03:31.020 space filling alterations,
- NOTE Confidence: 0.843554086
- $00:03:31.020 \longrightarrow 00:03:34.490$ just academics and mystical spiritual
- NOTE Confidence: 0.843554086
- $00:03:34.490 \longrightarrow 00:03:38.783$ experiences that are reported by users.
- NOTE Confidence: 0.843554086
- $00{:}03{:}38{.}783 \dashrightarrow 00{:}03{:}42{.}898$ And for all these effects,
- NOTE Confidence: 0.843554086
- $00:03:42.900 \longrightarrow 00:03:45.084$ I've I've shown to also provide
- NOTE Confidence: 0.843554086

 $00:03:45.084 \rightarrow 00:03:47.163$ kind of promising results in

NOTE Confidence: 0.843554086

00:03:47.163 --> 00:03:48.837 different psychiatric disorders,

NOTE Confidence: 0.843554086

 $00:03:48.840 \longrightarrow 00:03:51.460$ and in particular in depression,

NOTE Confidence: 0.843554086

 $00:03:51.460 \longrightarrow 00:03:52.888$ anxiety and addiction.

NOTE Confidence: 0.843554086

 $00:03:52.888 \dashrightarrow 00:03:56.220$ So all of this brings the question

NOTE Confidence: 0.843554086

 $00{:}03{:}56{.}310 \dashrightarrow 00{:}03{:}59{.}705$ about brain mechanism and in fact how

NOTE Confidence: 0.843554086

 $00{:}03{:}59{.}705 \dashrightarrow 00{:}04{:}02{.}231$ this brain mechanism can account for

NOTE Confidence: 0.843554086

 $00:04:02.231 \rightarrow 00:04:04.016$ both these changes in perception,

NOTE Confidence: 0.843554086

 $00{:}04{:}04{.}020 \dashrightarrow 00{:}04{:}06{.}680$ but also the the rapeutic effects

NOTE Confidence: 0.843554086

 $00{:}04{:}06.680 \dashrightarrow 00{:}04{:}08.276$ of these molecules.

NOTE Confidence: 0.843554086

 $00:04:08.280 \dashrightarrow 00:04:10.616$ So first I will try to travel from

NOTE Confidence: 0.843554086

 $00:04:10.616 \longrightarrow 00:04:12.460$ the receptors to the brain effect

NOTE Confidence: 0.843554086

 $00{:}04{:}12{.}460 \dashrightarrow 00{:}04{:}14{.}764$ and then to the cognitive and the

NOTE Confidence: 0.843554086

 $00:04:14.764 \rightarrow 00:04:16.999$ theoretical aspects of the psychedelics.

NOTE Confidence: 0.843554086

 $00:04:17.000 \longrightarrow 00:04:18.864$ So regarding the receptors,

NOTE Confidence: 0.843554086

 $00:04:18.864 \rightarrow 00:04:21.660$ maybe the first question is where

- NOTE Confidence: 0.843554086
- $00:04:21.743 \rightarrow 00:04:24.417$ are the 5-2 receptors in the brain?
- NOTE Confidence: 0.843554086
- 00:04:24.420 --> 00:04:26.660 And in fact, as you can see here,
- NOTE Confidence: 0.843554086
- 00:04:26.660 --> 00:04:28.300 I don't know if you can see my my mind,
- NOTE Confidence: 0.843554086
- $00{:}04{:}28{.}300 \dashrightarrow 00{:}04{:}29{.}896$ so I don't, I'm not sure.
- NOTE Confidence: 0.843554086
- $00:04:29.900 \longrightarrow 00:04:33.292$ But you can see that they are quite
- NOTE Confidence: 0.843554086
- $00:04:33.292 \rightarrow 00:04:35.529$ broadly distributed across the brain
- NOTE Confidence: 0.843554086
- $00:04:35.529 \rightarrow 00:04:38.860$ and in particular they are located in.
- NOTE Confidence: 0.843554086
- $00:04:38.860 \longrightarrow 00:04:40.880$ Region that corresponds to
- NOTE Confidence: 0.843554086
- $00{:}04{:}40.880 \dashrightarrow 00{:}04{:}43.411$ some important networks and in
- NOTE Confidence: 0.843554086
- $00:04:43.411 \longrightarrow 00:04:45.811$ particular the default mode network
- NOTE Confidence: 0.843554086
- 00:04:45.811 -> 00:04:48.649 and the task positive network.
- NOTE Confidence: 0.843554086
- $00{:}04{:}48.650 \dashrightarrow 00{:}04{:}51.805$ And these two networks are
- NOTE Confidence: 0.843554086
- $00:04:51.805 \dashrightarrow 00:04:53.067$ supposedly anticorrelated.
- NOTE Confidence: 0.843554086
- 00:04:53.070 --> 00:04:54.990 The first one activate when you're
- NOTE Confidence: 0.843554086
- $00{:}04{:}54{.}990 \dashrightarrow 00{:}04{:}57{.}216$ doing nothing and the other one will
- NOTE Confidence: 0.843554086

 $00:04:57.216 \rightarrow 00:05:00.144$ activate when you are involved in the task.

NOTE Confidence: 0.843554086

00:05:00.150 --> 00:05:02.208 I just also highlighted on the

NOTE Confidence: 0.843554086

 $00:05:02.208 \longrightarrow 00:05:04.344$ left the five HT 1A receptor

NOTE Confidence: 0.843554086

 $00{:}05{:}04{.}344 \dashrightarrow 00{:}05{:}06{.}745$ that is located more on the the

NOTE Confidence: 0.843554086

 $00{:}05{:}06.745 \dashrightarrow 00{:}05{:}08.698$ the medial temporal lobe.

NOTE Confidence: 0.843554086

 $00:05:08.700 \rightarrow 00:05:10.156$ And particularly the hippocampus,

NOTE Confidence: 0.843554086

 $00{:}05{:}10.156 \dashrightarrow 00{:}05{:}12.755$ because there is more a kind of

NOTE Confidence: 0.843554086

 $00:05:12.755 \rightarrow 00:05:14.867$ inhibitory effect of this receptor that

NOTE Confidence: 0.843554086

 $00{:}05{:}14.867 \dashrightarrow 00{:}05{:}16.929$ is also activated by psyched elics.

NOTE Confidence: 0.91883033

 $00{:}05{:}19{.}580 \dashrightarrow 00{:}05{:}23{.}234$ So what happens now when we activate

NOTE Confidence: 0.91883033

 $00{:}05{:}23{.}234 \dashrightarrow 00{:}05{:}25{.}600$ this literary receptors in the brain?

NOTE Confidence: 0.91883033

 $00{:}05{:}25{.}600 \dashrightarrow 00{:}05{:}28{.}147$ So here you can see a kind of schematic

NOTE Confidence: 0.91883033

 $00{:}05{:}28.147 \dashrightarrow 00{:}05{:}30.558$ of different action of the psychedelic

NOTE Confidence: 0.91883033

 $00{:}05{:}30{.}558 \dashrightarrow 00{:}05{:}33{.}175$ and we're going to review this

NOTE Confidence: 0.91883033

 $00{:}05{:}33.175 \dashrightarrow 00{:}05{:}36.091$ progressively because it's kind of a

NOTE Confidence: 0.91883033

 $00:05:36.091 \rightarrow 00:05:37.874$ complex complicated schematic, right.

 $00:05:37.874 \rightarrow 00:05:40.790$ So here you can see the LSD on the

NOTE Confidence: 0.91883033

 $00{:}05{:}40.869 \dashrightarrow 00{:}05{:}43.851$ left and on like the red receptors

NOTE Confidence: 0.91883033

 $00:05:43.851 \dashrightarrow 00:05:46.480$ are the furnishings where receptors,

NOTE Confidence: 0.91883033

 $00:05:46.480 \longrightarrow 00:05:47.920$ so this LSD, but it's supposed

NOTE Confidence: 0.91883033

 $00{:}05{:}47{.}920 \dashrightarrow 00{:}05{:}49{.}788$ to be the same with the others.

NOTE Confidence: 0.91883033

 $00{:}05{:}49{.}790 \dashrightarrow 00{:}05{:}51{.}758$ Catholics will activate these

NOTE Confidence: 0.91883033

 $00{:}05{:}51{.}758 \dashrightarrow 00{:}05{:}54{.}710$ pyramidal neurons that you can see

NOTE Confidence: 0.91883033

 $00:05:54.796 \dashrightarrow 00:05:57.982$ here in layer 5 and layer six of the

NOTE Confidence: 0.91883033

 $00{:}05{:}57{.}982 \dashrightarrow 00{:}06{:}00{.}108$ preferred the prefrontal cortex.

NOTE Confidence: 0.91883033

00:06:00.110 --> 00:06:03.110 So there will be a huge activation of

NOTE Confidence: 0.91883033

 $00{:}06{:}03.110 \dashrightarrow 00{:}06{:}06{.}070$ these neuron just by a direct effect

NOTE Confidence: 0.91883033

 $00{:}06{:}06{.}070 \dashrightarrow 00{:}06{:}08{.}205$ on the fiber structure receptors.

NOTE Confidence: 0.91883033

 $00{:}06{:}08{.}210 \dashrightarrow 00{:}06{:}11{.}185$ There will be also an activation of

NOTE Confidence: 0.91883033

00:06:11.185 --> 00:06:13.424 these neurons through the appearance

NOTE Confidence: 0.91883033

 $00:06:13.424 \dashrightarrow 00:06:16.504$ from other brain areas and in particular NOTE Confidence: 0.91883033

 $00:06:16.504 \longrightarrow 00:06:19.418$ the telemus that also have these

NOTE Confidence: 0.91883033

 $00{:}06{:}19{.}418$ --> $00{:}06{:}21{.}808$ village tutorial receptors and this

NOTE Confidence: 0.91883033

 $00{:}06{:}21.810 \dashrightarrow 00{:}06{:}24.253$ will result in a glutamate release

NOTE Confidence: 0.91883033

 $00:06:24.253 \rightarrow 00:06:27.511$ in the prefrontal cortex still and

NOTE Confidence: 0.91883033

 $00:06:27.511 \rightarrow 00:06:29.695$ an increased synaptic plasticity

NOTE Confidence: 0.91883033

 $00{:}06{:}29.695 \dashrightarrow 00{:}06{:}32.030$ and you will see that.

NOTE Confidence: 0.91883033

 $00:06:32.030 \rightarrow 00:06:35.698$ This is also a very important mechanism.

NOTE Confidence: 0.91883033

 $00{:}06{:}35{.}700 \dashrightarrow 00{:}06{:}37{.}995$ But the father states where

NOTE Confidence: 0.91883033

 $00{:}06{:}37{.}995 \dashrightarrow 00{:}06{:}40{.}610$ receptors are not only located on.

NOTE Confidence: 0.91883033

00:06:40.610 --> 00:06:41.606 Excitatory neurons,

NOTE Confidence: 0.91883033

 $00{:}06{:}41.606 \dashrightarrow 00{:}06{:}45.092$ but also on inhibitory neurons and in

NOTE Confidence: 0.91883033

 $00:06:45.092 \rightarrow 00:06:47.789$ particular these Gabaergic neurons here.

NOTE Confidence: 0.91883033

 $00{:}06{:}47.790 \dashrightarrow 00{:}06{:}51.430$ And this will inhibit the pyramidal neuron.

NOTE Confidence: 0.91883033

 $00:06:51.430 \longrightarrow 00:06:53.761$ So there is a kind of balance

NOTE Confidence: 0.91883033

 $00{:}06{:}53.761 \dashrightarrow 00{:}06{:}55.222$ between excitation and inhibition

NOTE Confidence: 0.91883033

 $00{:}06{:}55{.}222 \dashrightarrow 00{:}06{:}57{.}959$ and there are also internal ones in

- NOTE Confidence: 0.91883033
- $00{:}06{:}57{.}959 \dashrightarrow 00{:}07{:}00{.}297$ the prefrontal cortex that would be

 $00:07:00.297 \rightarrow 00:07:02.529$ activated and that will also inhibit,

NOTE Confidence: 0.91883033

 $00:07:02.530 \longrightarrow 00:07:06.370$ inhibit the parent domains.

NOTE Confidence: 0.91883033

 $00:07:06.370 \longrightarrow 00:07:07.902$ But All in all,

NOTE Confidence: 0.91883033

 $00{:}07{:}07{.}902 \dashrightarrow 00{:}07{:}09{.}817$ there is a neural activation

NOTE Confidence: 0.91883033

 $00{:}07{:}09{.}817 \dashrightarrow 00{:}07{:}12{.}249$ of these pyramidal neurons,

NOTE Confidence: 0.91883033

 $00:07:12.250 \rightarrow 00:07:14.105$ in particular in the layer of five,

NOTE Confidence: 0.91883033

 $00:07:14.110 \longrightarrow 00:07:15.640$ the prefrontal cortex,

NOTE Confidence: 0.91883033

 $00{:}07{:}15.640 \dashrightarrow 00{:}07{:}19.822$ and this will lead to what has been

NOTE Confidence: 0.91883033

 $00{:}07{:}19.822 \dashrightarrow 00{:}07{:}22.870$ observed as an hyper frontality or hyper

NOTE Confidence: 0.91883033

 $00:07:22.870 \longrightarrow 00:07:24.890$ activity in the prefrontal cortex.

NOTE Confidence: 0.858121852083333

 $00:07:27.370 \longrightarrow 00:07:29.426$ OK, so now if we turn to like

NOTE Confidence: 0.858121852083333

 $00{:}07{:}29{.}426 \dashrightarrow 00{:}07{:}31{.}494$ the the brain effect of the

NOTE Confidence: 0.858121852083333

 $00{:}07{:}31{.}494 \dashrightarrow 00{:}07{:}33{.}708$ psyched elics and what what we can

NOTE Confidence: 0.858121852083333

 $00:07:33.780 \rightarrow 00:07:36.008$ observe with neuroimaging study.

 $00:07:36.010 \longrightarrow 00:07:39.090$ First of all there is a new

NOTE Confidence: 0.858121852083333

 $00{:}07{:}39{.}090 \dashrightarrow 00{:}07{:}41{.}310$ state of connectivity at first.

NOTE Confidence: 0.858121852083333

 $00:07:41.310 \longrightarrow 00:07:44.382$ And this is characterized by a

NOTE Confidence: 0.858121852083333

 $00:07:44.382 \rightarrow 00:07:46.430$ decreased within network connectivity.

NOTE Confidence: 0.858121852083333

 $00{:}07{:}46{.}430 \dashrightarrow 00{:}07{:}48{.}159$ So it means that in several network

NOTE Confidence: 0.858121852083333

 $00{:}07{:}48.159 \dashrightarrow 00{:}07{:}49.874$ you will have less connectivity of

NOTE Confidence: 0.858121852083333

 $00{:}07{:}49.874 \dashrightarrow 00{:}07{:}51.409$ different parts of this network

NOTE Confidence: 0.858121852083333

 $00{:}07{:}51{.}409 \dashrightarrow 00{:}07{:}53{.}290$ and this is particularly the case

NOTE Confidence: 0.858121852083333

 $00{:}07{:}53.290 \dashrightarrow 00{:}07{:}54.800$ in the development network and

NOTE Confidence: 0.858121852083333

 $00:07:54.800 \longrightarrow 00:07:57.354$ here in this study also in the

NOTE Confidence: 0.858121852083333

 $00{:}07{:}57{.}354 \dashrightarrow 00{:}07{:}59{.}749$ auditory network for the silo sibin.

NOTE Confidence: 0.858121852083333

00:07:59.750 --> 00:08:03.178 But we can see pretty much similar effect

NOTE Confidence: 0.858121852083333

 $00{:}08{:}03.178 \dashrightarrow 00{:}08{:}05.586$ in the different network with LSD here.

NOTE Confidence: 0.858121852083333

 $00{:}08{:}05{.}590 \dashrightarrow 00{:}08{:}08{.}182$ So what is in yellow is just the

NOTE Confidence: 0.858121852083333

 $00:08:08.182 \rightarrow 00:08:10.570$ mapping of the the network and in

NOTE Confidence: 0.858121852083333

 $00{:}08{:}10.570 \dashrightarrow 00{:}08{:}13.210$ blue-green it's the the decrease of

 $00:08:13.210 \longrightarrow 00:08:14.970$ the within network connectivity.

NOTE Confidence: 0.858121852083333

 $00:08:14.970 \longrightarrow 00:08:17.282$ You can see here also that in the

NOTE Confidence: 0.858121852083333

 $00{:}08{:}17.282 \dashrightarrow 00{:}08{:}19.078$ visual network you have decreased

NOTE Confidence: 0.858121852083333

 $00:08:19.078 \rightarrow 00:08:21.388$ connectivity and other networks can have

NOTE Confidence: 0.858121852083333

 $00:08:21.388 \rightarrow 00:08:24.068$ this decrease within network connectivity.

NOTE Confidence: 0.858121852083333

 $00{:}08{:}24.070 \dashrightarrow 00{:}08{:}27.038$ And we with AOS here we also have

NOTE Confidence: 0.858121852083333

 $00:08:27.038 \rightarrow 00:08:28.895$ this decrease within connectivity

NOTE Confidence: 0.858121852083333

 $00:08:28.895 \dashrightarrow 00:08:31.865$ within the in the different network.

NOTE Confidence: 0.858121852083333

 $00{:}08{:}31.870 \dashrightarrow 00{:}08{:}34.582$ And you have another result that is not

NOTE Confidence: 0.858121852083333

 $00:08:34.582 \rightarrow 00:08:36.810$ really observed with other psychedelics,

NOTE Confidence: 0.858121852083333

00:08:36.810 --> 00:08:39.183 which is an increase this time of

NOTE Confidence: 0.858121852083333

 $00:08:39.183 \longrightarrow 00:08:40.756$ the within network connectivity

NOTE Confidence: 0.858121852083333

 $00{:}08{:}40.756 \dashrightarrow 00{:}08{:}42.688$ in the salience network.

NOTE Confidence: 0.858121852083333

 $00{:}08{:}42.690 \dashrightarrow 00{:}08{:}44.664$ And we'll see that this is this

NOTE Confidence: 0.858121852083333

 $00:08:44.664 \rightarrow 00:08:46.559$ belongs to some discrepancies that

 $00:08:46.559 \rightarrow 00:08:49.009$ exist between the different molecules.

NOTE Confidence: 0.929674284545455

 $00:08:52.030 \longrightarrow 00:08:54.032$ On the other hand, there is an

NOTE Confidence: 0.92967428454555

00:08:54.032 --> 00:08:55.610 increased between network connectivity,

NOTE Confidence: 0.929674284545455

00:08:55.610 --> 00:08:58.172 which means that the network one

NOTE Confidence: 0.929674284545455

 $00:08:58.172 \dashrightarrow 00:09:00.704$ with another will be more connected.

NOTE Confidence: 0.929674284545455

 $00:09:00.710 \longrightarrow 00:09:03.851$ And this can be seen here in this kind NOTE Confidence: 0.929674284545455

 $00:09:03.851 \longrightarrow 00:09:06.722$ of metrics that shows the differences

NOTE Confidence: 0.929674284545455

 $00:09:06.722 \rightarrow 00:09:09.470$ in fact between silvbin and placebo.

NOTE Confidence: 0.929674284545455

 $00:09:09.470 \longrightarrow 00:09:11.486$ And what you can see in red is all

NOTE Confidence: 0.929674284545455

 $00:09:11.486 \dashrightarrow 00:09:13.264$ the combination of networks that

NOTE Confidence: 0.929674284545455

 $00:09:13.264 \rightarrow 00:09:15.496$ are more connected one to another.

NOTE Confidence: 0.929674284545455

 $00:09:15.500 \longrightarrow 00:09:18.308$ So there is really a kind of huge

NOTE Confidence: 0.929674284545455

 $00:09:18.308 \longrightarrow 00:09:20.380$ increase across the brain of this.

NOTE Confidence: 0.929674284545455

 $00:09:20.380 \rightarrow 00:09:23.120$ Between network and activity.

NOTE Confidence: 0.929674284545455

 $00:09:23.120 \rightarrow 00:09:25.640$ And this is also the case under LSD.

NOTE Confidence: 0.92967428454555

 $00{:}09{:}25{.}640 \dashrightarrow 00{:}09{:}28{.}205$ Here in green we can see how these networks

- NOTE Confidence: 0.929674284545455
- $00:09:28.205 \dashrightarrow 00:09:30.589$ would be more connected to to each other.

 $00:09:32.960 \longrightarrow 00:09:35.010$ Yeah. Are these two effects

NOTE Confidence: 0.840304975714286

 $00:09:35.020 \rightarrow 00:09:38.674$ consistent with just an increase in noise?

NOTE Confidence: 0.840304975714286

 $00:09:38.680 \rightarrow 00:09:40.544$ So if you just simply increase the noise,

NOTE Confidence: 0.840304975714286

 $00:09:40.550 \longrightarrow 00:09:42.180$ you're going to decrease the

NOTE Confidence: 0.840304975714286

 $00:09:42.180 \longrightarrow 00:09:43.810$ coherence within any given network

NOTE Confidence: 0.840304975714286

 $00:09:43.871 \dashrightarrow 00:09:45.476$ that was coherent and baseline.

NOTE Confidence: 0.840304975714286

00:09:45.480 --> 00:09:47.195 You inject noise different less

NOTE Confidence: 0.840304975714286

 $00{:}09{:}47.195 \dashrightarrow 00{:}09{:}49.045$ code and across networks if the

NOTE Confidence: 0.840304975714286

00:09:49.045 --> 00:09:50.550 networks are distinct in their

NOTE Confidence: 0.840304975714286

 $00:09:50.603 \rightarrow 00:09:52.108$ patterns or even anti correlated

NOTE Confidence: 0.840304975714286

 $00:09:52.108 \rightarrow 00:09:54.300$ because how we find them through ICA,

NOTE Confidence: 0.840304975714286

 $00:09:54.300 \rightarrow 00:09:57.079$ then you're going to lose the anticorrelation

NOTE Confidence: 0.840304975714286

 $00:09:57.079 \dashrightarrow 00:09:59.499$ which may read out as enhanced

NOTE Confidence: 0.840304975714286

 $00{:}09{:}59{.}499 \dashrightarrow 00{:}10{:}01{.}800$ correlation or loss of anticorrelation.

 $00:10:01.800 \longrightarrow 00:10:02.457$ So all right,

NOTE Confidence: 0.840304975714286

 $00{:}10{:}02{.}457 \dashrightarrow 00{:}10{:}05{.}029$ all it it's easy for me to see how the

NOTE Confidence: 0.840304975714286

 $00:10:05.029 \rightarrow 00:10:06.669$ loss of within network connectivity

NOTE Confidence: 0.840304975714286

 $00:10:06.669 \rightarrow 00:10:08.806$ could simply be the injection of noise.

NOTE Confidence: 0.840304975714286

 $00{:}10{:}08.810 \dashrightarrow 00{:}10{:}10{.}385$ It's less obvious to me whether the

NOTE Confidence: 0.840304975714286

 $00:10:10.385 \rightarrow 00:10:12.038$ second fight be increased in between.

NOTE Confidence: 0.840304975714286

 $00:10:12.040 \longrightarrow 00:10:13.028$ Never could be explained

NOTE Confidence: 0.840304975714286

 $00:10:13.028 \longrightarrow 00:10:14.016$ by just the injection.

NOTE Confidence: 0.822711560833333

 $00{:}10{:}17{.}790 \dashrightarrow 00{:}10{:}20{.}310$ I I think that the fact that we

NOTE Confidence: 0.822711560833333

 $00:10:20.310 \rightarrow 00:10:22.566$ find opposite pattern is like, yeah,

NOTE Confidence: 0.822711560833333

 $00{:}10{:}22.566 \dashrightarrow 00{:}10{:}25.134$ less incoherence with the idea that

NOTE Confidence: 0.822711560833333

 $00:10:25.134 \rightarrow 00:10:27.867$ we will have only a single like

NOTE Confidence: 0.666774305

 $00{:}10{:}27.880 \dashrightarrow 00{:}10{:}30.820$ these are both relative to base.

NOTE Confidence: 0.666774305

 $00{:}10{:}30.820 \dashrightarrow 00{:}10{:}33.046$ Find the different networks are non

NOTE Confidence: 0.666774305

 $00:10:33.046 \rightarrow 00:10:34.680$ correlated or anticorrelated if not.

NOTE Confidence: 0.821997356428571

 $00:10:35.570 \rightarrow 00:10:36.742$ It depends. For example,

- NOTE Confidence: 0.821997356428571
- $00:10:36.742 \longrightarrow 00:10:38.207$ the different network and the
- NOTE Confidence: 0.821997356428571
- $00{:}10{:}38{.}207 \dashrightarrow 00{:}10{:}39{.}728$ science or the executive network.
- NOTE Confidence: 0.821997356428571
- $00:10:39.730 \longrightarrow 00:10:40.914$ They are anticorrelated naturally.
- NOTE Confidence: 0.821997356428571
- $00:10:40.914 \longrightarrow 00:10:42.098$ So the fact that
- NOTE Confidence: 0.712017028
- $00:10:42.110 \longrightarrow 00:10:45.040$ there is a correlation between increased.
- NOTE Confidence: 0.873659975
- $00{:}10{:}46.610 \dashrightarrow 00{:}10{:}48.194$ This is the like this is the shortcut
- NOTE Confidence: 0.873659975
- $00:10:48.194 \longrightarrow 00:10:49.559$ that is made in many studies.
- NOTE Confidence: 0.873659975
- $00:10:49.560 \rightarrow 00:10:51.624$ That diagram, what we called a
- NOTE Confidence: 0.873659975
- $00{:}10{:}51.624 \dashrightarrow 00{:}10{:}53.554$ loss of anticorrelation is an
- NOTE Confidence: 0.873659975
- $00:10:53.554 \rightarrow 00:10:55.490$ increasing connectivity between them,
- NOTE Confidence: 0.740889780909091
- 00:10:55.530 --> 00:10:56.934 right? Yeah, but that's not true
- NOTE Confidence: 0.740889780909091
- $00{:}10{:}56{.}934 \dashrightarrow 00{:}10{:}58{.}340$ with all of these patterns.
- NOTE Confidence: 0.849177513571429
- $00{:}10{:}59{.}870 \dashrightarrow 00{:}11{:}01{.}967$ So what you can see here is that for
- NOTE Confidence: 0.849177513571429
- $00:11:01.967 \longrightarrow 00:11:03.735$ between some networks you will have
- NOTE Confidence: 0.849177513571429
- $00{:}11{:}03.735 \dashrightarrow 00{:}11{:}05.548$ an increase but with between some
- NOTE Confidence: 0.849177513571429

 $00:11:05.548 \rightarrow 00:11:07.445$ other you will have like a decrease.

NOTE Confidence: 0.849177513571429

 $00:11:07.450 \longrightarrow 00:11:09.360$ I did not detail everything

NOTE Confidence: 0.849177513571429

00:11:09.360 --> 00:11:11.270 because like to cover everything.

NOTE Confidence: 0.849177513571429

00:11:11.270 --> 00:11:13.286 I could not go in every details.

NOTE Confidence: 0.849177513571429

 $00{:}11{:}13.290 \dashrightarrow 00{:}11{:}16.476$ But indeed in fact the what you

NOTE Confidence: 0.849177513571429

00:11:16.476 --> 00:11:18.107 mentioned is a very important point NOTE Confidence: 0.849177513571429

00:11:18.107 --> 00:11:20.601 and you will see and we will see for

NOTE Confidence: 0.849177513571429

00:11:20.601 --> 00:11:22.736 instance that what was taken as an

NOTE Confidence: 0.849177513571429

 $00:11:22.736 \longrightarrow 00:11:24.786$ hyper frontality or an increase in

NOTE Confidence: 0.849177513571429

 $00{:}11{:}24.786 \dashrightarrow 00{:}11{:}26.940$ general activity in the brain could

NOTE Confidence: 0.849177513571429

 $00:11:27.009 \longrightarrow 00:11:29.109$ be in fact just related to the.

NOTE Confidence: 0.849177513571429

 $00{:}11{:}29{.}110 \dashrightarrow 00{:}11{:}31{.}112$ Is the child rescue effect of the

NOTE Confidence: 0.849177513571429

 $00:11:31.112 \longrightarrow 00:11:33.224$ of the drugs and that when you

NOTE Confidence: 0.849177513571429

 $00{:}11{:}33{.}224 \dashrightarrow 00{:}11{:}35{.}012$ when you correct that with for

NOTE Confidence: 0.849177513571429

 $00:11:35.078 \rightarrow 00:11:37.130$ example global signal regression,

NOTE Confidence: 0.849177513571429

 $00{:}11{:}37{.}130 \dashrightarrow 00{:}11{:}38{.}555$ you have very different pattern

- NOTE Confidence: 0.849177513571429
- $00:11:38.555 \longrightarrow 00:11:39.125$ of activation.
- NOTE Confidence: 0.662840443333333
- $00{:}11{:}42.310 \dashrightarrow 00{:}11{:}46.558$ Is the increase within salience network
- NOTE Confidence: 0.662840443333333
- $00:11:46.560 \rightarrow 00:11:48.704$ effect that you showed on the last slide?
- NOTE Confidence: 0.6396734
- $00:11:51.280 \rightarrow 00:11:54.508$ Since that. By itself like generally
- NOTE Confidence: 0.6396734
- $00:11:54.508 \rightarrow 00:11:56.368$ to this increasing between network
- NOTE Confidence: 0.6396734
- $00{:}11{:}56{.}368 \dashrightarrow 00{:}11{:}58{.}186$ connectivity or is that like an outlier?
- NOTE Confidence: 0.906482526
- 00:11:59.580 --> 00:12:01.460 Yeah, it's uh, something different.
- NOTE Confidence: 0.906482526
- $00:12:01.460 \rightarrow 00:12:03.889$ It's really the reason connectivity in the
- NOTE Confidence: 0.906482526
- 00:12:03.889 --> 00:12:06.165 sali
ence network and not just because it's
- NOTE Confidence: 0.906482526
- 00:12:06.165 --> 00:12:08.586 connected to all the other. Like, yeah,
- NOTE Confidence: 0.906482526
- $00:12:08.586 \rightarrow 00:12:10.824$ it's just like an individual pattern.
- NOTE Confidence: 0.15324295
- $00:12:12.950 \longrightarrow 00:12:16.965$ Umm. And so yes, so we're like this NOTE Confidence: 0.15324295
- 00:12:16.965 --> 00:12:19.546 is what I was just saying like there
- NOTE Confidence: 0.15324295
- 00:12:19.546 --> 00:12:21.739 is more coupling between the DMN
- NOTE Confidence: 0.15324295
- $00{:}12{:}21.739 \dashrightarrow 00{:}12{:}23.959$ and the task positive network under NOTE Confidence: 0.15324295

 $00:12:23.959 \rightarrow 00:12:26.309$ service saving and under iOS gas.

NOTE Confidence: 0.15324295

 $00:12:26.309 \longrightarrow 00:12:29.200$ So what you can see here in

NOTE Confidence: 0.15324295

 $00:12:29.300 \longrightarrow 00:12:31.070$ particular on the.

NOTE Confidence: 0.15324295

 $00:12:31.070 \longrightarrow 00:12:32.673$ On the bottom right is that when

NOTE Confidence: 0.15324295

 $00:12:32.673 \longrightarrow 00:12:34.163$ you choose a seed that belong

NOTE Confidence: 0.15324295

 $00:12:34.163 \longrightarrow 00:12:35.657$ to one of the two networks,

NOTE Confidence: 0.15324295

 $00:12:35.660 \longrightarrow 00:12:37.886$ you will see like a burst of

NOTE Confidence: 0.15324295

 $00:12:37.886 \longrightarrow 00:12:39.929$ activity on the other network.

NOTE Confidence: 0.15324295

00:12:39.930 --> 00:12:41.930 So it's also probably region

NOTE Confidence: 0.15324295

 $00:12:41.930 \longrightarrow 00:12:43.930$ dependent and some some parts

NOTE Confidence: 0.15324295

 $00:12:43.999 \longrightarrow 00:12:46.027$ of each of these network can

NOTE Confidence: 0.15324295

 $00:12:46.027 \longrightarrow 00:12:48.000$ be more connected to another.

NOTE Confidence: 0.15324295

 $00{:}12{:}48.000 \dashrightarrow 00{:}12{:}48.310$ Yeah.

NOTE Confidence: 0.27902532

00:12:51.050 - 00:12:54.402 Umm. So what we can see also during

NOTE Confidence: 0.27902532

 $00{:}12{:}54{.}402 \dashrightarrow 00{:}12{:}56{.}873$ rest is a reduced associative but an

NOTE Confidence: 0.27902532

00:12:56.873 --> 00:12:58.998 increased sensory brain wide connectivity

00:12:58.998 --> 00:13:01.366 and this is what I was mentioning

NOTE Confidence: 0.27902532

00:13:01.366 --> 00:13:03.032 after our global senior regression.

NOTE Confidence: 0.27902532

 $00{:}13{:}03{.}032 \dashrightarrow 00{:}13{:}06{.}328$ So you can see that for sale saving NOTE Confidence: 0.27902532

00:13:06.328 --> 00:13:09.848 in this study with this increase in

NOTE Confidence: 0.27902532

 $00{:}13{:}09{.}848 \dashrightarrow 00{:}13{:}12{.}360$ the particularity of capital area.

NOTE Confidence: 0.27902532

 $00{:}13{:}12{.}360 \dashrightarrow 00{:}13{:}14{.}145$ And a decrease in the frontal area

NOTE Confidence: 0.27902532

00:13:14.145 --> 00:13:16.244 and you can and you have kind of

NOTE Confidence: 0.27902532

 $00{:}13{:}16{.}244 \dashrightarrow 00{:}13{:}17{.}872$ a similar pattern that is quite

NOTE Confidence: 0.27902532

00:13:17.872 $\operatorname{-->}$ 00:13:19.930 striking how these two are are are

NOTE Confidence: 0.27902532

 $00{:}13{:}19{.}930 \dashrightarrow 00{:}13{:}22{.}610$ really close to another with the very NOTE Confidence: 0.27902532

 $00:13:22.610 \rightarrow 00:13:24.700$ same increasing the exhibitor area,

NOTE Confidence: 0.27902532

 $00{:}13{:}24.700 \dashrightarrow 00{:}13{:}27.388$ decrease in frontal and in this case NOTE Confidence: 0.27902532

00:13:27.388 --> 00:13:29.084 also the somatomotor cortex that

NOTE Confidence: 0.27902532

 $00{:}13{:}29{.}084 \dashrightarrow 00{:}13{:}30{.}988$ is also that has also an increased

NOTE Confidence: 0.27902532

00:13:30.988 --> 00:13:32.560 connectivity with the rest of the brain.

