

WEBVTT

NOTE duration:"01:27:53.6960000"

NOTE language:en-us

NOTE Confidence: 0.86981076

00:00:00.000 --> 00:00:01.940 Leave, you're introducing our speaker

NOTE Confidence: 0.86981076

00:00:01.940 --> 00:00:03.460 today. Yes, my pleasure.

NOTE Confidence: 0.86981076

00:00:03.460 --> 00:00:05.740 Do we have any announcements before?

NOTE Confidence: 0.86981076

00:00:05.740 --> 00:00:08.400 Yeah, I just I just wanted to

NOTE Confidence: 0.86981076

00:00:08.400 --> 00:00:10.300 to everybody on the call.

NOTE Confidence: 0.86981076

00:00:10.300 --> 00:00:12.960 I just wanted to say that this

NOTE Confidence: 0.86981076

00:00:12.960 --> 00:00:15.240 has been just an incredible year.

NOTE Confidence: 0.8539269

00:00:17.270 --> 00:00:19.510 Where we faced many,

NOTE Confidence: 0.8539269

00:00:19.510 --> 00:00:22.950 many terrible challenges and losses.

NOTE Confidence: 0.8539269

00:00:22.950 --> 00:00:26.408 With particularly Randumb Ann

NOTE Confidence: 0.8539269

00:00:26.408 --> 00:00:30.442 and Bob Malesan. Close friends

NOTE Confidence: 0.8539269

00:00:30.442 --> 00:00:33.006 and colleagues teachers mentors.

NOTE Confidence: 0.8539269

00:00:33.010 --> 00:00:35.135 People have played an important

NOTE Confidence: 0.8539269

00:00:35.135 --> 00:00:37.694 life in the Department. We've lost

NOTE Confidence: 0.8539269

00:00:37.694 --> 00:00:39.829 other important alumni and friends.

NOTE Confidence: 0.8539269

00:00:39.830 --> 00:00:43.430 Other apartment as well.

NOTE Confidence: 0.8539269

00:00:43.430 --> 00:00:45.802 Um? On top of that,

NOTE Confidence: 0.8539269

00:00:45.802 --> 00:00:47.642 we've had to completely adapt

NOTE Confidence: 0.8539269

00:00:47.642 --> 00:00:49.257 and change nearly everything

NOTE Confidence: 0.8539269

00:00:49.257 --> 00:00:52.483 that we do the way we treat the

NOTE Confidence: 0.8539269

00:00:52.483 --> 00:00:54.548 way that we conduct research.

NOTE Confidence: 0.8539269

00:00:54.550 --> 00:00:57.062 The way that we take care of patients

NOTE Confidence: 0.8539269

00:00:57.062 --> 00:00:59.824 and the Department has shown remarkable

NOTE Confidence: 0.8539269

00:00:59.824 --> 00:01:01.888 flexibility and resilience and

NOTE Confidence: 0.8539269

00:01:01.888 --> 00:01:04.458 adapting to the changing context.

NOTE Confidence: 0.8539269

00:01:04.460 --> 00:01:06.842 I also wanted to note that

NOTE Confidence: 0.8539269

00:01:06.842 --> 00:01:08.430 whenever our Department was

NOTE Confidence: 0.8539269

00:01:08.506 --> 00:01:10.858 asked to step up and to do more.

NOTE Confidence: 0.8539269

00:01:10.860 --> 00:01:13.854 That we had volunteers from our

NOTE Confidence: 0.8539269

00:01:13.854 --> 00:01:16.464 residents who volunteered to serve
NOTE Confidence: 0.8539269

00:01:16.464 --> 00:01:19.099 taking care of medical patients,
NOTE Confidence: 0.8539269

00:01:19.100 --> 00:01:22.022 going back to to volunteer and
NOTE Confidence: 0.8539269

00:01:22.022 --> 00:01:25.127 medical units to volunteers on our
NOTE Confidence: 0.8539269

00:01:25.127 --> 00:01:27.275 voluntary and full-time faculty
NOTE Confidence: 0.8539269

00:01:27.275 --> 00:01:30.098 who have provided support to
NOTE Confidence: 0.8539269

00:01:30.098 --> 00:01:33.033 people in our healthcare community
NOTE Confidence: 0.8539269

00:01:33.033 --> 00:01:34.794 without any compensation.
NOTE Confidence: 0.8539269

00:01:34.800 --> 00:01:35.968 Trainees participated
NOTE Confidence: 0.8539269

00:01:35.968 --> 00:01:38.888 in that program as well.
NOTE Confidence: 0.8539269

00:01:38.890 --> 00:01:42.598 That that that the actions of
NOTE Confidence: 0.8539269

00:01:42.598 --> 00:01:45.070 our Department have provided.
NOTE Confidence: 0.8539269

00:01:45.070 --> 00:01:46.116 You know,
NOTE Confidence: 0.8539269

00:01:46.116 --> 00:01:48.731 one source of inspiration after
NOTE Confidence: 0.8539269

00:01:48.731 --> 00:01:51.990 another and and that's been really
NOTE Confidence: 0.8539269

00:01:51.990 --> 00:01:55.182 good because as a Department we've

NOTE Confidence: 0.8539269

00:01:55.182 --> 00:01:58.149 also faced the terrible burden of

NOTE Confidence: 0.8539269

00:01:58.149 --> 00:02:01.005 the murder of of black Indigenous

NOTE Confidence: 0.8539269

00:02:01.005 --> 00:02:04.162 people of color by police that

NOTE Confidence: 0.8539269

00:02:04.162 --> 00:02:06.530 reverberated through our Department

NOTE Confidence: 0.8539269

00:02:06.530 --> 00:02:10.059 and resonated with the health care

NOTE Confidence: 0.8539269

00:02:10.059 --> 00:02:12.957 disparities in the impact of Covid.

NOTE Confidence: 0.8539269

00:02:12.960 --> 00:02:15.546 They have been such a painful

NOTE Confidence: 0.8539269

00:02:15.546 --> 00:02:18.100 part of this year as well.

NOTE Confidence: 0.8539269

00:02:18.100 --> 00:02:20.660 And and the hopeful actions

NOTE Confidence: 0.8539269

00:02:20.660 --> 00:02:23.216 of many in the Department.

NOTE Confidence: 0.8539269

00:02:23.216 --> 00:02:26.288 And now the Anti Racism Taskforce,

NOTE Confidence: 0.8539269

00:02:26.290 --> 00:02:28.850 hopefully will will make something

NOTE Confidence: 0.8539269

00:02:28.850 --> 00:02:32.554 good and positive out of the adversity

NOTE Confidence: 0.8539269

00:02:32.554 --> 00:02:36.358 that that we've seen around us.

NOTE Confidence: 0.8539269

00:02:36.360 --> 00:02:39.855 So I come away thinking that I'm

NOTE Confidence: 0.8539269

00:02:39.855 --> 00:02:43.459 very glad to put 2020 behind us.

NOTE Confidence: 0.8539269

00:02:43.460 --> 00:02:45.995 Looking forward to 2021 with

NOTE Confidence: 0.8539269

00:02:45.995 --> 00:02:47.009 great anticipation.

NOTE Confidence: 0.8539269

00:02:47.010 --> 00:02:51.427 I hope those of you who have

NOTE Confidence: 0.8539269

00:02:51.427 --> 00:02:54.260 the opportunity to do so.

NOTE Confidence: 0.8539269

00:02:54.260 --> 00:02:56.756 Take advantage of the opportunity to

NOTE Confidence: 0.8539269

00:02:56.756 --> 00:02:59.559 get an early injection of the vaccine.

NOTE Confidence: 0.8539269

00:02:59.560 --> 00:03:02.080 This is really going to be another

NOTE Confidence: 0.8539269

00:03:02.080 --> 00:03:04.816 way that we in our community can

NOTE Confidence: 0.8539269

00:03:04.816 --> 00:03:07.704 take care of ourselves and to prevent

NOTE Confidence: 0.8539269

00:03:07.704 --> 00:03:10.889 being part of the spread of this

NOTE Confidence: 0.8539269

00:03:10.889 --> 00:03:13.024 terrible pandemic to our families,

NOTE Confidence: 0.8539269

00:03:13.024 --> 00:03:15.468 to our patients, to our colleagues.

NOTE Confidence: 0.8539269

00:03:15.468 --> 00:03:18.310 So I hope you will take advantage

NOTE Confidence: 0.8539269

00:03:18.389 --> 00:03:20.888 of this vaccine that has been

NOTE Confidence: 0.8539269

00:03:20.888 --> 00:03:23.478 so well tested and developed.

NOTE Confidence: 0.8539269

00:03:23.480 --> 00:03:27.214 Um? So thank you again.

NOTE Confidence: 0.8539269

00:03:27.214 --> 00:03:31.870 I think we have a wonderful lecture to

NOTE Confidence: 0.8539269

00:03:31.992 --> 00:03:36.269 celebrate the end of 2020 and Chris,

NOTE Confidence: 0.8539269

00:03:36.270 --> 00:03:38.670 would you introduce our

NOTE Confidence: 0.8539269

00:03:38.670 --> 00:03:40.480 distinguished speaker today?

NOTE Confidence: 0.8014752

00:03:41.250 --> 00:03:42.450 Thank you John.

NOTE Confidence: 0.8014752

00:03:42.450 --> 00:03:46.108 Yeah my pleasure in my honor to to do so.

NOTE Confidence: 0.8014752

00:03:46.110 --> 00:03:48.630 Our speaker today is Roland

NOTE Confidence: 0.8014752

00:03:48.630 --> 00:03:50.646 Griffiths from Johns Hopkins.

NOTE Confidence: 0.8014752

00:03:50.650 --> 00:03:52.534 Roland is let me get the

NOTE Confidence: 0.8014752

00:03:52.534 --> 00:03:53.790 full title right here.

NOTE Confidence: 0.8014752

00:03:53.790 --> 00:03:55.098 The Oliver Lee McCabe,

NOTE Confidence: 0.8014752

00:03:55.098 --> 00:03:56.733 the third professor in the

NOTE Confidence: 0.8014752

00:03:56.733 --> 00:03:57.699 Neuropsychopharmacology of consciousness

NOTE Confidence: 0.8014752

00:03:57.699 --> 00:03:59.469 as well as professor of Psychiatry

NOTE Confidence: 0.8014752

00:03:59.469 --> 00:04:01.010 and Behavioral Sciences in Hopkins.

NOTE Confidence: 0.8014752

00:04:01.010 --> 00:04:03.344 And he's the director of the

NOTE Confidence: 0.8014752

00:04:03.344 --> 00:04:04.900 Hopkins Center for Psychedelic

NOTE Confidence: 0.8014752

00:04:04.976 --> 00:04:06.758 and Consciousness Research.

NOTE Confidence: 0.8014752

00:04:06.760 --> 00:04:08.790 And Roland was already added

NOTE Confidence: 0.8014752

00:04:08.790 --> 00:04:10.414 extraordinarily impactful and and

NOTE Confidence: 0.8014752

00:04:10.414 --> 00:04:12.479 productive figure in pharmacology prior

NOTE Confidence: 0.8014752

00:04:12.479 --> 00:04:14.484 to getting involved in psychedelics.

NOTE Confidence: 0.8014752

00:04:14.490 --> 00:04:15.600 But since 1999,

NOTE Confidence: 0.8014752

00:04:15.600 --> 00:04:18.190 when he began his work with psilocybin

NOTE Confidence: 0.8014752

00:04:18.267 --> 00:04:20.187 and other psychedelic drugs,

NOTE Confidence: 0.8014752

00:04:20.190 --> 00:04:22.190 it's it's really difficult to

NOTE Confidence: 0.8014752

00:04:22.190 --> 00:04:24.964 overstate the impact he's had as a

NOTE Confidence: 0.8014752

00:04:24.964 --> 00:04:27.076 central figure in the resurgence of

NOTE Confidence: 0.8014752

00:04:27.076 --> 00:04:29.217 interest in psychedelics as potential

NOTE Confidence: 0.8014752

00:04:29.217 --> 00:04:31.941 therapeutic agents as well as agents

NOTE Confidence: 0.8014752

00:04:31.941 --> 00:04:35.214 that give us some window into the

NOTE Confidence: 0.8014752

00:04:35.214 --> 00:04:37.090 nature of human consciousness.

NOTE Confidence: 0.8014752

00:04:37.090 --> 00:04:37.792 This is,

NOTE Confidence: 0.8014752

00:04:37.792 --> 00:04:40.600 as I'm sure many in this audience knows,

NOTE Confidence: 0.8014752

00:04:40.600 --> 00:04:42.000 something that's that's really

NOTE Confidence: 0.8014752

00:04:42.000 --> 00:04:44.110 burst onto the the the the

NOTE Confidence: 0.8014752

00:04:44.110 --> 00:04:45.160 mainstream public imagination,

NOTE Confidence: 0.8014752

00:04:45.160 --> 00:04:46.915 and as well as academic

NOTE Confidence: 0.8014752

00:04:46.915 --> 00:04:48.670 medical seen in the last.

NOTE Confidence: 0.8014752

00:04:48.670 --> 00:04:50.776 I'll say five or six years.

NOTE Confidence: 0.8014752

00:04:50.780 --> 00:04:51.784 But it was been.