00:13:35.450 - 00:13:38.341 Umm, the telem, the Telemus is also

NOTE Confidence: 0.783622192222222

 $00{:}13{:}38{.}341 \dashrightarrow 00{:}13{:}41{.}037$ more connected to other areas and

NOTE Confidence: 0.783622192222222

 $00:13:41.037 \longrightarrow 00:13:43.327$ in particular to sensory areas.

NOTE Confidence: 0.783622192222222

 $00:13:43.330 \longrightarrow 00:13:44.968$ So there is a bit small,

NOTE Confidence: 0.783622192222222

00:13:44.970 $\operatorname{-->}$ 00:13:47.562 but what you can see here is that in

NOTE Confidence: 0.783622192222222

 $00{:}13{:}47{.}562 \dashrightarrow 00{:}13{:}51{.}034$ this kind of ring graph is all the

NOTE Confidence: 0.783622192222222

 $00{:}13{:}51{.}034 \dashrightarrow 00{:}13{:}54{.}050$ red lines corresponds to an increase

NOTE Confidence: 0.783622192222222

00:13:54.050 --> 00:13:56.566 in connectivity and it's and there

NOTE Confidence: 0.783622192222222

 $00{:}13{:}56{.}566 \dashrightarrow 00{:}13{:}58{.}512$ is an increase that is kind of

NOTE Confidence: 0.783622192222222

 $00{:}13{:}58{.}512 \dashrightarrow 00{:}14{:}00{.}684$ specific to the to the sensory areas

NOTE Confidence: 0.783622192222222

 $00{:}14{:}00{.}684 \dashrightarrow 00{:}14{:}02{.}310$ compared to the associated areas.

NOTE Confidence: 0.609355668

00:14:04.840 --> 00:14:07.810 And finally, under iOS card,

NOTE Confidence: 0.609355668

 $00:14:07.810 \longrightarrow 00:14:09.940$ there is an increase of coupling

NOTE Confidence: 0.609355668

 $00:14:09.940 \longrightarrow 00:14:11.868$ between the visual area and

NOTE Confidence: 0.609355668

 $00{:}14{:}11.868 \dashrightarrow 00{:}14{:}13.200$ the development network.

NOTE Confidence: 0.609355668

00:14:13.200 --> 00:14:13.952 But interestingly,

- NOTE Confidence: 0.609355668
- 00:14:13.952 --> 00:14:16.960 I mean even if it's also like a
- NOTE Confidence: 0.609355668
- $00:14:17.037 \rightarrow 00:14:19.815$ correlate of what I presented before,
- NOTE Confidence: 0.609355668
- $00:14:19.820 \rightarrow 00:14:21.512$ there is a decreased coupling between
- NOTE Confidence: 0.609355668
- $00{:}14{:}21{.}512 \dashrightarrow 00{:}14{:}23{.}799$ the visual and the task positive network.
- NOTE Confidence: 0.609355668
- $00:14:23.800 \rightarrow 00:14:26.054$ And in this study the salience network
- NOTE Confidence: 0.609355668
- $00{:}14{:}26.054 \dashrightarrow 00{:}14{:}28.260$ has an increased within connectivity.
- NOTE Confidence: 0.609355668
- $00:14:28.260 \longrightarrow 00:14:29.540$ So it may be related.
- NOTE Confidence: 0.75955571625
- $00:14:32.390 \longrightarrow 00:14:33.462$ So under Iowa schedule,
- NOTE Confidence: 0.75955571625
- $00:14:33.462 \longrightarrow 00:14:35.070$ I think that are quite specific
- NOTE Confidence: 0.75955571625
- $00:14:35.128 \longrightarrow 00:14:36.790$ and in particular there are there,
- NOTE Confidence: 0.75955571625
- $00:14:36.790 \longrightarrow 00:14:39.618$ there are changes in visual areas that
- NOTE Confidence: 0.75955571625
- 00:14:39.618 --> 00:14:42.457 really look like visual stimulation even
- NOTE Confidence: 0.75955571625
- $00{:}14{:}42{.}457 \dashrightarrow 00{:}14{:}45{.}547$ if participants have their eyes closed.
- NOTE Confidence: 0.75955571625
- $00{:}14{:}45{.}550 \dashrightarrow 00{:}14{:}47{.}726$ So this is what you can see here.
- NOTE Confidence: 0.75955571625
- $00{:}14{:}47{.}730 \dashrightarrow 00{:}14{:}50{.}970$ So in fact there are like 4 condition
- NOTE Confidence: 0.75955571625

 $00{:}14{:}50{.}970 \dashrightarrow 00{:}14{:}53{.}987$ like I close before and after iOS

NOTE Confidence: 0.75955571625

 $00{:}14{:}53{.}987 \dashrightarrow 00{:}14{:}57{.}629$ which on the blue and the red and the

NOTE Confidence: 0.75955571625

 $00:14:57.630 \rightarrow 00:15:00.430$ sorry yes before and after and and.

NOTE Confidence: 0.75955571625

 $00:15:00.430 \longrightarrow 00:15:02.120$ Natural image which means visual

NOTE Confidence: 0.75955571625

 $00{:}15{:}02{.}120 \dashrightarrow 00{:}15{:}03{.}810$ stimulation before and after in

NOTE Confidence: 0.75955571625

 $00{:}15{:}03.865 \dashrightarrow 00{:}15{:}05.489$ in white and green and what you

NOTE Confidence: 0.75955571625

 $00{:}15{:}05{.}489 \dashrightarrow 00{:}15{:}07{.}299$ can see that there is a decrease.

NOTE Confidence: 0.75955571625

 $00:15:07.300 \longrightarrow 00:15:09.178$ So this is the Brodmann areas

NOTE Confidence: 0.75955571625

00:15:09.178 --> 00:15:10.880 corresponding to the visual cortex.

NOTE Confidence: 0.75955571625

 $00:15:10.880 \rightarrow 00:15:14.499$ There is a decrease in fact only.

NOTE Confidence: 0.75955571625

 $00{:}15{:}14.500 \dashrightarrow 00{:}15{:}16.336$ That was before I was camp.

NOTE Confidence: 0.75955571625

 $00:15:16.340 \longrightarrow 00:15:17.380$ So in other words,

NOTE Confidence: 0.75955571625

 $00{:}15{:}17{.}380 \dashrightarrow 00{:}15{:}18{.}420$ after I was scared,

NOTE Confidence: 0.75955571625

 $00:15:18.420 \rightarrow 00:15:21.260$ you have the I closed all the eyes open.

NOTE Confidence: 0.75955571625

 $00:15:21.260 \longrightarrow 00:15:23.260$ You have the same activity

NOTE Confidence: 0.75955571625

 $00:15:23.260 \longrightarrow 00:15:24.860$ in the visual areas,

- NOTE Confidence: 0.75955571625
- $00:15:24.860 \rightarrow 00:15:30.170$ which is like kind of striking and you also
- NOTE Confidence: 0.584492735714286
- 00:15:31.060 00:15:33.888 relative to. Single track
- NOTE Confidence: 0.584492735714286
- $00:15:33.888 \longrightarrow 00:15:36.009$ within trial baseline.
- NOTE Confidence: 0.584492735714286
- $00:15:36.010 \rightarrow 00:15:38.896$ So that's not comparing across conditions,
- NOTE Confidence: 0.584492735714286
- 00:15:38.900 --> 00:15:40.400 just comparing each trajectory in
- NOTE Confidence: 0.584492735714286
- 00:15:40.400 --> 00:15:44.430 each condition to its own, yeah?
- NOTE Confidence: 0.7594860232
- $00:15:44.430 \longrightarrow 00:15:46.570$ Then you can have also.
- NOTE Confidence: 0.7594860232
- 00:15:46.570 --> 00:15:48.061 So there is also an I I
- NOTE Confidence: 0.7594860232
- $00:15:48.061 \longrightarrow 00:15:49.589$ will go back to that later,
- NOTE Confidence: 0.7594860232
- $00{:}15{:}49{.}590 \dashrightarrow 00{:}15{:}51{.}940$ a decreased feedback and an
- NOTE Confidence: 0.7594860232
- $00:15:51.940 \rightarrow 00:15:54.352$ increased feed forward under iasca
- NOTE Confidence: 0.7594860232
- $00:15:54.352 \longrightarrow 00:15:57.358$ in eyes closed condition and this
- NOTE Confidence: 0.7594860232
- $00{:}15{:}57{.}358 \dashrightarrow 00{:}16{:}00{.}329$ looks like a visual stimulation.
- NOTE Confidence: 0.7594860232
- $00{:}16{:}00{.}330 \dashrightarrow 00{:}16{:}02{.}514$ So in fact you have like this increase
- NOTE Confidence: 0.7594860232
- $00:16:02.514 \longrightarrow 00:16:04.649$ that you can see of the blue line
- NOTE Confidence: 0.7594860232

 $00{:}16{:}04.649 \dashrightarrow 00{:}16{:}06.488$ and the decrease of the red line.

NOTE Confidence: 0.7594860232

 $00:16:06.490 \rightarrow 00:16:12.510$ So it's like in a way visual eyes close.

NOTE Confidence: 0.7594860232

 $00:16:12.510 \longrightarrow 00:16:14.550$ You have like similar pattern to.

NOTE Confidence: 0.7594860232

 $00:16:14.550 \rightarrow 00:16:17.784$ Uh, to visual estimation, the iOS can.

NOTE Confidence: 0.7594860232

00:16:17.790 --> 00:16:19.968 Under LSD it's a bit different,

NOTE Confidence: 0.7594860232

 $00:16:19.970 \longrightarrow 00:16:20.942$ but there isn't.

NOTE Confidence: 0.7594860232

 $00{:}16{:}20{.}942 \dashrightarrow 00{:}16{:}23{.}210$ It was observed that there was an

NOTE Confidence: 0.7594860232

 $00:16:23.277 \rightarrow 00:16:25.869$ increased activity in the visual cortex.

NOTE Confidence: 0.7594860232

 $00{:}16{:}25.870 \dashrightarrow 00{:}16{:}29.134$ And also an increased coordination between

NOTE Confidence: 0.7594860232

 $00:16:29.134 \rightarrow 00:16:32.549$ several subparts of the visual cortex.

NOTE Confidence: 0.7594860232

 $00{:}16{:}32{.}550 \dashrightarrow 00{:}16{:}35{.}268$ So this can be correlated to

NOTE Confidence: 0.7594860232

 $00:16:35.268 \rightarrow 00:16:37.510$ the visual imagery under LSD.

NOTE Confidence: 0.7594860232

00:16:37.510 --> 00:16:38.980 But it's quite difficult in

NOTE Confidence: 0.7594860232

 $00:16:38.980 \longrightarrow 00:16:40.450$ fact to compare because it's

NOTE Confidence: 0.7594860232

 $00{:}16{:}40.507 \dashrightarrow 00{:}16{:}42.187$ all these studies are different,

NOTE Confidence: 0.7594860232

 $00:16:42.190 \rightarrow 00:16:44.409$ are not necessarily using the same methods.

 $00:16:47.580 \longrightarrow 00:16:50.616$ Another effect that is uh quite

NOTE Confidence: 0.727787348333333

 $00:16:50.620 \rightarrow 00:16:53.555$ reproducibly observed under psychedelic is

NOTE Confidence: 0.727787348333333

 $00:16:53.555 \rightarrow 00:16:57.580$ a decrease of low frequency bands power.

NOTE Confidence: 0.727787348333333

 $00:16:57.580 \longrightarrow 00:17:00.751$ So you know that the different association

NOTE Confidence: 0.727787348333333

 $00{:}17{:}00{.}751 \dashrightarrow 00{:}17{:}03.660$ carried like the vector of synchronization

NOTE Confidence: 0.727787348333333

 $00{:}17{:}03.660 \dashrightarrow 00{:}17{:}06.660$ and information transfer across the brain.

NOTE Confidence: 0.727787348333333

00:17:06.660 --> 00:17:08.900 And what you can see on the second

NOTE Confidence: 0.727787348333333

00:17:08.900 --> 00:17:10.827 delic here for LG Stylo savings,

NOTE Confidence: 0.727787348333333

 $00:17:10.830 \longrightarrow 00:17:13.224$ that there is really a important

NOTE Confidence: 0.727787348333333

 $00{:}17{:}13.224 \dashrightarrow 00{:}17{:}15.709$ decrease of alpha and beta bands.

NOTE Confidence: 0.727787348333333

 $00{:}17{:}15{.}710 \dashrightarrow 00{:}17{:}17{.}859$ And for LS you have also decreased

NOTE Confidence: 0.727787348333333

 $00{:}17{:}17{.}859 \dashrightarrow 00{:}17{:}20{.}347$ in Delta and data and also in gamma.

NOTE Confidence: 0.727787348333333

 $00{:}17{:}20{.}350 \dashrightarrow 00{:}17{:}23{.}326$ So for LSD you have basically a decrease

NOTE Confidence: 0.727787348333333

 $00{:}17{:}23.326 \dashrightarrow 00{:}17{:}26.487$ of all broadband decrease whereas for solo

NOTE Confidence: 0.727787348333333

00:17:26.487 --> 00:17:30.409 Sabine it would be more for alpha and beta.

 $00:17:30.410 \longrightarrow 00:17:32.524$ This is another way and from another

NOTE Confidence: 0.727787348333333

 $00:17:32.524 \rightarrow 00:17:34.190$ study that confirms this results.

NOTE Confidence: 0.727787348333333

 $00:17:34.190 \longrightarrow 00:17:36.878$ And what you can see that yes indeed NOTE Confidence: 0.727787348333333

 $00:17:36.878 \rightarrow 00:17:38.854$ the decrease is higher under LSD

NOTE Confidence: 0.727787348333333

 $00{:}17{:}38.854 \dashrightarrow 00{:}17{:}41.590$ and there is also a shift of alpha

NOTE Confidence: 0.727787348333333

 $00:17:41.590 \rightarrow 00:17:43.210$ frequency toward higher frequency

NOTE Confidence: 0.727787348333333

00:17:43.210 --> 00:17:47.022 that you can see on the bottom left.

NOTE Confidence: 0.727787348333333

 $00{:}17{:}47.022 \dashrightarrow 00{:}17{:}50.825$ And a decrease that is more specific

NOTE Confidence: 0.727787348333333

 $00:17:50.825 \rightarrow 00:17:55.690$ to alpha and beta than under siding.

NOTE Confidence: 0.727787348333333

 $00{:}17{:}55.690 \dashrightarrow 00{:}17{:}56.444$ For the,

NOTE Confidence: 0.727787348333333

 $00{:}17{:}56{.}444 \dashrightarrow 00{:}17{:}59{.}083$ you also have a decrease of alpha

NOTE Confidence: 0.727787348333333

00:17:59.083 - > 00:18:02.170 and beta band that you can see here,

NOTE Confidence: 0.727787348333333

 $00{:}18{:}02{.}170 \dashrightarrow 00{:}18{:}04{.}375$ but we'll see that there are different

NOTE Confidence: 0.727787348333333

 $00{:}18{:}04{.}375 \dashrightarrow 00{:}18{:}06{.}382$ pattern and in particular that the

NOTE Confidence: 0.727787348333333

 $00{:}18{:}06{.}382 \dashrightarrow 00{:}18{:}08{.}380$ feed forward or the Yammer bands

NOTE Confidence: 0.727787348333333

 $00{:}18{:}08{.}380 \dashrightarrow 00{:}18{:}10{.}593$ are increased on the iOS and this

 $00:18:10.593 \rightarrow 00:18:13.236$ is not something that is observed

NOTE Confidence: 0.727787348333333

 $00:18:13.236 \rightarrow 00:18:16.088$ on the silo siding.

NOTE Confidence: 0.727787348333333

00:18:16.090 --> 00:18:19.290 For a decrease and so saving is more

NOTE Confidence: 0.727787348333333

00:18:19.290 --> 00:18:22.586 like no effect or really very light

NOTE Confidence: 0.727787348333333

 $00{:}18{:}22.586 \dashrightarrow 00{:}18{:}26.000$ changes for this for this frequency.

NOTE Confidence: 0.727787348333333

 $00{:}18{:}26.000 \dashrightarrow 00{:}18{:}27.852$ And I was scared.

NOTE Confidence: 0.727787348333333

 $00:18:27.852 \longrightarrow 00:18:30.167$ There are other accused that.

NOTE Confidence: 0.727787348333333

00:18:30.170 --> 00:18:30.594 Um,

NOTE Confidence: 0.727787348333333

 $00{:}18{:}30{.}594 \dashrightarrow 00{:}18{:}33{.}562$ the there is a change in the

NOTE Confidence: 0.727787348333333

 $00{:}18{:}33{.}562 \dashrightarrow 00{:}18{:}35{.}034$ feedforward connectivity and

NOTE Confidence: 0.727787348333333

 $00:18:35.034 \longrightarrow 00:18:37.644$ in particular there is here.

NOTE Confidence: 0.727787348333333

 $00{:}18{:}37.650 \dashrightarrow 00{:}18{:}39.702$ So this study focused on information

NOTE Confidence: 0.727787348333333

 $00{:}18{:}39{.}702 \dashrightarrow 00{:}18{:}42{.}076$ transfer and what you can see is

NOTE Confidence: 0.727787348333333

 $00{:}18{:}42.076 \dashrightarrow 00{:}18{:}43.954$ that there is an increased postural

NOTE Confidence: 0.727787348333333

 $00:18:43.954 \longrightarrow 00:18:45.158$ entire information transfer,

 $00:18:45.158 \rightarrow 00:18:48.710$ so from sensory areas to higher level areas,

NOTE Confidence: 0.727787348333333

 $00{:}18{:}48{.}710 \dashrightarrow 00{:}18{:}50{.}696$ whereas there is a decrease in

NOTE Confidence: 0.727787348333333

 $00:18:50.696 \rightarrow 00:18:52.230$ terrible posterior information from so.

NOTE Confidence: 0.727787348333333

 $00:18:52.230 \longrightarrow 00:18:53.238$ And this is the,

NOTE Confidence: 0.727787348333333

 $00{:}18{:}53{.}238 \dashrightarrow 00{:}18{:}55{.}518$ the graph I just showed you before about

NOTE Confidence: 0.727787348333333

 $00{:}18{:}55{.}518 \dashrightarrow 00{:}18{:}57{.}648$ the the mimicking of visual stimulation

NOTE Confidence: 0.727787348333333

 $00:18:57.648 \rightarrow 00:19:00.244$ when eyes are closed and this is the same.

NOTE Confidence: 0.727787348333333

 $00:19:00.250 \longrightarrow 00:19:00.970$ Do that for a while.

NOTE Confidence: 0.727787348333333

 $00:19:00.970 \rightarrow 00:19:03.568$ The previous increasing backlog is decreased.

NOTE Confidence: 0.727787348333333

00:19:03.570 --> 00:19:04.150 Lucy,

NOTE Confidence: 0.848151772

00:19:04.870 --> 00:19:06.342 I don't understand these

NOTE Confidence: 0.848151772

 $00{:}19{:}06{.}342 \dashrightarrow 00{:}19{:}08{.}154$ data and that's my failing.

NOTE Confidence: 0.848151772

 $00:19:08.154 \rightarrow 00:19:09.959$ Are you able to explain?

NOTE Confidence: 0.848151772

00:19:09.960 --> 00:19:13.187 Succinctly, how this the the data that

NOTE Confidence: 0.848151772

 $00:19:13.187 \rightarrow 00:19:16.430$ you're showing the EEG connectivity data?

NOTE Confidence: 0.848151772

 $00:19:16.430 \rightarrow 00:19:17.942$ Correspond to feedforward versus

 $00:19:17.942 \longrightarrow 00:19:19.832$ feedback information transfer or is

NOTE Confidence: 0.848151772

 $00{:}19{:}19{.}832 \dashrightarrow 00{:}19{:}21{.}879$ that like a whole lecture by itself?

NOTE Confidence: 0.64943965

 $00{:}19{:}22.510 \dashrightarrow 00{:}19{:}26.448$ So no like gamma was like regarding the

NOTE Confidence: 0.64943965

 $00{:}19{:}26{.}448 \dashrightarrow 00{:}19{:}29{.}150$ association so it's a bit the shortcut.

NOTE Confidence: 0.64943965

00:19:29.150 --> 00:19:31.929 Alpha and beta were more associated with

NOTE Confidence: 0.64943965

00:19:31.929 --> 00:19:34.775 top down processing while gamma was more

NOTE Confidence: 0.64943965

 $00:19:34.775 \rightarrow 00:19:36.730$ associated with both of our processing.

NOTE Confidence: 0.837813694705883

 $00:19:37.440 \longrightarrow 00:19:39.234$ OK. So these are inferences from

NOTE Confidence: 0.837813694705883

 $00:19:39.234 \rightarrow 00:19:41.068$ relative power from changes in power

NOTE Confidence: 0.837813694705883

 $00:19:41.068 \rightarrow 00:19:42.528$ in the different frequency bands

NOTE Confidence: 0.703879090909091

 $00{:}19{:}42{.}960 \dashrightarrow 00{:}19{:}45{.}066$ like the. So this is for

NOTE Confidence: 0.703879090909091

00:19:45.066 --> 00:19:46.920 the gamma versus alpha beta,

NOTE Confidence: 0.703879090909091

 $00{:}19{:}46{.}920 \dashrightarrow 00{:}19{:}48{.}666$ but for the like the study

NOTE Confidence: 0.703879090909091

 $00{:}19{:}48.666 \dashrightarrow 00{:}19{:}50.759$ that is on the bottom left,

NOTE Confidence: 0.703879090909091

 $00{:}19{:}50{.}760 \dashrightarrow 00{:}19{:}52{.}980$ it's really like the the

- $00:19:52.980 \longrightarrow 00:19:54.756$ measure the information transfer
- NOTE Confidence: 0.703879090909091
- $00{:}19{:}54.756 \dashrightarrow 00{:}19{:}56.570$ between different areas so.
- NOTE Confidence: 0.570898831
- 00:19:59.210 --> 00:20:00.338 I think there's
- NOTE Confidence: 0.655185045
- $00{:}20{:}00{.}350 \dashrightarrow 00{:}20{:}02{.}540$ like a time 15 cross correlation.
- NOTE Confidence: 0.82964784
- $00{:}20{:}02{.}870 \dashrightarrow 00{:}20{:}05{.}796$ Yeah, they do like the I.
- NOTE Confidence: 0.82964784
- 00:20:05.796 --> 00:20:07.826 They do a Granger causality,
- NOTE Confidence: 0.82964784
- 00:20:07.830 --> 00:20:08.900 I think in this study.
- NOTE Confidence: 0.641944056
- $00:20:10.200 \rightarrow 00:20:11.240$ But in the earlier study,
- NOTE Confidence: 0.641944056
- $00{:}20{:}11.240 \dashrightarrow 00{:}20{:}12.608$ there wasn't featured personality.
- NOTE Confidence: 0.641944056
- $00{:}20{:}12.608 \dashrightarrow 00{:}20{:}14.660$ It's just based on an assumption
- NOTE Confidence: 0.641944056
- $00:20:14.660 \longrightarrow 00:20:17.368$ based on what's been observed in
- NOTE Confidence: 0.641944056
- $00{:}20{:}17.368 \dashrightarrow 00{:}20{:}18.596$ visual processing for example,
- NOTE Confidence: 0.641944056
- $00:20:18.600 \longrightarrow 00:20:19.468$ or something like that
- NOTE Confidence: 0.635256753333333
- $00:20:20.090 \longrightarrow 00:20:22.770$ in the previous one with I like.
- NOTE Confidence: 0.51813069
- 00:20:24.900 --> 00:20:29.000 Alpha represents top down ohh,
- NOTE Confidence: 0.653160873333333
- $00:20:29.070 \longrightarrow 00:20:30.996$ so the alpha and the like.

- NOTE Confidence: 0.653160873333333
- $00{:}20{:}31.000 \dashrightarrow 00{:}20{:}32.855$ The correspondence between alpha and
- NOTE Confidence: 0.653160873333333
- $00:20:32.855 \rightarrow 00:20:35.748$ top down is more related to like other
- NOTE Confidence: 0.653160873333333
- $00:20:35.748 \rightarrow 00:20:38.009$ studies that they did not present here.
- NOTE Confidence: 0.653160873333333
- $00:20:38.010 \rightarrow 00:20:42.600$ It's like several studies showed that.
- NOTE Confidence: 0.653160873333333
- 00:20:42.600 --> 00:20:44.035 You have like like object
- NOTE Confidence: 0.653160873333333
- $00:20:44.035 \rightarrow 00:20:45.777$ recognition for example is held by
- NOTE Confidence: 0.653160873333333
- $00:20:45.777 \longrightarrow 00:20:47.289$ half hours and things like that.
- NOTE Confidence: 0.653160873333333
- $00:20:47.290 \longrightarrow 00:20:48.430$ But it's a different feature.
- NOTE Confidence: 0.653160873333333
- $00{:}20{:}48{.}430 \dashrightarrow 00{:}20{:}52{.}339$ It's visual processing exactly, yeah, yeah.
- NOTE Confidence: 0.695682267272727
- $00:20:56.420 \rightarrow 00:20:58.940$ OK. And the last,
- NOTE Confidence: 0.695682267272727
- $00:20:58.940 \rightarrow 00:21:03.620$ the last part of the literature isn't?
- NOTE Confidence: 0.695682267272727
- 00:21:03.620 --> 00:21:07.598 Interested about signal complexity or entry?
- NOTE Confidence: 0.695682267272727
- $00:21:07.600 \rightarrow 00:21:10.822$ So it's basically corresponds to the
- NOTE Confidence: 0.695682267272727
- $00{:}21{:}10.822 \dashrightarrow 00{:}21{:}14.082$ quantity of information in the brain
- NOTE Confidence: 0.695682267272727
- $00{:}21{:}14.082 \dashrightarrow 00{:}21{:}17.148$ and how how much this information
- NOTE Confidence: 0.695682267272727

 $00:21:17.148 \rightarrow 00:21:19.800$ is unpredictable in space and time.

NOTE Confidence: 0.695682267272727

00:21:19.800 --> 00:21:22.040 So this is an example for cytosine

NOTE Confidence: 0.695682267272727

 $00:21:22.040 \longrightarrow 00:21:24.260$ and how you can measure that.

NOTE Confidence: 0.695682267272727

 $00:21:24.260 \rightarrow 00:21:26.934$ So you take the activity in different

NOTE Confidence: 0.695682267272727

 $00{:}21{:}26{.}934 \dashrightarrow 00{:}21{:}29{.}865$ region and you can see how these

NOTE Confidence: 0.695682267272727

 $00{:}21{:}29.865 \dashrightarrow 00{:}21{:}32.421$ different region are correlated and have NOTE Confidence: 0.695682267272727

 $00:21:32.503 \rightarrow 00:21:35.298$ connectivity at different time points.

NOTE Confidence: 0.695682267272727

 $00{:}21{:}35{.}300 \dashrightarrow 00{:}21{:}38{.}820$ And you can measure I don't know what

NOTE Confidence: 0.695682267272727

00:21:38.820 --> 00:21:41.776 it is and you can measure the entropy

NOTE Confidence: 0.695682267272727

 $00:21:41.776 \longrightarrow 00:21:44.203$ by looking at the probability of

NOTE Confidence: 0.695682267272727

 $00{:}21{:}44{.}203 \dashrightarrow 00{:}21{:}47{.}113$ changing of this pattern of connectivity

NOTE Confidence: 0.695682267272727

 $00{:}21{:}47.120 \dashrightarrow 00{:}21{:}49.628$ in the across the run inference.

NOTE Confidence: 0.695682267272727

 $00:21:49.630 \longrightarrow 00:21:52.241$ And what it was found is that

NOTE Confidence: 0.695682267272727

00:21:52.241 - 00:21:55.269 there is an increase of entropy.

NOTE Confidence: 0.695682267272727

00:21:55.270 --> 00:21:56.810 Leaving.

NOTE Confidence: 0.695682267272727

 $00:21:56.810 \longrightarrow 00:21:59.258$ And there are other way to
$00{:}21{:}59{.}258 \dashrightarrow 00{:}22{:}00{.}482$ measure the complexity,

NOTE Confidence: 0.695682267272727

 $00{:}22{:}00{.}490 \dashrightarrow 00{:}22{:}02{.}310$ so these diversity of information

NOTE Confidence: 0.695682267272727

 $00:22:02.310 \longrightarrow 00:22:05.099$ in the brain and the diversity of

NOTE Confidence: 0.695682267272727

 $00:22:05.099 \rightarrow 00:22:06.750$ pattern in the brain, for example.

NOTE Confidence: 0.787701955769231

 $00:22:08.820 \rightarrow 00:22:11.984$ Complexity and you can see also that

NOTE Confidence: 0.787701955769231

 $00:22:11.984 \rightarrow 00:22:15.084$ there is an increase in complexity

NOTE Confidence: 0.787701955769231

 $00{:}22{:}15.084 \dashrightarrow 00{:}22{:}18.366$ under saving and LSD and that

NOTE Confidence: 0.787701955769231

00:22:18.366 --> 00:22:21.649 under LSD like it's a very general

NOTE Confidence: 0.787701955769231

 $00:22:21.650 \rightarrow 00:22:23.438$ complexity that interest pretty

NOTE Confidence: 0.787701955769231

 $00:22:23.438 \rightarrow 00:22:26.120$ much like all the posterior part

NOTE Confidence: 0.787701955769231

 $00:22:26.192 \longrightarrow 00:22:29.710$ of the brain, whether for like.

NOTE Confidence: 0.787701955769231

 $00{:}22{:}29{.}710 \dashrightarrow 00{:}22{:}31{.}440$ The solar savings? More India.

NOTE Confidence: 0.75088678144445

 $00{:}22{:}33{.}850 \dashrightarrow 00{:}22{:}36{.}025$ And this increase of Lymphoseek

NOTE Confidence: 0.75088678144445

 $00{:}22{:}36.025 \dashrightarrow 00{:}22{:}38.255$ complexity was also observed and

NOTE Confidence: 0.75088678144445

00:22:38.255 --> 00:22:41.165 of Shannon entropy under iOS cap.

 $00:22:41.170 \longrightarrow 00:22:45.069$ So this is something that is quite.

NOTE Confidence: 0.75088678144445

00:22:45.070 --> 00:22:47.422 Like that seems to be shared

NOTE Confidence: 0.75088678144445

 $00{:}22{:}47.422 \dashrightarrow 00{:}22{:}49.370$ between the different molecules.

NOTE Confidence: 0.813777563636364

00:22:49.940 --> 00:22:52.148 Lucy sorry again my my ignorance

NOTE Confidence: 0.813777563636364

 $00:22:52.148 \longrightarrow 00:22:54.560$ of some of the techniques.

NOTE Confidence: 0.813777563636364

 $00{:}22{:}54{.}560 \dashrightarrow 00{:}22{:}56{.}527$ I have an intuition for what increased

NOTE Confidence: 0.813777563636364

 $00:22:56.527 \rightarrow 00:22:58.020$ entropy means that's rough crudely

NOTE Confidence: 0.813777563636364

 $00:22:58.020 \rightarrow 00:22:59.515$ analogous to more noise right?

NOTE Confidence: 0.813777563636364

 $00:22:59.520 \rightarrow 00:23:01.152$ Injecting noise. What is?

NOTE Confidence: 0.813777563636364

 $00:23:01.152 \rightarrow 00:23:02.376$ What is complexity?

NOTE Confidence: 0.813777563636364

00:23:02.380 --> 00:23:03.804 Does this measure of

NOTE Confidence: 0.813777563636364

00:23:03.804 --> 00:23:05.940 Flexity getting in is it on?

NOTE Confidence: 0.813777563636364

 $00:23:05.940 \longrightarrow 00:23:07.542$ The complexity and entropy are both

NOTE Confidence: 0.813777563636364

 $00:23:07.542 \rightarrow 00:23:09.706$ going in the same direction and I

NOTE Confidence: 0.813777563636364

 $00{:}23{:}09{.}706 \dashrightarrow 00{:}23{:}11{.}757$ think of complexity sort of amid a

NOTE Confidence: 0.813777563636364

00:23:11.757 --> 00:23:13.853 happy medium between between, you know,

- NOTE Confidence: 0.813777563636364
- $00:23:13.853 \rightarrow 00:23:15.539$ crystalline purity and total noise and.
- NOTE Confidence: 0.813777563636364
- $00{:}23{:}15{.}540 \dashrightarrow 00{:}23{:}17{.}190$ Like somewhere in the middle but.
- NOTE Confidence: 0.820870224545455
- $00:23:18.550 \longrightarrow 00:23:19.885$ So, so complexity will be
- NOTE Confidence: 0.820870224545455
- 00:23:19.885 00:23:21.580 so I will just jump like.
- NOTE Confidence: 0.820870224545455
- $00:23:21.580 \longrightarrow 00:23:22.870$ So this was more the title,
- NOTE Confidence: 0.820870224545455
- $00{:}23{:}22{.}870 \dashrightarrow 00{:}23{:}24{.}767$ but this slide is more about entropy.
- NOTE Confidence: 0.820870224545455
- $00:23:24.770 \longrightarrow 00:23:26.405$ But the next slide will
- NOTE Confidence: 0.820870224545455
- 00:23:26.405 00:23:27.386 show about complexity.
- NOTE Confidence: 0.820870224545455
- $00{:}23{:}27{.}390 \dashrightarrow 00{:}23{:}31{.}870$ But complexity is basically like
- NOTE Confidence: 0.820870224545455
- $00{:}23{:}31{.}870 \dashrightarrow 00{:}23{:}33{.}895$ the diversity of information
- NOTE Confidence: 0.820870224545455
- 00:23:33.895 00:23:36.145 you can have in the brain.
- NOTE Confidence: 0.820870224545455
- 00:23:36.150 --> 00:23:38.688 So it's like.
- NOTE Confidence: 0.820870224545455
- 00:23:38.690 --> 00:23:39.980 I don't know exactly how to
- NOTE Confidence: 0.820870224545455
- $00{:}23{:}39{.}980 \dashrightarrow 00{:}23{:}40{.}840$ explain better than that,
- NOTE Confidence: 0.820870224545455
- $00{:}23{:}40.840 \dashrightarrow 00{:}23{:}43.120$ but it's not like with entropy.
- NOTE Confidence: 0.820870224545455

 $00:23:43.120 \longrightarrow 00:23:44.278$ We have also the idea of

NOTE Confidence: 0.820870224545455

 $00{:}23{:}44{.}278 \dashrightarrow 00{:}23{:}45{.}590$ a kind of a disorder,

NOTE Confidence: 0.820870224545455

 $00{:}23{:}45{.}590 \dashrightarrow 00{:}23{:}48{.}310$ so also like a lot of changes across

NOTE Confidence: 0.820870224545455

 $00:23:48.310 \rightarrow 00:23:51.174$ time and the complexity will be for

NOTE Confidence: 0.820870224545455

 $00{:}23{:}51{.}174 \dashrightarrow 00{:}23{:}53{.}672$ example a more enhanced repertoire,

NOTE Confidence: 0.820870224545455

 $00{:}23{:}53.672 \dashrightarrow 00{:}23{:}58.544$ like more diverse patterns of activation.

NOTE Confidence: 0.820870224545455

 $00:23:58.550 \longrightarrow 00:23:59.350$ Does it make sense?

NOTE Confidence: 0.884581558181818

 $00:23:59.440 \longrightarrow 00:24:00.976$ Yes. So they don't have to go in

NOTE Confidence: 0.884581558181818

 $00:24:00.976 \longrightarrow 00:24:03.329$ the same direction, but it's not

NOTE Confidence: 0.884581558181818

 $00:24:03.329 \rightarrow 00:24:05.744$ contradictory that they do OK.

NOTE Confidence: 0.730377439230769

 $00{:}24{:}08.000 \dashrightarrow 00{:}24{:}11.640$ So unless there is also more occurrence

NOTE Confidence: 0.730377439230769

00:24:11.640 --> 00:24:15.299 of global coherence phase log states, so.

NOTE Confidence: 0.730377439230769

 $00{:}24{:}15{.}299 \dashrightarrow 00{:}24{:}19{.}371$ So here what the authors did is that

NOTE Confidence: 0.730377439230769

 $00{:}24{:}19{.}371 \dashrightarrow 00{:}24{:}22{.}758$ so they took the the brain activity

NOTE Confidence: 0.730377439230769

 $00:24:22.758 \rightarrow 00:24:25.571$ and they try to slice it according

NOTE Confidence: 0.730377439230769

 $00{:}24{:}25{.}571 \dashrightarrow 00{:}24{:}28{.}539$ to like to define kind of phase lock

 $00{:}24{:}28{.}539 \dashrightarrow 00{:}24{:}31{.}262$ states that corresponds in fact to

NOTE Confidence: 0.730377439230769

 $00{:}24{:}31{.}262 \dashrightarrow 00{:}24{:}33{.}537$ activation patterns of activation and

NOTE Confidence: 0.730377439230769

 $00{:}24{:}33.615 \dashrightarrow 00{:}24{:}36.420$ of connectivity between different areas.

NOTE Confidence: 0.730377439230769

 $00:24:36.420 \rightarrow 00:24:38.646$ So this is not very obvious.

NOTE Confidence: 0.730377439230769

00:24:38.650 -> 00:24:41.702 Here but in fact so you have states

NOTE Confidence: 0.730377439230769

 $00{:}24{:}41.702 \dashrightarrow 00{:}24{:}43.886$ where some region are connected one to

NOTE Confidence: 0.730377439230769

 $00{:}24{:}43.886 \dashrightarrow 00{:}24{:}45.842$ the other and the first states that

NOTE Confidence: 0.730377439230769

 $00{:}24{:}45.842 \dashrightarrow 00{:}24{:}48.095$ is that you can see the more frequent

NOTE Confidence: 0.730377439230769

 $00{:}24{:}48.095 \dashrightarrow 00{:}24{:}50.237$ than this is in fact increased under

NOTE Confidence: 0.730377439230769

 $00:24:50.240 \longrightarrow 00:24:52.128$ sale siding is in fact a state where

NOTE Confidence: 0.730377439230769

 $00:24:52.128 \rightarrow 00:24:53.648$ everything is connected to another.

NOTE Confidence: 0.730377439230769

 $00{:}24{:}53.650 \dashrightarrow 00{:}24{:}55.911$ So there is no difference and not

NOTE Confidence: 0.730377439230769

 $00{:}24{:}55{.}911 \dashrightarrow 00{:}24{:}57{.}968$ sub support that are more connected

NOTE Confidence: 0.730377439230769

 $00{:}24{:}57{.}968 \dashrightarrow 00{:}25{:}00{.}210$ than other and that can corresponds

NOTE Confidence: 0.730377439230769

 $00:25:00.210 \longrightarrow 00:25:02.370$ to a specific network.

 $00:25:02.370 \longrightarrow 00:25:04.014$ And what is observed is that

NOTE Confidence: 0.730377439230769

 $00:25:04.014 \rightarrow 00:25:06.010$ in fact on the same savings.

NOTE Confidence: 0.730377439230769

 $00{:}25{:}06{.}010 \dashrightarrow 00{:}25{:}08{.}824$ So not only this Facebook state is.

NOTE Confidence: 0.730377439230769

 $00:25:08.830 \rightarrow 00:25:10.895$ More frequent, but also there is uh,

NOTE Confidence: 0.730377439230769

 $00:25:10.900 \longrightarrow 00:25:13.204$ more probability to switch from any

NOTE Confidence: 0.730377439230769

 $00:25:13.204 \rightarrow 00:25:16.120$ other states to this state of coherence,

NOTE Confidence: 0.730377439230769

 $00:25:16.120 \longrightarrow 00:25:19.220$ whereas like this frontoparietal state,

NOTE Confidence: 0.730377439230769

 $00:25:19.220 \longrightarrow 00:25:21.452$ the state three is less probable

NOTE Confidence: 0.730377439230769

 $00{:}25{:}21{.}452 \dashrightarrow 00{:}25{:}24{.}134$ and there is less transition toward

NOTE Confidence: 0.730377439230769

 $00:25:24.134 \rightarrow 00:25:26.366$ the states after something.

NOTE Confidence: 0.711693891777778

 $00:25:26.640 \longrightarrow 00:25:28.020$ Is this with global signal

NOTE Confidence: 0.711693891777778

 $00:25:28.020 \longrightarrow 00:25:29.124$ regression in the data?

NOTE Confidence: 0.7290025966666667

 $00:25:31.290 \longrightarrow 00:25:33.502$ I'm not sure just state one is

NOTE Confidence: 0.7290025966666667

 $00{:}25{:}33.502 \dashrightarrow 00{:}25{:}36.558$ global signal, right? So it's state.

NOTE Confidence: 0.7290025966666667

00:25:36.558 --> 00:25:39.390 So if you do it without global signal

NOTE Confidence: 0.7290025966666667

 $00:25:39.466 \rightarrow 00:25:42.714$ regression and the prominent state is global.

- NOTE Confidence: 0.7290025966666667
- 00:25:42.720 --> 00:25:44.974 If you if you did global signal
- NOTE Confidence: 0.7290025966666667
- $00:25:44.974 \rightarrow 00:25:46.559$ regression and still saw that,
- NOTE Confidence: 0.7290025966666667
- $00:25:46.560 \rightarrow 00:25:48.060$ that would mean something quite different.
- NOTE Confidence: 0.7408089666666667
- $00{:}25{:}49{.}030 \dashrightarrow 00{:}25{:}51{.}630$ I think the control for that, but I
- NOTE Confidence: 0.7408089666666667
- $00:25:51.630 \longrightarrow 00:25:55.780$ cannot like yeah when I'm not 100% sure.
- NOTE Confidence: 0.894535264
- 00:25:57.970 --> 00:26:02.195 And finally, you can also slice
- NOTE Confidence: 0.894535264
- 00:26:02.195 --> 00:26:04.370 the like decompose the brain
- NOTE Confidence: 0.894535264
- $00:26:04.370 \longrightarrow 00:26:06.110$ activity into harmonic states.
- NOTE Confidence: 0.894535264
- $00:26:06.110 \longrightarrow 00:26:08.434$ So this is a bit tricky and
- NOTE Confidence: 0.894535264
- $00:26:08.434 \longrightarrow 00:26:11.089$ I'm not an expert about that,
- NOTE Confidence: 0.894535264
- $00:26:11.090 \rightarrow 00:26:13.484$ but basically you will use the connectome
- NOTE Confidence: 0.894535264
- $00{:}26{:}13.484 \dashrightarrow 00{:}26{:}14.930$ and the structural connectivity
- NOTE Confidence: 0.894535264
- $00:26:14.930 \longrightarrow 00:26:18.123$ of the brain and you will check
- NOTE Confidence: 0.894535264
- 00:26:18.123 00:26:21.488 how like the different harmonies,
- NOTE Confidence: 0.894535264
- $00:26:21.490 \longrightarrow 00:26:23.550$ the different frequency of
- NOTE Confidence: 0.894535264

 $00:26:23.550 \longrightarrow 00:26:25.610$ oscillation of this structural

NOTE Confidence: 0.894535264

 $00{:}26{:}25{.}610 \dashrightarrow 00{:}26{:}27{.}900$ connectivity and you can then map.

NOTE Confidence: 0.894535264

00:26:27.900 --> 00:26:31.215 And analyze brain imaging according NOTE Confidence: 0.894535264

00:26:31.215 --> 00:26:35.620 to a combination of these different

NOTE Confidence: 0.894535264

 $00{:}26{:}35{.}620 \dashrightarrow 00{:}26{:}37{.}824$ patterns of connectome harmonics.

NOTE Confidence: 0.894535264

 $00{:}26{:}37{.}824 \dashrightarrow 00{:}26{:}41{.}130$ So this is what these authors

NOTE Confidence: 0.894535264

 $00:26:41.218 \longrightarrow 00:26:43.770$ like developed and used for

NOTE Confidence: 0.894535264

 $00:26:43.770 \rightarrow 00:26:46.470$ studying cellular Sabine and LSD.

NOTE Confidence: 0.894535264

 $00{:}26{:}46{.}470 \dashrightarrow 00{:}26{:}48{.}612$ And basically what they find for

NOTE Confidence: 0.894535264

 $00:26:48.612 \longrightarrow 00:26:51.025$ silo sybian is that here the

NOTE Confidence: 0.894535264

 $00{:}26{:}51.025 \dashrightarrow 00{:}26{:}52.841$ representation of the different

NOTE Confidence: 0.894535264

 $00:26:52.841 \longrightarrow 00:26:55.198$ energy like the different the

NOTE Confidence: 0.894535264

 $00{:}26{:}55{.}198 \dashrightarrow 00{:}26{:}57{.}548$ probability of this harmonic pattern.

NOTE Confidence: 0.894535264

 $00{:}26{:}57{.}550 \dashrightarrow 00{:}27{:}00{.}105$ And there is some changes where some

NOTE Confidence: 0.894535264

 $00{:}27{:}00{.}105 \dashrightarrow 00{:}27{:}02{.}672$ of them will be more represented

NOTE Confidence: 0.894535264

 $00{:}27{:}02.672 \dashrightarrow 00{:}27{:}05.786$ under and some of them will be less

- NOTE Confidence: 0.894535264
- $00:27:05.786 \rightarrow 00:27:07.397$ represented and interestingly when

 $00{:}27{:}07{.}397 \dashrightarrow 00{:}27{:}09{.}427$ you plot the overall probability.

NOTE Confidence: 0.894535264

 $00:27:09.430 \longrightarrow 00:27:10.398$ You have different states.

NOTE Confidence: 0.894535264

 $00:27:10.398 \rightarrow 00:27:12.384$ What you can see is that the more

NOTE Confidence: 0.894535264

 $00{:}27{:}12{.}384 \dashrightarrow 00{:}27{:}14{.}078$ probable state will be a bit less

NOTE Confidence: 0.894535264

 $00{:}27{:}14.078 \dashrightarrow 00{:}27{:}15.318$ probable underside of siding,

NOTE Confidence: 0.894535264

 $00:27:15.320 \rightarrow 00:27:17.654$ while some states that are usually

NOTE Confidence: 0.894535264

 $00:27:17.654 \rightarrow 00:27:19.670$ less represented in those possible

NOTE Confidence: 0.894535264

 $00{:}27{:}19.670 \dashrightarrow 00{:}27{:}21.645$ will be more representative under

NOTE Confidence: 0.894535264

 $00:27:21.645 \longrightarrow 00:27:24.029$ set of sibling and they're the

NOTE Confidence: 0.894535264

 $00:27:24.029 \longrightarrow 00:27:25.497$ same pattern with LSD.

NOTE Confidence: 0.894535264

 $00{:}27{:}25{.}500 \dashrightarrow 00{:}27{:}27{.}684$ So the main idea here is to say

NOTE Confidence: 0.894535264

 $00{:}27{:}27{.}684 \dashrightarrow 00{:}27{:}30{.}123$ that in fact you will push some

NOTE Confidence: 0.894535264

 $00{:}27{:}30{.}123 \dashrightarrow 00{:}27{:}32{.}380$ state that are usually quite rare

NOTE Confidence: 0.894535264

 $00{:}27{:}32{.}380 \dashrightarrow 00{:}27{:}34{.}564$ and you will decrease may be state

 $00:27:34.564 \longrightarrow 00:27:37.640$ that are more frequent.

NOTE Confidence: 0.894535264

 $00{:}27{:}37{.}640 \dashrightarrow 00{:}27{:}40{.}650$ The brain when taking psychedelic

NOTE Confidence: 0.669421177777778

 $00:27:41.100 \rightarrow 00:27:42.730$ and that that's qualitatively consistent

NOTE Confidence: 0.669421177777778

 $00:27:42.730 \longrightarrow 00:27:44.034$ with the increased complexity,

NOTE Confidence: 0.669421177777778

00:27:44.040 --> 00:27:45.800 right, because you have more,

NOTE Confidence: 0.669421177777778

 $00:27:45.800 \rightarrow 00:27:47.400$ more states are being represented so

NOTE Confidence: 0.669421177777778

00:27:47.400 --> 00:27:49.168 there's a larger repertories, OK.

NOTE Confidence: 0.8292837966666667

 $00:27:50.750 \longrightarrow 00:27:52.970$ And like there were also other,

NOTE Confidence: 0.8292837966666667

 $00{:}27{:}52{.}970 \dashrightarrow 00{:}27{:}55{.}450$ uh, quite technical studies using

NOTE Confidence: 0.8292837966666667

 $00:27:55.450 \longrightarrow 00:27:57.930$ the fractal dimension in spatial

NOTE Confidence: 0.8292837966666667

 $00{:}27{:}58.008 \dashrightarrow 00{:}28{:}01.108$ or temporal dimensions or the

NOTE Confidence: 0.8292837966666667

00:28:01.108 --> 00:28:02.968 directed international connectivity.

NOTE Confidence: 0.8292837966666667

 $00:28:02.970 \longrightarrow 00:28:05.224$ But the main idea was that you

NOTE Confidence: 0.8292837966666667

 $00{:}28{:}05{.}224 \dashrightarrow 00{:}28{:}07{.}137$ have less constraints in the brain

NOTE Confidence: 0.8292837966666667

 $00{:}28{:}07{.}137 \dashrightarrow 00{:}28{:}08{.}977$ and more diverse and fluctuates

NOTE Confidence: 0.8292837966666667

 $00:28:08.977 \rightarrow 00:28:12.312$ fluctuation in the brain connectivity

- NOTE Confidence: 0.8292837966666667
- 00:28:12.312 --> 00:28:14.313 patterns under psychedelics.

00:28:16.550 --> 00:28:17.430 Different religions.

NOTE Confidence: 0.897841461666667

 $00{:}28{:}20.000 \dashrightarrow 00{:}28{:}23.728$ So that's a very good question. In fact I I

NOTE Confidence: 0.704572464923077

 $00{:}28{:}24{.}240 \dashrightarrow 00{:}28{:}26{.}840$ I think the people on zoom since we're

NOTE Confidence: 0.704572464923077

00:28:26.840 --> 00:28:29.018 hearing from from Luby's microphone.

NOTE Confidence: 0.704572464923077

 $00{:}28{:}29{.}020 \dashrightarrow 00{:}28{:}30{.}294$ So I think they're having I loud

NOTE Confidence: 0.704572464923077

 $00{:}28{:}30{.}294 \dashrightarrow 00{:}28{:}31{.}793$ and I'm close but I think they're

NOTE Confidence: 0.704572464923077

 $00:28:31.793 \rightarrow 00:28:32.933$ having a little trouble hearing.

NOTE Confidence: 0.704572464923077

 $00{:}28{:}32{.}940 \dashrightarrow 00{:}28{:}34{.}837$ So the question was how does this

NOTE Confidence: 0.704572464923077

 $00:28:34.837 \rightarrow 00:28:36.020$ compare these these complexity

NOTE Confidence: 0.704572464923077

 $00{:}28{:}36{.}020 \dashrightarrow 00{:}28{:}37{.}892$ findings compared to what might be

NOTE Confidence: 0.704572464923077

 $00{:}28{:}37{.}892 \dashrightarrow 00{:}28{:}39{.}860$ seen with other psychoactive drugs.

NOTE Confidence: 0.704572464923077

 $00{:}28{:}39{.}860 \dashrightarrow 00{:}28{:}41{.}726$ Are these unique to the psyched elic.

NOTE Confidence: 0.695785695857143

00:28:41.940 --> 00:28:45.716 So I did not see other study doing

NOTE Confidence: 0.695785695857143

 $00{:}28{:}45.716 \dashrightarrow 00{:}28{:}49.630$ that for example for Kittanning so.

 $00{:}28{:}49{.}630 \dashrightarrow 00{:}28{:}51{.}943$ Which is may be one of the things that has

NOTE Confidence: 0.695785695857143

 $00{:}28{:}51{.}943 \dashrightarrow 00{:}28{:}54{.}019$ the more closest pharmacological pattern

NOTE Confidence: 0.695785695857143

 $00:28:54.019 \rightarrow 00:28:56.659$ by activating the neurons and algorithm.

NOTE Confidence: 0.725407173846154

 $00:28:58.380 \rightarrow 00:29:00.708$ Or even just a more land drug likeness

NOTE Confidence: 0.725407173846154

00:29:00.708 --> 00:29:02.640 SSRI or some other drug, yeah,

NOTE Confidence: 0.725407173846154

 $00{:}29{:}02.640 \dashrightarrow 00{:}29{:}04.260$ he's going to have some monoamines

NOTE Confidence: 0.725407173846154

 $00:29:04.260 \longrightarrow 00:29:08.010$ and compared the network. So

NOTE Confidence: 0.654770575

 $00:29:08.010 \longrightarrow 00:29:09.366$ I will go to that later.

NOTE Confidence: 0.654770575

 $00{:}29{:}09{.}370 \dashrightarrow 00{:}29{:}11{.}230$ But there is like this,

NOTE Confidence: 0.654770575

 $00{:}29{:}11{.}230 \dashrightarrow 00{:}29{:}14.607$ this study by character is team

NOTE Confidence: 0.654770575

00:29:14.607 --> 00:29:16.992 that compared for example the

NOTE Confidence: 0.654770575

 $00:29:16.992 \longrightarrow 00:29:18.423$ integration between different

NOTE Confidence: 0.654770575

 $00{:}29{:}18{.}423 \dashrightarrow 00{:}29{:}20{.}406$ networks and we can think that

NOTE Confidence: 0.654770575

 $00{:}29{:}20{.}406 \dashrightarrow 00{:}29{:}23{.}005$ this is also linked to this between

NOTE Confidence: 0.654770575

 $00:29:23.005 \rightarrow 00:29:25.098$ connectivity across the brain and

NOTE Confidence: 0.654770575

 $00:29:25.098 \rightarrow 00:29:28.460$ there is not a change in modularity.

 $00:29:28.460 \rightarrow 00:29:30.222$ This is not exactly the same, but.

NOTE Confidence: 0.654770575

00:29:30.222 $\operatorname{-->}$ 00:29:34.020 We can imagine that this is a right not

NOTE Confidence: 0.654770575

 $00{:}29{:}34.020 \dashrightarrow 00{:}29{:}36.620$ to put all these effects and also an

NOTE Confidence: 0.654770575

 $00:29:36.620 \rightarrow 00:29:38.834$ important thing is that these effects

NOTE Confidence: 0.654770575

 $00{:}29{:}38{.}834 \dashrightarrow 00{:}29{:}40{.}709$ are correlated to acute effects.

NOTE Confidence: 0.654770575

 $00{:}29{:}40.710 \dashrightarrow 00{:}29{:}42.054$ So I mean it's,

NOTE Confidence: 0.654770575

 $00:29:42.054 \longrightarrow 00:29:44.530$ it's it could be quite specific in

NOTE Confidence: 0.654770575

 $00{:}29{:}44{.}530 \dashrightarrow 00{:}29{:}46{.}840$ fact to the subjective effect but for

NOTE Confidence: 0.654770575

 $00:29:46.840 \longrightarrow 00:29:48.040$ ketamine it's a very good question.

NOTE Confidence: 0.654770575

00:29:48.040 --> 00:29:49.234 I mean yeah,

NOTE Confidence: 0.654770575

 $00:29:49.234 \rightarrow 00:29:52.020$ because even if the subjective I'll be

NOTE Confidence: 0.654770575

 $00{:}29{:}52.099 \dashrightarrow 00{:}29{:}54.825$ different may be there are like just.

NOTE Confidence: 0.654770575

00:29:54.825 --> 00:29:56.750 As far as I know,

NOTE Confidence: 0.654770575

 $00:29:56.750 \longrightarrow 00:29:58.616$ it hasn't been explored so much,

NOTE Confidence: 0.7736864186666667

 $00{:}29{:}58.870 \dashrightarrow 00{:}30{:}00{.}304$ but these analysis could be done

 $00:30:00.304 \rightarrow 00:30:02.018$ in the resting state F MRI datasets

NOTE Confidence: 0.7736864186666667

00:30:02.018 --> 00:30:05.700 that exist, right? But yeah.

NOTE Confidence: 0.6519327166666667

 $00{:}30{:}05{.}700 \dashrightarrow 00{:}30{:}06{.}258$ This is so

NOTE Confidence: 0.817343114166667

 $00:30:06.270 \longrightarrow 00:30:07.812$ someone needs to figure out what

NOTE Confidence: 0.817343114166667

 $00:30:07.812 \longrightarrow 00:30:10.040$ it means and then do it, yeah?

NOTE Confidence: 0.706522505

 $00{:}30{:}13.590 \dashrightarrow 00{:}30{:}15.750$ There are other important changes

NOTE Confidence: 0.706522505

 $00:30:15.750 \longrightarrow 00:30:18.640$ in those acrylic about emotion,

NOTE Confidence: 0.706522505

 $00:30:18.640 \dashrightarrow 00:30:22.615$ social and software processing so.

NOTE Confidence: 0.706522505

 $00{:}30{:}22.620 \dashrightarrow 00{:}30{:}24.786$ And there is overall decreased response,

NOTE Confidence: 0.706522505

00:30:24.790 --> 00:30:28.360 brain response during emotional processing.

NOTE Confidence: 0.706522505

 $00:30:28.360 \longrightarrow 00:30:29.739$ So what you can see here is

NOTE Confidence: 0.706522505

 $00{:}30{:}29{.}739 \dashrightarrow 00{:}30{:}31{.}148$ that on the side of saving,

NOTE Confidence: 0.706522505

 $00{:}30{:}31{.}150 \dashrightarrow 00{:}30{:}34{.}293$ there is a decrease for of the

NOTE Confidence: 0.706522505

 $00{:}30{:}34{.}293 \dashrightarrow 00{:}30{:}36{.}869$ amygdala activity that is more

NOTE Confidence: 0.706522505

 $00{:}30{:}36{.}869 \dashrightarrow 00{:}30{:}39{.}141$ important for negative emotion

NOTE Confidence: 0.706522505

 $00:30:39.141 \longrightarrow 00:30:41.413$ compared to neutral emotion.

- NOTE Confidence: 0.706522505
- $00:30:41.420 \longrightarrow 00:30:45.310$ Here uh is uh under again like the
- NOTE Confidence: 0.706522505
- $00:30:45.310 \rightarrow 00:30:47.650$ network and small yellow you have
- NOTE Confidence: 0.706522505
- $00:30:47.650 \rightarrow 00:30:50.268$ the increase to shuffle places.
- NOTE Confidence: 0.759773478571429
- $00:30:52.320 \rightarrow 00:30:54.889$ And here and here is a ninja.
- NOTE Confidence: 0.698466468333333
- $00:30:57.630 \rightarrow 00:31:01.678$ Measure of the N 170 and which you can see
- NOTE Confidence: 0.698466468333333
- $00{:}31{:}01{.}678 \dashrightarrow 00{:}31{:}04{.}769$ is that there is a specific increase of.
- NOTE Confidence: 0.698466468333333
- $00:31:04.770 \dashrightarrow 00:31:08.564$ Of this wave this is associated with.
- NOTE Confidence: 0.698466468333333
- $00:31:08.570 \longrightarrow 00:31:09.538$ I've just been thinking
- NOTE Confidence: 0.698466468333333
- $00:31:09.538 \longrightarrow 00:31:10.990$ that you don't see at all,
- NOTE Confidence: 0.698466468333333
- $00:31:10.990 \longrightarrow 00:31:15.840$ for it's important for neutral emotion.
- NOTE Confidence: 0.698466468333333
- $00:31:15.840 \longrightarrow 00:31:18.388$ Question are they under the influence of?
- NOTE Confidence: 0.851360112
- $00{:}31{:}20{.}430 \dashrightarrow 00{:}31{:}22{.}100$ Yeah, for this, for this,
- NOTE Confidence: 0.851360112
- 00:31:22.100 --> 00:31:24.281 it says it's, it's during the, the,
- NOTE Confidence: 0.851360112
- $00:31:24.281 \longrightarrow 00:31:26.086$ it's during the acute effects.
- NOTE Confidence: 0.827788101666667
- $00{:}31{:}30{.}620 \dashrightarrow 00{:}31{:}34{.}195$ But this decrease of the and 170
- NOTE Confidence: 0.827788101666667

 $00{:}31{:}34{.}195 \dashrightarrow 00{:}31{:}36{.}470$ was also fined for neutral steam in

NOTE Confidence: 0.827788101666667

 $00:31:36.470 \longrightarrow 00:31:38.431$ another study and also for organiza

NOTE Confidence: 0.827788101666667

 $00:31:38.431 \longrightarrow 00:31:40.303$ steam that you know are these

NOTE Confidence: 0.827788101666667

 $00:31:40.373 \rightarrow 00:31:42.375$ kind of triangle that you can see

NOTE Confidence: 0.827788101666667

 $00{:}31{:}42{.}375 \dashrightarrow 00{:}31{:}44{.}174$ with the using visual integration.

NOTE Confidence: 0.827788101666667

 $00:31:44.174 \rightarrow 00:31:47.030$ So maybe they are not very specific

NOTE Confidence: 0.827788101666667

00:31:47.103 --> 00:31:49.017 emotional processing. Umm.

NOTE Confidence: 0.827788101666667

 $00:31:49.017 \rightarrow 00:31:52.566$ This is not observed under iowaska really,

NOTE Confidence: 0.827788101666667

 $00{:}31{:}52{.}570 \dashrightarrow 00{:}31{:}54{.}266$ but there is less study for Iowa Aska.

NOTE Confidence: 0.827788101666667

 $00{:}31{:}54{.}270 \dashrightarrow 00{:}31{:}57{.}728$ In fact, there was an increase of

NOTE Confidence: 0.827788101666667

 $00{:}31{:}57{.}728 \dashrightarrow 00{:}32{:}00{.}754$ different region pertaining to the to

NOTE Confidence: 0.827788101666667

 $00{:}32{:}00{.}754 \dashrightarrow 00{:}32{:}03{.}670$ the medial temporal lobe and increase

NOTE Confidence: 0.827788101666667

 $00:32:03.670 \rightarrow 00:32:08.458$ connectivity again between the and the right.

NOTE Confidence: 0.827788101666667

 $00{:}32{:}08{.}460 \dashrightarrow 00{:}32{:}09{.}860$ This confirms that the same

NOTE Confidence: 0.827788101666667

 $00:32:09.860 \rightarrow 00:32:11.260$ study that they presented before,

NOTE Confidence: 0.827788101666667

 $00:32:11.260 \rightarrow 00:32:15.390$ so it's difficult to generalize.

- NOTE Confidence: 0.827788101666667
- $00:32:15.390 \longrightarrow 00:32:16.900$ And they'll say there is,
- NOTE Confidence: 0.827788101666667
- $00{:}32{:}16{.}900 \dashrightarrow 00{:}32{:}19{.}348$ there is also an increased interaction
- NOTE Confidence: 0.827788101666667
- $00{:}32{:}19{.}348 \dashrightarrow 00{:}32{:}21{.}803$ with the environment and in particular
- NOTE Confidence: 0.827788101666667
- $00{:}32{:}21.803 \dashrightarrow 00{:}32{:}24.250$ so there there were several studies
- NOTE Confidence: 0.827788101666667
- 00:32:24.250 --> 00:32:27.000 using LSD during music listening.
- NOTE Confidence: 0.827788101666667
- $00:32:27.000 \rightarrow 00:32:29.136$ And what you can see is that there
- NOTE Confidence: 0.827788101666667
- $00:32:29.136 \dashrightarrow 00:32:31.210$ is an increased coupling between
- NOTE Confidence: 0.827788101666667
- $00:32:31.210 \dashrightarrow 00:32:34.471$ visual cortex and cortex and more
- NOTE Confidence: 0.827788101666667
- $00{:}32{:}34{.}471 \dashrightarrow 00{:}32{:}38{.}053$ particularly there is more influence of.
- NOTE Confidence: 0.827788101666667
- $00:32:38.060 \longrightarrow 00:32:39.460$ Over the visual context.
- NOTE Confidence: 0.827788101666667
- $00{:}32{:}39{.}460 \dashrightarrow 00{:}32{:}42{.}461$ That can be linked to the visual imagery
- NOTE Confidence: 0.827788101666667
- $00:32:42.461 \rightarrow 00:32:45.765$ that you have when listening to music under.
- NOTE Confidence: 0.827788101666667
- $00{:}32{:}45{.}770 \dashrightarrow 00{:}32{:}46{.}120$ Because.
- NOTE Confidence: 0.86158159
- $00{:}32{:}46{.}920 \dashrightarrow 00{:}32{:}48{.}770$ That contrast there is listening
- NOTE Confidence: 0.86158159
- $00{:}32{:}48.770 \dashrightarrow 00{:}32{:}50.250$ to music without psyched elics,
- NOTE Confidence: 0.777129905

 $00:32:50.820 \dashrightarrow 00:32:53.196$ yes. In this case it's with and without.

NOTE Confidence: 0.777129905

 $00{:}32{:}53{.}200 \dashrightarrow 00{:}32{:}55{.}160$ And they did also before,

NOTE Confidence: 0.777129905

 $00:32:55.160 \longrightarrow 00:32:56.888$ so this is the same on the right.

NOTE Confidence: 0.777129905

 $00{:}32{:}56.890 \dashrightarrow 00{:}32{:}58.505$ This is the same alcohol

NOTE Confidence: 0.777129905

 $00:32:58.505 \longrightarrow 00:33:00.120$ that they did also before,

NOTE Confidence: 0.777129905

00:33:00.120 -> 00:33:02.286 during and after. So they compare,

NOTE Confidence: 0.750090865

 $00:33:02.400 \rightarrow 00:33:03.696$ but they're always listening to music.

NOTE Confidence: 0.758702994

00:33:04.630 --> 00:33:06.790 No. Before listening to music,

NOTE Confidence: 0.758702994

00:33:06.790 $\operatorname{-->}$ 00:33:08.378 under secondary, before music,

NOTE Confidence: 0.758702994

 $00:33:08.378 \longrightarrow 00:33:09.966$ during and after music.

NOTE Confidence: 0.758702994

 $00{:}33{:}09{.}970 \dashrightarrow 00{:}33{:}11{.}825$ So there is like 2

NOTE Confidence: 0.758702994

00:33:11.825 -> 00:33:14.910 crossover there is possible.

NOTE Confidence: 0.758702994

00:33:14.910 --> 00:33:16.154 These three moments before,

NOTE Confidence: 0.758702994

 $00{:}33{:}16{.}154 \dashrightarrow 00{:}33{:}18{.}020$ during and after listening to me.

NOTE Confidence: 0.758702994

00:33:18.020 --> 00:33:20.066 So only one can only listen

NOTE Confidence: 0.758702994

 $00:33:20.066 \rightarrow 00:33:21.430$ to music during one.

- NOTE Confidence: 0.7464181166666667
- $00:33:22.000 \rightarrow 00:33:23.715$ And what they showed this couple in
- NOTE Confidence: 0.7464181166666667
- $00:33:23.715 \dashrightarrow 00:33:25.440$ finding is the interactive effect.
- NOTE Confidence: 0.7464181166666667
- 00:33:25.440 --> 00:33:27.510 Exactly. Music and psychedelic. Yeah.
- NOTE Confidence: 0.831140435
- $00:33:27.520 \rightarrow 00:33:32.370$ Thank you. And there is also so.
- NOTE Confidence: 0.831140435
- $00{:}33{:}32{.}370 \dashrightarrow 00{:}33{:}34{.}350$ And an increase of um,
- NOTE Confidence: 0.831140435
- 00:33:34.350 > 00:33:36.535 um diversity under music that
- NOTE Confidence: 0.831140435
- $00:33:36.535 \longrightarrow 00:33:39.296$ is more important than in the
- NOTE Confidence: 0.831140435
- $00{:}33{:}39{.}296 \dashrightarrow 00{:}33{:}41{.}746$ condition before and after music.
- NOTE Confidence: 0.831140435
- $00{:}33{:}41.750 \dashrightarrow 00{:}33{:}43.926$ So in the middle you have during music
- NOTE Confidence: 0.831140435
- $00:33:43.926 \rightarrow 00:33:46.108$ and so it's increased everywhere.
- NOTE Confidence: 0.831140435
- $00:33:46.110 \longrightarrow 00:33:48.354$ But you have any direction between
- NOTE Confidence: 0.831140435
- $00{:}33{:}48{.}354 \dashrightarrow 00{:}33{:}50{.}828$ music and non music in this case.
- NOTE Confidence: 0.57179818
- $00{:}33{:}53{.}610 \dashrightarrow 00{:}33{:}56{.}400$ Then there is a music.
- NOTE Confidence: 0.57179818
- $00:33:56.400 \longrightarrow 00:33:57.768$ Is there any differences?
- NOTE Confidence: 0.57179818
- $00{:}33{:}57.768 \dashrightarrow 00{:}33{:}59.136$ Also are there like
- NOTE Confidence: 0.57179818

 $00:33:59.136 \longrightarrow 00:34:00.190$ connections between other?