NOTE Confidence: 0.8014752

00:04:51.784 --> 00:04:53.732 But that is due to the pioneering

NOTE Confidence: 0.8014752

00:04:53.732 --> 00:04:55.940 efforts of Roland and a small

NOTE Confidence: 0.8014752

00:04:55.940 --> 00:04:57.530 handful of other colleagues

NOTE Confidence: 0.8014752

00:04:57.530 --> 00:04:59.625 who's kept interest in these

NOTE Confidence: 0.8014752

00:04:59.625 --> 00:05:01.628 substances alive over the decades.
NOTE Confidence: 0.8014752

00:05:01.628 --> 00:05:03.854 The work of the Hopkins Group has
NOTE Confidence: 0.8014752

00:05:03.854 --> 00:05:06.138 been truly seminal in doing the
NOTE Confidence: 0.8014752

00:05:06.138 --> 00:05:07.726 first modern controlled studies.
NOTE Confidence: 0.8014752

00:05:07.730 --> 00:05:11.090 Of psilocybin and other drugs as.
NOTE Confidence: 0.8014752

00:05:11.090 --> 00:05:12.125 Therapeutic agents across
NOTE Confidence: 0.8014752

00:05:12.125 --> 00:05:13.505 a number of indications,
NOTE Confidence: 0.8014752

00:05:13.510 --> 00:05:14.978 particularly impactful or 2016,
NOTE Confidence: 0.8014752

00:05:14.978 --> 00:05:18.008 study on the use of psilocybin in late life,
NOTE Confidence: 0.8014752

00:05:18.010 --> 00:05:18.724 existential despair.
NOTE Confidence: 0.8014752

00:05:18.724 --> 00:05:20.866 So in the hospital setting and
NOTE Confidence: 0.8014752

00:05:20.866 --> 00:05:23.136 then the study that just came out
NOTE Confidence: 0.8014752

00:05:23.136 --> 00:05:25.072 in depression and I trust we'll
NOTE Confidence: 0.8014752

00:05:25.072 --> 00:05:27.007 hear something about those today.
NOTE Confidence: 0.8014752

00:05:27.010 --> 00:05:29.467 So this is an area that we're
NOTE Confidence: 0.8014752

00:05:29.467 --> 00:05:31.849 beginning to do some work on it.

NOTE Confidence: 0.8014752
00:05:31.850 --> 00:05:34.272 Yale and with work in a number
NOTE Confidence: 0.8014752
00:05:34.272 --> 00:05:35.310 of different agents.
NOTE Confidence: 0.8014752
00:05:35.310 --> 00:05:36.010 Of course,
NOTE Confidence: 0.8014752
00:05:36.010 --> 00:05:38.110 this has been the Home Academy
NOTE Confidence: 0.8014752
00:05:38.110 --> 00:05:39.808 in research for some time,
NOTE Confidence: 0.8014752
00:05:39.810 --> 00:05:41.825 but more recently with Serial
NOTE Confidence: 0.8014752
00:05:41.825 --> 00:05:43.034 Disease is work.
NOTE Confidence: 0.8014752
00:05:43.040 --> 00:05:45.385 Looking at salvinorin A as well as
NOTE Confidence: 0.8014752
00:05:45.385 --> 00:05:47.857 ongoing studies with DMT and and psilocybin,
NOTE Confidence: 0.8014752
00:05:47.860 --> 00:05:49.625 Ben Kelmendi has spearheaded work
NOTE Confidence: 0.8014752
00:05:49.625 --> 00:05:51.979 in both PTSD and USI Dee Ann.
NOTE Confidence: 0.8014752
00:05:51.980 --> 00:05:54.227 We have some work in depression coming
NOTE Confidence: 0.8014752
00:05:54.227 --> 00:05:56.799 along as well as some mechanistic work.
NOTE Confidence: 0.8014752
00:05:56.800 --> 00:05:58.108 Alex Kwan and others,
NOTE Confidence: 0.8014752
00:05:58.108 --> 00:06:00.070 and Alan anticipating this group have
NOTE Confidence: 0.8014752

00:06:00.129 --> 00:06:01.959 been doing some mechanistic work.
NOTE Confidence: 0.8014752

00:06:01.960 --> 00:06:04.832 So this is an area that we're excited
NOTE Confidence: 0.8014752

00:06:04.832 --> 00:06:07.693 about and so to bring one of The
NOTE Confidence: 0.8014752

00:06:07.693 --> 00:06:10.085 Pioneers of this field in to speak
NOTE Confidence: 0.8014752

00:06:10.085 --> 00:06:12.834 to us today is really a great way to.
NOTE Confidence: 0.8014752

00:06:12.834 --> 00:06:14.773 Map upper Ground round series for 2020,
NOTE Confidence: 0.8014752

00:06:14.780 --> 00:06:16.376 so Roland it's really a pleasure to
NOTE Confidence: 0.8014752

00:06:16.376 --> 00:06:18.383 have you here today and we're very much
NOTE Confidence: 0.8014752

00:06:18.383 --> 00:06:19.640 looking forward to your presentation.
NOTE Confidence: 0.8076033

00:06:21.740 --> 00:06:25.268 Thank you, Chris is delightful to be here,
NOTE Confidence: 0.8076033

00:06:25.270 --> 00:06:28.532 so I'm going to talk about psilocybin
NOTE Confidence: 0.8076033

00:06:28.532 --> 00:06:31.309 little bit of history neuro.
NOTE Confidence: 0.8076033

00:06:31.310 --> 00:06:33.430 Pharmacology and then implications
NOTE Confidence: 0.8076033

00:06:33.430 --> 00:06:36.080 for treatment user might disclosures.
NOTE Confidence: 0.8076033

00:06:36.080 --> 00:06:39.830 In a nutshell, a variety of.
NOTE Confidence: 0.8076033

00:06:39.830 --> 00:06:42.150 Private sector and philanthropic

NOTE Confidence: 0.8076033

00:06:42.150 --> 00:06:45.630 support has been important to this.

NOTE Confidence: 0.8076033

00:06:45.630 --> 00:06:51.398 A little bit of NIH support as well.

NOTE Confidence: 0.8076033

00:06:51.400 --> 00:06:54.847 But I'm going to talk about is our research

NOTE Confidence: 0.8076033

00:06:54.847 --> 00:06:58.397 at Johns Hopkins over the last 20 years.

NOTE Confidence: 0.8076033

00:06:58.400 --> 00:07:03.244 Ancilla Simon and that started off with.

NOTE Confidence: 0.8076033

00:07:03.250 --> 00:07:06.620 As a labor of love with a very little bit

NOTE Confidence: 0.8076033

00:07:06.706 --> 00:07:09.746 of philanthropic support and blossom,

NOTE Confidence: 0.8076033

00:07:09.750 --> 00:07:12.420 this last year with the founding

NOTE Confidence: 0.8076033

00:07:12.420 --> 00:07:15.078 of our Center for psychedelic

NOTE Confidence: 0.8076033

00:07:15.078 --> 00:07:17.418 and Conscious Research.

NOTE Confidence: 0.8076033

00:07:17.420 --> 00:07:21.130 The work I'm going to present is is that on

NOTE Confidence: 0.8076033

00:07:21.222 --> 00:07:25.110 behalf of a team of very talented colleagues,

NOTE Confidence: 0.8076033

00:07:25.110 --> 00:07:27.672 a member of whom I've worked

NOTE Confidence: 0.8076033

00:07:27.672 --> 00:07:31.228 with for some time, like Matt.

NOTE Confidence: 0.8076033

00:07:31.228 --> 00:07:35.848 Johnson and then Bill Richards.

NOTE Confidence: 0.8076033

00:07:35.850 --> 00:07:38.466 So just by way of background,
NOTE Confidence: 0.8076033

00:07:38.470 --> 00:07:40.218 psilocybin is a naturally
NOTE Confidence: 0.8076033

00:07:40.218 --> 00:07:41.529 occurring tryptamine alkaloid.
NOTE Confidence: 0.8076033

00:07:41.530 --> 00:07:43.278 It's the principal psychoactive
NOTE Confidence: 0.8076033

00:07:43.278 --> 00:07:45.026 component of Sloss Pea,
NOTE Confidence: 0.8076033

00:07:45.030 --> 00:07:47.210 genus of mushrooms and psilocybin,
NOTE Confidence: 0.8076033

00:07:47.210 --> 00:07:49.400 in the form of mushrooms,
NOTE Confidence: 0.8076033

00:07:49.400 --> 00:07:52.872 have been used for hundreds or perhaps
NOTE Confidence: 0.8076033

00:07:52.872 --> 00:07:56.189 thousands of years in various cultures.
NOTE Confidence: 0.8076033

00:07:56.190 --> 00:07:58.342 In terms of background,
NOTE Confidence: 0.8076033

00:07:58.342 --> 00:07:59.418 these classic.
NOTE Confidence: 0.8076033

00:07:59.420 --> 00:08:01.656 Psychedelics are structurally diverse
NOTE Confidence: 0.8076033

00:08:01.656 --> 00:08:05.010 group of compounds that bind serotonin
NOTE Confidence: 0.8076033

00:08:05.093 --> 00:08:07.445 2A receptors and then of course,
NOTE Confidence: 0.8076033

00:08:07.450 --> 00:08:09.960 they produced this unique profile
NOTE Confidence: 0.8076033

00:08:09.960 --> 00:08:11.968 in changes of perceptions,

NOTE Confidence: 0.8076033

00:08:11.970 --> 00:08:13.476 emotions and thoughts.

NOTE Confidence: 0.8076033

00:08:13.476 --> 00:08:15.053 And so, structurally,

NOTE Confidence: 0.8076033

00:08:15.053 --> 00:08:17.918 they are the classic tryptamines

NOTE Confidence: 0.8076033

00:08:17.918 --> 00:08:20.210 and then the phenethylamines.

NOTE Confidence: 0.8076033

00:08:20.210 --> 00:08:20.606 Historically,

NOTE Confidence: 0.8076033

00:08:20.606 --> 00:08:22.982 a lot of research was conducted

NOTE Confidence: 0.8076033

00:08:22.982 --> 00:08:25.951 back in the 50s and 60s and then

NOTE Confidence: 0.8076033

00:08:25.951 --> 00:08:28.149 research with this whole set of

NOTE Confidence: 0.8076033

00:08:28.149 --> 00:08:30.269 compounds went dormant for almost

NOTE Confidence: 0.8076033

00:08:30.269 --> 00:08:32.908 three decades because of the safety

NOTE Confidence: 0.8076033

00:08:32.908 --> 00:08:35.722 concerns that were raised in response

NOTE Confidence: 0.8076033

00:08:35.722 --> 00:08:39.094 to the widespread non medical use of

NOTE Confidence: 0.8076033

00:08:39.094 --> 00:08:42.209 these compounds in the in the 60s.

NOTE Confidence: 0.8076033

00:08:42.210 --> 00:08:46.778 Just a brief statement about abuse and risk,

NOTE Confidence: 0.8076033

00:08:46.780 --> 00:08:47.920 of course.

NOTE Confidence: 0.8076033

00:08:47.920 --> 00:08:50.200 Psilocybin is a schedule.
NOTE Confidence: 0.8076033

00:08:50.200 --> 00:08:52.696 One compound is not considered to
NOTE Confidence: 0.8076033

00:08:52.696 --> 00:08:55.892 be a drug of addiction sabinada
NOTE Confidence: 0.8076033

00:08:55.892 --> 00:08:59.472 because it doesn't produce compulsive
NOTE Confidence: 0.8076033

00:08:59.472 --> 00:09:01.620 drug seeking behavior.
NOTE Confidence: 0.8076033

00:09:01.620 --> 00:09:03.904 Medical emergency from psilocybin
NOTE Confidence: 0.8076033

00:09:03.904 --> 00:09:06.188 use are very rare.
NOTE Confidence: 0.8076033

00:09:06.190 --> 00:09:06.761 Nonetheless,
NOTE Confidence: 0.8076033

00:09:06.761 --> 00:09:09.616 there is concern about potential
NOTE Confidence: 0.8076033

00:09:09.616 --> 00:09:10.758 adverse effects,
NOTE Confidence: 0.8076033

00:09:10.760 --> 00:09:13.280 including panic reactions and
NOTE Confidence: 0.8076033

00:09:13.280 --> 00:09:14.540 possible precipitation.
NOTE Confidence: 0.8076033

00:09:14.540 --> 00:09:17.558 Of enduring psychiatric conditions and and,
NOTE Confidence: 0.8076033

00:09:17.560 --> 00:09:20.320 we documented the validity of these
NOTE Confidence: 0.8076033

00:09:20.320 --> 00:09:23.590 concerns in a large Internet survey.
NOTE Confidence: 0.8076033

00:09:23.590 --> 00:09:26.248 We did have almost 2000 people

NOTE Confidence: 0.8076033

00:09:26.248 --> 00:09:28.711 who described and reported the

NOTE Confidence: 0.8076033

00:09:28.711 --> 00:09:31.139 effects of challenging experiences.

NOTE Confidence: 0.8076033

00:09:31.140 --> 00:09:33.650 After taking psilocybin and 11%

NOTE Confidence: 0.8076033

00:09:33.650 --> 00:09:36.165 of this group describing their

NOTE Confidence: 0.8076033

00:09:36.165 --> 00:09:37.674 very worst experience,

NOTE Confidence: 0.8076033

00:09:37.680 --> 00:09:41.530 put themselves at risk or others at

NOTE Confidence: 0.8076033

00:09:41.530 --> 00:09:44.948 risk for physical harm an I think.