NOTE Confidence: 0.808012673333333

 $00{:}34{:}03{.}280 \dashrightarrow 00{:}34{:}06{.}094$ No there there is a like the

NOTE Confidence: 0.808012673333333

 $00:34:06.094 \rightarrow 00:34:08.140$ it's mostly between like this

NOTE Confidence: 0.808012673333333

 $00:34:08.140 \rightarrow 00:34:11.370$ visual cortex like hyper complex.

NOTE Confidence: 0.808012673333333

00:34:11.370 --> 00:34:13.390 I mean the rights against

NOTE Confidence: 0.808012673333333

 $00:34:13.390 \longrightarrow 00:34:15.635$ like the change in, yeah,

NOTE Confidence: 0.808012673333333

 $00:34:15.635 \rightarrow 00:34:17.630$ of the global density of the brain,

NOTE Confidence: 0.808012673333333

 $00:34:17.630 \longrightarrow 00:34:22.340$ but it's not very like pop up.

NOTE Confidence: 0.734931534375

 $00{:}34{:}24{.}420 \dashrightarrow 00{:}34{:}25{.}749$ On those saving,

NOTE Confidence: 0.734931534375

 $00:34:25.749 \longrightarrow 00:34:28.407$ there is a processing of social

NOTE Confidence: 0.734931534375

 $00{:}34{:}28{.}407 \dashrightarrow 00{:}34{:}31{.}224$ exclusion that you can see on the cortex.

NOTE Confidence: 0.734931534375

 $00{:}34{:}31{.}224 \dashrightarrow 00{:}34{:}33{.}894$ And on the reduced distinction

NOTE Confidence: 0.734931534375

 $00{:}34{:}33{.}894 \dashrightarrow 00{:}34{:}37{.}349$ between self and other and the

NOTE Confidence: 0.734931534375

 $00:34:37.349 \longrightarrow 00:34:39.188$ posterior singulate cortex.

NOTE Confidence: 0.734931534375

 $00:34:39.190 \longrightarrow 00:34:40.348$ So I put that all together.

NOTE Confidence: 0.734931534375

 $00:34:40.350 \longrightarrow 00:34:41.808$ It's not exactly the same topic,

- NOTE Confidence: 0.734931534375
- $00:34:41.810 \longrightarrow 00:34:44.848$ but just to say that it can
- NOTE Confidence: 0.734931534375
- $00:34:44.850 \rightarrow 00:34:47.730$ corresponds to this feeling of like
- NOTE Confidence: 0.734931534375
- $00{:}34{:}47.730 \dashrightarrow 00{:}34{:}49.650$ connectedness with the environment.
- NOTE Confidence: 0.734931534375
- $00{:}34{:}49.650 \dashrightarrow 00{:}34{:}52.000$ Yeah, ours.
- NOTE Confidence: 0.734931534375
- $00{:}34{:}52{.}000 \dashrightarrow 00{:}34{:}53{.}120$ Like you think that
- NOTE Confidence: 0.736148826
- $00:34:53.370 \longrightarrow 00:34:54.530$ was sort of like the?
- NOTE Confidence: 0.63991158375
- $00{:}34{:}57{.}500 \dashrightarrow 00{:}34{:}58{.}920$ Like potentially like the
- NOTE Confidence: 0.63991158375
- $00:34:58.920 \longrightarrow 00:35:00.340$ Pro social effect vaccine.
- NOTE Confidence: 0.76175901444445
- $00{:}35{:}00{.}600 \dashrightarrow 00{:}35{:}01{.}563$ Yeah. So yeah.
- NOTE Confidence: 0.76175901444445
- $00{:}35{:}01{.}563 \dashrightarrow 00{:}35{:}04{.}696$ So I would I would talk about like the
- NOTE Confidence: 0.761759014444445
- $00:35:04.696 \rightarrow 00:35:07.108$ like the link between behavior and.
- NOTE Confidence: 0.76175901444445
- $00{:}35{:}07{.}110 \dashrightarrow 00{:}35{:}09{.}162$ So, but in fact it's not so easy to
- NOTE Confidence: 0.76175901444445
- $00:35:09.162 \dashrightarrow 00:35:11.566$ find the neural correlate of the solution,
- NOTE Confidence: 0.76175901444445
- 00:35:11.570 --> 00:35:14.090 probably because it's a big entity that's
- NOTE Confidence: 0.76175901444445
- $00:35:14.090 \rightarrow 00:35:18.997$ very different aspect of the experience of.
- NOTE Confidence: 0.76175901444445

00:35:19.000 --> 00:35:20.760 Business. So for social inclusion,

NOTE Confidence: 0.76175901444445

 $00:35:20.760 \longrightarrow 00:35:21.968$ what do they use?

NOTE Confidence: 0.76175901444445

 $00:35:21.968 \longrightarrow 00:35:23.712$ So the user, you know,

NOTE Confidence: 0.76175901444445

 $00:35:23.712 \rightarrow 00:35:26.208$ this disable paradigm whereby people were

NOTE Confidence: 0.767092913333333

 $00{:}35{:}27{.}280 \dashrightarrow 00{:}35{:}28{.}736$ and there we have a question in the

NOTE Confidence: 0.767092913333333

 $00:35:28.736 \longrightarrow 00:35:31.050$ chat, what kind of music was it?

NOTE Confidence: 0.6826704825

 $00:35:31.240 \longrightarrow 00:35:32.335$ Oh, and general.

NOTE Confidence: 0.6826704825

 $00:35:32.335 \rightarrow 00:35:35.150$ So in this case exactly, I don't know.

NOTE Confidence: 0.6826704825

 $00{:}35{:}35{.}150 \dashrightarrow 00{:}35{:}36{.}800$ But they use a play list

NOTE Confidence: 0.6826704825

 $00:35:36.800 \rightarrow 00:35:38.010$ that is quite control.

NOTE Confidence: 0.6826704825

 $00{:}35{:}38.010 \dashrightarrow 00{:}35{:}40.210$ So in the playlist there is Electro music,

NOTE Confidence: 0.6826704825

00:35:40.210 --> 00:35:41.650 classic music and it's like,

NOTE Confidence: 0.6826704825

 $00{:}35{:}41.650 \dashrightarrow 00{:}35{:}44.866$ but it's a kind of control.

NOTE Confidence: 0.6826704825

 $00:35:44.870 \longrightarrow 00:35:46.098$ In the clinical trials,

NOTE Confidence: 0.568878696

 $00:35:46.110 \longrightarrow 00:35:48.050$ the same the Hopkins playlist,

NOTE Confidence: 0.568878696

 $00:35:48.050 \longrightarrow 00:35:48.960$ the same one they use.

- NOTE Confidence: 0.838114426
- $00:35:49.370 \longrightarrow 00:35:51.858$ I I'm not 100% sure that they use
- NOTE Confidence: 0.838114426
- $00{:}35{:}51{.}858 \dashrightarrow 00{:}35{:}54{.}357$ this very play list in this case,
- NOTE Confidence: 0.838114426
- $00:35:54.360 \longrightarrow 00:35:56.005$ but this is a very good question.
- NOTE Confidence: 0.838114426
- $00{:}35{:}56{.}010 \dashrightarrow 00{:}35{:}57{.}078$ But I think it's the same.
- NOTE Confidence: 0.838114426
- $00:35:57.080 \longrightarrow 00:35:58.868$ It's the same team, so it's
- NOTE Confidence: 0.838114426
- $00:35:58.868 \dashrightarrow 00:36:00.890$ probably the same kind of right? But
- NOTE Confidence: 0.870584653333333
- $00:36:00.900 \longrightarrow 00:36:03.126$ it's not words and it's not.
- NOTE Confidence: 0.84274507
- 00:36:04.570 --> 00:36:07.209 I don't know if there is no,
- NOTE Confidence: 0.84274507
- $00{:}36{:}07{.}210 \dashrightarrow 00{:}36{:}09{.}471$ may be the place somewhere on the on
- NOTE Confidence: 0.84274507
- $00{:}36{:}09{.}471 \dashrightarrow 00{:}36{:}10{.}969$ the supplementary information that I
- NOTE Confidence: 0.84274507
- $00:36:10.969 \rightarrow 00:36:13.060$ don't have like the lyrics. Sorry.
- NOTE Confidence: 0.754479112857143
- $00:36:15.680 \longrightarrow 00:36:18.300$ There is also a decreased
- NOTE Confidence: 0.754479112857143
- 00:36:18.300 --> 00:36:19.348 surprise processing,
- NOTE Confidence: 0.754479112857143
- $00{:}36{:}19{.}350 \dashrightarrow 00{:}36{:}22{.}200$ so a decreased mismatch negativity,
- NOTE Confidence: 0.754479112857143
- $00{:}36{:}22{.}200 \dashrightarrow 00{:}36{:}25{.}032$ that is this wave that appears when you
- NOTE Confidence: 0.754479112857143

 $00:36:25.032 \rightarrow 00:36:28.056$ have a sequence and and when you are

NOTE Confidence: 0.754479112857143

 $00:36:28.060 \rightarrow 00:36:31.434$ processing a deviant team within a sequence.

NOTE Confidence: 0.754479112857143

 $00:36:31.440 \longrightarrow 00:36:34.116$ So this is decreased on the sybian

NOTE Confidence: 0.754479112857143

 $00:36:34.116 \rightarrow 00:36:35.820$ and quite intriguingly, it's.

NOTE Confidence: 0.754479112857143

 $00{:}36{:}35{.}820 \dashrightarrow 00{:}36{:}38{.}304$ It's even like it seems to be more pronounced

NOTE Confidence: 0.754479112857143

 $00:36:38.304 \rightarrow 00:36:40.666$ for standard than deviant stimuli here,

NOTE Confidence: 0.754479112857143

 $00:36:40.666 \longrightarrow 00:36:43.627$ but it's only for tactile and it

NOTE Confidence: 0.754479112857143

 $00{:}36{:}43.627 \dashrightarrow 00{:}36{:}47.300$ was not found for. Auditory system.

NOTE Confidence: 0.754479112857143

00:36:47.300 --> 00:36:49.370 Whereas for LSD it was finding

NOTE Confidence: 0.754479112857143

 $00:36:49.370 \longrightarrow 00:36:50.750$ the very classical overall,

NOTE Confidence: 0.754479112857143

00:36:50.750 --> 00:36:51.722 uh, paradigm, uh,

NOTE Confidence: 0.754479112857143

 $00{:}36{:}51.722 \dashrightarrow 00{:}36{:}53.990$ where you are just a different tone

NOTE Confidence: 0.754479112857143

 $00{:}36{:}54.056 \dashrightarrow 00{:}36{:}56.304$ and you can see that there is this

NOTE Confidence: 0.754479112857143

 $00:36:56.304 \rightarrow 00:36:57.594$ decrease in mismatch negativity

NOTE Confidence: 0.754479112857143

 $00{:}36{:}57{.}594 \dashrightarrow 00{:}36{:}59{.}904$ with the rain red red line that

NOTE Confidence: 0.754479112857143

 $00:36:59.904 \rightarrow 00:37:02.030$ is not showing this since it's.

 $00{:}37{:}04.670 \dashrightarrow 00{:}37{:}08.810$ OK. So I would just.

NOTE Confidence: 0.91527589

 $00{:}37{:}08{.}810 \dashrightarrow 00{:}37{:}11{.}298$ Just shows a few data showing that it's

NOTE Confidence: 0.91527589

 $00:37:11.298 \rightarrow 00:37:13.503$ it's it's probably all these effects

NOTE Confidence: 0.91527589

 $00:37:13.503 \rightarrow 00:37:15.821$ probably depend on the five receptors

NOTE Confidence: 0.91527589

 $00:37:15.821 \longrightarrow 00:37:18.287$ because it could be also independent.

NOTE Confidence: 0.91527589

00:37:18.290 --> 00:37:20.490 But in fact Ketanserin,

NOTE Confidence: 0.91527589

 $00:37:20.490 \dashrightarrow 00:37:24.706$ which is an antagonist of a further 2A,

NOTE Confidence: 0.91527589

 $00{:}37{:}24.706 \dashrightarrow 00{:}37{:}27.226$ blocks many neural and behavioral

NOTE Confidence: 0.91527589

 $00:37:27.226 \longrightarrow 00:37:29.209$ effects of psychedelics.

NOTE Confidence: 0.91527589

 $00:37:29.210 \longrightarrow 00:37:32.276$ So here you can see that the

NOTE Confidence: 0.91527589

 $00{:}37{:}32.276 \dashrightarrow 00{:}37{:}34.760$ contrast between LSD and placebo.

NOTE Confidence: 0.91527589

 $00{:}37{:}34.760 \dashrightarrow 00{:}37{:}37.070$ Show pretty much the same

NOTE Confidence: 0.91527589

 $00{:}37{:}37{.}070 \dashrightarrow 00{:}37{:}39{.}546$ pattern of differences as the

NOTE Confidence: 0.91527589

 $00{:}37{:}39{.}546 \dashrightarrow 00{:}37{:}43{.}950$ contrast between LSD and LSD.

NOTE Confidence: 0.91527589

 $00:37:43.950 \longrightarrow 00:37:45.824$ Here it's the same ID, so uh,

 $00:37:45.824 \rightarrow 00:37:47.996$ with ketanserin plus iOS call you,

NOTE Confidence: 0.91527589

 $00{:}37{:}48.000 \dashrightarrow 00{:}37{:}50.610$ you have no more the decrease in the alpha

NOTE Confidence: 0.91527589

 $00{:}37{:}50.610 \dashrightarrow 00{:}37{:}52.879$ that you could see with iOS scalone.

NOTE Confidence: 0.91527589

 $00{:}37{:}52.880 \dashrightarrow 00{:}37{:}54.854$ And this has been shown in several

NOTE Confidence: 0.91527589

 $00{:}37{:}54.854 \dashrightarrow 00{:}37{:}56.860$ studies that I will not list here,

NOTE Confidence: 0.91527589

 $00{:}37{:}56{.}860 \dashrightarrow 00{:}37{:}59{.}948$ but it was regularly used and showed that

NOTE Confidence: 0.91527589

 $00:37:59.948 \dashrightarrow 00:38:02.600$ it antagonized pretty much all the effects.

NOTE Confidence: 0.91527589

 $00:38:02.600 \longrightarrow 00:38:05.730$ Another way to check that.

NOTE Confidence: 0.91527589

 $00{:}38{:}05{.}730 \dashrightarrow 00{:}38{:}08{.}076$ Involved in the effects of the

NOTE Confidence: 0.91527589

 $00:38:08.080 \longrightarrow 00:38:10.873$ of the psychedelic is to use the

NOTE Confidence: 0.91527589

 $00{:}38{:}10.873 \dashrightarrow 00{:}38{:}13.560$ gene expression map and to see

NOTE Confidence: 0.91527589

00:38:13.560 --> 00:38:15.905 whether this gene expression map

NOTE Confidence: 0.91527589

 $00:38:15.905 \dashrightarrow 00:38:17.478$ corresponds to the subjective,

NOTE Confidence: 0.91527589

 $00:38:17.478 \longrightarrow 00:38:19.674$ sorry to the to the neural

NOTE Confidence: 0.91527589

 $00{:}38{:}19.674 \dashrightarrow 00{:}38{:}21.009$ effects in this case.

NOTE Confidence: 0.91527589

 $00:38:21.010 \longrightarrow 00:38:22.170$ So that is so.

 $00:38:22.170 \rightarrow 00:38:25.096$ What you can see is there is kind of

NOTE Confidence: 0.91527589

 $00{:}38{:}25.096 \dashrightarrow 00{:}38{:}27.316$ similarity in the expression map and

NOTE Confidence: 0.91527589

 $00:38:27.316 \rightarrow 00:38:30.210$ the change in global brain connectivity NOTE Confidence: 0.91527589

 $00{:}38{:}30{.}210$ --> $00{:}38{:}33{.}792$ observed under LSD and you can also NOTE Confidence: 0.91527589

 $00:38:33.792 \rightarrow 00:38:36.403$ correlate these maps across the time.

NOTE Confidence: 0.91527589

00:38:36.403 - 00:38:39.370 So this is what the this thing did uh,

NOTE Confidence: 0.91527589

 $00:38:39.370 \longrightarrow 00:38:40.630$ with silvbin on the right.

NOTE Confidence: 0.91527589

 $00{:}38{:}40{.}630 \dashrightarrow 00{:}38{:}42{.}961$ And what you can see is that there is

NOTE Confidence: 0.91527589

 $00{:}38{:}42.961 \dashrightarrow 00{:}38{:}44.975$ an increase of correlation between

NOTE Confidence: 0.91527589

00:38:44.975 - 00:38:47.080 the neural effects of silvbin

NOTE Confidence: 0.91527589

 $00:38:47.080 \rightarrow 00:38:49.826$ and the 5H2 receptor gene map,

NOTE Confidence: 0.91527589

 $00{:}38{:}49{.}826 \dashrightarrow 00{:}38{:}52{.}396$ whereas there is an inspiration

NOTE Confidence: 0.91527589

 $00:38:52.396 \longrightarrow 00:38:55.290$ for the 1A receptor map which is

NOTE Confidence: 0.91527589

 $00{:}38{:}55{.}290 \dashrightarrow 00{:}38{:}57{.}900$ supposedly like as an opposite effect.

NOTE Confidence: 0.744754138571429

 $00{:}38{:}58{.}630 \dashrightarrow 00{:}39{:}00{.}550$ There's a comment in the chat that gets

00:39:00.550 --> 00:39:02.108 answered isn't fully selected for two,

NOTE Confidence: 0.744754138571429

 $00{:}39{:}02{.}110 \dashrightarrow 00{:}39{:}04{.}750$ and there is a more selective 1 available,

NOTE Confidence: 0.97899743

00:39:06.780 --> 00:39:10.000 MDL 100907. You know if anyone is

NOTE Confidence: 0.97899743

 $00:39:10.000 \rightarrow 00:39:11.760$ following up with the more selective and

NOTE Confidence: 0.63310873444444

00:39:12.220 --> 00:39:14.686 I didn't see a study using

NOTE Confidence: 0.63310873444444

00:39:14.686 --> 00:39:15.919 a different antagonist,

NOTE Confidence: 0.63310873444444

 $00:39:15.920 \rightarrow 00:39:17.400$ this is the one that is mostly used,

NOTE Confidence: 0.63310873444444

 $00:39:17.400 \longrightarrow 00:39:19.740$ but maybe there are like.

NOTE Confidence: 0.63310873444444

 $00{:}39{:}19{.}740 \dashrightarrow 00{:}39{:}22{.}702$ Yeah. And and finally,

NOTE Confidence: 0.63310873444444

 $00:39:22.702 \longrightarrow 00:39:26.572$ you can also simulate what would be an

NOTE Confidence: 0.63310873444444

 $00:39:26.572 \dashrightarrow 00:39:31.380$ excitatory gain modulation obtained by 5.

NOTE Confidence: 0.63310873444444

 $00{:}39{:}31{.}380 \dashrightarrow 00{:}39{:}33{.}435$ Activation and you can reproduce

NOTE Confidence: 0.63310873444444

 $00{:}39{:}33{.}435 \dashrightarrow 00{:}39{:}35{.}079$ again the empirical data.

NOTE Confidence: 0.63310873444444

 $00:39:35.080 \longrightarrow 00:39:37.019$ So you can see that there is

NOTE Confidence: 0.63310873444444

 $00{:}39{:}37.019 \dashrightarrow 00{:}39{:}38.314$ a nice correlation between

NOTE Confidence: 0.63310873444444

00:39:38.314 --> 00:39:40.294 empirical change in global brain

 $00:39:40.294 \rightarrow 00:39:44.170$ connectivity and the model changes.

NOTE Confidence: 0.63310873444444

00:39:44.170 --> 00:39:48.450 OK. So now I returned from rent

NOTE Confidence: 0.63310873444444

 $00:39:48.450 \rightarrow 00:39:51.340$ recognition and So what I will try,

NOTE Confidence: 0.63310873444444

 $00:39:51.340 \longrightarrow 00:39:53.614$ but it's more hypothetical is to

NOTE Confidence: 0.63310873444444

 $00{:}39{:}53.614 \dashrightarrow 00{:}39{:}55.954$ predict how what kind of cognitive

NOTE Confidence: 0.63310873444444

 $00:39:55.954 \rightarrow 00:39:58.930$ effects we can have by the brain effects

NOTE Confidence: 0.63310873444444

 $00:39:59.009 \rightarrow 00:40:01.259$ that we just have seen together.

NOTE Confidence: 0.63310873444444

 $00:40:01.260 \longrightarrow 00:40:04.291$ So the first part is about the

NOTE Confidence: 0.63310873444444

 $00:40:04.291 \longrightarrow 00:40:07.384$ reduction of the the connectivity

NOTE Confidence: 0.63310873444444

 $00:40:07.384 \longrightarrow 00:40:10.209$ in the default mode network.

NOTE Confidence: 0.63310873444444

 $00{:}40{:}10.210 \dashrightarrow 00{:}40{:}13.002$ And indeed what we can bet is that

NOTE Confidence: 0.63310873444444

 $00:40:13.002 \rightarrow 00:40:15.609$ this change in connectivity can give

NOTE Confidence: 0.63310873444444

 $00{:}40{:}15.610 \dashrightarrow 00{:}40{:}17.332$ the so-called equity solution or may be

NOTE Confidence: 0.63310873444444

 $00:40:17.332 \longrightarrow 00:40:19.643$ you will be less self focused and

NOTE Confidence: 0.63310873444444

 $00:40:19.643 \rightarrow 00:40:21.493$ more available to process external

 $00:40:21.493 \longrightarrow 00:40:23.073$ information because you have a

NOTE Confidence: 0.63310873444444

 $00{:}40{:}23.073 \dashrightarrow 00{:}40{:}24.639$ deactivation of the of the default

NOTE Confidence: 0.63310873444444

 $00:40:24.639 \rightarrow 00:40:27.740$ mode network that will be disrupted.

NOTE Confidence: 0.63310873444444

 $00:40:27.740 \rightarrow 00:40:29.520$ The increased connectivity between

NOTE Confidence: 0.63310873444444

 $00{:}40{:}29{.}520 \dashrightarrow 00{:}40{:}31{.}745$ network and the increased complexity

NOTE Confidence: 0.63310873444444

 $00{:}40{:}31.745 \dashrightarrow 00{:}40{:}34.287$ slash diversity slash repertoire may NOTE Confidence: 0.63310873444444

 $00:40:34.287 \rightarrow 00:40:36.922$ corresponds to a more information

NOTE Confidence: 0.63310873444444

 $00:40:36.922 \rightarrow 00:40:40.074$ sharing across the brain and also

NOTE Confidence: 0.63310873444444

 $00{:}40{:}40{.}074 \dashrightarrow 00{:}40{:}42{.}454$ more fluctuation and more update

NOTE Confidence: 0.63310873444444

 $00:40:42.454 \longrightarrow 00:40:45.078$ of the content of the brain.

NOTE Confidence: 0.63310873444444

 $00:40:45.080 \longrightarrow 00:40:47.360$ What has been interpreted by several

NOTE Confidence: 0.63310873444444

 $00{:}40{:}47{.}360 \dashrightarrow 00{:}40{:}49{.}460$ authors at a possible enhanced

NOTE Confidence: 0.63310873444444

 $00{:}40{:}49{.}460 \dashrightarrow 00{:}40{:}51{.}504$ state of consciousness because

NOTE Confidence: 0.63310873444444

 $00:40:51.504 \rightarrow 00:40:53.548$ information sharing and complexity

NOTE Confidence: 0.63310873444444

 $00{:}40{:}53{.}548 \dashrightarrow 00{:}40{:}56{.}339$ has been also linked to different

NOTE Confidence: 0.63310873444444

 $00:40:56.339 \longrightarrow 00:40:57.665$ states of consciousness.

 $00{:}40{:}57.670 \dashrightarrow 00{:}41{:}00.120$ And we can also think that the

NOTE Confidence: 0.63310873444444

 $00:41:00.120 \longrightarrow 00:41:01.170$ connectivity between different

NOTE Confidence: 0.63310873444444

 $00:41:01.170 \longrightarrow 00:41:04.285$ sensory areas can lead to the seizure,

NOTE Confidence: 0.63310873444444

 $00:41:04.290 \rightarrow 00:41:07.090$ which is an effect that is regularly

NOTE Confidence: 0.63310873444444

 $00{:}41{:}07.090 \dashrightarrow 00{:}41{:}08.710$ observed under psyched elic.

NOTE Confidence: 0.820016447058824

 $00:41:11.110 \longrightarrow 00:41:12.922$ On the other hand,

NOTE Confidence: 0.820016447058824

 $00:41:12.922 \longrightarrow 00:41:15.187$ so the reduced connectivity in

NOTE Confidence: 0.820016447058824

 $00{:}41{:}15.187 \dashrightarrow 00{:}41{:}17.156$ associative several region but

NOTE Confidence: 0.820016447058824

 $00{:}41{:}17.156 \dashrightarrow 00{:}41{:}19.750$ increased in sensory areas and the

NOTE Confidence: 0.820016447058824

 $00:41:19.750 \longrightarrow 00:41:22.130$ change in this alpha band or feedback.

NOTE Confidence: 0.820016447058824

 $00{:}41{:}22.130 \dashrightarrow 00{:}41{:}24.494$ And for some molecules in particular

NOTE Confidence: 0.820016447058824

 $00{:}41{:}24{.}494 \dashrightarrow 00{:}41{:}26{.}556$ they always get increased forward

NOTE Confidence: 0.820016447058824

 $00{:}41{:}26.556 \dashrightarrow 00{:}41{:}28.626$ or the exchange in telemetry

NOTE Confidence: 0.820016447058824

 $00{:}41{:}28.626$ --> $00{:}41{:}30.600$ collectivity change from the LSD.

NOTE Confidence: 0.820016447058824

 $00{:}41{:}30.600 \dashrightarrow 00{:}41{:}32.960$ All this may lead to so cognitive impairment

 $00:41:32.960 \longrightarrow 00:41:35.357$ is a really like broad prediction,

NOTE Confidence: 0.820016447058824

 $00{:}41{:}35{.}360 \dashrightarrow 00{:}41{:}37{.}362$ but in fact it has been observed

NOTE Confidence: 0.820016447058824

 $00{:}41{:}37{.}362 \dashrightarrow 00{:}41{:}39{.}056$ under secondary but more may be

NOTE Confidence: 0.820016447058824

 $00:41:39.056 \rightarrow 00:41:40.986$ more specifically to an increased

NOTE Confidence: 0.820016447058824

 $00{:}41{:}40{.}986 \dashrightarrow 00{:}41{:}42{.}765$ sensory processing and maybe to

NOTE Confidence: 0.820016447058824

 $00{:}41{:}42.765 \dashrightarrow 00{:}41{:}44.440$ less constraints that would be

NOTE Confidence: 0.820016447058824

 $00:41:44.440 \rightarrow 00:41:46.669$ applied on this sensory processing.

NOTE Confidence: 0.905500086153846

 $00{:}41{:}48.700 \dashrightarrow 00{:}41{:}51.178$ So now let's check whether this

NOTE Confidence: 0.905500086153846

 $00{:}41{:}51{.}178 \dashrightarrow 00{:}41{:}53{.}760$ prediction can be observed in the data.

NOTE Confidence: 0.905500086153846

00:41:53.760 --> 00:41:55.368 So first of all,

NOTE Confidence: 0.905500086153846

 $00{:}41{:}55{.}368 \dashrightarrow 00{:}41{:}57{.}378$ not all the neuroimaging studies

NOTE Confidence: 0.905500086153846

 $00{:}41{:}57{.}378 \dashrightarrow 00{:}41{:}59{.}708$ explored the the correlation with

NOTE Confidence: 0.905500086153846

00:41:59.708 --> 00:42:02.028 subjective effect and it's quite

NOTE Confidence: 0.905500086153846

 $00{:}42{:}02.028 \dashrightarrow 00{:}42{:}04.438$ difficult to prove that all together.

NOTE Confidence: 0.905500086153846

 $00:42:04.440 \longrightarrow 00:42:06.360$ But many of them explored

NOTE Confidence: 0.905500086153846

 $00:42:06.360 \longrightarrow 00:42:08.280$ whether a visual experience was

- NOTE Confidence: 0.905500086153846
- $00:42:08.353 \rightarrow 00:42:10.577$ correlated with several patterns,
- NOTE Confidence: 0.905500086153846
- $00:42:10.580 \longrightarrow 00:42:12.911$ and in particular it has been found
- NOTE Confidence: 0.905500086153846
- $00{:}42{:}12{.}911 \dashrightarrow 00{:}42{:}15{.}440$ that the decrease of the N 170 was
- NOTE Confidence: 0.905500086153846
- $00:42:15.440 \rightarrow 00:42:16.880$ correlated with visual experience.
- NOTE Confidence: 0.905500086153846
- $00{:}42{:}16.880 \dashrightarrow 00{:}42{:}20.570$ So may be there is less integration
- NOTE Confidence: 0.905500086153846
- $00:42:20.570 \longrightarrow 00:42:22.415$ of visual information.
- NOTE Confidence: 0.905500086153846
- $00{:}42{:}22{.}420 \dashrightarrow 00{:}42{:}24.688$ That it was correlated to an increased
- NOTE Confidence: 0.905500086153846
- $00:42:24.688 \rightarrow 00:42:26.580$ activity in visual cortex increased
- NOTE Confidence: 0.905500086153846
- $00{:}42{:}26.580 \dashrightarrow 00{:}42{:}28.288$ connective connectivity between visual
- NOTE Confidence: 0.905500086153846
- $00{:}42{:}28.288 \dashrightarrow 00{:}42{:}30.800$ cortex and the rest of the brain.
- NOTE Confidence: 0.905500086153846
- $00:42:30.800 \longrightarrow 00:42:32.308$ The decrease of alpha
- NOTE Confidence: 0.905500086153846
- 00:42:32.308 --> 00:42:33.816 notably in posterior region,
- NOTE Confidence: 0.905500086153846
- $00:42:33.820 \longrightarrow 00:42:36.345$ so notably those are pertaining
- NOTE Confidence: 0.905500086153846
- $00{:}42{:}36{.}345 \dashrightarrow 00{:}42{:}39{.}696$ to the visual cortex of the
- NOTE Confidence: 0.905500086153846
- 00:42:39.696 --> 00:42:41.898 posterior different network.
- NOTE Confidence: 0.905500086153846

 $00:42:41.900 \longrightarrow 00:42:44.092$ The connectivity between the

NOTE Confidence: 0.905500086153846

 $00:42:44.092 \rightarrow 00:42:46.832$ telemus and the fusiform gyrus.

NOTE Confidence: 0.905500086153846

00:42:46.840 --> 00:42:49.000 And as I said earlier,

NOTE Confidence: 0.905500086153846

 $00:42:49.000 \rightarrow 00:42:51.184$ like more influence of the parade book

NOTE Confidence: 0.905500086153846

 $00{:}42{:}51{.}184 \dashrightarrow 00{:}42{:}53{.}400$ and book Cortex on the visual cortex.

NOTE Confidence: 0.905500086153846

 $00{:}42{:}53{.}400 \dashrightarrow 00{:}42{:}56{.}920$ So all this data is kind of difficult

NOTE Confidence: 0.905500086153846

 $00:42:56.920 \rightarrow 00:42:59.560$ to summarize in just one aspect.

NOTE Confidence: 0.905500086153846

 $00:42:59.560 \longrightarrow 00:43:02.278$ What we can see is that.

NOTE Confidence: 0.905500086153846

 $00:43:02.280 \rightarrow 00:43:04.368$ Let's say generally like the change

NOTE Confidence: 0.905500086153846

 $00{:}43{:}04{.}368 \dashrightarrow 00{:}43{:}06{.}259$ in visual cortex and disconnectivity

NOTE Confidence: 0.905500086153846

 $00{:}43{:}06{.}259 \dashrightarrow 00{:}43{:}09{.}262$ seems to be associated with the the

NOTE Confidence: 0.905500086153846

 $00:43:09.262 \rightarrow 00:43:11.309$ visual experience under psychedelic.

NOTE Confidence: 0.905500086153846

00:43:11.310 --> 00:43:11.906 The DMT,

NOTE Confidence: 0.905500086153846

00:43:11.906 --> 00:43:12.204 uh,

NOTE Confidence: 0.905500086153846

 $00:43:12.204 \rightarrow 00:43:14.778$ there is a decrease of alpha and the

NOTE Confidence: 0.905500086153846

 $00:43:14.778 \rightarrow 00:43:17.280$ increase of complexity that was also

- NOTE Confidence: 0.905500086153846
- $00:43:17.280 \rightarrow 00:43:19.733$ associated with visual experience and
- NOTE Confidence: 0.905500086153846
- $00:43:19.733 \longrightarrow 00:43:22.048$ this change in feedforward feedback.
- NOTE Confidence: 0.905500086153846
- 00:43:22.050 --> 00:43:23.988 And again like in this case,
- NOTE Confidence: 0.905500086153846
- $00:43:23.990 \longrightarrow 00:43:25.580$ it's quite natural to think that
- NOTE Confidence: 0.905500086153846
- $00{:}43{:}25{.}580 \dashrightarrow 00{:}43{:}27{.}229$ the increase it corresponds to an
- NOTE Confidence: 0.905500086153846
- $00{:}43{:}27.229 \dashrightarrow 00{:}43{:}28.317$ increase of sensory processing.
- NOTE Confidence: 0.792972314
- $00:43:30.780 \longrightarrow 00:43:33.490$ I got the solution so.
- NOTE Confidence: 0.792972314
- $00:43:33.490 \longrightarrow 00:43:35.730$ What was found in several studies that
- NOTE Confidence: 0.792972314
- $00{:}43{:}35{.}730 \dashrightarrow 00{:}43{:}38{.}041$ it was correlated with the decreased
- NOTE Confidence: 0.792972314
- $00:43:38.041 \rightarrow 00:43:40.084$ alpha regulatory activity, and notably
- NOTE Confidence: 0.792972314
- $00:43:40.084 \rightarrow 00:43:41.969$ in the posterior cingulate cortex,
- NOTE Confidence: 0.792972314
- $00{:}43{:}41{.}970 \dashrightarrow 00{:}43{:}43{.}986$ which is part of the default network.
- NOTE Confidence: 0.792972314
- $00:43:43.990 \longrightarrow 00:43:47.504$ So This is why it makes sense.
- NOTE Confidence: 0.792972314
- $00{:}43{:}47{.}510$ --> $00{:}43{:}49{.}610$ But there were also, like many other NOTE Confidence: 0.792972314
- $00{:}43{:}49{.}610 \dashrightarrow 00{:}43{:}51{.}659$ correlate of the euro dissolution that
- NOTE Confidence: 0.792972314

 $00:43:51.659 \rightarrow 00:43:53.843$ are quite difficult to put together.