NOTE Confidence: 0.8076033

00:09:44.950 --> 00:09:49.577 Most most notably to me is 10% reported

NOTE Confidence: 0.8076033

00:09:49.577 --> 00:09:51.845 in during adverse psychological

NOTE Confidence: 0.8076033

00:09:51.845 --> 00:09:55.934 symptoms lasting over a year that they

NOTE Confidence: 0.8076033

00:09:55.934 --> 00:09:58.864 attributed to this difficult experience.

NOTE Confidence: 0.8076033

00:09:58.870 --> 00:10:00.258 So such.

NOTE Confidence: 0.8076033

00:10:00.258 --> 00:10:03.034 Experiences are very uncommon

NOTE Confidence: 0.8076033

00:10:03.034 --> 00:10:05.116 in laboratory environments.

NOTE Confidence: 0.8076033

00:10:05.120 --> 00:10:07.100 With respect to molecular

NOTE Confidence: 0.8076033

00:10:07.100 --> 00:10:08.585 mechanisms of action,
NOTE Confidence: 0.8076033

00:10:08.590 --> 00:10:11.488 I mentioned serotonin 2A receptors is
NOTE Confidence: 0.8076033

00:10:11.488 --> 00:10:15.484 is the target in which they function as
NOTE Confidence: 0.8076033

00:10:15.484 --> 00:10:18.980 agonist Saint Agnes just as last year,
NOTE Confidence: 0.8076033

00:10:18.980 --> 00:10:21.969 Kim at L and Incel looked and
NOTE Confidence: 0.8076033

00:10:21.969 --> 00:10:24.329 determine the active state structure
NOTE Confidence: 0.8076033

00:10:24.329 --> 00:10:27.794 of the serotonin 2A receptor as it's
NOTE Confidence: 0.8076033

00:10:27.794 --> 00:10:30.857 bound to a prototypic hallucinogen,
NOTE Confidence: 0.8076033

00:10:30.860 --> 00:10:33.926 and so I think we can expect
NOTE Confidence: 0.8076033

00:10:33.926 --> 00:10:36.879 with this kind of development.
NOTE Confidence: 0.8076033

00:10:36.880 --> 00:10:39.440 In the understanding of the
NOTE Confidence: 0.8076033

00:10:39.440 --> 00:10:42.000 receptor pocket and the active
NOTE Confidence: 0.89114755

00:10:42.096 --> 00:10:45.984 sites that this is going to accelerate the
NOTE Confidence: 0.89114755

00:10:45.984 --> 00:10:49.700 discovery of even more selective compounds.
NOTE Confidence: 0.89114755

00:10:49.700 --> 00:10:52.695 Again, in terms of mechanisms
NOTE Confidence: 0.89114755

00:10:52.695 --> 00:10:55.690 and serotonin 2A receptors are

NOTE Confidence: 0.89114755

00:10:55.793 --> 00:10:58.988 expressed in key cortical areas,

NOTE Confidence: 0.89114755

00:10:58.990 --> 00:11:02.080 particularly cortex in apical dendrites,

NOTE Confidence: 0.89114755

00:11:02.080 --> 00:11:05.788 in layer five of paramel cells,

NOTE Confidence: 0.89114755

00:11:05.790 --> 00:11:09.558 thalamus, claustrum, locus Aurelius.

NOTE Confidence: 0.89114755

00:11:09.560 --> 00:11:13.058 And with respect to biological mechanisms.

NOTE Confidence: 0.89114755

00:11:13.060 --> 00:11:15.790 The current thinking is that there's

NOTE Confidence: 0.89114755

00:11:15.790 --> 00:11:19.266 really a small subset of serotonin 2A

NOTE Confidence: 0.89114755

00:11:19.266 --> 00:11:21.891 excitatory trigger neurons that are

NOTE Confidence: 0.89114755

00:11:21.891 --> 00:11:24.889 responsible for initiating cascade of

NOTE Confidence: 0.89114755

00:11:24.889 --> 00:11:27.989 cellular events that result ultimately

NOTE Confidence: 0.89114755

00:11:27.989 --> 00:11:30.769 in destabilization of brain networks.

NOTE Confidence: 0.89114755

00:11:30.769 --> 00:11:33.847 And then the emergence of novel

NOTE Confidence: 0.89114755

00:11:33.847 --> 00:11:36.883 patterns of connectivity that of course

NOTE Confidence: 0.89114755

00:11:36.883 --> 00:11:40.066 resolved when the drug is illuminated

NOTE Confidence: 0.89114755

00:11:40.066 --> 00:11:43.324 and it's been hypothesize, d'oh.

NOTE Confidence: 0.89114755

00:11:43.324 --> 00:11:47.008 He said metaphor, if you will,
NOTE Confidence: 0.89114755

00:11:47.010 --> 00:11:50.699 that in the case of psychiatric disorders,
NOTE Confidence: 0.89114755

00:11:50.700 --> 00:11:52.320 malfunctioning networks can
NOTE Confidence: 0.89114755

00:11:52.320 --> 00:11:54.480 subsequently reconnect in more
NOTE Confidence: 0.89114755

00:11:54.480 --> 00:11:56.510 adaptive and healthier ways.
NOTE Confidence: 0.89114755

00:11:56.510 --> 00:11:59.800 So the metaphor given is to that
NOTE Confidence: 0.89114755

00:11:59.800 --> 00:12:02.849 of resetting the computer system.
NOTE Confidence: 0.7697508

00:12:05.290 --> 00:12:09.119 This is a now classic depiction of
NOTE Confidence: 0.7697508

00:12:09.119 --> 00:12:11.650 brain network communication patterns.
NOTE Confidence: 0.7697508

00:12:11.650 --> 00:12:13.444 This was out.
NOTE Confidence: 0.7697508

00:12:13.444 --> 00:12:18.496 This is MRI data out of Imperial and
NOTE Confidence: 0.7697508

00:12:18.496 --> 00:12:23.613 what's shown here is this connected gram.
NOTE Confidence: 0.7697508

00:12:23.620 --> 00:12:26.180 And the left shows placebo.
NOTE Confidence: 0.7697508

00:12:26.180 --> 00:12:28.350 The different colors are different
NOTE Confidence: 0.7697508

00:12:28.350 --> 00:12:31.247 networks and most of the connectivity
NOTE Confidence: 0.7697508

00:12:31.247 --> 00:12:33.839 is within network connectivity.

NOTE Confidence: 0.7697508

00:12:33.840 --> 00:12:35.970 Some across network connectivity and

NOTE Confidence: 0.7697508

00:12:35.970 --> 00:12:38.847 then on the right they connectivity

NOTE Confidence: 0.7697508

00:12:38.847 --> 00:12:41.507 pattern acutely under psilocybin.

NOTE Confidence: 0.7697508

00:12:41.510 --> 00:12:44.060 So there's this large breakout

NOTE Confidence: 0.7697508

00:12:44.060 --> 00:12:45.080 of intercommunication.

NOTE Confidence: 0.7697508

00:12:45.080 --> 00:12:46.928 This isn't just random.

NOTE Confidence: 0.7697508

00:12:46.928 --> 00:12:51.209 The width of those lines are indicating that.

NOTE Confidence: 0.8234268

00:12:53.750 --> 00:12:55.206 Systematic organization

NOTE Confidence: 0.8234268

00:12:55.206 --> 00:12:57.390 of that communication,

NOTE Confidence: 0.8234268

00:12:57.390 --> 00:13:03.116 and then that resolves as psilocybin is.

NOTE Confidence: 0.8234268

00:13:03.120 --> 00:13:07.442 Illuminated so another snapshot at.

NOTE Confidence: 0.8234268

00:13:07.442 --> 00:13:09.757 You know what are these

NOTE Confidence: 0.8234268

00:13:09.757 --> 00:13:11.818 mechanisms of action you know,

NOTE Confidence: 0.8234268

00:13:11.820 --> 00:13:14.480 takes us to the different

NOTE Confidence: 0.8234268

00:13:14.480 --> 00:13:16.076 network functions and.

NOTE Confidence: 0.8234268

00:13:16.080 --> 00:13:20.178 And one very popular and metaphorically

NOTE Confidence: 0.8234268

00:13:20.178 --> 00:13:22.910 compelling observation has been

NOTE Confidence: 0.8234268

00:13:23.009 --> 00:13:26.585 that there are deactivations in the

NOTE Confidence: 0.8234268

00:13:26.585 --> 00:13:30.130 default mode network under psilocybin,

NOTE Confidence: 0.8234268

00:13:30.130 --> 00:13:34.484 and the default mode network is very

NOTE Confidence: 0.8234268

00:13:34.484 --> 00:13:39.988 often thought to under write a sense of

NOTE Confidence: 0.8234268

00:13:39.988 --> 00:13:43.508 self or self preferential processing.

NOTE Confidence: 0.8234268

00:13:43.510 --> 00:13:45.842 It's increased in depression.

NOTE Confidence: 0.8234268

00:13:45.842 --> 00:13:48.757 Decreased acutely with Silla Simon

NOTE Confidence: 0.8234268

00:13:48.757 --> 00:13:52.255 and it fits with this story that

NOTE Confidence: 0.8234268

00:13:52.255 --> 00:13:54.490 these compounds may result in,

NOTE Confidence: 0.8234268

00:13:54.490 --> 00:13:56.810 you know, dissolution of self,

NOTE Confidence: 0.8234268

00:13:56.810 --> 00:13:57.884 if you will,

NOTE Confidence: 0.8234268

00:13:57.884 --> 00:14:00.032 or ego if you dissolve this

NOTE Confidence: 0.8234268

00:14:00.032 --> 00:14:02.380 self preferential processing.

NOTE Confidence: 0.8234268

00:14:02.380 --> 00:14:05.500 It also fits with the fact that long

NOTE Confidence: 0.8234268

00:14:05.500 --> 00:14:07.472 term meditators showed decreases

NOTE Confidence: 0.8234268

00:14:07.472 --> 00:14:10.257 in default mode network processing,

NOTE Confidence: 0.8234268

00:14:10.260 --> 00:14:13.324 but this is just going to be one

NOTE Confidence: 0.8234268

00:14:13.324 --> 00:14:16.300 of many levels of explanation.

NOTE Confidence: 0.81042093

00:14:19.170 --> 00:14:21.876 Barrett Fred Barrett from our lab

NOTE Confidence: 0.81042093

00:14:21.876 --> 00:14:24.859 has just recently published some work

NOTE Confidence: 0.81042093

00:14:24.859 --> 00:14:27.599 showing that psilocybin alters colostrum

NOTE Confidence: 0.81042093

00:14:27.599 --> 00:14:30.429 connectivity to classic brain networks,

NOTE Confidence: 0.81042093

00:14:30.430 --> 00:14:33.508 and that's a big interest because.

NOTE Confidence: 0.8179065

00:14:36.060 --> 00:14:37.626 Crick, among others,

NOTE Confidence: 0.8179065

00:14:37.626 --> 00:14:40.236 hypothesize that the Claustrum might

NOTE Confidence: 0.8179065

00:14:40.236 --> 00:14:43.197 be intricately involved in the nature

NOTE Confidence: 0.8179065

00:14:43.197 --> 00:14:45.492 of consciousness and classroom is,

NOTE Confidence: 0.8179065

00:14:45.500 --> 00:14:48.482 you know, a structure that is

NOTE Confidence: 0.8179065

00:14:48.482 --> 00:14:50.470 highly enervated in serotonin.

NOTE Confidence: 0.8179065

00:14:50.470 --> 00:14:53.613 2A receptors in a lot of connectivity
NOTE Confidence: 0.8179065

00:14:53.613 --> 00:14:55.940 in cortical brain structures,
NOTE Confidence: 0.8179065

00:14:55.940 --> 00:14:59.041 so that's that's going to be an
NOTE Confidence: 0.8179065

00:14:59.041 --> 00:15:01.357 interesting piece to the puzzle
NOTE Confidence: 0.8179065

00:15:01.357 --> 00:15:04.514 and then buried in a separate study
NOTE Confidence: 0.8179065

00:15:04.514 --> 00:15:07.099 showed psilocybin transcendent.
NOTE Confidence: 0.8179065

00:15:07.100 --> 00:15:09.348 Transiently reduces amygdala response
NOTE Confidence: 0.8179065

00:15:09.348 --> 00:15:12.158 to emotional and neutral faces.
NOTE Confidence: 0.8179065

00:15:12.160 --> 00:15:15.526 This is a week post psilocybin,
NOTE Confidence: 0.8179065

00:15:15.530 --> 00:15:18.896 so we're what we're looking for.
NOTE Confidence: 0.8179065

00:15:18.900 --> 00:15:20.898 Here is what?
NOTE Confidence: 0.8179065

00:15:20.898 --> 00:15:24.894 What elements of neuronal functioning might
NOTE Confidence: 0.8179065

00:15:24.894 --> 00:15:29.260 account for enduring effects of psilocybin?
NOTE Confidence: 0.8179065

00:15:29.260 --> 00:15:33.820 The Olsen lab at UC.
NOTE Confidence: 0.8179065

00:15:33.820 --> 00:15:39.468 Davis has, let's see.
NOTE Confidence: 0.8179065

00:15:39.470 --> 00:15:42.422 Well, let me start with the

NOTE Confidence: 0.8179065

00:15:42.422 --> 00:15:43.898 anti inflammatory effects.

NOTE Confidence: 0.8179065

00:15:43.900 --> 00:15:46.552 So Chuck Nichols has shown that

NOTE Confidence: 0.8179065

00:15:46.552 --> 00:15:48.320 psychedelics have very potent

NOTE Confidence: 0.8179065

00:15:48.402 --> 00:15:50.289 anti inflammatory effects,

NOTE Confidence: 0.8179065

00:15:50.290 --> 00:15:53.272 so that may be among the potential

NOTE Confidence: 0.8179065

00:15:53.272 --> 00:15:55.641 mechanisms and then the Olson

NOTE Confidence: 0.8179065

00:15:55.641 --> 00:15:58.166 lab has shown that psychedelics

NOTE Confidence: 0.8179065

00:15:58.166 --> 00:16:00.630 produce structural and functional.

NOTE Confidence: 0.8179065

00:16:00.630 --> 00:16:02.061 Neuroplasticity narrated Genesis,

NOTE Confidence: 0.8179065

00:16:02.061 --> 00:16:04.923 Spina Genesis of Napa Genesis immediately

NOTE Confidence: 0.8179065

00:16:04.923 --> 00:16:07.020 through various signaling pathways.

NOTE Confidence: 0.8179065

00:16:07.020 --> 00:16:08.220 So, so,

NOTE Confidence: 0.8179065

00:16:08.220 --> 00:16:10.020 the idea that.

NOTE Confidence: 0.8179065

00:16:10.020 --> 00:16:11.824 Enduring neuroplastic changes might

NOTE Confidence: 0.8179065

00:16:11.824 --> 00:16:14.530 account for what's going on with

NOTE Confidence: 0.8179065

00:16:14.604 --> 00:16:17.060 psychedelics is certainly compelling
NOTE Confidence: 0.8179065

00:16:17.060 --> 00:16:19.516 and interesting biological mechanism.
NOTE Confidence: 0.8770007

00:16:21.550 --> 00:16:23.282 Overall, this neuropharmacology is
NOTE Confidence: 0.8770007

00:16:23.282 --> 00:16:26.590 just a very active area of research,
NOTE Confidence: 0.8770007

00:16:26.590 --> 00:16:30.246 and there's a lot of progress being made,
NOTE Confidence: 0.8770007

00:16:30.250 --> 00:16:35.866 so it's a hugely exciting area to jump into.
NOTE Confidence: 0.8770007

00:16:35.870 --> 00:16:38.686 However, to me when we first started this
NOTE Confidence: 0.8770007

00:16:38.686 --> 00:16:41.335 among the most interesting features of
NOTE Confidence: 0.8770007

00:16:41.335 --> 00:16:44.149 the psychedelics were that they produce
NOTE Confidence: 0.8770007

00:16:44.221 --> 00:16:47.016 these profound acute and sometimes
NOTE Confidence: 0.8770007

00:16:47.016 --> 00:16:49.252 enduring alterations of consciousness.
NOTE Confidence: 0.8770007

00:16:49.260 --> 00:16:52.676 And just I just need to say how
NOTE Confidence: 0.8770007

00:16:52.676 --> 00:16:55.718 deeply ignorant we are about the
NOTE Confidence: 0.8770007

00:16:55.718 --> 00:16:57.810 very nature of consciousness.
NOTE Confidence: 0.8770007

00:16:57.810 --> 00:17:01.098 So I think we need to go into
NOTE Confidence: 0.8770007

00:17:01.098 --> 00:17:03.510 this with some humility.

NOTE Confidence: 0.8770007

00:17:03.510 --> 00:17:06.360 There's this hard problem of consciousness,

NOTE Confidence: 0.8770007

00:17:06.360 --> 00:17:09.210 which is indeed a hard and

NOTE Confidence: 0.8770007

00:17:09.210 --> 00:17:11.110 perhaps unsolved soluble problem.

NOTE Confidence: 0.8770007

00:17:11.110 --> 00:17:14.715 And it strikes me as a mystical

NOTE Confidence: 0.8770007

00:17:14.715 --> 00:17:17.530 puzzle in and of itself.

NOTE Confidence: 0.8770007

00:17:17.530 --> 00:17:20.267 And then just last week we published

NOTE Confidence: 0.8770007

00:17:20.267 --> 00:17:23.150 a pair of viewpoint articles.

NOTE Confidence: 0.8770007

00:17:23.150 --> 00:17:25.485 This is in pharmacology and

NOTE Confidence: 0.8770007

00:17:25.485 --> 00:17:26.419 translational Sciences.

NOTE Confidence: 0.8770007

00:17:26.420 --> 00:17:28.132 Olson taking the position,

NOTE Confidence: 0.8770007

00:17:28.132 --> 00:17:30.272 that subject subjective effects are

NOTE Confidence: 0.8770007

00:17:30.272 --> 00:17:32.969 not necessary for therapeutic effects,

NOTE Confidence: 0.8770007

00:17:32.970 --> 00:17:35.310 and we took the contrarian

NOTE Confidence: 0.8770007

00:17:35.310 --> 00:17:37.182 position that they are.

NOTE Confidence: 0.8770007

00:17:37.190 --> 00:17:39.525 And of course it's going

NOTE Confidence: 0.8770007

00:17:39.525 --> 00:17:41.393 to be some interaction.
NOTE Confidence: 0.8770007

00:17:41.400 --> 00:17:44.921 Well, I would submit it's going to
NOTE Confidence: 0.8770007

00:17:44.921 --> 00:17:48.019 be some interaction between the two.
NOTE Confidence: 0.8770007

00:17:48.020 --> 00:17:49.720 Um?
NOTE Confidence: 0.8770007

00:17:49.720 --> 00:17:54.040 So to tell you a little bit about what we
NOTE Confidence: 0.8770007

00:17:54.154 --> 00:17:58.798 have done over the last 20 years we've done.
NOTE Confidence: 0.8770007

00:17:58.800 --> 00:18:02.958 A number of studies in healthy participants,
NOTE Confidence: 0.8770007

00:18:02.960 --> 00:18:04.148 both psychedelic,
NOTE Confidence: 0.8770007

00:18:04.148 --> 00:18:05.930 naive and experienced.
NOTE Confidence: 0.8770007

00:18:05.930 --> 00:18:08.306 We've looked at novice
NOTE Confidence: 0.8770007

00:18:08.306 --> 00:18:10.088 and long-term meditators,
NOTE Confidence: 0.8770007

00:18:10.090 --> 00:18:12.920 religious professionals.
NOTE Confidence: 0.8770007

00:18:12.920 --> 00:18:15.380 Depressed and anxious cancer patients,
NOTE Confidence: 0.8770007

00:18:15.380 --> 00:18:17.840 people with major depressive disorders,
NOTE Confidence: 0.8770007

00:18:17.840 --> 00:18:18.738 cigarette smoking.
NOTE Confidence: 0.8770007

00:18:18.738 --> 00:18:21.432 We're doing studies now with anorexia

NOTE Confidence: 0.8770007

00:18:21.432 --> 00:18:23.505 nervosa and depressed patients

NOTE Confidence: 0.8770007

00:18:23.505 --> 00:18:25.709 with early Alzheimer's disease.

NOTE Confidence: 0.8770007

00:18:25.710 --> 00:18:29.740 And So what I'm going to do is tell you

NOTE Confidence: 0.8770007

00:18:29.843 --> 00:18:34.078 a little bit about the healthy volunteer.

NOTE Confidence: 0.8770007

00:18:34.080 --> 00:18:36.475 Participants were search and then

NOTE Confidence: 0.8770007

00:18:36.475 --> 00:18:39.978 quickly go over the work with the

NOTE Confidence: 0.8770007

00:18:39.978 --> 00:18:42.518 cancer and depressed patients and.

NOTE Confidence: 0.8770007

00:18:42.520 --> 00:18:43.624 And smokers.

NOTE Confidence: 0.8770007

00:18:43.624 --> 00:18:46.936 Today we have treated over 375

NOTE Confidence: 0.8770007

00:18:46.936 --> 00:18:49.790 participants and over 700 sessions,

NOTE Confidence: 0.8770007

00:18:49.790 --> 00:18:52.891 so we've accumulated a good bit of

NOTE Confidence: 0.8770007

00:18:52.891 --> 00:18:55.170 experience with still assignment.

NOTE Confidence: 0.858462330000001

00:18:57.180 --> 00:19:00.726 So I want to start off with the studies

NOTE Confidence: 0.858462330000001

00:19:00.726 --> 00:19:04.418 in healthy participants because it's a

NOTE Confidence: 0.858462330000001

00:19:04.418 --> 00:19:08.132 model for administration of high doses

NOTE Confidence: 0.858462330000001

00:19:08.132 --> 00:19:11.516 an it's that model that we have used
NOTE Confidence: 0.8584623300000001

00:19:11.516 --> 00:19:14.886 in our our treatment studies to date.
NOTE Confidence: 0.8584623300000001

00:19:14.890 --> 00:19:18.338 So these I'm going to just summarize some
NOTE Confidence: 0.8584623300000001

00:19:18.338 --> 00:19:21.289 results across several different studies,
NOTE Confidence: 0.8584623300000001

00:19:21.290 --> 00:19:24.727 but these are all double blind studies.
NOTE Confidence: 0.8584623300000001

00:19:24.730 --> 00:19:26.734 Participants were medically and
NOTE Confidence: 0.8584623300000001

00:19:26.734 --> 00:19:28.738 psychiatrically healthy and most.
NOTE Confidence: 0.8584623300000001

00:19:28.740 --> 00:19:31.962 In these studies were without any
NOTE Confidence: 0.8584623300000001

00:19:31.962 --> 00:19:34.714 histories of psychedelic use because
NOTE Confidence: 0.8584623300000001

00:19:34.714 --> 00:19:38.291 we didn't want to skew the population
NOTE Confidence: 0.8584623300000001

00:19:38.291 --> 00:19:41.487 toward people who were proponents or
NOTE Confidence: 0.8584623300000001

00:19:41.487 --> 00:19:44.607 had had positive experiences that our
NOTE Confidence: 0.8584623300000001

00:19:44.610 --> 00:19:47.230 participants meet with our session
NOTE Confidence: 0.8584623300000001

00:19:47.230 --> 00:19:50.430 monitors to develop repor and trust,
NOTE Confidence: 0.8584623300000001

00:19:50.430 --> 00:19:53.070 thought to minimize adverse reactions.
NOTE Confidence: 0.8584623300000001

00:19:53.070 --> 00:19:55.190 An experimental conditions are

NOTE Confidence: 0.858462330000001
00:19:55.190 --> 00:19:57.840 designed to minimize expectancy bias,
NOTE Confidence: 0.858462330000001
00:19:57.840 --> 00:20:00.168 but this is a.
NOTE Confidence: 0.858462330000001
00:20:00.168 --> 00:20:03.660 Incredibly complex thing to do with
NOTE Confidence: 0.858462330000001
00:20:03.777 --> 00:20:06.917 approach to different ways.
NOTE Confidence: 0.858462330000001
00:20:06.920 --> 00:20:09.440 Studies are conducted in a comfortable
NOTE Confidence: 0.858462330000001
00:20:09.440 --> 00:20:11.120 living room like environment.
NOTE Confidence: 0.858462330000001
00:20:11.120 --> 00:20:14.060 I participant comes in in the morning,
NOTE Confidence: 0.858462330000001
00:20:14.060 --> 00:20:16.580 takes a capsule containing cell assignment,
NOTE Confidence: 0.858462330000001
00:20:16.580 --> 00:20:19.520 is asked to lay on a couch.
NOTE Confidence: 0.858462330000001
00:20:19.520 --> 00:20:21.620 We used this structured situation
NOTE Confidence: 0.858462330000001
00:20:21.620 --> 00:20:23.720 developed back in the 60s.
NOTE Confidence: 0.858462330000001
00:20:23.720 --> 00:20:27.040 We ask people to have eye shades and
NOTE Confidence: 0.858462330000001
00:20:27.040 --> 00:20:29.171 headphones through which they listen
NOTE Confidence: 0.858462330000001
00:20:29.171 --> 00:20:31.613 to a program of music throughout
NOTE Confidence: 0.858462330000001
00:20:31.613 --> 00:20:34.220 the period of drug action there,
NOTE Confidence: 0.858462330000001

00:20:34.220 --> 00:20:36.770 in the presence of two.
NOTE Confidence: 0.8584623300000001

00:20:36.770 --> 00:20:39.038 Monitor facilitators guides if you will,
NOTE Confidence: 0.8584623300000001

00:20:39.040 --> 00:20:41.808 but the invitation is to go inward and
NOTE Confidence: 0.8584623300000001

00:20:41.808 --> 00:20:43.969 explore their own inner experience,
NOTE Confidence: 0.8584623300000001

00:20:43.970 --> 00:20:46.250 so this isn't a guided session.
NOTE Confidence: 0.8584623300000001

00:20:46.250 --> 00:20:50.264 We don't. We don't think of it as a.
NOTE Confidence: 0.8584623300000001

00:20:50.270 --> 00:20:51.802 Certainly not a classic
NOTE Confidence: 0.8584623300000001

00:20:51.802 --> 00:20:52.568 psychotherapeutic session.
NOTE Confidence: 0.8584623300000001

00:20:52.570 --> 00:20:54.868 We're not inviting them to talk.
NOTE Confidence: 0.8584623300000001

00:20:54.870 --> 00:20:59.497 We're inviting them just to going inward.
NOTE Confidence: 0.8584623300000001

00:20:59.500 --> 00:21:01.870 This shows time course of monitor
NOTE Confidence: 0.8584623300000001

00:21:01.870 --> 00:21:05.009 ratings across the six Hours session period.
NOTE Confidence: 0.8584623300000001

00:21:05.010 --> 00:21:07.971 This is from a dose effect study
NOTE Confidence: 0.8584623300000001

00:21:07.971 --> 00:21:10.326 showing very nice orderly dose
NOTE Confidence: 0.8584623300000001

00:21:10.326 --> 00:21:12.806 and time related effects of.
NOTE Confidence: 0.8584623300000001

00:21:12.810 --> 00:21:14.570 Up still assignment with effects.