NOTE Confidence: 0.792972314

 $00{:}43{:}53.850 \dashrightarrow 00{:}43{:}55.209$ So, for example,

NOTE Confidence: 0.792972314

 $00:43:55.209 \rightarrow 00:43:57.927$ a disintegration of the salience network,

NOTE Confidence: 0.792972314

 $00:43:57.930 \rightarrow 00:43:59.430$ a disconnection between the parietal

NOTE Confidence: 0.792972314

 $00{:}43{:}59{.}430 \dashrightarrow 00{:}44{:}01{.}250$ lobes and the medial temporal lobes,

NOTE Confidence: 0.792972314

00:44:01.250 --> 00:44:03.250 decreased connectivity between parapro

NOTE Confidence: 0.792972314

00:44:03.250 --> 00:44:05.250 campus and retrosplenial cortex,

NOTE Confidence: 0.792972314

 $00:44:05.250 \longrightarrow 00:44:07.290$ change of increase of salience

NOTE Confidence: 0.792972314

00:44:07.290 --> 00:44:08.106 network connectivity.

NOTE Confidence: 0.792972314

 $00{:}44{:}08.110 \dashrightarrow 00{:}44{:}12.506$ So many, many correlates that are not

NOTE Confidence: 0.792972314

 $00{:}44{:}12.506 \dashrightarrow 00{:}44{:}16.338$ obviously a linkable to these effects.

NOTE Confidence: 0.792972314

00:44:16.340 --> 00:44:20.498 And regarding the overall subjective effects,

NOTE Confidence: 0.792972314

 $00{:}44{:}20{.}500 \dashrightarrow 00{:}44{:}22{.}452$ the decreased network integrity

NOTE Confidence: 0.792972314

 $00:44:22.452 \rightarrow 00:44:24.404$ and segregation was correlated

NOTE Confidence: 0.792972314

 $00:44:24.404 \longrightarrow 00:44:26.915$ to that and also connectivity

NOTE Confidence: 0.792972314

 $00:44:26.915 \rightarrow 00:44:29.860$ with the somatomotor region, so.
- NOTE Confidence: 0.792972314
- $00:44:29.860 \longrightarrow 00:44:33.476$ This is also quite, let's say,

 $00:44:33.476 \longrightarrow 00:44:35.116$ natural to think that's OK.

NOTE Confidence: 0.792972314

 $00:44:35.120 \longrightarrow 00:44:37.232$ When you when you change the the

NOTE Confidence: 0.792972314

 $00:44:37.232 \rightarrow 00:44:39.320$ integration of information across the brain,

NOTE Confidence: 0.792972314

 $00:44:39.320 \longrightarrow 00:44:40.850$ you will have this subjective effect.

NOTE Confidence: 0.684731414545455

 $00{:}44{:}41{.}860 \dashrightarrow 00{:}44{:}44{.}513$ But they they could simply be correlated

NOTE Confidence: 0.684731414545455

 $00:44:44.513 \rightarrow 00:44:46.790$ with the intensity effect specifically

NOTE Confidence: 0.8595364

 $00:44:46.800 \rightarrow 00:44:49.178$ exactly in this in this study, it was

NOTE Confidence: 0.8595364

 $00{:}44{:}49{.}178 \dashrightarrow 00{:}44{:}51{.}648$ not correlated to specific substrate.

NOTE Confidence: 0.901278804285714

 $00{:}44{:}53.770 \dashrightarrow 00{:}44{:}55.738$ I mean it would be interested to, yeah,

NOTE Confidence: 0.901278804285714

 $00{:}44{:}55{.}738 \dashrightarrow 00{:}44{:}57{.}482$ yeah, it would be interesting to have to

NOTE Confidence: 0.901278804285714

 $00{:}44{:}57{.}482 \dashrightarrow 00{:}44{:}59{.}107$ have something that is more specific,

NOTE Confidence: 0.901278804285714

 $00{:}44{:}59{.}110 \dashrightarrow 00{:}45{:}00{.}772$ but also all these phenomena are

NOTE Confidence: 0.901278804285714

 $00{:}45{:}00.772 \dashrightarrow 00{:}45{:}02.310$ probably correlated one to another,

NOTE Confidence: 0.901278804285714

 $00{:}45{:}02{.}310 \dashrightarrow 00{:}45{:}04{.}704$ so it's difficult to to separate them.

 $00:45:06.780 \longrightarrow 00:45:10.212$ Regarding emotions and mood.

NOTE Confidence: 0.788969192

 $00{:}45{:}10{.}212 \dashrightarrow 00{:}45{:}14{.}808$ So we saw this decreased brain response to

NOTE Confidence: 0.788969192

 $00:45:14.808 \rightarrow 00:45:17.682$ negative emotional stimuli and this

NOTE Confidence: 0.788969192

 $00:45:17.682 \rightarrow 00:45:21.190$ could lead to a bias toward positive emotion.

NOTE Confidence: 0.788969192

 $00{:}45{:}21.190 \dashrightarrow 00{:}45{:}23.950$ And in fact it was not.

NOTE Confidence: 0.788969192

 $00:45:23.950 \longrightarrow 00:45:26.646$ It was found, but maybe not as expected.

NOTE Confidence: 0.788969192

 $00:45:26.650 \dashrightarrow 00:45:29.290$ So here you can see that the decrease.

NOTE Confidence: 0.788969192

 $00:45:29.290 \rightarrow 00:45:31.838$ So there is this decrease in the

NOTE Confidence: 0.788969192

00:45:31.838 --> 00:45:34.415 amygdala for negative that is more

NOTE Confidence: 0.788969192

 $00:45:34.415 \longrightarrow 00:45:36.395$ important than for neutral.

NOTE Confidence: 0.788969192

 $00{:}45{:}36{.}400 \dashrightarrow 00{:}45{:}40{.}048$ Uh stimuli and and uh the reaction time

NOTE Confidence: 0.788969192

 $00{:}45{:}40.048 \dashrightarrow 00{:}45{:}44.197$ that you can see uh uh under is increased,

NOTE Confidence: 0.788969192

 $00:45:44.200 \rightarrow 00:45:45.744$ but it seems to be increased for everything.

NOTE Confidence: 0.788969192

 $00:45:45.750 \rightarrow 00:45:47.300$ So negative, neutral and shapes.

NOTE Confidence: 0.788969192

 $00{:}45{:}47{.}300 \dashrightarrow 00{:}45{:}48{.}637$ That is the control in these studies.

NOTE Confidence: 0.788969192

 $00:45:48.640 \rightarrow 00:45:53.536$ So not very specific to an emotional aspect.

- NOTE Confidence: 0.788969192
- $00:45:53.540 \rightarrow 00:45:53.934$ Unfortunately,
- NOTE Confidence: 0.788969192
- $00:45:53.934 \longrightarrow 00:45:56.298$ let's say or in other study,
- NOTE Confidence: 0.788969192
- $00:45:56.300 \longrightarrow 00:45:58.760$ there is some specific bias
- NOTE Confidence: 0.788969192
- $00:45:58.760 \longrightarrow 00:46:00.236$ toward positive emotion.
- NOTE Confidence: 0.788969192
- $00{:}46{:}00{.}240 \dashrightarrow 00{:}46{:}05{.}424$ So in this case it's like the the error
- NOTE Confidence: 0.788969192
- $00{:}46{:}05{.}424 \dashrightarrow 00{:}46{:}07{.}339$ rate in recognizing emotional faces.
- NOTE Confidence: 0.788969192
- $00:46:07.339 \longrightarrow 00:46:09.900$ So what you can see is that there
- NOTE Confidence: 0.788969192
- $00:46:09.900 \longrightarrow 00:46:11.440$ is more error for negative,
- NOTE Confidence: 0.788969192
- $00{:}46{:}11{.}440 \dashrightarrow 00{:}46{:}14{.}800$ so it's negative emotion is less recognized.
- NOTE Confidence: 0.788969192
- $00:46:14.800 \rightarrow 00:46:17.158$ And in this study also you can see that
- NOTE Confidence: 0.788969192
- $00:46:17.158 \rightarrow 00:46:19.686$ there is less recognition for fearful faces.
- NOTE Confidence: 0.788969192
- 00:46:19.690 --> 00:46:22.048 You don't have it for other,
- NOTE Confidence: 0.788969192
- $00{:}46{:}22.050 \dashrightarrow 00{:}46{:}24.150$ it's not significant for the other emotions.
- NOTE Confidence: 0.788969192
- $00{:}46{:}24.150 \dashrightarrow 00{:}46{:}27.054$ And in this study they used 2 doses
- NOTE Confidence: 0.788969192
- $00{:}46{:}27.054 \dashrightarrow 00{:}46{:}29.702$ of LSD and there is not apparently
- NOTE Confidence: 0.788969192

 $00:46:29.702 \longrightarrow 00:46:32.414$ a dose effect for this aspect.

NOTE Confidence: 0.854157456190476

 $00{:}46{:}34{.}540 \dashrightarrow 00{:}46{:}37{.}236$ And what we may be interested in in

NOTE Confidence: 0.854157456190476

 $00{:}46{:}37.236 \dashrightarrow 00{:}46{:}39.336$ particular as as psychiatrist as I

NOTE Confidence: 0.854157456190476

 $00:46:39.336 \longrightarrow 00:46:41.780$ am is the positive effect on mood.

NOTE Confidence: 0.854157456190476

 $00{:}46{:}41.780 \dashrightarrow 00{:}46{:}44.795$ And for that even in the first study we

NOTE Confidence: 0.854157456190476

 $00{:}46{:}44.795 \dashrightarrow 00{:}46{:}48.099$ have a significant positive effect on mood.

NOTE Confidence: 0.854157456190476

 $00{:}46{:}48.100 \dashrightarrow 00{:}46{:}50.900$ And in the second one too that is

NOTE Confidence: 0.854157456190476

 $00:46:50.900 \rightarrow 00:46:52.964$ like associated with stellar sibling

NOTE Confidence: 0.854157456190476

 $00{:}46{:}52{.}964 \dashrightarrow 00{:}46{:}55{.}538$ index or in Africa controls here.

NOTE Confidence: 0.854157456190476

 $00:46:55.540 \longrightarrow 00:46:57.990$ And what you can see is that

NOTE Confidence: 0.854157456190476

 $00{:}46{:}57{.}990 \dashrightarrow 00{:}47{:}00{.}039$ this positive effect change is

NOTE Confidence: 0.854157456190476

 $00{:}47{:}00{.}039 \dashrightarrow 00{:}47{:}02{.}339$ correlated to the enterable change.

NOTE Confidence: 0.854157456190476

 $00:47:02.340 \longrightarrow 00:47:03.720$ So this is quite a.

NOTE Confidence: 0.854157456190476

 $00{:}47{:}03.720 \dashrightarrow 00{:}47{:}06.464$ Grievance and are quite nice to see that

NOTE Confidence: 0.854157456190476

 $00:47:06.464 \longrightarrow 00:47:09.474$ it could be a like one of the neural

NOTE Confidence: 0.854157456190476

 $00:47:09.474 \rightarrow 00:47:11.658$ substrates of this of this improvement.

- NOTE Confidence: 0.7326779366666667
- $00{:}47{:}11{.}960 \dashrightarrow 00{:}47{:}15{.}566$ There's a comment in the chat.
- NOTE Confidence: 0.7326779366666667
- $00{:}47{:}15.570 \dashrightarrow 00{:}47{:}17.922$ That the. Pointing out that these
- NOTE Confidence: 0.7326779366666667
- 00:47:17.922 --> 00:47:20.570 are all in healthy controls exactly,
- NOTE Confidence: 0.7326779366666667
- $00{:}47{:}20.570 \dashrightarrow 00{:}47{:}22.368$ or perhaps general population.
- NOTE Confidence: 0.7326779366666667
- $00{:}47{:}22.370 \dashrightarrow 00{:}47{:}24.338$ So it's possible that these would
- NOTE Confidence: 0.7326779366666667
- $00:47:24.338 \rightarrow 00:47:25.442$ be qualitatively different findings
- NOTE Confidence: 0.7326779366666667
- $00:47:25.442 \longrightarrow 00:47:26.858$ into test subjects or in another.
- NOTE Confidence: 0.676314146
- $00{:}47{:}27{.}490 \dashrightarrow 00{:}47{:}29{.}850$ Thank you for this transition.
- NOTE Confidence: 0.676314146
- $00{:}47{:}29.850 \dashrightarrow 00{:}47{:}33.119$ So I'm going to the to the
- NOTE Confidence: 0.676314146
- $00:47:33.119 \longrightarrow 00:47:34.053$ antidepressant effect.
- NOTE Confidence: 0.676314146
- 00:47:34.060 --> 00:47:35.248 And uh, overall, uh,
- NOTE Confidence: 0.676314146
- $00{:}47{:}35{.}248 \dashrightarrow 00{:}47{:}37{.}030$ what was found is that the
- NOTE Confidence: 0.676314146
- $00{:}47{:}37.102 \dashrightarrow 00{:}47{:}38.950$ changes in magnitude were
- NOTE Confidence: 0.676314146
- $00{:}47{:}38{.}950 \dashrightarrow 00{:}47{:}40{.}798$ also alleviating depression in
- NOTE Confidence: 0.676314146
- $00{:}47{:}40.798 \dashrightarrow 00{:}47{:}42.490$ participant with depression.
- NOTE Confidence: 0.475956620571429

- $00:47:43.950 \longrightarrow 00:47:45.462$ Just another comment please.
- NOTE Confidence: 0.475956620571429
- $00{:}47{:}45{.}462 \dashrightarrow 00{:}47{:}46{.}596$ Are acute effects.
- NOTE Confidence: 0.7204687475
- $00{:}47{:}49{.}190 \dashrightarrow 00{:}47{:}49{.}698$ There's a bit of
- NOTE Confidence: 0.7622667
- $00{:}47{:}49.880 \dashrightarrow 00{:}47{:}52.370$ yeah, everything is acute I so
- NOTE Confidence: 0.7622667
- $00:47:52.370 \longrightarrow 00:47:54.605$ there are several studies showing
- NOTE Confidence: 0.7622667
- 00:47:54.605 --> 00:47:57.075 studying effects after one week,
- NOTE Confidence: 0.7622667
- $00:47:57.080 \longrightarrow 00:47:58.646$ but I did not detail by
- NOTE Confidence: 0.7622667
- 00:47:58.646 --> 00:48:00.409 mean I have like with time,
- NOTE Confidence: 0.7622667
- $00{:}48{:}00{.}410 \dashrightarrow 00{:}48{:}01{.}718$ so I did not detail everything.
- NOTE Confidence: 0.7622667
- $00{:}48{:}01.720 \dashrightarrow 00{:}48{:}06.207$ So this is really for acute effects.
- NOTE Confidence: 0.7622667
- $00:48:06.210 \longrightarrow 00:48:09.250$ So for participants with depression,
- NOTE Confidence: 0.7622667
- $00{:}48{:}09{.}250 \dashrightarrow 00{:}48{:}12{.}141$ so quite strangely, there is an increased NOTE Confidence: 0.7622667
- 00:48:12.141 --> 00:48:14.549 animal activity during phase processing.
- NOTE Confidence: 0.7622667
- 00:48:14.550 --> 00:48:17.518 So this was interpreted by the others as
- NOTE Confidence: 0.7622667
- $00{:}48{:}17{.}518$ --> $00{:}48{:}20{.}807$ being a moment where you are confronted, NOTE Confidence: 0.7622667
- $00{:}48{:}20{.}810 \dashrightarrow 00{:}48{:}23{.}834$ confronted to negative emotion and that it

- NOTE Confidence: 0.7622667
- $00:48:23.834 \rightarrow 00:48:27.030$ could be still positive for the people.

00:48:27.030 --> 00:48:29.984 But during rest there is a decreased

NOTE Confidence: 0.7622667

 $00:48:29.984 \longrightarrow 00:48:32.200$ amygdala activity that was in

NOTE Confidence: 0.7622667

 $00:48:32.200 \longrightarrow 00:48:34.390$ this study correlated with the

NOTE Confidence: 0.7622667

 $00:48:34.390 \longrightarrow 00:48:36.495$ improvement that was subsequently.

NOTE Confidence: 0.7622667

00:48:36.495 --> 00:48:38.160 Observed after service.

NOTE Confidence: 0.715679338333333

 $00:48:41.450 \rightarrow 00:48:45.188$ There is also a decreased amygdala.

NOTE Confidence: 0.715679338333333

 $00:48:45.190 \longrightarrow 00:48:47.755$ Even from the personal cortex

NOTE Confidence: 0.715679338333333

 $00:48:47.755 \longrightarrow 00:48:49.807$ connectivity that was correlated

NOTE Confidence: 0.715679338333333

 $00{:}48{:}49{.}807 \dashrightarrow 00{:}48{:}52{.}834$ with a decrease in ruminations and

NOTE Confidence: 0.715679338333333

 $00{:}48{:}52{.}834 \dashrightarrow 00{:}48{:}56{.}432$ overall what is observed in this study

NOTE Confidence: 0.715679338333333

 $00{:}48{:}56{.}432 \dashrightarrow 00{:}48{:}59{.}539$ where subjects with depression at the

NOTE Confidence: 0.715679338333333

00:48:59.540 --> 00:49:01.130 received signal savings that there

NOTE Confidence: 0.715679338333333

00:49:01.130 --> 00:49:03.024 is a better emotion recognition after

NOTE Confidence: 0.715679338333333

 $00{:}49{:}03.024 \dashrightarrow 00{:}49{:}04.774$ the the the intake that is correlated

- $00:49:04.774 \longrightarrow 00:49:06.488$ with the improvement of the mood.
- NOTE Confidence: 0.81704183
- $00:49:07.740 \longrightarrow 00:49:09.810$ When you say after is this.
- NOTE Confidence: 0.74829128
- 00:49:10.860 --> 00:49:12.216 During these days, uh,
- NOTE Confidence: 0.74829128
- 00:49:12.216 --> 00:49:15.300 in it's one week after I think I'm, yeah.
- NOTE Confidence: 0.74829128
- $00:49:15.300 \longrightarrow 00:49:16.830$ Well beyond the period. It's.
- NOTE Confidence: 0.74829128
- $00:49:16.830 \longrightarrow 00:49:18.830$ Yeah. It's their ability to
- NOTE Confidence: 0.74829128
- $00:49:18.830 \dashrightarrow 00:49:20.430$ recognize after the treatment.
- NOTE Confidence: 0.74829128
- $00:49:20.430 \rightarrow 00:49:22.218$ Yes, it's not during the treatment.
- NOTE Confidence: 0.7614136766666667
- $00{:}49{:}25{.}440 \dashrightarrow 00{:}49{:}28{.}110$ So there there are two studies
- NOTE Confidence: 0.7614136766666667
- $00:49:28.110 \rightarrow 00:49:30.362$ exploring how network integration
- NOTE Confidence: 0.7614136766666667
- $00:49:30.362 \rightarrow 00:49:34.332$ changes the sailor saving could play a
- NOTE Confidence: 0.7614136766666667
- $00:49:34.332 \longrightarrow 00:49:36.877$ role in this antidepressant effects.
- NOTE Confidence: 0.7614136766666667
- $00{:}49{:}36{.}880 \dashrightarrow 00{:}49{:}39{.}080$ So the first one we showed that there
- NOTE Confidence: 0.7614136766666667
- 00:49:39.080 --> 00:49:41.523 was a an increased connectivity between
- NOTE Confidence: 0.7614136766666667
- $00:49:41.523 \rightarrow 00:49:44.253$ the entire single singular cortex and
- NOTE Confidence: 0.7614136766666667
- $00:49:44.323 \rightarrow 00:49:46.373$ the posterior singulate cortex that

 $00:49:46.373 \rightarrow 00:49:49.045$ are part of the respectively that's

NOTE Confidence: 0.7614136766666667

 $00:49:49.045 \rightarrow 00:49:52.120$ positive network and different network,

NOTE Confidence: 0.7614136766666667

 $00:49:52.120 \longrightarrow 00:49:54.946$ so there is a better integration.

NOTE Confidence: 0.7614136766666667

 $00:49:54.950 \rightarrow 00:49:56.735$ Between these two regions pertaining

NOTE Confidence: 0.7614136766666667

 $00{:}49{:}56.735 \dashrightarrow 00{:}49{:}59.341$ to two different networks and they also

NOTE Confidence: 0.7614136766666667

 $00:49:59.341 \rightarrow 00:50:01.236$ studied like the cognitive flexibility,

NOTE Confidence: 0.7614136766666667

 $00:50:01.240 \longrightarrow 00:50:03.224$ they found that both of them were increased.

NOTE Confidence: 0.761413676666667

00:50:03.230 --> 00:50:04.688 But quite strangely,

NOTE Confidence: 0.7614136766666667

 $00:50:04.688 \rightarrow 00:50:07.118$ these two measures were articulated,

NOTE Confidence: 0.7614136766666667

 $00:50:07.120 \longrightarrow 00:50:09.150$ so the more changing in the connectivity

NOTE Confidence: 0.7614136766666667

 $00:50:09.150 \longrightarrow 00:50:11.559$ and the less improvement in flexibility.

NOTE Confidence: 0.7614136766666667

 $00{:}50{:}11.560 \dashrightarrow 00{:}50{:}16.187$ So it was difficult to understand this

NOTE Confidence: 0.7614136766666667

00:50:16.187 --> 00:50:21.020 result. And there is, uh, another um.

NOTE Confidence: 0.7614136766666667

 $00{:}50{:}21.020 \dashrightarrow 00{:}50{:}23.243$ Study uh where uh you can see that the

NOTE Confidence: 0.7614136766666667

 $00:50:23.243 \rightarrow 00:50:25.161$ higher integration between different

00:50:25.161 - > 00:50:26.964 networks, so the default network,

NOTE Confidence: 0.7614136766666667

 $00{:}50{:}26{.}964 \dashrightarrow 00{:}50{:}27{.}596$ executive network,

NOTE Confidence: 0.7614136766666667

 $00:50:27.600 \rightarrow 00:50:29.760$ salience network that you can see

NOTE Confidence: 0.7614136766666667

 $00:50:29.760 \longrightarrow 00:50:32.460$ in this bar plot and the decrease

NOTE Confidence: 0.7614136766666667

 $00{:}50{:}32.460 \dashrightarrow 00{:}50{:}34.560$ recruitment of the default mode

NOTE Confidence: 0.7614136766666667

 $00{:}50{:}34{.}560 \dashrightarrow 00{:}50{:}37{.}157$ network was associated with a better

NOTE Confidence: 0.7614136766666667

 $00:50:37.160 \longrightarrow 00:50:40.436$ outcome of the depressive symptoms.

NOTE Confidence: 0.7614136766666667

 $00{:}50{:}40{.}440 \dashrightarrow 00{:}50{:}42{.}379$ And this seems to be specific to

NOTE Confidence: 0.7614136766666667

 $00{:}50{:}42.379 \dashrightarrow 00{:}50{:}43.986$ the Silo saving treatment because

NOTE Confidence: 0.7614136766666667

 $00:50:43.986 \rightarrow 00:50:46.134$ in this study they compared with

NOTE Confidence: 0.7614136766666667

 $00:50:46.134 \longrightarrow 00:50:48.553$ the stellar prime and they did not

NOTE Confidence: 0.7614136766666667

 $00:50:48.553 \rightarrow 00:50:50.198$ observe this change of modularity.

NOTE Confidence: 0.7614136766666667

 $00:50:50.200 \longrightarrow 00:50:51.632$ So what they called.

NOTE Confidence: 0.7614136766666667

 $00:50:51.632 \longrightarrow 00:50:54.502$ If you like to use the inverse

NOTE Confidence: 0.7614136766666667

 $00:50:54.502 \longrightarrow 00:50:55.778$ of integration.

NOTE Confidence: 0.7614136766666667

00:50:55.780 --> 00:50:56.230 No,

- NOTE Confidence: 0.7614136766666667
- 00:50:56.230 -> 00:50:59.380 I mean yeah you understand so the
- NOTE Confidence: 0.7614136766666667
- $00{:}50{:}59{.}380 \dashrightarrow 00{:}51{:}02{.}179$ when the network are correlated
- NOTE Confidence: 0.7614136766666667
- $00{:}51{:}02{.}179 \dashrightarrow 00{:}51{:}05{.}594$ there is a less modularity and
- NOTE Confidence: 0.7614136766666667
- $00{:}51{:}05{.}594 \dashrightarrow 00{:}51{:}08{.}078$ they find that it was correlated
- NOTE Confidence: 0.7614136766666667
- $00{:}51{:}08.078 \dashrightarrow 00{:}51{:}11.129$ to the to the outcome.
- NOTE Confidence: 0.7614136766666667
- 00:51:11.130 -> 00:51:11.640 OK.
- NOTE Confidence: 0.574943902
- $00:51:11.810 \longrightarrow 00:51:13.740$ Yeah, yeah. In the chat.
- NOTE Confidence: 0.574943902
- $00:51:13.740 \longrightarrow 00:51:18.290$ Sharif so. These are. Let's see.
- NOTE Confidence: 0.574943902
- $00:51:18.290 \longrightarrow 00:51:20.180$ Well, the comment is it's hard
- NOTE Confidence: 0.574943902
- $00:51:20.180 \longrightarrow 00:51:22.039$ to have a placebo control.
- NOTE Confidence: 0.724912134
- $00:51:24.730 \longrightarrow 00:51:25.870$ The changes are you know,
- NOTE Confidence: 0.724912134
- $00{:}51{:}25{.}870 \dashrightarrow 00{:}51{:}26{.}464$ they're, they're,
- NOTE Confidence: 0.724912134
- $00:51:26.464 \rightarrow 00:51:28.543$ they're changes in many of these cases.
- NOTE Confidence: 0.724912134
- $00{:}51{:}28{.}550 \dashrightarrow 00{:}51{:}30{.}536$ How much of that is attributable
- NOTE Confidence: 0.724912134
- $00{:}51{:}30{.}536 \dashrightarrow 00{:}51{:}32{.}729$ to suicide and versus other aspects
- NOTE Confidence: 0.724912134

 $00:51:32.730 \rightarrow 00:51:34.770$ of the experience that the patient,

NOTE Confidence: 0.724912134

 $00{:}51{:}34{.}770 \dashrightarrow 00{:}51{:}37{.}230$ which I think is a an incredibly

NOTE Confidence: 0.724912134

 $00:51:37.230 \rightarrow 00:51:40.990$ incredible challenge for this entire field,

NOTE Confidence: 0.724912134

00:51:40.990 --> 00:51:42.638 not in clinical outcome

NOTE Confidence: 0.724912134

 $00:51:42.638 \longrightarrow 00:51:44.740$ studies as well as study.

NOTE Confidence: 0.865008929333333

00:51:46.280 --> 00:51:48.275 It's also like I I'm not sure

NOTE Confidence: 0.865008929333333

 $00{:}51{:}48.275 \dashrightarrow 00{:}51{:}50.937$ that the the rule is necessary to

NOTE Confidence: 0.865008929333333

 $00:51:50.937 \rightarrow 00:51:53.107$ distinguish the like the subjective

NOTE Confidence: 0.865008929333333

00:51:53.107 --> 00:51:55.531 effects or let's say like I'm not

NOTE Confidence: 0.865008929333333

 $00:51:55.531 \rightarrow 00:51:58.256$ sure if it's possible to have a

NOTE Confidence: 0.865008929333333

 $00:51:58.256 \rightarrow 00:52:00.666$ very good placebo condition indeed.

NOTE Confidence: 0.865008929333333

00:52:00.670 --> 00:52:03.162 And I don't know like let's say

NOTE Confidence: 0.865008929333333

00:52:03.162 --> 00:52:05.470 my practical part is more like OK,

NOTE Confidence: 0.865008929333333

 $00:52:05.470 \rightarrow 00:52:06.685$ it's like what you're interested

NOTE Confidence: 0.865008929333333

 $00:52:06.685 \rightarrow 00:52:08.550$ in is the is the improvement.

NOTE Confidence: 0.865008929333333

 $00:52:08.550 \longrightarrow 00:52:10.654$ So of course you don't want to to

- NOTE Confidence: 0.865008929333333
- $00:52:10.654 \longrightarrow 00:52:12.884$ put your patient with the like a
- NOTE Confidence: 0.865008929333333
- $00:52:12.884 \rightarrow 00:52:14.786$ risk that will be that's correlated
- NOTE Confidence: 0.865008929333333
- $00:52:14.786 \longrightarrow 00:52:16.300$ to these improvements.
- NOTE Confidence: 0.865008929333333
- $00{:}52{:}16{.}300 \dashrightarrow 00{:}52{:}19{.}378$ But um, yeah and this is also one of
- NOTE Confidence: 0.865008929333333
- $00:52:19.378 \longrightarrow 00:52:22.720$ the strong attack with to microdosing.
- NOTE Confidence: 0.865008929333333
- $00:52:22.720 \longrightarrow 00:52:23.820$ But in fact yes,
- NOTE Confidence: 0.865008929333333
- $00:52:23.820 \rightarrow 00:52:25.876$ in all these studies of course people
- NOTE Confidence: 0.865008929333333
- $00{:}52{:}25.876 \dashrightarrow 00{:}52{:}28.291$ knows that they that they were they
- NOTE Confidence: 0.865008929333333
- $00:52:28.291 \rightarrow 00:52:30.098$ have psychedelic and not a placebo.
- NOTE Confidence: 0.865008929333333
- 00:52:30.100 --> 00:52:30.590 So
- NOTE Confidence: 0.687546431428571
- $00{:}52{:}30{.}720 \dashrightarrow 00{:}52{:}32{.}510$ in this case these are
- NOTE Confidence: 0.687546431428571
- $00:52:32.510 \dashrightarrow 00:52:33.575$ within subject comparisons.
- NOTE Confidence: 0.687546431428571
- $00{:}52{:}33{.}575 \dashrightarrow 00{:}52{:}35{.}300$ So place bo question doesn't arise
- NOTE Confidence: 0.687546431428571
- $00{:}52{:}35{.}300 \dashrightarrow 00{:}52{:}38{.}125$ but it does for some of the other
- NOTE Confidence: 0.687546431428571
- $00:52:38.125 \dashrightarrow 00:52:39.513$ literature that you've reviewed.
- NOTE Confidence: 0.687546431428571

 $00:52:39.520 \longrightarrow 00:52:41.134$ Think of this as the cordless

NOTE Confidence: 0.687546431428571

 $00:52:41.134 \longrightarrow 00:52:42.735$ of the overall experience. Yeah.

NOTE Confidence: 0.687546431428571

00:52:42.735 --> 00:52:44.340 Yeah. Significant component.

NOTE Confidence: 0.737187001666667

00:52:44.350 --> 00:52:45.649 Exactly. Yeah. Yeah.

NOTE Confidence: 0.737187001666667

 $00:52:45.649 \longrightarrow 00:52:47.751$ But I mean, the experience is

NOTE Confidence: 0.737187001666667

 $00{:}52{:}47.751 \dashrightarrow 00{:}52{:}49.086$ also treated by the component.

NOTE Confidence: 0.737187001666667

00:52:49.090 --> 00:52:50.206 So I don't know if it's

NOTE Confidence: 0.737187001666667

 $00:52:50.210 \longrightarrow 00:52:51.960$ realistically satisfied.

NOTE Confidence: 0.737187001666667

 $00{:}52{:}51{.}960 \dashrightarrow 00{:}52{:}54{.}009$ Yeah, yeah, exactly.

NOTE Confidence: 0.85726861

 $00{:}52{:}58{.}860 \dashrightarrow 00{:}53{:}00{.}516$ So my last thought, if I have time,

NOTE Confidence: 0.85726861

 $00{:}53{:}00{.}520 \dashrightarrow 00{:}53{:}02{.}060$ is to talk a bit about the

NOTE Confidence: 0.85726861

 $00{:}53{:}02{.}060 \dashrightarrow 00{:}53{:}03{.}184$ theoretical models. It's fine.

NOTE Confidence: 0.85726861

 $00:53:03.184 \rightarrow 00:53:06.300$ So, so there are few of them right now.

NOTE Confidence: 0.85726861

 $00:53:06.300 \rightarrow 00:53:08.673$ The consequence theory,

NOTE Confidence: 0.85726861

 $00:53:08.673 \rightarrow 00:53:11.638$ the relaxed belief under psychedelics,

NOTE Confidence: 0.85726861

 $00:53:11.640 \rightarrow 00:53:14.826$ and the cortical posterior cortical models.