NOTE Confidence: 0.858462330000001
00:21:14.570 --> 00:21:17.114 As you can see coming on in about
NOTE Confidence: 0.858462330000001
00:21:17.114 --> 00:21:19.333 30 minutes reaching peak effects at
NOTE Confidence: 0.858462330000001
00:21:19.333 --> 00:21:22.012 two to three hours and then tapering
NOTE Confidence: 0.858462330000001
00:21:22.012 --> 00:21:24.780 off by the end of the session day.
NOTE Confidence: 0.858462330000001
00:21:24.780 --> 00:21:27.588 People are very close to back to normal.
NOTE Confidence: 0.858462330000001
00:21:27.590 --> 00:21:29.360 We release them in the company
NOTE Confidence: 0.858462330000001
00:21:29.360 --> 00:21:31.918 of a friend or family member who
NOTE Confidence: 0.858462330000001
00:21:31.918 --> 00:21:33.229 accompanied them home.
NOTE Confidence: 0.8567688
00:21:35.440 --> 00:21:37.304 So what happens will,
NOTE Confidence: 0.8567688
00:21:37.304 --> 00:21:38.236 not surprisingly,
NOTE Confidence: 0.8567688
00:21:38.240 --> 00:21:41.509 you give a high dose of psilocybin,
NOTE Confidence: 0.8567688
00:21:41.510 --> 00:21:43.378 and you produce these
NOTE Confidence: 0.8567688
00:21:43.378 --> 00:21:44.779 classic psychedelic effects,
NOTE Confidence: 0.8567688
00:21:44.780 --> 00:21:46.644 including the perceptual changes,
NOTE Confidence: 0.8567688
00:21:46.644 --> 00:21:47.576 greater emotionality,
NOTE Confidence: 0.8567688

00:21:47.580 --> 00:21:49.448 both positive and negative,
NOTE Confidence: 0.8567688

00:21:49.448 --> 00:21:50.849 and cognitive changes.
NOTE Confidence: 0.8567688

00:21:50.850 --> 00:21:52.620 Sense of meaning,
NOTE Confidence: 0.8567688

00:21:52.620 --> 00:21:55.150 sometimes suspiciousness but what was
NOTE Confidence: 0.8567688

00:21:55.150 --> 00:21:58.976 stood out and was so intriguing to me
NOTE Confidence: 0.8567688

00:21:58.976 --> 00:22:02.426 initially was that in most participants
NOTE Confidence: 0.8567688

00:22:02.426 --> 00:22:05.590 under these kinds of conditions.
NOTE Confidence: 0.8567688

00:22:05.590 --> 00:22:07.498 Psilocybin produces large increases
NOTE Confidence: 0.8567688

00:22:07.498 --> 00:22:09.406 in self rated questionnaires.
NOTE Confidence: 0.8567688

00:22:09.410 --> 00:22:11.695 To designed that were initially
NOTE Confidence: 0.8567688

00:22:11.695 --> 00:22:13.980 designed to measure naturally occur
NOTE Confidence: 0.8567688

00:22:14.053 --> 00:22:16.168 in mystical or insightful type
NOTE Confidence: 0.8567688

00:22:16.168 --> 00:22:18.894 experiences and this shows post session
NOTE Confidence: 0.8567688

00:22:18.894 --> 00:22:21.589 ratings of mystical experience on
NOTE Confidence: 0.8567688

00:22:21.589 --> 00:22:23.745 our Mystical Experience questionnaire
NOTE Confidence: 0.8567688

00:22:23.750 --> 00:22:26.140 that we've developed and validated.

NOTE Confidence: 0.8567688
00:22:26.140 --> 00:22:29.008 Just showing this is nice dose
NOTE Confidence: 0.8567688
00:22:29.008 --> 00:22:30.920 related effects high scores.
NOTE Confidence: 0.8567688
00:22:30.920 --> 00:22:34.022 What in the world is a
NOTE Confidence: 0.8567688
00:22:34.022 --> 00:22:35.573 mystical experience you?
NOTE Confidence: 0.8567688
00:22:35.580 --> 00:22:37.372 Might very well ask,
NOTE Confidence: 0.8567688
00:22:37.372 --> 00:22:40.060 and in retrospect we have a.
NOTE Confidence: 0.8567688
00:22:40.060 --> 00:22:43.196 We made a series branding error here.
NOTE Confidence: 0.8567688
00:22:43.200 --> 00:22:45.476 Calling this questionnaire and
NOTE Confidence: 0.8567688
00:22:45.476 --> 00:22:47.183 mystical experience Questionnaire
NOTE Confidence: 0.8567688
00:22:47.183 --> 00:22:50.350 'cause if the funnels people but.
NOTE Confidence: 0.8567688
00:22:50.350 --> 00:22:52.262 But in any case,
NOTE Confidence: 0.8567688
00:22:52.262 --> 00:22:54.652 this questionnaire is really comprised
NOTE Confidence: 0.8567688
00:22:54.652 --> 00:22:57.850 of questions that probe different
NOTE Confidence: 0.8567688
00:22:57.850 --> 00:23:00.486 phenomenological factors and the.
NOTE Confidence: 0.8567688
00:23:00.490 --> 00:23:02.718 The first three questions,
NOTE Confidence: 0.8567688

00:23:02.718 --> 00:23:06.650 or three sets of questions you know,
NOTE Confidence: 0.8567688

00:23:06.650 --> 00:23:08.081 probe the phenomenological.
NOTE Confidence: 0.8567688

00:23:08.081 --> 00:23:12.160 Our concept of unity as a core feature.
NOTE Confidence: 0.8567688

00:23:12.160 --> 00:23:14.170 This interconnectedness of all people
NOTE Confidence: 0.8567688

00:23:14.170 --> 00:23:17.600 and things all is 1 pure consciousness.
NOTE Confidence: 0.8567688

00:23:17.600 --> 00:23:19.432 And that's accompanied by
NOTE Confidence: 0.8567688

00:23:19.432 --> 00:23:21.264 this sense of sacredness,
NOTE Confidence: 0.8567688

00:23:21.270 --> 00:23:23.106 reference or press ishness.
NOTE Confidence: 0.8567688

00:23:23.106 --> 00:23:24.483 There's something valuable
NOTE Confidence: 0.8567688

00:23:24.483 --> 00:23:25.860 about this experience,
NOTE Confidence: 0.8567688

00:23:25.860 --> 00:23:30.578 and it has this noetic quality of.
NOTE Confidence: 0.8567688

00:23:30.580 --> 00:23:31.939 Having encountered ultimate
NOTE Confidence: 0.8567688

00:23:31.939 --> 00:23:35.110 reality or the truth value of it,
NOTE Confidence: 0.8567688

00:23:35.110 --> 00:23:38.372 it seems more real and more true
NOTE Confidence: 0.8567688

00:23:38.372 --> 00:23:41.100 than everyday waking consciousness.
NOTE Confidence: 0.8567688

00:23:41.100 --> 00:23:43.620 And then the other factors are

NOTE Confidence: 0.8567688

00:23:43.620 --> 00:23:45.887 this deeply felt positive move

NOTE Confidence: 0.8567688

00:23:45.887 --> 00:23:49.457 transcendence of time and space and the

NOTE Confidence: 0.8567688

00:23:49.457 --> 00:23:51.679 ineffability difficulty put into words.

NOTE Confidence: 0.8567688

00:23:51.680 --> 00:23:54.260 Well, here's that.

NOTE Confidence: 0.8567688

00:23:54.260 --> 00:23:55.576 Thorn in our side,

NOTE Confidence: 0.8567688

00:23:55.576 --> 00:23:58.349 having used mystical and so so I just

NOTE Confidence: 0.8567688

00:23:58.349 --> 00:24:00.164 need to state mystical experience

NOTE Confidence: 0.8567688

00:24:00.164 --> 00:24:02.653 is defined by respondent endorsing

NOTE Confidence: 0.8567688

00:24:02.653 --> 00:24:05.313 a constellation of empirically

NOTE Confidence: 0.8567688

00:24:05.313 --> 00:24:07.308 measured phenomenological dimensions,

NOTE Confidence: 0.8567688

00:24:07.310 --> 00:24:09.535 and these this measure need

NOTE Confidence: 0.8567688

00:24:09.535 --> 00:24:11.760 not imply supernatural or non

NOTE Confidence: 0.8567688

00:24:11.840 --> 00:24:14.220 rational levels of explanation.

NOTE Confidence: 0.8567688

00:24:14.220 --> 00:24:17.797 And and if you think about it,

NOTE Confidence: 0.8567688

00:24:17.800 --> 00:24:21.237 it's just been this kind of phenomena

NOTE Confidence: 0.8567688

00:24:21.237 --> 00:24:24.383 has been described by very many
NOTE Confidence: 0.8567688

00:24:24.383 --> 00:24:27.013 different names across the decades,
NOTE Confidence: 0.8567688

00:24:27.020 --> 00:24:29.580 like conversion experience with what
NOTE Confidence: 0.8567688

00:24:29.580 --> 00:24:32.140 William James initially described this.
NOTE Confidence: 0.8567688

00:24:32.140 --> 00:24:34.700 But also mystical religious peak.
NOTE Confidence: 0.8567688

00:24:34.700 --> 00:24:36.388 Transcendental experiences,
NOTE Confidence: 0.8567688

00:24:36.388 --> 00:24:38.920 transforming moment epiphanies.
NOTE Confidence: 0.8567688

00:24:38.920 --> 00:24:42.816 So when I initiated this work at Hopkins,
NOTE Confidence: 0.8567688

00:24:42.820 --> 00:24:45.250 Paul McHugh was our chair.
NOTE Confidence: 0.8567688

00:24:45.250 --> 00:24:48.064 Anne and Paul was insistent that
NOTE Confidence: 0.8567688

00:24:48.064 --> 00:24:51.100 we were just looking at delirium.
NOTE Confidence: 0.8567688

00:24:51.100 --> 00:24:54.868 And so we did a study in which
NOTE Confidence: 0.8567688

00:24:54.868 --> 00:24:56.939 we administered his scale,
NOTE Confidence: 0.8567688

00:24:56.940 --> 00:24:59.916 which is a gold standard measure
NOTE Confidence: 0.8567688

00:24:59.916 --> 00:25:03.159 now for delirium than many mental
NOTE Confidence: 0.8567688

00:25:03.159 --> 00:25:05.475 status examination to people

NOTE Confidence: 0.8567688

00:25:05.475 --> 00:25:08.673 who had psilocybin and what we

NOTE Confidence: 0.8567688

00:25:08.673 --> 00:25:11.019 were able to show is that.

NOTE Confidence: 0.8567688

00:25:11.020 --> 00:25:11.525 Um,

NOTE Confidence: 0.8567688

00:25:11.525 --> 00:25:14.050 that many metal isn't affected

NOTE Confidence: 0.8567688

00:25:14.050 --> 00:25:17.361 across the same range of doses

NOTE Confidence: 0.8567688

00:25:17.361 --> 00:25:19.745 of psilocybin that produced

NOTE Confidence: 0.8567688

00:25:19.745 --> 00:25:22.129 full on mystical experiences.

NOTE Confidence: 0.8567688

00:25:22.130 --> 00:25:24.830 In addition to mystical experiences,

NOTE Confidence: 0.8567688

00:25:24.830 --> 00:25:26.990 there's this other quality

NOTE Confidence: 0.8567688

00:25:26.990 --> 00:25:28.610 of these experiences,

NOTE Confidence: 0.8567688

00:25:28.610 --> 00:25:32.313 and that's those would be labeled experiences

NOTE Confidence: 0.8567688

00:25:32.313 --> 00:25:34.550 of significant psychological insight,

NOTE Confidence: 0.8567688

00:25:34.550 --> 00:25:37.250 and so those are increased

NOTE Confidence: 0.8567688

00:25:37.250 --> 00:25:39.950 in a dose related manner.

NOTE Confidence: 0.8567688

00:25:39.950 --> 00:25:44.798 We've actually now just developed and.

NOTE Confidence: 0.8567688

00:25:44.800 --> 00:25:48.069 I think it's in press or maybe
NOTE Confidence: 0.8567688

00:25:48.069 --> 00:25:49.470 just recently published.
NOTE Confidence: 0.8567688

00:25:49.470 --> 00:25:51.602 Our Psychological Insight questionnaire
NOTE Confidence: 0.8567688

00:25:51.602 --> 00:25:54.800 that pairs with our Mystical experience
NOTE Confidence: 0.85812974

00:25:54.871 --> 00:25:57.463 questionnaire and gets at a different
NOTE Confidence: 0.85812974

00:25:57.463 --> 00:26:00.016 facet of these experiences that may
NOTE Confidence: 0.85812974

00:26:00.016 --> 00:26:03.046 be quite important. We think too.
NOTE Confidence: 0.85812974

00:26:03.046 --> 00:26:05.574 And during therapeutic effects.
NOTE Confidence: 0.85812974

00:26:05.580 --> 00:26:08.443 So what I've described to this point
NOTE Confidence: 0.85812974

00:26:08.443 --> 00:26:11.340 has been the session experience.
NOTE Confidence: 0.85812974

00:26:11.340 --> 00:26:15.180 You know, these are all post session ratings,
NOTE Confidence: 0.85812974

00:26:15.180 --> 00:26:17.934 but the interesting piece of this
NOTE Confidence: 0.85812974

00:26:17.934 --> 00:26:20.352 work is the attributions that
NOTE Confidence: 0.85812974

00:26:20.352 --> 00:26:22.857 people make to these experiences.
NOTE Confidence: 0.85812974

00:26:22.860 --> 00:26:25.260 Going further out in time.
NOTE Confidence: 0.85812974

00:26:25.260 --> 00:26:28.924 And so here's one month after high dose

NOTE Confidence: 0.85812974

00:26:28.924 --> 00:26:31.913 sessions and healthy volunteers in which

NOTE Confidence: 0.85812974

00:26:31.913 --> 00:26:35.328 we have about 80% of people staying.

NOTE Confidence: 0.85812974

00:26:35.328 --> 00:26:37.708 Reflecting back on that experience

NOTE Confidence: 0.85812974

00:26:37.708 --> 00:26:39.920 a month ago and rating,

NOTE Confidence: 0.85812974

00:26:39.920 --> 00:26:42.853 it is among the five most personally

NOTE Confidence: 0.85812974

00:26:42.853 --> 00:26:44.749 meaningful or spiritually significant

NOTE Confidence: 0.85812974

00:26:44.749 --> 00:26:47.569 experiences of their entire lifetimes.

NOTE Confidence: 0.85812974

00:26:47.570 --> 00:26:50.587 And that it wouldn't even occur to

NOTE Confidence: 0.85812974

00:26:50.587 --> 00:26:54.340 me to ask a question of this sort.

NOTE Confidence: 0.85812974

00:26:54.340 --> 00:26:56.590 People rate these things about

NOTE Confidence: 0.85812974

00:26:56.590 --> 00:26:59.200 30% say it's the single most

NOTE Confidence: 0.85812974

00:26:59.200 --> 00:27:00.496 spiritually significant experience

NOTE Confidence: 0.85812974

00:27:00.496 --> 00:27:02.450 of their entire lifetime,

NOTE Confidence: 0.85812974

00:27:02.450 --> 00:27:05.453 but it was only after we start

NOTE Confidence: 0.85812974

00:27:05.453 --> 00:27:08.686 bringing people back in to do follow

NOTE Confidence: 0.85812974

00:27:08.686 --> 00:27:11.464 up interviews and we're realizing this.

NOTE Confidence: 0.85812974

00:27:11.470 --> 00:27:14.224 This is really unusual and certainly

NOTE Confidence: 0.85812974

00:27:14.224 --> 00:27:17.025 unprecedented in my working with a

NOTE Confidence: 0.85812974

00:27:17.025 --> 00:27:21.110 variety of psychoactive. Substances.

NOTE Confidence: 0.85812974

00:27:21.110 --> 00:27:24.518 And here we have about 90%.

NOTE Confidence: 0.85812974

00:27:24.520 --> 00:27:26.952 Attributing increased sense of

NOTE Confidence: 0.85812974

00:27:26.952 --> 00:27:29.384 well being life satisfaction

NOTE Confidence: 0.85812974

00:27:29.384 --> 00:27:32.059 or positive behavior change.

NOTE Confidence: 0.85812974

00:27:32.060 --> 00:27:35.651 So I'm just going to run down the kinds

NOTE Confidence: 0.85812974

00:27:35.651 --> 00:27:39.286 of things that people are endorsing.

NOTE Confidence: 0.85812974

00:27:39.290 --> 00:27:42.293 This is either one month after Sessions

NOTE Confidence: 0.85812974

00:27:42.293 --> 00:27:46.123 or in the right hand side from a

NOTE Confidence: 0.85812974

00:27:46.123 --> 00:27:49.185 different studies were six months after

NOTE Confidence: 0.85812974

00:27:49.185 --> 00:27:52.790 sessions and just the large effect sizes,

NOTE Confidence: 0.85812974

00:27:52.790 --> 00:27:55.676 Cohen D's of greater than one.

NOTE Confidence: 0.85812974

00:27:55.680 --> 00:27:58.572 But this is classically people attribute

NOTE Confidence: 0.85812974

00:27:58.572 --> 00:28:00.982 to these experiences, positive changes,

NOTE Confidence: 0.85812974

00:28:00.982 --> 00:28:03.540 positive attitudes about self, so.

NOTE Confidence: 0.85812974

00:28:03.540 --> 00:28:06.690 Increase self confidence in authority,

NOTE Confidence: 0.85812974

00:28:06.690 --> 00:28:08.733 authenticity, playfulness etc.

NOTE Confidence: 0.85812974

00:28:08.733 --> 00:28:11.457 Positive attitudes about life

NOTE Confidence: 0.85812974

00:28:11.457 --> 00:28:14.700 like increased life appreciation,

NOTE Confidence: 0.85812974

00:28:14.700 --> 00:28:16.950 gratitude, enthusiasm, meaning,

NOTE Confidence: 0.85812974

00:28:16.950 --> 00:28:17.700 etc.

NOTE Confidence: 0.85812974

00:28:17.700 --> 00:28:21.450 Positive mood changes increased love,

NOTE Confidence: 0.85812974

00:28:21.450 --> 00:28:23.190 inner peace,

NOTE Confidence: 0.85812974

00:28:23.190 --> 00:28:26.670 positive emotions decreased anger.

NOTE Confidence: 0.85812974

00:28:26.670 --> 00:28:28.350 Positive social effects.

NOTE Confidence: 0.85812974

00:28:28.350 --> 00:28:29.470 Positive relationships,

NOTE Confidence: 0.85812974

00:28:29.470 --> 00:28:31.150 greater tolerance start.

NOTE Confidence: 0.85812974

00:28:31.150 --> 00:28:33.390 Others love towards others.

NOTE Confidence: 0.85812974

00:28:33.390 --> 00:28:35.630 Empathy towards others compassion.

NOTE Confidence: 0.8099022

00:28:37.660 --> 00:28:39.580 Broadly speaking, increased

NOTE Confidence: 0.8099022

00:28:39.580 --> 00:28:41.500 spirituality, increased sense,

NOTE Confidence: 0.8099022

00:28:41.500 --> 00:28:44.700 of reverence, preciousness of life,

NOTE Confidence: 0.8099022

00:28:44.700 --> 00:28:46.620 profound sacred experiences.

NOTE Confidence: 0.8983963000000001

00:28:49.510 --> 00:28:51.875 And people will also endorse

NOTE Confidence: 0.8983963000000001

00:28:51.875 --> 00:28:54.729 behavior changes now these are in

NOTE Confidence: 0.8983963000000001

00:28:54.729 --> 00:28:57.177 the healthy volunteer so we didn't

NOTE Confidence: 0.8983963000000001

00:28:57.177 --> 00:28:59.837 have a single behavior target which

NOTE Confidence: 0.8983963000000001

00:28:59.837 --> 00:29:02.980 we do in the addictions of course.

NOTE Confidence: 0.8983963000000001

00:29:02.980 --> 00:29:06.116 But people report all kinds of things,

NOTE Confidence: 0.8983963000000001

00:29:06.120 --> 00:29:07.872 such as increased improved

NOTE Confidence: 0.8983963000000001

00:29:07.872 --> 00:29:09.624 social relationships or increased

NOTE Confidence: 0.8983963000000001

00:29:09.624 --> 00:29:11.510 physical self care activities,

NOTE Confidence: 0.8983963000000001

00:29:11.510 --> 00:29:14.550 spiritual practices, creative activities.

NOTE Confidence: 0.8983963000000001

00:29:14.550 --> 00:29:16.746 So that's out to six months.

NOTE Confidence: 0.8983963000000001
00:29:16.750 --> 00:29:19.288 Here is 14 months and this
NOTE Confidence: 0.8983963000000001
00:29:19.288 --> 00:29:20.980 is just endorsement of.
NOTE Confidence: 0.8983963000000001
00:29:20.980 --> 00:29:24.165 Increases in well being or life satisfaction.
NOTE Confidence: 0.8983963000000001
00:29:24.170 --> 00:29:27.570 The red bar shows five weeks after a
NOTE Confidence: 0.8983963000000001
00:29:27.570 --> 00:29:30.786 high dose of psilocybin and the blue
NOTE Confidence: 0.8983963000000001
00:29:30.786 --> 00:29:34.628 bar shows 14 months in that same group.
NOTE Confidence: 0.8983963000000001
00:29:34.630 --> 00:29:37.360 So these are these are sustained
NOTE Confidence: 0.8983963000000001
00:29:37.360 --> 00:29:39.680 and anecdotally years later people
NOTE Confidence: 0.8983963000000001
00:29:39.680 --> 00:29:41.800 will still make attributions of
NOTE Confidence: 0.8983963000000001
00:29:41.800 --> 00:29:45.474 this type and and it's not just the
NOTE Confidence: 0.8983963000000001
00:29:45.474 --> 00:29:47.370 volunteer that's reporting this,
NOTE Confidence: 0.8983963000000001
00:29:47.370 --> 00:29:50.560 we have done, we've added.
NOTE Confidence: 0.8983963000000001
00:29:50.560 --> 00:29:52.750 Measures of Community observer ratings.
NOTE Confidence: 0.8983963000000001
00:29:52.750 --> 00:29:54.940 These would be family members,
NOTE Confidence: 0.8983963000000001
00:29:54.940 --> 00:29:58.608 friends, colleagues at work.
NOTE Confidence: 0.8983963000000001

00:29:58.610 --> 00:29:59.956 Providing ratings.
NOTE Confidence: 0.8983963000000001

00:29:59.956 --> 00:30:03.994 Volunteers across a range of measures
NOTE Confidence: 0.8983963000000001

00:30:03.994 --> 00:30:08.364 similar to those that they report and
NOTE Confidence: 0.8983963000000001

00:30:08.364 --> 00:30:12.490 those are showing similar kinds of effects.
NOTE Confidence: 0.8983963000000001

00:30:12.490 --> 00:30:15.196 And then just as a placeholder,
NOTE Confidence: 0.8983963000000001

00:30:15.200 --> 00:30:17.876 'cause I'm going to return to
NOTE Confidence: 0.8983963000000001

00:30:17.876 --> 00:30:20.170 it at the very end,
NOTE Confidence: 0.8983963000000001

00:30:20.170 --> 00:30:22.014 mystical experiences scores predict
NOTE Confidence: 0.8983963000000001

00:30:22.014 --> 00:30:23.858 meaningfulness and spiritual significance
NOTE Confidence: 0.8983963000000001

00:30:23.858 --> 00:30:25.600 and openness in personality.
NOTE Confidence: 0.8983963000000001

00:30:25.600 --> 00:30:28.631 At 14 months of there's something about
NOTE Confidence: 0.8983963000000001

00:30:28.631 --> 00:30:30.934 these mystical experiences that are
NOTE Confidence: 0.8983963000000001

00:30:30.934 --> 00:30:33.274 predictive of long-term enduring effects,
NOTE Confidence: 0.8983963000000001

00:30:33.280 --> 00:30:35.992 and I'd just be remiss not
NOTE Confidence: 0.8983963000000001

00:30:35.992 --> 00:30:37.348 to acknowledge that,
NOTE Confidence: 0.8983963000000001

00:30:37.350 --> 00:30:39.624 in spite of all the screening

NOTE Confidence: 0.8983963000000001
00:30:39.624 --> 00:30:42.320 we do in the preparation,
NOTE Confidence: 0.8983963000000001
00:30:42.320 --> 00:30:45.260 the support during and after.
NOTE Confidence: 0.8983963000000001
00:30:45.260 --> 00:30:47.750 About 1/3 of volunteers in
NOTE Confidence: 0.8983963000000001
00:30:47.750 --> 00:30:51.420 one of our studies and I think
NOTE Confidence: 0.8983963000000001
00:30:51.420 --> 00:30:54.105 that figure is roughly right.
NOTE Confidence: 0.8983963000000001
00:30:54.110 --> 00:30:57.066 Experienced stronger extreme feelings
NOTE Confidence: 0.8983963000000001
00:30:57.066 --> 00:31:01.500 of fear sometime during the session.
NOTE Confidence: 0.8983963000000001
00:31:01.500 --> 00:31:04.150 Figure as unpredictable time course,
NOTE Confidence: 0.8983963000000001
00:31:04.150 --> 00:31:05.581 but Despite that,
NOTE Confidence: 0.8983963000000001
00:31:05.581 --> 00:31:07.966 most of these volunteers rated
NOTE Confidence: 0.8983963000000001
00:31:07.966 --> 00:31:10.199 these experiences overall having
NOTE Confidence: 0.8983963000000001
00:31:10.199 --> 00:31:12.607 meaning and spiritual significance.
NOTE Confidence: 0.8983963000000001
00:31:12.610 --> 00:31:15.300 Then no volunteer rated the
NOTE Confidence: 0.8983963000000001
00:31:15.300 --> 00:31:17.990 experiences to decrease their sense
NOTE Confidence: 0.8983963000000001
00:31:18.079 --> 00:31:21.067 of well being or life satisfaction.
NOTE Confidence: 0.88415223