- NOTE Confidence: 0.85726861
- $00:53:14.830 \longrightarrow 00:53:18.659$ So we will start with the the
- NOTE Confidence: 0.85726861
- $00{:}53{:}18.659 \dashrightarrow 00{:}53{:}21.010$ corticostriatal dynamic particle theory.
- NOTE Confidence: 0.85726861
- $00:53:21.010 \longrightarrow 00:53:22.984$ So the main idea is that the
- NOTE Confidence: 0.85726861
- $00:53:22.984 \rightarrow 00:53:25.080$ teams will play a very important
- NOTE Confidence: 0.85726861
- $00{:}53{:}25{.}080 \dashrightarrow 00{:}53{:}27{.}045$ role in the psychedelic effects,
- NOTE Confidence: 0.85726861
- $00:53:27.050 \longrightarrow 00:53:29.600$ and in particular it will.
- NOTE Confidence: 0.796863066111111
- $00:53:31.610 \rightarrow 00:53:33.486$ It, like the telemus,
- NOTE Confidence: 0.796863066111111
- $00:53:33.486 \rightarrow 00:53:35.831$ normally filter information and other
- NOTE Confidence: 0.796863066111111
- $00:53:35.831 \rightarrow 00:53:38.150$ psychedelic it will be less able
- NOTE Confidence: 0.796863066111111
- $00:53:38.150 \rightarrow 00:53:39.816$ to filter information, intercepts,
- NOTE Confidence: 0.796863066111111
- $00:53:39.816 \rightarrow 00:53:41.604$ even exceptive information.
- NOTE Confidence: 0.796863066111111
- 00:53:41.604 --> 00:53:45.839 And um this uh will lead to um,
- NOTE Confidence: 0.796863066111111
- $00{:}53{:}45{.}840 \dashrightarrow 00{:}53{:}48{.}012$ uh kind of flooded uh information
- NOTE Confidence: 0.796863066111111
- $00{:}53{:}48.012 \dashrightarrow 00{:}53{:}50.189$ coming from the the sensory areas
- NOTE Confidence: 0.796863066111111
- $00:53:50.189 \rightarrow 00:53:52.813$ and it was shown also and I showed
- NOTE Confidence: 0.796863066111111

 $00:53:52.883 \longrightarrow 00:53:55.505$ that before that there was an

NOTE Confidence: 0.796863066111111

 $00:53:55.505 \rightarrow 00:53:57.253$ increased connectivity between the

NOTE Confidence: 0.796863066111111

 $00{:}53{:}57{.}260 \dashrightarrow 00{:}53{:}59{.}606$ telemus and the sensory areas whereas

NOTE Confidence: 0.796863066111111

 $00:53:59.606 \rightarrow 00:54:01.794$ there is a decreased connectivity

NOTE Confidence: 0.796863066111111

 $00:54:01.794 \rightarrow 00:54:04.549$ probably with the associative areas.

NOTE Confidence: 0.796863066111111

 $00{:}54{:}04{.}550 \dashrightarrow 00{:}54{:}06{.}699$ So overall this will the terms will

NOTE Confidence: 0.796863066111111

 $00:54:06.699 \rightarrow 00:54:09.540$ be at the origin of this pattern that

NOTE Confidence: 0.796863066111111

 $00:54:09.540 \rightarrow 00:54:12.069$ I already showed 2 whereby there is.

NOTE Confidence: 0.796863066111111

 $00{:}54{:}12.070 \dashrightarrow 00{:}54{:}14.818$ The decreased connectivity for

NOTE Confidence: 0.796863066111111

 $00:54:14.818 \rightarrow 00:54:16.879$ the associative areas,

NOTE Confidence: 0.796863066111111

 $00{:}54{:}16.880 \dashrightarrow 00{:}54{:}18.500$ whereas there is an increased

NOTE Confidence: 0.796863066111111

 $00:54:18.500 \longrightarrow 00:54:19.796$ connectivity for the sensory

NOTE Confidence: 0.796863066111111

 $00{:}54{:}19.796 \dashrightarrow 00{:}54{:}21.475$ cortices with the rest of the brain.

NOTE Confidence: 0.796863066111111

 $00{:}54{:}21{.}480 \dashrightarrow 00{:}54{:}24{.}531$ So there will be a kind of switch from

NOTE Confidence: 0.796863066111111

 $00:54:24.531 \rightarrow 00:54:27.492$ like a balance where you will have a

NOTE Confidence: 0.796863066111111

 $00:54:27.492 \rightarrow 00:54:30.790$ lot of sensory processing and really

- NOTE Confidence: 0.796863066111111
- $00:54:30.790 \rightarrow 00:54:32.920$ degraded integrative processing.
- NOTE Confidence: 0.796863066111111
- 00:54:32.920 --> 00:54:35.096 And this was fine,
- NOTE Confidence: 0.796863066111111
- $00{:}54{:}35{.}096 \dashrightarrow 00{:}54{:}37{.}130$ like with these two maps that
- NOTE Confidence: 0.796863066111111
- $00:54:37.130 \longrightarrow 00:54:38.770$ are quite similar to each other,
- NOTE Confidence: 0.796863066111111
- $00:54:38.770 \longrightarrow 00:54:39.290$ what is
- NOTE Confidence: 0.75846021375
- $00:54:39.300 \longrightarrow 00:54:41.030$ that gap in the middle
- NOTE Confidence: 0.75846021375
- $00:54:41.030 \rightarrow 00:54:42.068$ lateral prefrontal cortex?
- NOTE Confidence: 0.75846021375
- $00:54:42.070 \dashrightarrow 00:54:43.870$ There's an area of prefrontal there.
- NOTE Confidence: 0.75846021375
- $00{:}54{:}43.870 \dashrightarrow 00{:}54{:}46.518$ It is not reduced.
- NOTE Confidence: 0.75846021375
- 00:54:46.520 --> 00:54:49.090 Still. Where? I'm sorry.
- NOTE Confidence: 0.83135986
- $00{:}54{:}51{.}170 \dashrightarrow 00{:}54{:}53{.}128$ So you've got this global reduction scroll
- NOTE Confidence: 0.83135986
- $00{:}54{:}53.128 \dashrightarrow 00{:}54{:}55.080$ this association protects. Except there.
- NOTE Confidence: 0.69295615
- 00:54:57.630 --> 00:55:00.060 Uh, I like no,
- NOTE Confidence: 0.89740160125
- $00{:}55{:}00{.}070 \dashrightarrow 00{:}55{:}01{.}430$ I don't know what it is exactly that,
- NOTE Confidence: 0.89740160125
- $00:55:01.430 \longrightarrow 00:55:04.363$ but this, so this study were also
- NOTE Confidence: 0.89740160125

 $00:55:04.363 \rightarrow 00:55:07.049$ correlated with global signal regulation.

NOTE Confidence: 0.89740160125

 $00:55:07.050 \dashrightarrow 00:55:11.163$ So I mean this is the map of statistical.

NOTE Confidence: 0.89740160125

00:55:11.170 --> 00:55:13.114 So it's it's maybe just a threshold effect NOTE Confidence: 0.89740160125

 $00:55:13.114 \rightarrow 00:55:15.021$ and not necessarily something that is

NOTE Confidence: 0.89740160125

 $00:55:15.021 \rightarrow 00:55:17.430$ particularly not affected by this one.

NOTE Confidence: 0.89740160125

00:55:17.430 --> 00:55:21.038 Yeah. Yeah, it's really, yeah.

NOTE Confidence: 0.89740160125

 $00:55:21.040 \longrightarrow 00:55:21.718$ Freeze up and.

NOTE Confidence: 0.8829322125

 $00{:}55{:}25{.}740 \dashrightarrow 00{:}55{:}28{.}628$ So the second model.

NOTE Confidence: 0.8829322125

 $00{:}55{:}28.630 \dashrightarrow 00{:}55{:}30.826$ So the the main claim is that there is

NOTE Confidence: 0.8829322125

 $00:55:30.826 \rightarrow 00:55:33.103$ the under psychedelic there will be

NOTE Confidence: 0.8829322125

 $00{:}55{:}33{.}103 \dashrightarrow 00{:}55{:}35{.}310$ decreased prior and increased bottom up.

NOTE Confidence: 0.8829322125

 $00{:}55{:}35{.}310 \dashrightarrow 00{:}55{:}37{.}949$ So it starts from the irregular excitation

NOTE Confidence: 0.8829322125

 $00{:}55{:}37{.}949 \dashrightarrow 00{:}55{:}41{.}152$ of the of the layer 5 pyramidal neurons

NOTE Confidence: 0.8829322125

 $00:55:41.152 \rightarrow 00:55:43.376$ because of the receptor activation.

NOTE Confidence: 0.8829322125

 $00:55:43.376 \rightarrow 00:55:45.428$ According to the others,

NOTE Confidence: 0.8829322125

 $00:55:45.430 \longrightarrow 00:55:48.830$ this is the cause of the decreased power.

- NOTE Confidence: 0.8829322125
- $00{:}55{:}48{.}830 \dashrightarrow 00{:}55{:}51{.}146$ Because there is this kind of

 $00:55:51.146 \rightarrow 00:55:53.121$ desynchronization and thereby less like

NOTE Confidence: 0.8829322125

 $00:55:53.121 \rightarrow 00:55:56.138$ the low frequency rhythm would be less

NOTE Confidence: 0.8829322125

 $00:55:56.138 \rightarrow 00:55:58.509$ synchronized and therefore decreased.

NOTE Confidence: 0.8829322125

 $00:55:58.510 \rightarrow 00:55:59.680$ And this is what is observed,

NOTE Confidence: 0.8829322125

 $00{:}55{:}59{.}680 \dashrightarrow 00{:}56{:}02{.}270$ of course, in the in the literature.

NOTE Confidence: 0.8829322125

 $00:56:02.270 \longrightarrow 00:56:05.180$ And both of these will lead

NOTE Confidence: 0.8829322125

 $00:56:05.180 \longrightarrow 00:56:07.120$ to disruption of integrity.

NOTE Confidence: 0.8829322125

 $00{:}56{:}07{.}120 \dashrightarrow 00{:}56{:}09{.}486$ Of last last scale networks and what

NOTE Confidence: 0.8829322125

 $00:56:09.486 \rightarrow 00:56:12.548$ we have seen about like this increased

NOTE Confidence: 0.8829322125

 $00:56:12.548 \rightarrow 00:56:16.160$ entropy diversity during rest.

NOTE Confidence: 0.8829322125

 $00{:}56{:}16.160 \dashrightarrow 00{:}56{:}18.675$ And this is also corroborated

NOTE Confidence: 0.8829322125

 $00{:}56{:}18.675 \dashrightarrow 00{:}56{:}20.184$ by empirical data.

NOTE Confidence: 0.8829322125

 $00:56:20.190 \longrightarrow 00:56:22.759$ Uh, the other thing that all these

NOTE Confidence: 0.8829322125

 $00{:}56{:}22.759 \dashrightarrow 00{:}56{:}25.369$ corresponds to a decreased precision of

 $00:56:25.369 \rightarrow 00:56:28.458$ high level priors or decrease in belief,

NOTE Confidence: 0.8829322125

 $00{:}56{:}28{.}458{\:}{-}{-}{>}00{:}56{:}30{.}930$ because for them like this alpha

NOTE Confidence: 0.8829322125

 $00{:}56{:}31.010 \dashrightarrow 00{:}56{:}33.410$ rhythm and parameter neuron encodes

NOTE Confidence: 0.8829322125

 $00:56:33.410 \longrightarrow 00:56:35.810$ the precision of the priors.

NOTE Confidence: 0.8829322125

 $00:56:35.810 \longrightarrow 00:56:37.922$ So like it's not very easy to to

NOTE Confidence: 0.8829322125

 $00:56:37.922 \longrightarrow 00:56:40.574$ to to fill this gap between like

NOTE Confidence: 0.8829322125

 $00{:}56{:}40{.}574 \dashrightarrow 00{:}56{:}42{.}624$ the computational aspect and the

NOTE Confidence: 0.8829322125

 $00:56:42.700 \longrightarrow 00:56:44.508$ like the physical aspects.

NOTE Confidence: 0.8829322125

 $00{:}56{:}44{.}510 \dashrightarrow 00{:}56{:}46{.}806$ But this is what they propose and

NOTE Confidence: 0.8829322125

 $00:56:46.806 \rightarrow 00:56:48.822$ the consequence of that would be

NOTE Confidence: 0.8829322125

 $00{:}56{:}48.822 \dashrightarrow 00{:}56{:}50.754$ that there will be a liberation.

NOTE Confidence: 0.8829322125

 $00:56:50.760 \rightarrow 00:56:54.253$ The bottom up information that will slow

NOTE Confidence: 0.8829322125

 $00{:}56{:}54{.}253 \dashrightarrow 00{:}56{:}57{.}680$ and so and also a more as sensibility,

NOTE Confidence: 0.8829322125

 $00:56:57.680 \longrightarrow 00:56:59.520$ sensitivity to updates and

NOTE Confidence: 0.8829322125

 $00{:}56{:}59{.}520 \dashrightarrow 00{:}57{:}00{.}900$ to prediction error.

NOTE Confidence: 0.8829322125

 $00{:}57{:}00{.}900 \dashrightarrow 00{:}57{:}03{.}760$ So you will have you will be more open to

- NOTE Confidence: 0.8829322125
- $00:57:03.835 \rightarrow 00:57:06.559$ new information and update your models.
- NOTE Confidence: 0.8829322125
- $00{:}57{:}06{.}560 \dashrightarrow 00{:}57{:}08{.}252$ And they propose that this is
- NOTE Confidence: 0.8829322125
- $00{:}57{:}08.252 \dashrightarrow 00{:}57{:}10.521$ one of the crucial aspects of the
- NOTE Confidence: 0.8829322125
- $00{:}57{:}10.521 \dashrightarrow 00{:}57{:}12.316$ the rapeutical aspect of this molecule
- NOTE Confidence: 0.8829322125
- $00{:}57{:}12.316 \dashrightarrow 00{:}57{:}14.797$ that you are able to update some rich,
- NOTE Confidence: 0.8829322125
- 00:57:14.800 --> 00:57:16.099 very rigid model,
- NOTE Confidence: 0.8829322125
- 00:57:16.099 --> 00:57:17.398 pathologically rigid model,
- NOTE Confidence: 0.8829322125
- $00:57:17.400 \rightarrow 00:57:18.828$ for example in depression,
- NOTE Confidence: 0.8829322125
- 00:57:18.828 --> 00:57:19.899 anxiety or addictions.
- NOTE Confidence: 0.566183864545454
- $00:57:22.640 \longrightarrow 00:57:25.153$ And finally there is the classic the
- NOTE Confidence: 0.566183864545454
- $00:57:25.153 \rightarrow 00:57:26.640$ cortical cluster cortical model.
- NOTE Confidence: 0.566183864545454
- $00{:}57{:}26{.}640 \dashrightarrow 00{:}57{:}31{.}240$ So. So this is the classroom,
- NOTE Confidence: 0.566183864545454
- $00{:}57{:}31{.}240 \dashrightarrow 00{:}57{:}33{.}980$ and what we know about it is that it is
- NOTE Confidence: 0.566183864545454
- $00{:}57{:}34.055 \dashrightarrow 00{:}57{:}36.799$ that it received input from the corpus.
- NOTE Confidence: 0.566183864545454
- $00{:}57{:}36{.}800 \dashrightarrow 00{:}57{:}42{.}116$ It expresses itself also 5H3 receptors.
- NOTE Confidence: 0.566183864545454

 $00:57:42.120 \longrightarrow 00:57:44.676$ And uh, the role of the claustrum is to

NOTE Confidence: 0.566183864545454

 $00{:}57{:}44.676 \dashrightarrow 00{:}57{:}47.233$ um to allow cortical synchronization and

NOTE Confidence: 0.566183864545454

 $00{:}57{:}47{.}233 \dashrightarrow 00{:}57{:}50{.}520$ also it is activated during task switching.

NOTE Confidence: 0.566183864545454

 $00{:}57{:}50{.}520 \dashrightarrow 00{:}57{:}53{.}310$ So it's a kind of.

NOTE Confidence: 0.566183864545454

 $00{:}57{:}53{.}310$ --> $00{:}57{:}57{.}600$ Then leader of different cortical network.

NOTE Confidence: 0.566183864545454

 $00{:}57{:}57{.}600$ --> $00{:}57{:}59{.}826$ So you should activate through receptors NOTE Confidence: 0.566183864545454

 $00:57:59.826 \rightarrow 00:58:02.501$ at these two location like the clustering

NOTE Confidence: 0.566183864545454

 $00:58:02.501 \rightarrow 00:58:05.140$ directly and also in the prefrontal cortex.

NOTE Confidence: 0.566183864545454

 $00{:}58{:}05{.}140 \dashrightarrow 00{:}58{:}07{.}204$ So the others think that it

NOTE Confidence: 0.566183864545454

 $00:58:07.204 \rightarrow 00:58:08.580$ results in a decoupling.

NOTE Confidence: 0.566183864545454

 $00:58:08.580 \longrightarrow 00:58:10.470$ So it will not be synchronized because

NOTE Confidence: 0.566183864545454

 $00:58:10.470 \rightarrow 00:58:12.358$ there will not be like this harmony

NOTE Confidence: 0.566183864545454

 $00{:}58{:}12{.}358 \dashrightarrow 00{:}58{:}14{.}739$ between the two but they will work a bit

NOTE Confidence: 0.566183864545454

 $00{:}58{:}14.739 \dashrightarrow 00{:}58{:}16.594$ separately and this will lead to aberrant

NOTE Confidence: 0.566183864545454

 $00:58:16.600 \rightarrow 00:58:19.340$ cognitive control on network states.

NOTE Confidence: 0.566183864545454

 $00:58:19.340 \longrightarrow 00:58:21.604$ And in fact overall the the the customer

- NOTE Confidence: 0.566183864545454
- $00{:}58{:}21{.}604 \dashrightarrow 00{:}58{:}24{.}181$ will not be able to no more to to do
- NOTE Confidence: 0.566183864545454
- $00:58:24.181 \rightarrow 00:58:25.411$ these cortical synchronization and
- NOTE Confidence: 0.566183864545454
- $00{:}58{:}25{.}411 \dashrightarrow 00{:}58{:}27{.}798$ it will lead to a disruption and.
- NOTE Confidence: 0.566183864545454
- $00{:}58{:}27.800 \dashrightarrow 00{:}58{:}29.625$ And that's simulation of different
- NOTE Confidence: 0.566183864545454
- $00{:}58{:}29.625 \dashrightarrow 00{:}58{:}31.450$ cortical networks that are crucial
- NOTE Confidence: 0.566183864545454
- 00:58:31.505 --> 00:58:32.669 for brain functioning.
- NOTE Confidence: 0.566183864545454
- $00:58:32.670 \longrightarrow 00:58:34.825$ So in particular the different
- NOTE Confidence: 0.566183864545454
- 00:58:34.825 00:58:36.980 network by the continued work.
- NOTE Confidence: 0.566183864545454
- $00{:}58{:}36{.}980 \dashrightarrow 00{:}58{:}39{.}964$ And all this is supported by one study.
- NOTE Confidence: 0.566183864545454
- 00:58:39.970 00:58:42.670 So of course the recognizer
- NOTE Confidence: 0.566183864545454
- $00:58:42.670 \rightarrow 00:58:44.830$ techniques like further replication,
- NOTE Confidence: 0.566183864545454
- $00{:}58{:}44{.}830 \dashrightarrow 00{:}58{:}46{.}058$ but in this study,
- NOTE Confidence: 0.566183864545454
- $00:58:46.058 \rightarrow 00:58:48.820$ so there is a change of connectivity
- NOTE Confidence: 0.566183864545454
- $00{:}58{:}48.820 \dashrightarrow 00{:}58{:}50.860$ between the classroom and
- NOTE Confidence: 0.566183864545454
- 00:58:50.860 --> 00:58:52.624 different different networks,
- NOTE Confidence: 0.566183864545454

 $00:58:52.624 \rightarrow 00:58:55.132$ in particular the development

NOTE Confidence: 0.566183864545454

 $00{:}58{:}55{.}132 \dashrightarrow 00{:}58{:}57{.}640$ network and the frontal.

NOTE Confidence: 0.566183864545454

00:58:57.640 --> 00:58:58.514 Control, uh,

NOTE Confidence: 0.566183864545454

 $00:58:58.514 \rightarrow 00:59:01.573$ network and there is also like change

NOTE Confidence: 0.566183864545454

 $00:59:01.573 \dashrightarrow 00:59:05.019$ per se in the activity of the classroom.

NOTE Confidence: 0.566183864545454

 $00:59:05.020 \longrightarrow 00:59:06.928$ This isn't healthy.

NOTE Confidence: 0.566183864545454

00:59:06.930 --> 00:59:07.505 Yes,

NOTE Confidence: 0.566183864545454

00:59:07.505 --> 00:59:08.080 yes.

NOTE Confidence: 0.723804322727273

 $00{:}59{:}09{.}740 \dashrightarrow 00{:}59{:}11{.}756$ And how well I know the

NOTE Confidence: 0.723804322727273

 $00:59:11.756 \rightarrow 00:59:13.610$ classrooms like 1 voxel thing.

NOTE Confidence: 0.723804322727273

00:59:13.610 --> 00:59:15.062 Like how good is the site

NOTE Confidence: 0.723804322727273

 $00:59:15.062 \longrightarrow 00:59:15.788$ with modern methods?

NOTE Confidence: 0.723804322727273

 $00:59:15.790 \longrightarrow 00:59:16.882$ How good is imaging

NOTE Confidence: 0.723804322727273

 $00:59:16.882 \rightarrow 00:59:17.974$ imaging in the classroom?

NOTE Confidence: 0.874501021875

00:59:21.720 --> 00:59:23.772 OK, I would like to finish and I I

NOTE Confidence: 0.874501021875

 $00:59:23.772 \rightarrow 00:59:25.876$ hope that we may discuss about that.

 $00{:}59{:}25{.}880 \dashrightarrow 00{:}59{:}28{.}256$ So I'm coming from the consciousness

NOTE Confidence: 0.874501021875

00:59:28.256 --> 00:59:31.237 field of cognitive science and and I I

NOTE Confidence: 0.874501021875

 $00{:}59{:}31{.}237 \dashrightarrow 00{:}59{:}33{.}235$ get interested in psychedelic because for

NOTE Confidence: 0.874501021875

 $00{:}59{:}33{.}301 \dashrightarrow 00{:}59{:}35{.}716$ me it was quite obvious that subjectively

NOTE Confidence: 0.874501021875

 $00{:}59{:}35{.}716 \dashrightarrow 00{:}59{:}37{.}968$ there will be a strong impact of

NOTE Confidence: 0.874501021875

 $00:59:37.968 \dashrightarrow 00:59:39.176$ psychedelic and conscious perception.

NOTE Confidence: 0.874501021875

 $00{:}59{:}39{.}180 \dashrightarrow 00{:}59{:}41{.}340$ I just want to propose a link between

NOTE Confidence: 0.874501021875

 $00{:}59{:}41{.}340 \dashrightarrow 00{:}59{:}43{.}463$ what I know of conscious perception

NOTE Confidence: 0.874501021875

 $00{:}59{:}43.463 \dashrightarrow 00{:}59{:}45.743$ and the effect of psychedelic and

NOTE Confidence: 0.874501021875

 $00{:}59{:}45{.}812 \dashrightarrow 00{:}59{:}48{.}164$ like it's also a way to describe maybe

NOTE Confidence: 0.874501021875

 $00{:}59{:}48.164 \dashrightarrow 00{:}59{:}50.260$ the Rebus a bit differently because.

NOTE Confidence: 0.874501021875

 $00{:}59{:}50{.}260 \dashrightarrow 00{:}59{:}53{.}608$ Many of the premises of this will be common.

NOTE Confidence: 0.874501021875

 $00{:}59{:}53{.}610 \dashrightarrow 00{:}59{:}57{.}470$ So this is the model that I used a lot

NOTE Confidence: 0.874501021875

 $00{:}59{:}57{.}470 \dashrightarrow 01{:}00{:}00{.}088$ to to all my studies on consciousness.

NOTE Confidence: 0.874501021875

 $01:00:00.090 \longrightarrow 01:00:01.986$ And this is the model of the

01:00:01.986 --> 01:00:03.010 global neuronal workspace.

NOTE Confidence: 0.874501021875

 $01{:}00{:}03.010 \dashrightarrow 01{:}00{:}05.509$ So the main idea is that consciousness

NOTE Confidence: 0.874501021875

 $01:00:05.509 \rightarrow 01:00:08.367$ rely on the activation of a specific

NOTE Confidence: 0.874501021875

 $01{:}00{:}08.370 \dashrightarrow 01{:}00{:}12.012$ network that corresponds to like the

NOTE Confidence: 0.874501021875

 $01{:}00{:}12.012 \dashrightarrow 01{:}00{:}14.440$ connection between different brain

NOTE Confidence: 0.874501021875

 $01:00:14.526 \rightarrow 01:00:17.688$ area through a long distance neurons.

NOTE Confidence: 0.874501021875

 $01{:}00{:}17.690 \dashrightarrow 01{:}00{:}19.916$ And the main idea is that.

NOTE Confidence: 0.874501021875

01:00:19.920 --> 01:00:21.138 So all the time you will have,

NOTE Confidence: 0.874501021875

01:00:21.140 --> 01:00:22.708 you will unconsciously process

NOTE Confidence: 0.874501021875

01:00:22.708 --> 01:00:24.668 information and few information will

NOTE Confidence: 0.874501021875

 $01{:}00{:}24.668 \dashrightarrow 01{:}00{:}26.803$ be amplified in particular by top

NOTE Confidence: 0.874501021875

 $01:00:26.803 \rightarrow 01:00:28.907$ down processing to enter this network

NOTE Confidence: 0.874501021875

 $01:00:28.907 \rightarrow 01:00:30.712$ and being shared and broadcasted

NOTE Confidence: 0.874501021875

 $01{:}00{:}30{.}712 \dashrightarrow 01{:}00{:}31{.}795$ across the brain.

NOTE Confidence: 0.874501021875

 $01:00:31.800 \rightarrow 01:00:34.356$ So it will bring like a kind of huge

NOTE Confidence: 0.874501021875

 $01{:}00{:}34.356 \dashrightarrow 01{:}00{:}36.245$ activation and this encoding of

 $01:00:36.245 \rightarrow 01:00:38.175$ information shared by different brain

NOTE Confidence: 0.874501021875

 $01:00:38.175 \rightarrow 01:00:40.482$ areas would really corresponds to

NOTE Confidence: 0.874501021875

 $01:00:40.482 \rightarrow 01:00:42.797$ conscious perception of this information.

NOTE Confidence: 0.874501021875

01:00:42.800 --> 01:00:43.498 Umm,

NOTE Confidence: 0.874501021875

 $01{:}00{:}43.498 \dashrightarrow 01{:}00{:}47.202$ and this top down could be linked

NOTE Confidence: 0.874501021875

 $01:00:47.202 \rightarrow 01:00:49.330$ to this alpha band or beta band.

NOTE Confidence: 0.874501021875

01:00:49.330 --> 01:00:51.470 And as I said before,

NOTE Confidence: 0.874501021875

 $01:00:51.470 \rightarrow 01:00:53.500$ some studies showed that perception

NOTE Confidence: 0.874501021875

 $01:00:53.500 \rightarrow 01:00:57.920$ was helped by this particular vendor.

NOTE Confidence: 0.874501021875

 $01:00:57.920 \longrightarrow 01:00:58.403$ Oscillations.

NOTE Confidence: 0.874501021875

 $01:00:58.403 \longrightarrow 01:01:01.784$ And so there will be this kind

NOTE Confidence: 0.874501021875

01:01:01.784 --> 01:01:04.119 of broadcasting in this network,

NOTE Confidence: 0.874501021875

 $01:01:04.120 \longrightarrow 01:01:04.885$ but also filtering.

NOTE Confidence: 0.874501021875

01:01:04.885 --> 01:01:06.670 So there are two roles of this

NOTE Confidence: 0.874501021875

01:01:06.728 --> 01:01:08.408 amplification and of this top

- 01:01:08.408 --> 01:01:09.080 down processing.
- NOTE Confidence: 0.874501021875
- $01:01:09.080 \longrightarrow 01:01:10.880$ First of all to amplify so that you
- NOTE Confidence: 0.874501021875
- $01:01:10.880 \longrightarrow 01:01:12.661$ can perceive and you know that your
- NOTE Confidence: 0.874501021875
- $01:01:12.661 \rightarrow 01:01:13.946$ attention plays a very important
- NOTE Confidence: 0.874501021875
- $01:01:14.001 \rightarrow 01:01:15.357$ role in conscious perception,
- NOTE Confidence: 0.874501021875
- $01{:}01{:}15{.}360 \dashrightarrow 01{:}01{:}18{.}648$ but also to determine and to
- NOTE Confidence: 0.874501021875
- $01:01:18.648 \rightarrow 01:01:22.450$ disambiguate what you are exposed to.
- NOTE Confidence: 0.874501021875
- 01:01:22.450 --> 01:01:23.617 And of course,
- NOTE Confidence: 0.874501021875
- 01:01:23.617 --> 01:01:25.562 like this sharing of information
- NOTE Confidence: 0.874501021875
- $01:01:25.562 \rightarrow 01:01:27.947$ really and like with the pyramidal
- NOTE Confidence: 0.874501021875
- $01{:}01{:}27{.}947 \dashrightarrow 01{:}01{:}30{.}245$ neurons and also like just global
- NOTE Confidence: 0.874501021875
- $01{:}01{:}30{.}314 \dashrightarrow 01{:}01{:}32{.}330$ connectivity across the brain.
- NOTE Confidence: 0.865779436363637
- $01:01:34.480 \longrightarrow 01:01:36.538$ So if we start with the
- NOTE Confidence: 0.865779436363637
- 01:01:36.538 --> 01:01:38.520 same idea as the Rebus,
- NOTE Confidence: 0.865779436363637
- $01:01:38.520 \longrightarrow 01:01:42.349$ so the activity of the pyramidal neuron
- NOTE Confidence: 0.865779436363637
- 01:01:42.349 --> 01:01:44.760 decrease low frequency rhythm and

- NOTE Confidence: 0.865779436363637
- 01:01:44.760 --> 01:01:46.620 increased inter network connectivity.
- NOTE Confidence: 0.865779436363637
- $01:01:46.620 \longrightarrow 01:01:49.868$ So let's see how this plays a
- NOTE Confidence: 0.865779436363637
- $01:01:49.868 \longrightarrow 01:01:51.080$ role in consciousness.
- NOTE Confidence: 0.865779436363637
- $01:01:51.080 \longrightarrow 01:01:54.167$ So the pyramid on the run have
- NOTE Confidence: 0.865779436363637
- $01{:}01{:}54{.}167 \dashrightarrow 01{:}01{:}56{.}966$ been shown to support information
- NOTE Confidence: 0.865779436363637
- $01:01:56.966 \longrightarrow 01:02:00.223$ integration so and to allow
- NOTE Confidence: 0.865779436363637
- $01:02:00.223 \longrightarrow 01:02:02.275$ coincidence detection between external
- NOTE Confidence: 0.865779436363637
- 01:02:02.275 --> 01:02:04.840 data and internal prediction so.
- NOTE Confidence: 0.865779436363637
- $01:02:04.840 \longrightarrow 01:02:06.790$ In fact, the computation between
- NOTE Confidence: 0.865779436363637
- 01:02:06.790 --> 01:02:08.775 priors and and sensory input
- NOTE Confidence: 0.865779436363637
- 01:02:08.775 --> 01:02:10.760 can can also occur directly
- NOTE Confidence: 0.865779436363637
- $01:02:10.836 \longrightarrow 01:02:12.716$ injecting these neurons and not
- NOTE Confidence: 0.865779436363637
- $01:02:12.716 \longrightarrow 01:02:15.449$ necessarily in a in a video area,
- NOTE Confidence: 0.865779436363637
- $01:02:15.450 \longrightarrow 01:02:17.880$ but already at the neural level.
- NOTE Confidence: 0.865779436363637
- $01:02:17.880 \longrightarrow 01:02:20.268$ But it has also been involved
- NOTE Confidence: 0.865779436363637

01:02:20.268 --> 01:02:21.462 in conscious computations.

NOTE Confidence: 0.865779436363637

 $01:02:21.470 \longrightarrow 01:02:23.030$ And indeed there was a study

NOTE Confidence: 0.865779436363637

 $01:02:23.030 \longrightarrow 01:02:24.832$ showing that if you change the

NOTE Confidence: 0.865779436363637

 $01:02:24.832 \rightarrow 01:02:26.577$ calcium activity in the dendrites,

NOTE Confidence: 0.865779436363637

 $01:02:26.580 \longrightarrow 01:02:28.890$ you can modulate threshold for

NOTE Confidence: 0.865779436363637

 $01:02:28.890 \longrightarrow 01:02:31.200$ perceptual detection and also that NOTE Confidence: 0.86577943636363637

 $01:02:31.272 \rightarrow 01:02:33.760$ anesthesia decouples these neurons.

NOTE Confidence: 0.865779436363637

 $01:02:33.760 \longrightarrow 01:02:35.944$ And that's it can be one of the

NOTE Confidence: 0.865779436363637

 $01{:}02{:}35{.}944 \dashrightarrow 01{:}02{:}37{.}857$ mechanism through which you lose

NOTE Confidence: 0.865779436363637

 $01:02:37.857 \rightarrow 01:02:39.165$ consciousness during anesthesia.

NOTE Confidence: 0.866432583333333

01:02:41.650 --> 01:02:44.312 So as I said, like uh, alpha situation,

NOTE Confidence: 0.866432583333333

 $01:02:44.312 \rightarrow 01:02:47.160$ we're shown to carry a part of the

NOTE Confidence: 0.866432583333333

01:02:47.235 --> 01:02:49.959 top down sensory prediction and this

NOTE Confidence: 0.866432583333333

01:02:49.959 --> 01:02:52.229 prediction will change your orientation

NOTE Confidence: 0.866432583333333

 $01{:}02{:}52{.}229 \dashrightarrow 01{:}02{:}55{.}400$ of attention on the external world and

NOTE Confidence: 0.866432583333333

 $01:02:55.477 \rightarrow 01:02:57.890$ also help to disambiguate sensor inputs.

 $01:02:57.890 \longrightarrow 01:02:59.786$ So This is why, for example,

NOTE Confidence: 0.866432583333333

 $01:02:59.790 \longrightarrow 01:03:02.490$ you can see that this you will have the

NOTE Confidence: 0.866432583333333

 $01:03:02.490 \rightarrow 01:03:04.710$ impression that the left circle is convex,

NOTE Confidence: 0.866432583333333

 $01:03:04.710 \rightarrow 01:03:07.230$ is convex while the right one is concave.

NOTE Confidence: 0.866432583333333

 $01:03:07.230 \longrightarrow 01:03:09.454$ And you will be pretty sure about that

NOTE Confidence: 0.866432583333333

 $01:03:09.454 \rightarrow 01:03:11.648$ even if there is no like it could.

NOTE Confidence: 0.866432583333333

 $01:03:11.650 \rightarrow 01:03:14.219$ Also be like uh the the opposite,

NOTE Confidence: 0.866432583333333

 $01:03:14.220 \longrightarrow 01:03:16.411$ but just because in general the light

NOTE Confidence: 0.866432583333333

 $01{:}03{:}16{.}411 \dashrightarrow 01{:}03{:}18{.}515$ comes from the from the from the

NOTE Confidence: 0.866432583333333

01:03:18.515 --> 01:03:21.890 sky and not from the ground. Umm.