00:31:23.410 --> 00:31:25.993 OK, so now I'm going to move on to
NOTE Confidence: 0.88415223

00:31:25.993 --> 00:31:28.527 talk about our therapeutic trials and
NOTE Confidence: 0.88415223

00:31:28.527 --> 00:31:31.220 I'll start with our cancer study.
NOTE Confidence: 0.88415223

00:31:31.220 --> 00:31:35.708 These are people. With.
NOTE Confidence: 0.88415223

00:31:35.710 --> 00:31:41.382 With the. And a significant life
NOTE Confidence: 0.88415223

00:31:41.382 --> 00:31:44.714 threatening diagnosis of cancer.
NOTE Confidence: 0.88415223

00:31:44.720 --> 00:31:47.648 And as as you might imagine,
NOTE Confidence: 0.88415223

00:31:47.650 --> 00:31:50.982 people with such a diagnosis often develop
NOTE Confidence: 0.88415223

00:31:50.982 --> 00:31:52.988 chronic and debilitating syndromes
NOTE Confidence: 0.88415223

00:31:52.988 --> 00:31:55.478 of either anxiety or depression.
NOTE Confidence: 0.88415223

00:31:55.480 --> 00:31:57.395 There were several studies back
NOTE Confidence: 0.88415223

00:31:57.395 --> 00:32:00.564 in the 60s or 70s that suggested
NOTE Confidence: 0.88415223

00:32:00.564 --> 00:32:03.494 that psychedelics might be an
NOTE Confidence: 0.88415223

00:32:03.494 --> 00:32:05.252 interesting intervention here.
NOTE Confidence: 0.88415223

00:32:05.260 --> 00:32:08.676 In this case, we have 51 participants,
NOTE Confidence: 0.88415223

00:32:08.680 --> 00:32:11.720 mean age, 56 have female.

NOTE Confidence: 0.88415223

00:32:11.720 --> 00:32:15.409 Most of the studies that we have

NOTE Confidence: 0.88415223

00:32:15.409 --> 00:32:19.098 done to date, you know are skewed

NOTE Confidence: 0.88415223

00:32:19.098 --> 00:32:21.206 toward educated white individuals.

NOTE Confidence: 0.88415223

00:32:21.210 --> 00:32:24.894 In this case, about 45% had some

NOTE Confidence: 0.88415223

00:32:24.894 --> 00:32:27.529 lifetime use of a psychedelic,

NOTE Confidence: 0.88415223

00:32:27.530 --> 00:32:30.686 but on average 31 years ago.

NOTE Confidence: 0.88415223

00:32:30.690 --> 00:32:35.160 So these weren't current users.

NOTE Confidence: 0.88415223

00:32:35.160 --> 00:32:39.348 This is the prognosis.

NOTE Confidence: 0.88415223

00:32:39.350 --> 00:32:42.520 About 65% had recurrent or

NOTE Confidence: 0.88415223

00:32:42.520 --> 00:32:43.788 metastatic disease.

NOTE Confidence: 0.88415223

00:32:43.790 --> 00:32:46.606 35% possibility of recurrence,

NOTE Confidence: 0.88415223

00:32:46.606 --> 00:32:51.870 and there are various types of cancers.

NOTE Confidence: 0.88415223

00:32:51.870 --> 00:32:54.830 Terms of skin diagnosis.

NOTE Confidence: 0.88415223

00:32:54.830 --> 00:32:58.530 About 40% had depressed mood,

NOTE Confidence: 0.88415223

00:32:58.530 --> 00:33:01.640 30% anxiety 30% mixed

NOTE Confidence: 0.88415223

00:33:01.640 --> 00:33:04.310 anxiety or depression.
NOTE Confidence: 0.88415223

00:33:04.310 --> 00:33:07.924 51% had used medications previously
NOTE Confidence: 0.88415223

00:33:07.924 --> 00:33:12.010 for treatment of anxiety or depression.
NOTE Confidence: 0.8641079

00:33:14.780 --> 00:33:16.790 This is the study design.
NOTE Confidence: 0.8641079

00:33:16.790 --> 00:33:18.390 It was randomized double
NOTE Confidence: 0.8641079

00:33:18.390 --> 00:33:19.590 blind crossover design.
NOTE Confidence: 0.8641079

00:33:19.590 --> 00:33:22.044 Looking at the acute and sustained
NOTE Confidence: 0.8641079

00:33:22.044 --> 00:33:25.367 effects of a very low dose placebo like
NOTE Confidence: 0.8641079

00:33:25.367 --> 00:33:28.762 dose of still 7 one milligram for 70
NOTE Confidence: 0.8641079

00:33:28.762 --> 00:33:31.474 kilogram versus a moderately high dose.
NOTE Confidence: 0.8641079

00:33:31.480 --> 00:33:33.570 And and we administered that
NOTE Confidence: 0.8641079

00:33:33.570 --> 00:33:35.670 very minimal dose, partly blind,
NOTE Confidence: 0.8641079

00:33:35.670 --> 00:33:36.930 for blinding reasons.
NOTE Confidence: 0.8641079

00:33:36.930 --> 00:33:40.274 I can go into that in more detail,
NOTE Confidence: 0.8641079

00:33:40.280 --> 00:33:42.524 but people were told that they
NOTE Confidence: 0.8641079

00:33:42.524 --> 00:33:44.890 were going to receive psilocybin.

NOTE Confidence: 0.8641079

00:33:44.890 --> 00:33:46.410 The dose might vary.

NOTE Confidence: 0.8641079

00:33:46.410 --> 00:33:48.690 They were not told that there

NOTE Confidence: 0.8641079

00:33:48.771 --> 00:33:50.747 were simply 22 conditions,

NOTE Confidence: 0.8641079

00:33:50.750 --> 00:33:53.522 and that instruction set was similar

NOTE Confidence: 0.8641079

00:33:53.522 --> 00:33:57.018 for both the guides and the volunteers.

NOTE Confidence: 0.8641079

00:33:57.020 --> 00:34:01.286 So we're bending over backwards to.

NOTE Confidence: 0.8641079

00:34:01.290 --> 00:34:04.106 To blind the study as best as we

NOTE Confidence: 0.8641079

00:34:04.106 --> 00:34:06.869 could with respect to expectancies.

NOTE Confidence: 0.8641079

00:34:06.870 --> 00:34:08.530 Some people were randomized

NOTE Confidence: 0.8641079

00:34:08.530 --> 00:34:10.605 to just two session orders.

NOTE Confidence: 0.8641079

00:34:10.610 --> 00:34:12.690 They either received the high

NOTE Confidence: 0.8641079

00:34:12.690 --> 00:34:14.770 dose first on session one,

NOTE Confidence: 0.8641079

00:34:14.770 --> 00:34:18.098 and then there's a five week follow up,

NOTE Confidence: 0.8641079

00:34:18.100 --> 00:34:21.444 followed by the low dose or or the

NOTE Confidence: 0.8641079

00:34:21.444 --> 00:34:23.508 inverse sequence of dough sing,

NOTE Confidence: 0.8641079

00:34:23.510 --> 00:34:28.433 and then we did a six month follow up.

NOTE Confidence: 0.8641079

00:34:28.440 --> 00:34:29.992 Not surprisingly,

NOTE Confidence: 0.8641079

00:34:29.992 --> 00:34:32.320 under these conditions.

NOTE Confidence: 0.8641079

00:34:32.320 --> 00:34:34.084 People are reporting mystical

NOTE Confidence: 0.8641079

00:34:34.084 --> 00:34:34.966 type experiences.

NOTE Confidence: 0.8641079

00:34:34.970 --> 00:34:38.234 You can see our low dose session actually

NOTE Confidence: 0.8641079

00:34:38.234 --> 00:34:40.575 produces a not inconsequential elevation

NOTE Confidence: 0.8641079

00:34:40.575 --> 00:34:44.250 of this and that's as it should be.

NOTE Confidence: 0.8641079

00:34:44.250 --> 00:34:46.018 People are told they're

NOTE Confidence: 0.8641079

00:34:46.018 --> 00:34:47.786 going to get psilocybin.

NOTE Confidence: 0.8641079

00:34:47.790 --> 00:34:49.900 These are conditions are optimized

NOTE Confidence: 0.8641079

00:34:49.900 --> 00:34:52.650 to produce these kinds of effects,

NOTE Confidence: 0.8641079

00:34:52.650 --> 00:34:55.275 but a much bigger effects

NOTE Confidence: 0.8641079

00:34:55.275 --> 00:34:56.850 with still assignment.

NOTE Confidence: 0.8641079

00:34:56.850 --> 00:34:59.316 And here's the Attribution of meaning

NOTE Confidence: 0.8641079

00:34:59.316 --> 00:35:00.960 spiritual significance and well,

NOTE Confidence: 0.8641079

00:35:00.960 --> 00:35:01.435 being.

NOTE Confidence: 0.8641079

00:35:01.435 --> 00:35:03.335 Orange bars showing five

NOTE Confidence: 0.8641079

00:35:03.335 --> 00:35:05.710 weeks after the high dose.

NOTE Confidence: 0.8641079

00:35:05.710 --> 00:35:09.430 And blue bars now are showing that these

NOTE Confidence: 0.8641079

00:35:09.430 --> 00:35:12.959 effects are sustained out to six months.

NOTE Confidence: 0.8641079

00:35:12.960 --> 00:35:17.118 OK, So what about our clinical measures?

NOTE Confidence: 0.8641079

00:35:17.120 --> 00:35:20.354 So this is Hamdy Gold standard

NOTE Confidence: 0.8641079

00:35:20.354 --> 00:35:23.650 clinician rated measure of depression.

NOTE Confidence: 0.8641079

00:35:23.650 --> 00:35:26.620 The left panel shows clinically

NOTE Confidence: 0.8641079

00:35:26.620 --> 00:35:27.808 significant improvement.

NOTE Confidence: 0.8641079

00:35:27.810 --> 00:35:31.968 That's 50% drop in Ham D scores.

NOTE Confidence: 0.8641079

00:35:31.970 --> 00:35:36.190 So you're seeing about 92% of participants

NOTE Confidence: 0.8641079

00:35:36.190 --> 00:35:38.065 showing clinically significant

NOTE Confidence: 0.8641079

00:35:38.065 --> 00:35:42.070 improvement five weeks after the high dose,

NOTE Confidence: 0.8641079

00:35:42.070 --> 00:35:44.290 and that's sustained.

NOTE Confidence: 0.8641079

00:35:44.290 --> 00:35:46.510 It's six months.

NOTE Confidence: 0.8641079

00:35:46.510 --> 00:35:49.288 And then in the right panel,

NOTE Confidence: 0.8641079

00:35:49.290 --> 00:35:51.600 remission to the normal range.

NOTE Confidence: 0.8641079

00:35:51.600 --> 00:35:55.376 That's a handy score of seven or less

NOTE Confidence: 0.8641079

00:35:55.376 --> 00:35:58.549 considered to be in the normal range,

NOTE Confidence: 0.8641079

00:35:58.550 --> 00:36:01.791 60% at the end of five weeks

NOTE Confidence: 0.8641079

00:36:01.791 --> 00:36:04.385 and 70% at six months.

NOTE Confidence: 0.8641079

00:36:04.385 --> 00:36:06.605 Hamdy is showing very

NOTE Confidence: 0.8641079

00:36:06.605 --> 00:36:09.220 similar kinds of results.

NOTE Confidence: 0.8641079

00:36:09.220 --> 00:36:11.752 So we concluded from this study

NOTE Confidence: 0.8641079

00:36:11.752 --> 00:36:14.370 single moderate dose of psilocybin,

NOTE Confidence: 0.8641079

00:36:14.370 --> 00:36:16.166 when administered under supported

NOTE Confidence: 0.8641079

00:36:16.166 --> 00:36:17.962 conditions to these carefully

NOTE Confidence: 0.8641079

00:36:17.962 --> 00:36:20.394 screen and prepared participants can

NOTE Confidence: 0.8641079

00:36:20.394 --> 00:36:22.358 produce substantial and enduring

NOTE Confidence: 0.8641079

00:36:22.358 --> 00:36:24.200 decreases in depressed mood.