NOTE Confidence: 0.866432583333333

 $01{:}03{:}21{.}890 \dashrightarrow 01{:}03{:}24{.}446$ And in fact it has been shown in several

NOTE Confidence: 0.866432583333333

 $01:03:24.446 \longrightarrow 01:03:26.333$ studies that the expectation correspond NOTE Confidence: 0.866432583333333

 $01:03:26.333 \rightarrow 01:03:28.963$ to kind of template of activation that

NOTE Confidence: 0.866432583333333

01:03:28.963 --> 01:03:31.303 you can decode in the brain and that is

NOTE Confidence: 0.866432583333333

 $01{:}03{:}31{.}310 \dashrightarrow 01{:}03{:}33.896$ much to a sensory incoming evidence.

 $01{:}03{:}33{.}900 \dashrightarrow 01{:}03{:}36{.}537$ So in fact you have a kind of ghost

NOTE Confidence: 0.866432583333333

 $01:03:36.537 \rightarrow 01:03:38.319$ activation that corresponds to what

NOTE Confidence: 0.866432583333333

 $01:03:38.319 \rightarrow 01:03:40.888$ you're expecting and there is a matching NOTE Confidence: 0.866432583333333

 $01{:}03{:}40.888 \dashrightarrow 01{:}03{:}43.274$ and this really sharpened perception by

NOTE Confidence: 0.866432583333333

 $01{:}03{:}43.274 \dashrightarrow 01{:}03{:}46.220$ increasing the the signal to noise ratio.

NOTE Confidence: 0.752423082363636

 $01:03:49.480 \dashrightarrow 01:03:53.064$ And finally like of course connectivity is NOTE Confidence: 0.752423082363636

 $01{:}03{:}53.064 \dashrightarrow 01{:}03{:}56.837$ crucial so that cortical region of high

NOTE Confidence: 0.752423082363636

 $01:03:56.837 \rightarrow 01:04:00.190$ level region can constraint and like sensory

NOTE Confidence: 0.752423082363636

 $01:04:00.274 \rightarrow 01:04:03.279$ region according to this expectation.

NOTE Confidence: 0.752423082363636

 $01{:}04{:}03{.}280 \dashrightarrow 01{:}04{:}06{.}616$ And it was shown in this study that

NOTE Confidence: 0.752423082363636

 $01{:}04{:}06.620 \dashrightarrow 01{:}04{:}09.161$ like the top down effects rely on

NOTE Confidence: 0.752423082363636

01:04:09.161 --> 01:04:10.746 recurrent and enhanced connectivity

NOTE Confidence: 0.752423082363636

 $01{:}04{:}10.746$ --> $01{:}04{:}12.886$ within some different areas and

NOTE Confidence: 0.752423082363636

 $01:04:12.886 \rightarrow 01:04:15.444$ more broadly like the long distance

NOTE Confidence: 0.752423082363636

 $01{:}04{:}15{.}444 \dashrightarrow 01{:}04{:}17{.}778$ connectivity has been shown to be.

NOTE Confidence: 0.752423082363636

 $01:04:17.780 \longrightarrow 01:04:19.514$ Related to contraception,

 $01{:}04{:}19{.}514 \dashrightarrow 01{:}04{:}22{.}982$ uh threshold and information sharing too.

NOTE Confidence: 0.752423082363636

 $01:04:22.990 \rightarrow 01:04:26.450$ So what I would like to propose here is that.

NOTE Confidence: 0.752423082363636

 $01:04:26.450 \longrightarrow 01:04:29.418$ So if we take this hypothesis of global

NOTE Confidence: 0.752423082363636

 $01{:}04{:}29{.}418 \dashrightarrow 01{:}04{:}31{.}511$ neuronal workspace with this top down

NOTE Confidence: 0.752423082363636

 $01{:}04{:}31{.}511 \dashrightarrow 01{:}04{:}34{.}358$ that is very crucial to amplify and and

NOTE Confidence: 0.752423082363636

 $01:04:34.358 \rightarrow 01:04:36.508$ let's information enter this workspace,

NOTE Confidence: 0.752423082363636

 $01:04:36.510 \longrightarrow 01:04:38.658$ the decrease of alpha band will

NOTE Confidence: 0.752423082363636

 $01:04:38.658 \rightarrow 01:04:40.592$ impair this top down processing

NOTE Confidence: 0.752423082363636

 $01{:}04{:}40.592 \dashrightarrow 01{:}04{:}43.190$ and you will have therefore less

NOTE Confidence: 0.752423082363636

 $01:04:43.190 \rightarrow 01:04:45.530$ selectivity on your sensory input.

NOTE Confidence: 0.752423082363636

 $01:04:45.530 \longrightarrow 01:04:48.127$ So this is quite close to what

NOTE Confidence: 0.752423082363636

 $01{:}04{:}48{.}127 \dashrightarrow 01{:}04{:}50{.}729$ is proposed by characterized and

NOTE Confidence: 0.752423082363636

 $01{:}04{:}50{.}730 \dashrightarrow 01{:}04{:}52{.}908$ and also in the talamo particles.

NOTE Confidence: 0.752423082363636

 $01{:}04{:}52{.}910 \dashrightarrow 01{:}04{:}56{.}300$ Well, a looper proposal proposal.

NOTE Confidence: 0.752423082363636

 $01{:}04{:}56{.}300 \dashrightarrow 01{:}04{:}59{.}450$ So what are the consequences of that is that

 $01:04:59.450 \rightarrow 01:05:02.795$ you will have less filtering of information.

NOTE Confidence: 0.752423082363636

 $01{:}05{:}02.800 \dashrightarrow 01{:}05{:}04.613$ But also because there is this increase

NOTE Confidence: 0.752423082363636

01:05:04.613 --> 01:05:06.040 in their network connectivity,

NOTE Confidence: 0.752423082363636

 $01:05:06.040 \rightarrow 01:05:09.736$ you will have an amplification of the,

NOTE Confidence: 0.752423082363636

 $01:05:09.740 \longrightarrow 01:05:11.726$ we can say the neural vector

NOTE Confidence: 0.752423082363636

 $01{:}05{:}11.726$ --> $01{:}05{:}12.719$ encoding conscious percept.

NOTE Confidence: 0.752423082363636

 $01{:}05{:}12.720 \dashrightarrow 01{:}05{:}15.100$ So we can imagine that there will

NOTE Confidence: 0.752423082363636

 $01{:}05{:}15{.}100 \dashrightarrow 01{:}05{:}16{.}859$ be more amplification inside the

NOTE Confidence: 0.752423082363636

01:05:16.859 --> 01:05:18.863 workspace because there is a lot

NOTE Confidence: 0.752423082363636

 $01:05:18.863 \rightarrow 01:05:20.837$ of sharing of information and this

NOTE Confidence: 0.752423082363636

 $01:05:20.837 \longrightarrow 01:05:23.092$ will lead to this may lead to.

NOTE Confidence: 0.752423082363636

 $01:05:23.092 \rightarrow 01:05:25.052$ Maybe there is less information

NOTE Confidence: 0.752423082363636

 $01:05:25.052 \longrightarrow 01:05:26.228$ inside the workspace,

NOTE Confidence: 0.752423082363636

 $01{:}05{:}26{.}230 \dashrightarrow 01{:}05{:}27{.}780$ but this seems to be

NOTE Confidence: 0.752423082363636

 $01{:}05{:}27.780 \dashrightarrow 01{:}05{:}28.710$ subjectively very amplified.

NOTE Confidence: 0.752423082363636

 $01{:}05{:}28.710 \dashrightarrow 01{:}05{:}31.126$ And it was also interesting he showed that

 $01:05:31.126 \rightarrow 01:05:33.568$ when you were missing some information,

NOTE Confidence: 0.752423082363636

01:05:33.570 --> 01:05:35.418 you never you never detect that

NOTE Confidence: 0.752423082363636

01:05:35.418 --> 01:05:36.650 you're missing some information,

NOTE Confidence: 0.752423082363636

 $01:05:36.650 \rightarrow 01:05:38.850$ you just complete with information.

NOTE Confidence: 0.752423082363636

 $01:05:38.850 \longrightarrow 01:05:40.338$ And generally you have the illusion

NOTE Confidence: 0.752423082363636

 $01:05:40.338 \longrightarrow 01:05:41.082$ to perceive everything.

NOTE Confidence: 0.752423082363636

 $01{:}05{:}41.090 \dashrightarrow 01{:}05{:}42.546$ So the less you perceive and the

NOTE Confidence: 0.752423082363636

 $01{:}05{:}42.546 \dashrightarrow 01{:}05{:}44.178$ more you can have the impression

NOTE Confidence: 0.752423082363636

 $01:05:44.178 \longrightarrow 01:05:45.450$ that you perceive correctly,

NOTE Confidence: 0.752423082363636

 $01{:}05{:}45{.}450 \dashrightarrow 01{:}05{:}47{.}802$ and in fact you are just missing the

NOTE Confidence: 0.752423082363636

 $01{:}05{:}47.802 \dashrightarrow 01{:}05{:}50.029$ gap with your own representation.

NOTE Confidence: 0.752423082363636

01:05:50.030 --> 01:05:50.382 Also,

NOTE Confidence: 0.752423082363636

 $01{:}05{:}50{.}382 \dashrightarrow 01{:}05{:}52{.}846$ this can be linked to the temporal

NOTE Confidence: 0.752423082363636

 $01{:}05{:}52{.}846 \dashrightarrow 01{:}05{:}54{.}990$ dilatation that was regularly

NOTE Confidence: 0.752423082363636

 $01{:}05{:}54{.}990 \dashrightarrow 01{:}05{:}58{.}990$ described under a psyched elic.

01:05:58.990 --> 01:06:01.770 Japan, activity of pyramidal neurons.

NOTE Confidence: 0.752423082363636

 $01:06:01.770 \longrightarrow 01:06:03.723$ So I said that they were like

NOTE Confidence: 0.752423082363636

01:06:03.723 --> 01:06:05.190 kind of coincidence detectors.

NOTE Confidence: 0.752423082363636

 $01:06:05.190 \longrightarrow 01:06:07.526$ So maybe the feeling of epiphany or the

NOTE Confidence: 0.752423082363636

 $01:06:07.526 \longrightarrow 01:06:10.250$ feeling of coincidence is linked to this

NOTE Confidence: 0.752423082363636

 $01:06:10.250 \rightarrow 01:06:12.325$ hyperactivity of these pyramidal neurons.

NOTE Confidence: 0.752423082363636

01:06:12.330 --> 01:06:13.234 And um,

NOTE Confidence: 0.752423082363636

 $01:06:13.234 \rightarrow 01:06:15.946$ because you have less um uh,

NOTE Confidence: 0.752423082363636

 $01:06:15.950 \longrightarrow 01:06:17.620$ uh, prediction and you have

NOTE Confidence: 0.752423082363636

 $01:06:17.620 \longrightarrow 01:06:19.290$ less low uh frequency reason,

NOTE Confidence: 0.752423082363636

 $01:06:19.290 \longrightarrow 01:06:21.194$ you are less able to give a unique

NOTE Confidence: 0.752423082363636

 $01:06:21.194 \rightarrow 01:06:22.589$ interpretation of your sensory input.

NOTE Confidence: 0.752423082363636

 $01{:}06{:}22.590 \dashrightarrow 01{:}06{:}24.990$ So there is something that is

NOTE Confidence: 0.752423082363636

 $01:06:24.990 \longrightarrow 01:06:27.006$ maybe that can be more moving

NOTE Confidence: 0.752423082363636

 $01:06:27.006 \longrightarrow 01:06:29.195$ and maybe unstable in the way

NOTE Confidence: 0.752423082363636

 $01{:}06{:}29{.}195 \dashrightarrow 01{:}06{:}31{.}125$ you represent the external world.
01:06:31.130 --> 01:06:33.014 But because you have this activity

NOTE Confidence: 0.752423082363636

 $01:06:33.014 \rightarrow 01:06:34.270$ of the pyramidal neuron,

NOTE Confidence: 0.752423082363636

01:06:34.270 --> 01:06:36.232 maybe you will just match some

NOTE Confidence: 0.752423082363636

 $01{:}06{:}36{.}232 \dashrightarrow 01{:}06{:}38{.}261$ available templates that are here with

NOTE Confidence: 0.752423082363636

 $01:06:38.261 \rightarrow 01:06:39.921$ perception because they are activated NOTE Confidence: 0.752423082363636

 $01:06:39.921 \rightarrow 01:06:42.611$ and they are all used to integrate

NOTE Confidence: 0.752423082363636

 $01:06:42.611 \rightarrow 01:06:44.243$ external information with prediction.

NOTE Confidence: 0.752423082363636

 $01:06:44.250 \rightarrow 01:06:46.651$ So this may explain why you

NOTE Confidence: 0.752423082363636

 $01{:}06{:}46.651 \dashrightarrow 01{:}06{:}48.948$ match your sensory input with for

NOTE Confidence: 0.752423082363636

01:06:48.948 --> 01:06:50.938 example geometrical forms of faces

NOTE Confidence: 0.752423082363636

 $01{:}06{:}50{.}938 \dashrightarrow 01{:}06{:}53{.}456$ are very like common patterns of

NOTE Confidence: 0.752423082363636

 $01{:}06{:}53.456 \dashrightarrow 01{:}06{:}55.516$ activation that may be available

NOTE Confidence: 0.752423082363636

 $01:06:55.516 \rightarrow 01:06:58.444$ and and and will be just hyper

NOTE Confidence: 0.752423082363636

 $01{:}06{:}58{.}444 \dashrightarrow 01{:}07{:}00{.}770$ matched with this sensory inputs.

NOTE Confidence: 0.752423082363636

01:07:00.770 --> 01:07:01.558 And finally,

 $01:07:01.558 \rightarrow 01:07:04.316$ but this is a more general statement,

NOTE Confidence: 0.832602894117647

 $01{:}07{:}04.320 \dashrightarrow 01{:}07{:}06.938$ the increase of the uncertainty and the

NOTE Confidence: 0.832602894117647

 $01:07:06.938 \longrightarrow 01:07:08.954$ change in perception they have shown NOTE Confidence: 0.832602894117647

 $01:07:08.954 \rightarrow 01:07:12.330$ to be linked to like to to favor jumps

NOTE Confidence: 0.832602894117647

 $01{:}07{:}12.330 \dashrightarrow 01{:}07{:}14.600$ to conclusion and delusional ideas.

NOTE Confidence: 0.832602894117647

 $01{:}07{:}14.600 \dashrightarrow 01{:}07{:}17.918$ And there may be also, of course involved

NOTE Confidence: 0.832602894117647

01:07:17.918 --> 01:07:20.954 in the mental flexibility that have

NOTE Confidence: 0.832602894117647

 $01{:}07{:}20.954 \dashrightarrow 01{:}07{:}23.680$ potential the rapeutical effects. Yes.

NOTE Confidence: 0.805655854285714

 $01{:}07{:}26{.}920 \dashrightarrow 01{:}07{:}28{.}495$ So that's the part that talks about.

NOTE Confidence: 0.805655854285714

 $01:07:28.500 \longrightarrow 01:07:31.128$ So less ability to give unique

NOTE Confidence: 0.805655854285714

 $01{:}07{:}31{.}128 \dashrightarrow 01{:}07{:}32{.}880$ interpretation of sensory input.

NOTE Confidence: 0.805655854285714

 $01{:}07{:}32.880 \dashrightarrow 01{:}07{:}35.616$ And I wonder if it is related with

NOTE Confidence: 0.805655854285714

 $01:07:35.616 \longrightarrow 01:07:38.967$ the sort of we have to decrease

NOTE Confidence: 0.805655854285714

 $01:07:38.967 \rightarrow 01:07:40.518$ connectivity within networks.

NOTE Confidence: 0.805655854285714

 $01{:}07{:}40.520 \dashrightarrow 01{:}07{:}43.404$ And I wonder if that also applies

NOTE Confidence: 0.805655854285714

 $01{:}07{:}43.404 \dashrightarrow 01{:}07{:}45.518$ in terms of those interpretations

 $01{:}07{:}45{.}518 \dashrightarrow 01{:}07{:}48{.}152$ that are so ingrained in different

NOTE Confidence: 0.805655854285714

 $01{:}07{:}48.152 \dashrightarrow 01{:}07{:}50.472$ conditions or those associations that

NOTE Confidence: 0.805655854285714

 $01:07:50.472 \longrightarrow 01:07:52.762$ are ingrained in different conditions

NOTE Confidence: 0.805655854285714

 $01:07:52.762 \rightarrow 01:07:55.437$ like making an association between one.

NOTE Confidence: 0.805655854285714

 $01:07:55.440 \longrightarrow 01:07:57.688$ Do you like and I'll draw on something NOTE Confidence: 0.805655854285714

01:07:57.688 $-\!>$ 01:07:59.818 in the environment and like having

NOTE Confidence: 0.805655854285714

 $01{:}07{:}59{.}818 \dashrightarrow 01{:}08{:}02{.}353$ an obsessive thought or I wonder if

NOTE Confidence: 0.805655854285714

 $01:08:02.353 \rightarrow 01:08:05.360$ part of the what we see with imagine

NOTE Confidence: 0.805655854285714

 $01:08:05.360 \rightarrow 01:08:07.710$ like with less network connectivity,

NOTE Confidence: 0.805655854285714

 $01{:}08{:}07{.}710 \dashrightarrow 01{:}08{:}10{.}525$ also more complexities is related

NOTE Confidence: 0.805655854285714

 $01:08:10.525 \rightarrow 01:08:12.777$ with having that wider?

NOTE Confidence: 0.805655854285714

 $01{:}08{:}12.780 \dashrightarrow 01{:}08{:}16.215$ Repertory in terms of associations

NOTE Confidence: 0.805655854285714

 $01{:}08{:}16.215 \dashrightarrow 01{:}08{:}17.589$ or interpretation.

NOTE Confidence: 0.805655854285714

01:08:17.590 --> 01:08:18.960 Yeah, yeah,

NOTE Confidence: 0.813763891428571

01:08:19.050 --> 01:08:22.004 yeah. Yeah. So you write that this

 $01:08:22.010 \rightarrow 01:08:23.805$ diffuse ability to to interpret

NOTE Confidence: 0.813763891428571

 $01:08:23.805 \rightarrow 01:08:25.968$ uniquely and sensory input and we

NOTE Confidence: 0.813763891428571

 $01{:}08{:}25{.}968 \dashrightarrow 01{:}08{:}27{.}810$ also due to like the disintegration

NOTE Confidence: 0.813763891428571

 $01{:}08{:}27{.}810 \dashrightarrow 01{:}08{:}30{.}155$ of the network or the the increased

NOTE Confidence: 0.813763891428571

01:08:30.155 --> 01:08:32.201 connectivity of Internet work that can

NOTE Confidence: 0.813763891428571

 $01:08:32.210 \longrightarrow 01:08:34.988$ interfere with basically with the like NOTE Confidence: 0.813763891428571

 $01:08:34.988 \rightarrow 01:08:37.265$ like their regular functioning and

NOTE Confidence: 0.813763891428571

 $01{:}08{:}37{.}265 \dashrightarrow 01{:}08{:}39{.}708$ and and their role to to distinguish

NOTE Confidence: 0.813763891428571

 $01:08:39.708 \longrightarrow 01:08:41.689$ between one thing and another.

NOTE Confidence: 0.813763891428571

 $01:08:41.690 \longrightarrow 01:08:43.714$ But what I like is in this idea

NOTE Confidence: 0.813763891428571

 $01{:}08{:}43.714 \dashrightarrow 01{:}08{:}45.908$ and it's and and I didn't say

NOTE Confidence: 0.813763891428571

 $01:08:45.908 \longrightarrow 01:08:47.523$ but it's of course absolutely.

NOTE Confidence: 0.813763891428571

 $01:08:47.530 \longrightarrow 01:08:49.230$ Uh, compatible with the telemetry?

NOTE Confidence: 0.813763891428571

 $01{:}08{:}49{.}230 \dashrightarrow 01{:}08{:}52{.}800$ Uh, hypothesis because the telemetry,

NOTE Confidence: 0.813763891428571

 $01:08:52.800 \rightarrow 01:08:54.310$ the telemus also filtering information

NOTE Confidence: 0.813763891428571

 $01{:}08{:}54{.}310 \dashrightarrow 01{:}08{:}56{.}756$ and allowed to to to choose between

- NOTE Confidence: 0.813763891428571
- $01:08:56.756 \rightarrow 01:08:58.076$ several interpretations too.
- NOTE Confidence: 0.813763891428571
- $01:08:58.080 \longrightarrow 01:09:00.612$ So I think it's just another
- NOTE Confidence: 0.813763891428571
- $01{:}09{:}00.612 \dashrightarrow 01{:}09{:}01.878$ level of description.
- NOTE Confidence: 0.813763891428571
- 01:09:01.880 --> 01:09:02.500 But yeah,
- NOTE Confidence: 0.813763891428571
- 01:09:02.500 --> 01:09:04.360 because it's what I know it's,
- NOTE Confidence: 0.813763891428571
- 01:09:04.360 --> 01:09:05.896 I feel more comfortable with this
- NOTE Confidence: 0.813763891428571
- $01:09:05.896 \rightarrow 01:09:06.920$ way of describing things.
- NOTE Confidence: 0.813763891428571
- $01:09:06.920 \longrightarrow 01:09:08.992$ But of course it's it's not an emic
- NOTE Confidence: 0.813763891428571
- $01:09:08.992 \longrightarrow 01:09:10.949$ with the the other proposals.
- NOTE Confidence: 0.7818619375
- $01:09:13.600 \longrightarrow 01:09:15.756$ I'm almost done I think I have
- NOTE Confidence: 0.7818619375
- $01{:}09{:}15.756 \dashrightarrow 01{:}09{:}17.660$ two slides so please slide.
- NOTE Confidence: 0.7818619375
- $01{:}09{:}17.660 \dashrightarrow 01{:}09{:}21.832$ So the limitation all of these studies
- NOTE Confidence: 0.7818619375
- 01:09:21.832 --> 01:09:26.479 so I took this summary that only
- NOTE Confidence: 0.7818619375
- $01{:}09{:}26.480 \dashrightarrow 01{:}09{:}28.154$ talk about resting state of moral
- NOTE Confidence: 0.7818619375
- $01{:}09{:}28.154 \dashrightarrow 01{:}09{:}29.854$ literature but I think it's it's
- NOTE Confidence: 0.7818619375

 $01:09:29.854 \rightarrow 01:09:31.438$ quite obvious what are the problem

NOTE Confidence: 0.7818619375

 $01{:}09{:}31{.}438 \dashrightarrow 01{:}09{:}33{.}120$ with all this second indicator.

NOTE Confidence: 0.7818619375

 $01:09:33.120 \longrightarrow 01:09:36.306$ So first of all what you can see is

NOTE Confidence: 0.7818619375

 $01:09:36.306 \rightarrow 01:09:39.061$ that there is many many reanalysis

NOTE Confidence: 0.7818619375

 $01:09:39.061 \longrightarrow 01:09:41.810$ of few cohorts of data and.

NOTE Confidence: 0.7818619375

01:09:41.810 --> 01:09:42.692 This is striking,

NOTE Confidence: 0.7818619375

01:09:42.692 --> 01:09:44.456 like it's almost like half of

NOTE Confidence: 0.7818619375

 $01:09:44.456 \rightarrow 01:09:46.319$ the articles are in fact coming

NOTE Confidence: 0.7818619375

 $01{:}09{:}46{.}319 \dashrightarrow 01{:}09{:}47{.}523$ from the same data.

NOTE Confidence: 0.7818619375

01:09:47.530 --> 01:09:50.182 So this is of course a

NOTE Confidence: 0.7818619375

01:09:50.182 --> 01:09:51.508 problem for reproducibility.

NOTE Confidence: 0.7818619375

01:09:51.510 --> 01:09:53.470 And I I, I mean,

NOTE Confidence: 0.7818619375

 $01:09:53.470 \rightarrow 01:09:55.374$ I also totally admit that it's very

NOTE Confidence: 0.7818619375

 $01{:}09{:}55{.}374 \dashrightarrow 01{:}09{:}56{.}979$ difficult to build such studies and

NOTE Confidence: 0.7818619375

 $01{:}09{:}56{.}979 \dashrightarrow 01{:}09{:}58{.}701$ I I know what I'm talking about.

NOTE Confidence: 0.7818619375

 $01{:}09{:}58{.}710 \dashrightarrow 01{:}10{:}01{.}942$ But of course this is a problem for

- NOTE Confidence: 0.7818619375
- $01{:}10{:}01{.}942 \dashrightarrow 01{:}10{:}03{.}950$ interpretation and generalization.

01:10:03.950 --> 01:10:04.214 Second,

NOTE Confidence: 0.7818619375

 $01:10:04.214 \rightarrow 01:10:06.062$ so there are not so many participants

NOTE Confidence: 0.7818619375

 $01:10:06.062 \rightarrow 01:10:08.000$ in the study and we would like

NOTE Confidence: 0.7818619375

01:10:08.000 --> 01:10:09.350 to have more important study,

NOTE Confidence: 0.7818619375

01:10:09.350 --> 01:10:11.228 even if in cognitive psychology generally,

NOTE Confidence: 0.7818619375

 $01:10:11.230 \longrightarrow 01:10:11.760$ like with.

NOTE Confidence: 0.7818619375

 $01:10:11.760 \longrightarrow 01:10:13.615$ 25 people you are you already have

NOTE Confidence: 0.7818619375

 $01{:}10{:}13.615 \dashrightarrow 01{:}10{:}15.922$ like substantial results, of course.

NOTE Confidence: 0.7818619375

 $01:10:15.922 \rightarrow 01:10:19.149$ So here are only resting state literature,

NOTE Confidence: 0.7818619375

 $01:10:19.150 \longrightarrow 01:10:20.894$ but in fact it's like most of the

NOTE Confidence: 0.7818619375

01:10:20.894 --> 01:10:22.364 literature in your imaging literature

NOTE Confidence: 0.7818619375

 $01:10:22.364 \rightarrow 01:10:24.320$ and psychedelic is using resting state.

NOTE Confidence: 0.7818619375

 $01{:}10{:}24{.}320 \dashrightarrow 01{:}10{:}27{.}433$ And this is a like kind of an

NOTE Confidence: 0.7818619375

 $01{:}10{:}27{.}433 \dashrightarrow 01{:}10{:}29{.}050$ issue because in fact we don't know

 $01:10:29.101 \rightarrow 01:10:30.817$ exactly what people are doing during

NOTE Confidence: 0.7818619375

01:10:30.817 --> 01:10:32.416 resting state and in particular

NOTE Confidence: 0.7818619375

 $01{:}10{:}32.416 \dashrightarrow 01{:}10{:}33.886$ during secret experience there

NOTE Confidence: 0.7818619375

 $01:10:33.886 \longrightarrow 01:10:35.551$ may be totally attractive and

NOTE Confidence: 0.7818619375

 $01{:}10{:}35{.}551 \dashrightarrow 01{:}10{:}37{.}100$ fascinated by something and just

NOTE Confidence: 0.7818619375

 $01{:}10{:}37.100 \dashrightarrow 01{:}10{:}38.600$ processing one thing for a while.

NOTE Confidence: 0.7818619375

01:10:38.600 --> 01:10:41.246 And we don't know if what we are analyzing

NOTE Confidence: 0.7818619375

 $01:10:41.246 \rightarrow 01:10:43.866$ is like really demanding resting or

NOTE Confidence: 0.7818619375

 $01{:}10{:}43.866 \dashrightarrow 01{:}10{:}46.520$ just focalizing on something special that.

NOTE Confidence: 0.7818619375

 $01:10:46.520 \rightarrow 01:10:48.530$ And the difference across participants.

NOTE Confidence: 0.7818619375

 $01{:}10{:}48.530 \dashrightarrow 01{:}10{:}52.067$ So I think that we really need to have

NOTE Confidence: 0.7818619375

01:10:52.067 --> 01:10:54.510 more tasks because it's more constraining.

NOTE Confidence: 0.7818619375

 $01{:}10{:}54{.}510 \dashrightarrow 01{:}10{:}57{.}497$ So of course it also have its limits

NOTE Confidence: 0.7818619375

 $01{:}10{:}57{.}497 \dashrightarrow 01{:}10{:}59{.}842$ and but it it helps to compare

NOTE Confidence: 0.7818619375

 $01{:}10{:}59.842 \dashrightarrow 01{:}11{:}01.941$ different condition maybe in a

NOTE Confidence: 0.7818619375

 $01:11:01.941 \longrightarrow 01:11:03.210$ more constrained manner.

- NOTE Confidence: 0.7818619375
- 01:11:03.210 --> 01:11:04.114 So as I said,
- NOTE Confidence: 0.7818619375
- $01:11:04.114 \rightarrow 01:11:06.209$ so I did not mention there is just one.
- NOTE Confidence: 0.632653468
- 01:11:08.750 --> 01:11:10.870 Study with muslin, but uh,
- NOTE Confidence: 0.632653468
- $01:11:10.870 \longrightarrow 01:11:14.188$ so many of the study involved the
- NOTE Confidence: 0.632653468
- 01:11:14.188 --> 01:11:17.750 SILYBIN and LSD a bit less for iasca.
- NOTE Confidence: 0.632653468
- $01:11:17.750 \longrightarrow 01:11:19.166$ And what would be,
- NOTE Confidence: 0.632653468
- 01:11:19.166 --> 01:11:21.290 I think really interesting is to
- NOTE Confidence: 0.632653468
- $01:11:21.359 \rightarrow 01:11:24.030$ compare the drug one to another and
- NOTE Confidence: 0.632653468
- $01:11:24.030 \longrightarrow 01:11:25.980$ in particular with getting into
- NOTE Confidence: 0.632653468
- 01:11:25.980 --> 01:11:27.910 because I did not highlight it.
- NOTE Confidence: 0.632653468
- 01:11:27.910 --> 01:11:30.906 So yeah, yeah, someone should do that.
- NOTE Confidence: 0.632653468
- 01:11:30.910 --> 01:11:33.466 So because as you can see,
- NOTE Confidence: 0.632653468
- $01:11:33.470 \longrightarrow 01:11:34.634$ there are several aspects
- NOTE Confidence: 0.632653468
- $01{:}11{:}34{.}634 \dashrightarrow 01{:}11{:}36{.}089$ that are a bit different,
- NOTE Confidence: 0.632653468
- $01:11:36.090 \longrightarrow 01:11:38.045$ in particular for the feed
- NOTE Confidence: 0.632653468

 $01:11:38.045 \rightarrow 01:11:40.000$ forward we talked about already.

NOTE Confidence: 0.632653468

01:11:40.000 --> 01:11:41.986 But also the condition are generally

NOTE Confidence: 0.632653468

 $01:11:41.986 \longrightarrow 01:11:44.141$ different and even in the use of

NOTE Confidence: 0.632653468

01:11:44.141 --> 01:11:45.426 people like I generally taken

NOTE Confidence: 0.632653468

 $01:11:45.426 \longrightarrow 01:11:47.368$ in a ritual way and things like

NOTE Confidence: 0.632653468

 $01:11:47.368 \longrightarrow 01:11:49.492$ that and we we really want to

NOTE Confidence: 0.632653468

 $01:11:49.492 \rightarrow 01:11:52.124$ compare and to see what are the

NOTE Confidence: 0.632653468

 $01:11:52.124 \rightarrow 01:11:53.955$ pharmacological difference and the

NOTE Confidence: 0.632653468

01:11:53.955 --> 01:11:55.895 the neuroimaging differences between

NOTE Confidence: 0.632653468

 $01:11:55.900 \rightarrow 01:11:57.850$ several drugs in the very same.

NOTE Confidence: 0.4623852375

01:11:59.940 --> 01:12:03.420 But I'm experimental paradigm.

NOTE Confidence: 0.4623852375

01:12:03.420 --> 01:12:05.972 So we would also be very interested in

NOTE Confidence: 0.4623852375

 $01:12:05.972 \longrightarrow 01:12:07.436$ comparing these different population

NOTE Confidence: 0.4623852375

 $01{:}12{:}07{.}436 \dashrightarrow 01{:}12{:}10{.}089$ because in general the study were either

NOTE Confidence: 0.4623852375

01:12:10.089 --> 01:12:12.779 in control or in patient with depression.

NOTE Confidence: 0.4623852375

 $01:12:12.780 \rightarrow 01:12:15.090$ But there is not really comparison between

- NOTE Confidence: 0.4623852375
- $01:12:15.090 \rightarrow 01:12:17.977$ the two for neuroimaging studies at least.
- NOTE Confidence: 0.4623852375
- $01:12:17.980 \longrightarrow 01:12:19.696$ Um, we talked about it also,
- NOTE Confidence: 0.4623852375
- 01:12:19.700 --> 01:12:21.954 but uh it would be quite interesting
- NOTE Confidence: 0.4623852375
- $01{:}12{:}21{.}954 \dashrightarrow 01{:}12{:}24{.}815$ to see uh the long lasting effects or
- NOTE Confidence: 0.4623852375
- $01{:}12{:}24.815 \dashrightarrow 01{:}12{:}27.214$ at least just some study explored the
- NOTE Confidence: 0.4623852375
- $01{:}12{:}27{.}214 \dashrightarrow 01{:}12{:}28{.}936$ time dependent effect in the session.
- NOTE Confidence: 0.4623852375
- $01:12:28.940 \longrightarrow 01:12:30.550$ So they did several scan in the
- NOTE Confidence: 0.4623852375
- $01:12:30.550 \longrightarrow 01:12:31.990$ in the very same session.
- NOTE Confidence: 0.4623852375
- $01:12:31.990 \longrightarrow 01:12:34.356$ But it could be also interesting to
- NOTE Confidence: 0.4623852375
- $01:12:34.356 \longrightarrow 01:12:36.890$ see what is left after a session
- NOTE Confidence: 0.4623852375
- 01:12:36.890 --> 01:12:38.565 of psychedelic and also maybe
- NOTE Confidence: 0.4623852375
- $01{:}12{:}38.565 \dashrightarrow 01{:}12{:}40.140$ to explore the different doses.
- NOTE Confidence: 0.4623852375
- $01:12:40.140 \longrightarrow 01:12:42.289$ So there are several study with Microdose,
- NOTE Confidence: 0.4623852375
- $01{:}12{:}42.290 \dashrightarrow 01{:}12{:}43.844$ but it could be interesting within
- NOTE Confidence: 0.4623852375
- $01:12:43.844 \rightarrow 01:12:46.211$ us the same study and within the same
- NOTE Confidence: 0.4623852375

01:12:46.211 --> 01:12:48.125 experimental guidance to have several doses.

NOTE Confidence: 0.4623852375

01:12:48.130 --> 01:12:49.770 So to compare and to see what is

NOTE Confidence: 0.4623852375

 $01{:}12{:}49{.}770 \dashrightarrow 01{:}12{:}50{.}539$ dose dependent or not.

NOTE Confidence: 0.766819628333333

01:12:53.020 --> 01:12:55.568 OK, so as I should like psychedelic

NOTE Confidence: 0.766819628333333

 $01{:}12{:}55{.}568 \dashrightarrow 01{:}12{:}58{.}045$ drastically change a brain state of

NOTE Confidence: 0.766819628333333

 $01:12:58.045 \rightarrow 01:13:00.240$ activity and connectivity during rests,

NOTE Confidence: 0.766819628333333

 $01:13:00.240 \rightarrow 01:13:01.890$ decreased within connectivity,

NOTE Confidence: 0.766819628333333

01:13:01.890 --> 01:13:03.540 increase entropy and

NOTE Confidence: 0.766819628333333

01:13:03.540 --> 01:13:04.640 internetwork connectivity,

NOTE Confidence: 0.766819628333333

 $01{:}13{:}04.640 \dashrightarrow 01{:}13{:}08.370$ in particular in sensory areas.

NOTE Confidence: 0.766819628333333

 $01{:}13{:}08{.}370 \dashrightarrow 01{:}13{:}11{.}514$ This decrease of low frequency problems

NOTE Confidence: 0.766819628333333

 $01:13:11.514 \rightarrow 01:13:14.650$ that are probably involved in feedback.

NOTE Confidence: 0.766819628333333

 $01:13:14.650 \rightarrow 01:13:17.090$ Some effects are quite consistently

NOTE Confidence: 0.766819628333333

 $01:13:17.090 \rightarrow 01:13:19.042$ associated with subjective effects,

NOTE Confidence: 0.766819628333333

 $01{:}13{:}19{.}050 \dashrightarrow 01{:}13{:}21{.}269$ and in particular the effect of Magdala,

NOTE Confidence: 0.766819628333333

 $01:13:21.270 \longrightarrow 01:13:25.462$ which showed that it were quite linked to the

01:13:25.462 --> 01:13:29.150 increased positive effects under psychedelic.

NOTE Confidence: 0.766819628333333

 $01:13:29.150 \longrightarrow 01:13:31.148$ But some of the branches are

NOTE Confidence: 0.766819628333333

01:13:31.148 --> 01:13:33.029 changes are more difficult to link,

NOTE Confidence: 0.766819628333333

 $01:13:33.030 \rightarrow 01:13:35.520$ or are maybe inconsistent across

NOTE Confidence: 0.766819628333333

 $01:13:35.520 \longrightarrow 01:13:37.512$ studies or across psychedelics,

NOTE Confidence: 0.766819628333333

 $01:13:37.520 \rightarrow 01:13:41.174$ so it's difficult to really know what

NOTE Confidence: 0.766819628333333

 $01:13:41.174 \rightarrow 01:13:45.049$ what are their subjective correlates.

NOTE Confidence: 0.766819628333333

 $01:13:45.050 \rightarrow 01:13:46.595$ And finally the the current

NOTE Confidence: 0.766819628333333

 $01:13:46.595 \longrightarrow 01:13:48.140$ theoretical models agree on a

NOTE Confidence: 0.766819628333333

 $01:13:48.197 \rightarrow 01:13:50.147$ decrease of filtering prior control.

NOTE Confidence: 0.766819628333333

 $01:13:50.150 \longrightarrow 01:13:51.470$ So there are different terms,

NOTE Confidence: 0.766819628333333

 $01:13:51.470 \longrightarrow 01:13:54.494$ but basically the idea is that there is NOTE Confidence: 0.766819628333333

01:13:54.494 --> 01:13:56.460 less constraint on sensory processing

NOTE Confidence: 0.766819628333333

 $01:13:56.460 \longrightarrow 01:13:59.561$ and they kind of disagree on what is NOTE Confidence: 0.766819628333333

01:13:59.561 --> 01:14:01.829 the main mechanism or stable region NOTE Confidence: 0.766819628333333

 $01{:}14{:}01{.}829 \dashrightarrow 01{:}14{:}06{.}590$ that is involved in this effect.

NOTE Confidence: 0.766819628333333

 $01:14:06.590 \longrightarrow 01:14:08.186$ So the future direction,

NOTE Confidence: 0.766819628333333

 $01:14:08.186 \rightarrow 01:14:12.344$ so for me like on top of all the proposal

NOTE Confidence: 0.766819628333333

 $01:14:12.344 \rightarrow 01:14:16.124$ I made for having more maybe reliable or

NOTE Confidence: 0.766819628333333

 $01:14:16.124 \rightarrow 01:14:18.993$ generalizable data for second imaging.

NOTE Confidence: 0.766819628333333

01:14:18.993 --> 01:14:21.951 I think that the two direction

NOTE Confidence: 0.766819628333333

 $01:14:21.951 \longrightarrow 01:14:25.138$ that we have is on the first

NOTE Confidence: 0.766819628333333

01:14:25.138 --> 01:14:27.095 hand like a better description,

NOTE Confidence: 0.766819628333333

 $01:14:27.095 \rightarrow 01:14:28.820$ better description of the subjective

NOTE Confidence: 0.766819628333333

 $01{:}14{:}28.820 \dashrightarrow 01{:}14{:}31.509$ effects and maybe one also of the aspect is

NOTE Confidence: 0.766819628333333

 $01{:}14{:}31{.}509 \dashrightarrow 01{:}14{:}33{.}310$ that there is inter individual variation.

NOTE Confidence: 0.766819628333333

 $01:14:33.310 \longrightarrow 01:14:36.254$ So it will be very interesting and it's.

NOTE Confidence: 0.766819628333333

 $01:14:36.260 \rightarrow 01:14:38.330$ It's in fact something that's our

NOTE Confidence: 0.766819628333333

 $01{:}14{:}38{.}330 \dashrightarrow 01{:}14{:}41{.}039$ lab do to map the subjective effects

NOTE Confidence: 0.766819628333333

 $01:14:41.039 \rightarrow 01:14:43.965$ to a neural individual map and not

NOTE Confidence: 0.766819628333333

 $01:14:44.043 \rightarrow 01:14:46.535$ only to put everybody in the same.

 $01{:}14{:}49{.}150 \dashrightarrow 01{:}14{:}53{.}010$ In the same group and it's important

NOTE Confidence: 0.87041944

01:14:53.010 --> 01:14:56.930 because if we if we are working on

NOTE Confidence: 0.87041944

 $01:14:56.930 \longrightarrow 01:14:58.754$ this individual neural effects,

NOTE Confidence: 0.87041944

 $01{:}14{:}58.754 \dashrightarrow 01{:}15{:}02.070$ we will probably have more power to link

NOTE Confidence: 0.87041944

 $01:15:02.070 \longrightarrow 01:15:04.422$ the the subjective and the neural and

NOTE Confidence: 0.87041944

 $01{:}15{:}04{.}422 \dashrightarrow 01{:}15{:}07{.}405$ the maybe the receptor also and better

NOTE Confidence: 0.87041944

 $01:15:07.405 \rightarrow 01:15:09.785$ better understanding of the mechanistic.

NOTE Confidence: 0.87041944

01:15:09.790 --> 01:15:11.054 On the other hand,

NOTE Confidence: 0.87041944

 $01:15:11.054 \longrightarrow 01:15:13.402$ it will also be helpful to see

NOTE Confidence: 0.87041944

 $01:15:13.402 \longrightarrow 01:15:15.297$ what of these subjective effect

NOTE Confidence: 0.87041944

 $01:15:15.297 \rightarrow 01:15:17.520$ may be helpful for patients.

NOTE Confidence: 0.87041944

 $01:15:17.520 \longrightarrow 01:15:20.130$ And once they see your addiction?

NOTE Confidence: 0.87041944

 $01{:}15{:}20{.}130 \dashrightarrow 01{:}15{:}25{.}357$ And the second as a spect is in

NOTE Confidence: 0.87041944

01:15:25.357 $\operatorname{-->}$ 01:15:28.626 fact the using the psychedelic as a

NOTE Confidence: 0.87041944

 $01{:}15{:}28.626 \dashrightarrow 01{:}15{:}30.660$ pharmacological model of psychosis.

01:15:30.660 --> 01:15:32.868 So in this case what we would like

NOTE Confidence: 0.87041944

 $01{:}15{:}32.868 \dashrightarrow 01{:}15{:}35.904$ to do is rather to see what is the

NOTE Confidence: 0.87041944

 $01:15:35.904 \longrightarrow 01:15:37.630$ neural dysfunction in patients.

NOTE Confidence: 0.87041944

 $01:15:37.630 \longrightarrow 01:15:39.622$ So without taking them you can

NOTE Confidence: 0.87041944

01:15:39.622 --> 01:15:41.648 just doing brain imaging when they

NOTE Confidence: 0.87041944

 $01{:}15{:}41{.}648 \dashrightarrow 01{:}15{:}43{.}243$ have like specific symptoms and

NOTE Confidence: 0.87041944

01:15:43.243 --> 01:15:45.693 try to link these symptoms to what

NOTE Confidence: 0.87041944

 $01{:}15{:}45{.}693 \dashrightarrow 01{:}15{:}47{.}473$ we can observe under psychedelic

NOTE Confidence: 0.87041944

 $01{:}15{:}47{.}473 \dashrightarrow 01{:}15{:}50{.}050$ and again if possible in the.

NOTE Confidence: 0.87041944

 $01{:}15{:}50{.}050 \dashrightarrow 01{:}15{:}51{.}904$ Individual manner because in this case NOTE Confidence: 0.87041944

01:15:51.904 --> 01:15:54.171 we may think for example that when

NOTE Confidence: 0.87041944

01:15:54.171 --> 01:15:56.121 patient is as a cerebral exhibition

NOTE Confidence: 0.87041944

 $01{:}15{:}56{.}121 \dashrightarrow 01{:}15{:}58{.}191$ that is close to LSU response map

NOTE Confidence: 0.87041944

 $01{:}15{:}58{.}191 \dashrightarrow 01{:}16{:}00{.}292$ and therefore that is mechanism is

NOTE Confidence: 0.87041944

01:16:00.292 --> 01:16:04.360 more a certain energetic logic.

NOTE Confidence: 0.87041944

01:16:04.360 --> 01:16:04.713 Yeah.

01:16:04.713 --> 01:16:05.066 Dysfunction,

NOTE Confidence: 0.87041944

 $01:16:05.066 \rightarrow 01:16:07.184$ whereas another one may have for

NOTE Confidence: 0.87041944

01:16:07.184 --> 01:16:09.460 example a neural response map that is

NOTE Confidence: 0.87041944

01:16:09.460 --> 01:16:11.757 closer to look at anyone would have

NOTE Confidence: 0.87041944

01:16:11.757 --> 01:16:13.582 maybe more dissociative effects and

NOTE Confidence: 0.87041944

01:16:13.582 $\operatorname{-->}$ 01:16:16.114 things like that and the mechanistic

NOTE Confidence: 0.87041944

 $01{:}16{:}16{.}114 \dashrightarrow 01{:}16{:}18{.}982$ of possible the rapeutic drug may be

NOTE Confidence: 0.87041944

 $01{:}16{:}18{.}982 \dashrightarrow 01{:}16{:}21{.}628$ different and this will really open

NOTE Confidence: 0.87041944

 $01{:}16{:}21.628 \dashrightarrow 01{:}16{:}24.460$ the the field of individualized medicine.

NOTE Confidence: 0.87041944

 $01:16:24.460 \longrightarrow 01:16:25.494$ I finished.

NOTE Confidence: 0.87041944

01:16:25.494 --> 01:16:28.596 So thank you for your attention

NOTE Confidence: 0.87041944

 $01{:}16{:}28.600 \dashrightarrow 01{:}16{:}30.900$ and of course I yeah,

NOTE Confidence: 0.87041944

01:16:30.900 --> 01:16:31.938 I see that there were so

NOTE Confidence: 0.87041944

 $01{:}16{:}31{.}938 \dashrightarrow 01{:}16{:}32{.}860$ many questions in the chat.

NOTE Confidence: 0.87041944

01:16:32.860 --> 01:16:35.254 Sorry I could not do at the same time,

- $01:16:35.260 \longrightarrow 01:16:37.555$ but of course I would be happy to have
- NOTE Confidence: 0.87041944
- $01:16:37.555 \rightarrow 01:16:40.129$ your feedback and to answer your questions.
- NOTE Confidence: 0.74743540875
- 01:16:41.040 --> 01:16:41.991 Thank you, Lucy.
- NOTE Confidence: 0.74743540875
- $01:16:41.991 \rightarrow 01:16:43.576$ That was a wonderful day.
- NOTE Confidence: 0.74743540875
- $01:16:43.580 \longrightarrow 01:16:47.374$ Thank you. We do have a couple of
- NOTE Confidence: 0.74743540875
- $01{:}16{:}47{.}374 \dashrightarrow 01{:}16{:}48{.}970$ questions dangling in the chat.
- NOTE Confidence: 0.74743540875
- $01:16:48.970 \longrightarrow 01:16:49.996$ One thing for me to do,
- NOTE Confidence: 0.74743540875
- $01{:}16{:}50{.}000 \dashrightarrow 01{:}16{:}53{.}210$ the collective findings, this is a big.
- NOTE Confidence: 0.74743540875
- $01{:}16{:}53{.}210 \dashrightarrow 01{:}16{:}57{.}530$ Reconcile the phenomenon of a bad trip.
- NOTE Confidence: 0.74743540875
- 01:16:57.530 --> 01:16:58.530 And because, you know,
- NOTE Confidence: 0.74743540875
- $01:16:58.530 \longrightarrow 01:17:00.030$ to the extent that they did,
- NOTE Confidence: 0.74743540875
- $01:17:00.030 \rightarrow 01:17:02.004$ the group data all looked pretty positive.
- NOTE Confidence: 0.74743540875
- $01:17:02.010 \longrightarrow 01:17:03.282$ So how do we understand the
- NOTE Confidence: 0.74743540875
- $01:17:03.282 \longrightarrow 01:17:04.410$ phenomenon of a bad trip?
- NOTE Confidence: 0.74743540875
- $01{:}17{:}04{.}410 \dashrightarrow 01{:}17{:}05{.}110$ And relatedly,
- NOTE Confidence: 0.74743540875
- $01:17:05.110 \longrightarrow 01:17:07.210$ do we understand how or why

- NOTE Confidence: 0.74743540875
- $01:17:07.210 \longrightarrow 01:17:08.417$ some depressed individuals
- NOTE Confidence: 0.74743540875
- 01:17:08.417 --> 01:17:10.602 may be non responders despite
- NOTE Confidence: 0.74743540875
- $01:17:10.602 \rightarrow 01:17:12.350$ having the second experience?
- NOTE Confidence: 0.74743540875
- $01:17:12.350 \longrightarrow 01:17:13.616$ It's not quite the same question,
- NOTE Confidence: 0.74743540875
- $01:17:13.620 \rightarrow 01:17:15.419$ but both around how this negative affect.
- NOTE Confidence: 0.80539116125
- $01{:}17{:}16{.}170 \dashrightarrow 01{:}17{:}20{.}778$ Yes, so. So there is one study exploring.
- NOTE Confidence: 0.80539116125
- $01:17:20.780 \longrightarrow 01:17:23.034$ So the difference between, but in fact
- NOTE Confidence: 0.80539116125
- $01:17:23.034 \rightarrow 01:17:25.376$ it's not really the goal of the study,
- NOTE Confidence: 0.80539116125
- $01{:}17{:}25{.}380 \dashrightarrow 01{:}17{:}27{.}669$ but they were exploring the level of
- NOTE Confidence: 0.80539116125
- 01:17:27.669 --> 01:17:30.094 glutamate in the brain and they find
- NOTE Confidence: 0.80539116125
- $01:17:30.094 \rightarrow 01:17:32.164$ that the increasing glutamate in the
- NOTE Confidence: 0.80539116125
- 01:17:32.233 --> 01:17:34.543 prefrontal cortex was associated with bad
- NOTE Confidence: 0.80539116125
- $01{:}17{:}34{.}543$ --> $01{:}17{:}37{.}020$ trip and in the hippocampus was associated NOTE Confidence: 0.80539116125
- $01:17:37.020 \rightarrow 01:17:39.798$ with good trip if my memory are good.
- NOTE Confidence: 0.80539116125
- $01{:}17{:}39{.}800 \dashrightarrow 01{:}17{:}43{.}054$ So in fact there was a regional good trip or NOTE Confidence: 0.80539116125

01:17:43.054 --> 01:17:46.100 bad trip levels of mutants in this study,

NOTE Confidence: 0.80539116125

 $01:17:46.100 \rightarrow 01:17:47.015$ but otherwise it's.

NOTE Confidence: 0.80539116125

01:17:47.015 --> 01:17:49.560 Yeah, I think there is a general bias

NOTE Confidence: 0.80539116125

 $01{:}17{:}49.560 \dashrightarrow 01{:}17{:}51.636$ from a researcher in psychedelic towards

NOTE Confidence: 0.80539116125

 $01:17:51.636 \rightarrow 01:17:54.150$ the good trip and a very good setting.

NOTE Confidence: 0.80539116125

 $01{:}17{:}54{.}150 \dashrightarrow 01{:}17{:}58{.}099$ So many people in fact in this in this study.

NOTE Confidence: 0.80539116125

01:17:58.099 $\operatorname{-->}$ 01:18:00.500 Did not experience such a bad trip

NOTE Confidence: 0.80539116125

01:18:00.570 --> 01:18:02.964 and so we don't have, I think,

NOTE Confidence: 0.80539116125

 $01:18:02.964 \longrightarrow 01:18:05.736$ enough cases to really have the

NOTE Confidence: 0.80539116125

01:18:05.736 --> 01:18:07.699 neural correlates of battrick.

NOTE Confidence: 0.80539116125

 $01:18:07.700 \longrightarrow 01:18:09.485$ But this is a very interesting question,

NOTE Confidence: 0.8705727275

 $01:18:09.500 \longrightarrow 01:18:14.270$ of course, because we. She started.

NOTE Confidence: 0.8705727275

01:18:14.270 --> 01:18:17.196 Yeah, yeah. I'm sure you would

NOTE Confidence: 0.8705727275

 $01:18:17.196 \longrightarrow 01:18:19.070$ have improvement for that, but

NOTE Confidence: 0.877755048333333

 $01:18:19.400 \rightarrow 01:18:22.510$ can be interesting and at least, yeah.

NOTE Confidence: 0.567197738

 $01{:}18{:}24{.}190 \dashrightarrow 01{:}18{:}29{.}120$ Risk benefit ratio. You know, like.

- NOTE Confidence: 0.6829256
- $01:18:29.120 \longrightarrow 01:18:31.600$ To protect patients from that, we have

 $01:18:31.610 \longrightarrow 01:18:33.790$ to know what it is.

NOTE Confidence: 0.85788374

 $01:18:33.790 \rightarrow 01:18:35.428$ Worked for a couple of days,

NOTE Confidence: 0.7650653366666667

 $01:18:35.440 \longrightarrow 01:18:37.945$ but I think like anyways we do,

NOTE Confidence: 0.7650653366666667

01:18:37.945 --> 01:18:39.650 if there's more and more study,

NOTE Confidence: 0.78439685

01:18:39.660 --> 01:18:42.345 we will have more. Yeah. I mean,

NOTE Confidence: 0.78439685

01:18:42.345 --> 01:18:43.737 yeah, it could turn into, yeah,

NOTE Confidence: 0.78439685

01:18:43.737 --> 01:18:45.339 if you start, you can evaluate

NOTE Confidence: 0.717251925714286

 $01:18:45.350 \rightarrow 01:18:49.207$ exactly. And the second one was why?

NOTE Confidence: 0.717251925714286

01:18:49.210 --> 01:18:51.140 Depression do not respond.

NOTE Confidence: 0.717251925714286

 $01{:}18{:}51{.}140 \dashrightarrow 01{:}18{:}53{.}390$ So yeah, I mean this is even a broader

NOTE Confidence: 0.717251925714286

01:18:53.390 --> 01:18:55.074 question like for for psychiatrists like

NOTE Confidence: 0.717251925714286

01:18:55.074 --> 01:18:57.682 why in some case you give a medicine it

NOTE Confidence: 0.717251925714286

 $01{:}18{:}57.682 \dashrightarrow 01{:}18{:}59.434$ works and sometimes it doesn't work.

NOTE Confidence: 0.717251925714286

 $01{:}18{:}59{.}440 \dashrightarrow 01{:}19{:}01{.}846$ So it's a very difficult question.

 $01:19:01.850 \rightarrow 01:19:03.685$ Probably there is heterogeneity in

NOTE Confidence: 0.717251925714286

 $01:19:03.685 \rightarrow 01:19:05.800$ patients with depression first of all.

NOTE Confidence: 0.717251925714286

 $01{:}19{:}05{.}800 \dashrightarrow 01{:}19{:}08{.}068$ So of course they may not have the the

NOTE Confidence: 0.717251925714286

 $01:19:08.068 \rightarrow 01:19:10.145$ same neural mechanisms of depression and

NOTE Confidence: 0.717251925714286

 $01{:}19{:}10.145 \dashrightarrow 01{:}19{:}13.803$ and thereby not the same like a response

NOTE Confidence: 0.717251925714286

01:19:13.803 --> 01:19:17.893 to to treatment after like I can say

NOTE Confidence: 0.717251925714286

 $01:19:17.893 \rightarrow 01:19:19.759$ from my experience with ketamine because.

NOTE Confidence: 0.717251925714286

 $01:19:19.760 \longrightarrow 01:19:22.528$ We were using a lot of ketamine to

NOTE Confidence: 0.717251925714286

 $01:19:22.528 \rightarrow 01:19:24.948$ help people with a resistant depression

NOTE Confidence: 0.717251925714286

01:19:24.948 --> 01:19:27.870 and I don't know you manage afterward

NOTE Confidence: 0.717251925714286

 $01{:}19{:}27.870 \dashrightarrow 01{:}19{:}30.758$ to to know a bit which patient will

NOTE Confidence: 0.717251925714286

01:19:30.758 --> 01:19:32.541 be will have a good trip or bad

NOTE Confidence: 0.717251925714286

 $01:19:32.541 \longrightarrow 01:19:33.998$ trip or will have a response.

NOTE Confidence: 0.717251925714286

01:19:34.000 $\operatorname{-->}$ 01:19:36.264 And in in particular I think one of

NOTE Confidence: 0.717251925714286

 $01:19:36.264 \rightarrow 01:19:38.565$ the main aspect is really to accept

NOTE Confidence: 0.717251925714286

 $01:19:38.565 \longrightarrow 01:19:40.883$ the condition of the drug and to

 $01:19:40.883 \rightarrow 01:19:43.195$ accept also to be high during a while.

NOTE Confidence: 0.717251925714286

 $01:19:43.200 \longrightarrow 01:19:45.237$ And this is something that is absolutely

NOTE Confidence: 0.717251925714286

 $01{:}19{:}45{.}237 \dashrightarrow 01{:}19{:}47{.}871$ not easy to accept for many people and

NOTE Confidence: 0.717251925714286

 $01{:}19{:}47.871 \dashrightarrow 01{:}19{:}49.860$ in particular patient because they are.

NOTE Confidence: 0.717251925714286

01:19:49.860 --> 01:19:50.650 Really a fraid.

NOTE Confidence: 0.717251925714286

 $01{:}19{:}50.650 \dashrightarrow 01{:}19{:}53.415$ And one of the questions for example

NOTE Confidence: 0.717251925714286

 $01:19:53.415 \longrightarrow 01:19:56.877$ is for people with trauma like whether

NOTE Confidence: 0.717251925714286

 $01:19:56.877 \rightarrow 01:19:59.383$ the dissociative experience that they

NOTE Confidence: 0.717251925714286

01:19:59.383 --> 01:20:01.578 can really experience during during

NOTE Confidence: 0.717251925714286

01:20:01.578 --> 01:20:03.816 ketamine or I don't know exactly

NOTE Confidence: 0.717251925714286

 $01:20:03.816 \longrightarrow 01:20:04.292$ with psychedelic,

NOTE Confidence: 0.717251925714286

 $01:20:04.292 \longrightarrow 01:20:06.359$ we don't have a lot of data on that,

NOTE Confidence: 0.717251925714286

 $01{:}20{:}06{.}360 \dashrightarrow 01{:}20{:}08{.}480$ but how it can be managed and will

NOTE Confidence: 0.717251925714286

 $01{:}20{:}08.480 \dashrightarrow 01{:}20{:}11.076$ it be positive or negative for them.

NOTE Confidence: 0.717251925714286

 $01{:}20{:}11.080 \dashrightarrow 01{:}20{:}13.962$ And also there is a decorrelation between

- $01:20:13.962 \rightarrow 01:20:16.356$ the acute effect and the beneficial effects,
- NOTE Confidence: 0.717251925714286
- $01:20:16.360 \longrightarrow 01:20:16.632$ OK.
- NOTE Confidence: 0.717251925714286
- 01:20:16.632 --> 01:20:18.264 I mean it's quite striking straightening
- NOTE Confidence: 0.717251925714286
- $01:20:18.264 \rightarrow 01:20:20.189$ like some some of them will have very.
- NOTE Confidence: 0.717251925714286
- 01:20:20.190 --> 01:20:21.390 Kind of battery backfilling,
- NOTE Confidence: 0.717251925714286
- $01:20:21.390 \rightarrow 01:20:23.190$ but afterward they will feel really
- NOTE Confidence: 0.717251925714286
- $01:20:23.239 \rightarrow 01:20:24.643$ good and some other will really
- NOTE Confidence: 0.717251925714286
- $01:20:24.643 \rightarrow 01:20:26.396$ enjoy the trip and they will have
- NOTE Confidence: 0.717251925714286
- $01{:}20{:}26.396 \dashrightarrow 01{:}20{:}27.926$ no room blasting with the effects.
- NOTE Confidence: 0.717251925714286
- $01:20:27.930 \longrightarrow 01:20:30.750$ So there are several layers of
- NOTE Confidence: 0.717251925714286
- $01{:}20{:}30.750 \dashrightarrow 01{:}20{:}33.056$ response to that question, I think.
- NOTE Confidence: 0.717251925714286
- 01:20:33.056 --> 01:20:33.269 Yeah.
- NOTE Confidence: 0.582278756
- $01:20:35.810 \longrightarrow 01:20:37.050$ So it's still bad?
- NOTE Confidence: 0.582278756
- $01:20:37.050 \longrightarrow 01:20:39.688$ Yeah. See this. Thanks.
- NOTE Confidence: 0.582278756
- $01{:}20{:}39.690 \dashrightarrow 01{:}20{:}42.910$ And measured by MRI like do you
- NOTE Confidence: 0.582278756
- 01:20:42.910 --> 01:20:44.218 know approximately, I don't,

 $01{:}20{:}44.218 \dashrightarrow 01{:}20{:}46.010$ I don't think the last and the reason

NOTE Confidence: 0.582278756

01:20:46.067 --> 01:20:47.675 I ask the question is thinking

NOTE Confidence: 0.582278756

 $01:20:47.675 \longrightarrow 01:20:49.272$ logistically in terms of but we

NOTE Confidence: 0.582278756

 $01:20:49.272 \longrightarrow 01:20:50.676$ have the best imaging as another

NOTE Confidence: 0.582278756

 $01:20:50.676 \longrightarrow 01:20:52.582$ tool not being able to measure.

NOTE Confidence: 0.582278756

 $01:20:52.582 \rightarrow 01:20:54.730$ The occupancy of the party still

NOTE Confidence: 0.582278756

 $01{:}20{:}54.804 \dashrightarrow 01{:}20{:}56.640$ do every sector and then getting

NOTE Confidence: 0.582278756

 $01:20:56.640 \rightarrow 01:20:58.615$ a sense of how that occupancy

NOTE Confidence: 0.582278756

 $01{:}20{:}58.615 \dashrightarrow 01{:}21{:}00.649$ in a specific area is related

NOTE Confidence: 0.582278756

 $01:21:00.649 \rightarrow 01:21:03.250$ to what we see with the MRI.

NOTE Confidence: 0.582278756

01:21:03.250 --> 01:21:05.070 But I don't know if that's gonna

NOTE Confidence: 0.582278756

 $01{:}21{:}05{.}070 \dashrightarrow 01{:}21{:}07{.}890$ be like along those effects last,

NOTE Confidence: 0.582278756

 $01{:}21{:}07{.}890 \dashrightarrow 01{:}21{:}09{.}516$ is that something that we can

NOTE Confidence: 0.582278756

01:21:09.516 --> 01:21:11.119 see like 24 hours later or

NOTE Confidence: 0.695785028333333

 $01:21:11.480 \longrightarrow 01:21:14.112$ yeah, so most of the study that's

 $01:21:14.112 \longrightarrow 01:21:16.349$ explored the long lasting effect

NOTE Confidence: 0.695785028333333

01:21:16.350 --> 01:21:17.980 like they explored one week

NOTE Confidence: 0.695785028333333

 $01:21:17.980 \longrightarrow 01:21:19.610$ after or something like that.

NOTE Confidence: 0.695785028333333

01:21:19.610 --> 01:21:22.190 But I cannot remember something

NOTE Confidence: 0.695785028333333

 $01:21:22.190 \longrightarrow 01:21:25.278$ really long term in general the

NOTE Confidence: 0.695785028333333

 $01:21:25.278 \longrightarrow 01:21:28.183$ safety between two doses is so for

NOTE Confidence: 0.695785028333333

 $01:21:28.190 \longrightarrow 01:21:30.638$ study for example that are crossover.

NOTE Confidence: 0.695785028333333

 $01:21:30.640 \longrightarrow 01:21:32.218$ So for the clinical trial they

NOTE Confidence: 0.695785028333333

 $01{:}21{:}32{.}218 \dashrightarrow 01{:}21{:}33{.}270$ really tried to have.

NOTE Confidence: 0.695785028333333

01:21:33.270 --> 01:21:34.790 Long time between the two,

NOTE Confidence: 0.695785028333333

 $01:21:34.790 \longrightarrow 01:21:37.994$ but for like from dental study

NOTE Confidence: 0.695785028333333

 $01{:}21{:}37{.}994 \dashrightarrow 01{:}21{:}40{.}100$ usually they manage at least two

NOTE Confidence: 0.695785028333333

 $01{:}21{:}40.165 \dashrightarrow 01{:}21{:}42.613$ weeks between 2 intake to be sure that

NOTE Confidence: 0.695785028333333

 $01:21:42.613 \rightarrow 01:21:44.919$ they will not like the long lasting

NOTE Confidence: 0.695785028333333

 $01:21:44.919 \rightarrow 01:21:46.882$ effect for the placebo or condition.

NOTE Confidence: 0.695785028333333

 $01{:}21{:}46.882 \dashrightarrow 01{:}21{:}49.206$ But yeah it's I mean this question

01:21:49.206 --> 01:21:51.568 is not solved like we don't know

NOTE Confidence: 0.695785028333333

 $01:21:51.568 \longrightarrow 01:21:53.568$ exactly and we don't have enough

NOTE Confidence: 0.695785028333333

 $01{:}21{:}53.568 \dashrightarrow 01{:}21{:}55.710$ data to to really answer how long

NOTE Confidence: 0.695785028333333

 $01{:}21{:}55{.}710 \dashrightarrow 01{:}21{:}57{.}795$ does it last because you have like

NOTE Confidence: 0.695785028333333

01:21:57.795 --> 01:21:59.864 just the effect of the drug staying

NOTE Confidence: 0.695785028333333

01:21:59.864 $\operatorname{-->}$ 01:22:02.408 in the brain but also like I did not

NOTE Confidence: 0.695785028333333

 $01:22:02.408 \rightarrow 01:22:04.358$ mention the effect on on synaptic.

NOTE Confidence: 0.695785028333333

 $01:22:04.360 \longrightarrow 01:22:06.551$ But it's probably also very important in

NOTE Confidence: 0.695785028333333

 $01:22:06.551 \rightarrow 01:22:08.560$ particular for the beneficial effects,

NOTE Confidence: 0.695785028333333

 $01:22:08.560 \rightarrow 01:22:10.429$ and this may be long lasting effects.

NOTE Confidence: 0.8285810575

 $01:22:13.050 \longrightarrow 01:22:13.738$ We have a couple

NOTE Confidence: 0.920733328

 $01:22:13.750 \longrightarrow 01:22:15.050$ more questions in the chat,

NOTE Confidence: 0.920733328

 $01{:}22{:}15.050 \dashrightarrow 01{:}22{:}17.696$ but we are at 5:00 o'clock.

NOTE Confidence: 0.920733328

 $01{:}22{:}17.700 \dashrightarrow 01{:}22{:}19.540$ It was a wonderful presentation.

NOTE Confidence: 0.920733328

 $01{:}22{:}19.540 \dashrightarrow 01{:}22{:}20.877$ I really covered a lot of ground.

- $01:22:20.880 \longrightarrow 01:22:22.780$ Thank you. Thank you.
- NOTE Confidence: 0.79761831
- 01:22:30.230 --> 01:22:32.330 I mean people can send me
- NOTE Confidence: 0.79761831
- $01:22:32.330 \longrightarrow 01:22:33.730$ emails and have discussion.
- NOTE Confidence: 0.79761831
- $01:22:33.730 \longrightarrow 01:22:37.870$ I would be very happy to.
- NOTE Confidence: 0.79761831
- 01:22:37.870 --> 01:22:39.960 Yeah. Qualitative
- NOTE Confidence: 0.626936698888889
- $01{:}22{:}39{.}970 \dashrightarrow 01{:}22{:}41{.}214$ analysis of different narratives
- NOTE Confidence: 0.626936698888889
- 01:22:41.214 --> 01:22:45.070 in our seeking treatment study, OK.
- NOTE Confidence: 0.626936698888889
- 01:22:45.070 --> 01:22:49.340 Say. You know. And the model.