NOTE Confidence: 0.8641079
00:36:24.200 --> 00:36:26.996 In these people would like threading,
NOTE Confidence: 0.8641079
00:36:27.000 --> 00:36:29.580 cancer diagnosis and and the NYU
NOTE Confidence: 0.8641079
00:36:29.580 --> 00:36:32.619 Group ran a very similar study,
NOTE Confidence: 0.8641079
00:36:32.620 --> 00:36:36.105 slightly smaller in and got
NOTE Confidence: 0.8641079
00:36:36.105 --> 00:36:38.196 very similar conclusions.
NOTE Confidence: 0.8641079
00:36:38.200 --> 00:36:38.899 OK,
NOTE Confidence: 0.8641079
00:36:38.899 --> 00:36:42.394 moving on to the treatment
NOTE Confidence: 0.8641079
00:36:42.394 --> 00:36:45.190 of major depressive disorder.
NOTE Confidence: 0.8641079
00:36:45.190 --> 00:36:48.538 Don't need to tell your Department,
NOTE Confidence: 0.8641079
00:36:48.540 --> 00:36:50.740 but depressions of serious
NOTE Confidence: 0.8641079
00:36:50.740 --> 00:36:54.680 concern and I leave it at that.
NOTE Confidence: 0.8641079
00:36:54.680 --> 00:36:58.330 This study we reported JAMA
NOTE Confidence: 0.8641079
00:36:58.330 --> 00:37:01.250 Psychiatry just last month.
NOTE Confidence: 0.8641079
00:37:01.250 --> 00:37:03.380 And it was a randomized delayed
NOTE Confidence: 0.8641079
00:37:03.380 --> 00:37:05.815 treatment or or wait list control
NOTE Confidence: 0.8641079

00:37:05.815 --> 00:37:07.699 trial examining the efficacy
NOTE Confidence: 0.8641079

00:37:07.699 --> 00:37:09.583 of two psilocybin sessions,
NOTE Confidence: 0.8641079

00:37:09.590 --> 00:37:14.338 either 20 or 30 milligrams, for 70 kilogram.
NOTE Confidence: 0.8641079

00:37:14.340 --> 00:37:16.686 Sequentially 1st 20,
NOTE Confidence: 0.8641079

00:37:16.686 --> 00:37:19.814 then 30 under psychologically
NOTE Confidence: 0.8641079

00:37:19.814 --> 00:37:21.378 supported conditions.
NOTE Confidence: 0.8641079

00:37:21.380 --> 00:37:23.920 This is the study design,
NOTE Confidence: 0.8641079

00:37:23.920 --> 00:37:26.956 so there was a screening baseline.
NOTE Confidence: 0.77848345

00:37:26.960 --> 00:37:28.984 People randomized to immediate
NOTE Confidence: 0.77848345

00:37:28.984 --> 00:37:31.008 treatment or delayed treatment.
NOTE Confidence: 0.77848345

00:37:31.010 --> 00:37:33.675 They after preparation they receive
NOTE Confidence: 0.77848345

00:37:33.675 --> 00:37:36.340 two psilocybin sessions and then
NOTE Confidence: 0.77848345

00:37:36.423 --> 00:37:38.618 they followed up with handy.
NOTE Confidence: 0.77848345

00:37:38.620 --> 00:37:41.150 So the delayed treatment you
NOTE Confidence: 0.77848345

00:37:41.150 --> 00:37:43.174 literally just was delayed.
NOTE Confidence: 0.77848345

00:37:43.180 --> 00:37:46.210 They got timing of their hamdis

NOTE Confidence: 0.77848345

00:37:46.210 --> 00:37:49.412 were at similar time points and

NOTE Confidence: 0.77848345

00:37:49.412 --> 00:37:52.117 then they were crossed over.

NOTE Confidence: 0.77848345

00:37:52.120 --> 00:37:54.528 To the active condition.

NOTE Confidence: 0.77848345

00:37:54.528 --> 00:37:58.488 24 subjects mean age, 40 years,

NOTE Confidence: 0.77848345

00:37:58.488 --> 00:38:00.810 females overrepresented again.

NOTE Confidence: 0.77848345

00:38:00.810 --> 00:38:04.536 Educated white mean duration of illness.

NOTE Confidence: 0.77848345

00:38:04.540 --> 00:38:08.272 22 years duration of current episode

NOTE Confidence: 0.77848345

00:38:08.272 --> 00:38:13.055 24 months 58% had failed one or more

NOTE Confidence: 0.77848345

00:38:13.055 --> 00:38:16.980 medical trials in the current episode,

NOTE Confidence: 0.77848345

00:38:16.980 --> 00:38:19.464 baseline Hamdis were 23%.

NOTE Confidence: 0.77848345

00:38:19.464 --> 00:38:23.050 About 25% had some lifetime

NOTE Confidence: 0.77848345

00:38:23.050 --> 00:38:25.390 use of psychedelics.

NOTE Confidence: 0.77848345

00:38:25.390 --> 00:38:27.718 Hi, mystical experience scores.

NOTE Confidence: 0.77848345

00:38:27.718 --> 00:38:30.628 Not much of a difference

NOTE Confidence: 0.77848345

00:38:30.628 --> 00:38:32.578 between the two doses.

NOTE Confidence: 0.77848345

00:38:32.580 --> 00:38:36.090 And here's blinded handy ratings in
NOTE Confidence: 0.77848345

00:38:36.090 --> 00:38:39.661 the delay treatment and the immediate
NOTE Confidence: 0.77848345

00:38:39.661 --> 00:38:43.595 treatment at 5 weeks and eight weeks.
NOTE Confidence: 0.77848345

00:38:43.600 --> 00:38:46.500 So we're seeing huge effects.
NOTE Confidence: 0.77848345

00:38:46.500 --> 00:38:49.788 Major consti SUV.
NOTE Confidence: 0.77848345

00:38:49.790 --> 00:38:52.538 Well over 2.
NOTE Confidence: 0.77848345

00:38:52.540 --> 00:38:55.714 And this is showing data combined
NOTE Confidence: 0.77848345

00:38:55.714 --> 00:38:59.159 across the groups just showing that.
NOTE Confidence: 0.77848345

00:38:59.160 --> 00:39:01.650 The delay group decreased just
NOTE Confidence: 0.77848345

00:39:01.650 --> 00:39:05.474 in the very same way that the
NOTE Confidence: 0.77848345

00:39:05.474 --> 00:39:08.544 immediate group did post treatment.
NOTE Confidence: 0.77848345

00:39:08.550 --> 00:39:11.550 This is clinically significant response
NOTE Confidence: 0.77848345

00:39:11.550 --> 00:39:15.428 in the upper panel showing that one
NOTE Confidence: 0.77848345

00:39:15.428 --> 00:39:19.560 week for week and 12 weeks we have about 70%.
NOTE Confidence: 0.77848345

00:39:19.560 --> 00:39:20.986 And remission.
NOTE Confidence: 0.77848345

00:39:20.986 --> 00:39:23.838 At the same time,

NOTE Confidence: 0.77848345

00:39:23.840 --> 00:39:27.880 points is about 50 minutes better than 50%,

NOTE Confidence: 0.77848345

00:39:27.880 --> 00:39:29.900 which is very good.

NOTE Confidence: 0.77848345

00:39:29.900 --> 00:39:30.910 Here's quids.

NOTE Confidence: 0.77848345

00:39:30.910 --> 00:39:33.850 This is a patient rated depression

NOTE Confidence: 0.77848345

00:39:33.850 --> 00:39:36.470 inventory showing rather similar effects.

NOTE Confidence: 0.77848345

00:39:36.470 --> 00:39:39.865 I can't account for why that increased

NOTE Confidence: 0.77848345

00:39:39.865 --> 00:39:44.040 in the late treatment group at 5 weeks,

NOTE Confidence: 0.77848345

00:39:44.040 --> 00:39:46.570 but nonetheless big effect sizes,

NOTE Confidence: 0.77848345

00:39:46.570 --> 00:39:49.648 and this is interesting because we

NOTE Confidence: 0.77848345

00:39:49.648 --> 00:39:53.039 gave the quids post session days.

NOTE Confidence: 0.77848345

00:39:53.040 --> 00:39:55.720 And so what's shown here?

NOTE Confidence: 0.77848345

00:39:55.720 --> 00:39:58.600 This is collapsed across both

NOTE Confidence: 0.77848345

00:39:58.600 --> 00:40:00.328 groups is changing.

NOTE Confidence: 0.77848345

00:40:00.330 --> 00:40:03.564 Score from Baseline today day one

NOTE Confidence: 0.77848345

00:40:03.564 --> 00:40:07.175 post session one is that first

NOTE Confidence: 0.77848345

00:40:07.175 --> 00:40:10.535 point suggesting that we're getting
NOTE Confidence: 0.77848345

00:40:10.535 --> 00:40:13.802 full on therapeutic effects even
NOTE Confidence: 0.77848345

00:40:13.802 --> 00:40:17.240 the day after the first session.
NOTE Confidence: 0.8552547

00:40:19.940 --> 00:40:22.140 This is Beck depression inventory.
NOTE Confidence: 0.8552547

00:40:22.140 --> 00:40:24.750 Then this is just showing
NOTE Confidence: 0.8552547

00:40:24.750 --> 00:40:27.360 the same kinds of effects.
NOTE Confidence: 0.8552547

00:40:27.360 --> 00:40:29.940 Here's Patient health questionnaire,
NOTE Confidence: 0.8552547

00:40:29.940 --> 00:40:31.875 patient rated depression,
NOTE Confidence: 0.8552547

00:40:31.880 --> 00:40:35.100 large effect sizes. Here's hamme.
NOTE Confidence: 0.8251834

00:40:37.250 --> 00:40:41.380 State trade inventory patient rated.
NOTE Confidence: 0.8251834

00:40:41.380 --> 00:40:43.640 And suicidal ideations with
NOTE Confidence: 0.8251834

00:40:43.640 --> 00:40:45.335 not significantly different,
NOTE Confidence: 0.8251834

00:40:45.340 --> 00:40:50.436 intended to decrease, and in both groups.
NOTE Confidence: 0.8251834

00:40:50.440 --> 00:40:52.325 Sport conclusions here are the
NOTE Confidence: 0.8251834

00:40:52.325 --> 00:40:54.844 modern high dose of psilocybin when
NOTE Confidence: 0.8251834

00:40:54.844 --> 00:40:57.120 administered under supportive conditions,

NOTE Confidence: 0.8251834

00:40:57.120 --> 00:40:59.345 can produce substantial in and

NOTE Confidence: 0.8251834

00:40:59.345 --> 00:41:01.570 during decreases and depressed mood.

NOTE Confidence: 0.8251834

00:41:01.570 --> 00:41:03.430 Depression was subsequently deep

NOTE Confidence: 0.8251834

00:41:03.430 --> 00:41:05.755 was substantially decreased the day

NOTE Confidence: 0.8251834

00:41:05.755 --> 00:41:08.239 after the first monitor dose session,

NOTE Confidence: 0.8251834

00:41:08.240 --> 00:41:11.726 suggesting that a single dose may be

NOTE Confidence: 0.8251834

00:41:11.726 --> 00:41:14.040 adequate for therapeutic response.

NOTE Confidence: 0.8251834

00:41:14.040 --> 00:41:16.040 Treatment did not exacerbate

NOTE Confidence: 0.8251834

00:41:16.040 --> 00:41:18.040 depression in any participant.

NOTE Confidence: 0.8251834

00:41:18.040 --> 00:41:21.040 I didn't didn't show you that,

NOTE Confidence: 0.8251834

00:41:21.040 --> 00:41:24.040 but there was no indication that

NOTE Confidence: 0.8251834

00:41:24.040 --> 00:41:25.540 treatment exacerbated depression.

NOTE Confidence: 0.8251834

00:41:25.540 --> 00:41:29.260 Two of the 24 participants had little or

NOTE Confidence: 0.8251834

00:41:29.260 --> 00:41:34.478 no therapeutic response, and and were.

NOTE Confidence: 0.8251834

00:41:34.480 --> 00:41:38.332 Working up our follow up data now but these.

NOTE Confidence: 0.8251834

00:41:38.340 --> 00:41:40.628 These attacks are impressively
NOTE Confidence: 0.8251834

00:41:40.628 --> 00:41:45.020 sustained out to our one year followup,
NOTE Confidence: 0.8251834

00:41:45.020 --> 00:41:47.760 with some some recurrence,
NOTE Confidence: 0.8251834

00:41:47.760 --> 00:41:51.185 but nonetheless it's it's interesting.
NOTE Confidence: 0.8251834

00:41:51.190 --> 00:41:51.568 Um?
NOTE Confidence: 0.8251834

00:41:51.568 --> 00:41:53.836 Big limitation of this study is
NOTE Confidence: 0.8251834

00:41:53.836 --> 00:41:56.690 that didn't include a placebo or
NOTE Confidence: 0.8251834

00:41:56.690 --> 00:41:58.890 pharmacologically active control condition.
NOTE Confidence: 0.8251834

00:41:58.890 --> 00:42:03.426 But as I said, that's a it's a.
NOTE Confidence: 0.8251834

00:42:03.430 --> 00:42:05.730 Very difficult to figure out.
NOTE Confidence: 0.8251834

00:42:05.730 --> 00:42:06.268 Well,
NOTE Confidence: 0.8251834

00:42:06.268 --> 00:42:09.496 I don't think there's any single
NOTE Confidence: 0.8251834

00:42:09.496 --> 00:42:11.756 comparison condition that actually
NOTE Confidence: 0.8251834

00:42:11.756 --> 00:42:14.556 results in an adequate control.
NOTE Confidence: 0.8251834

00:42:14.560 --> 00:42:17.220 And in terms of status,
NOTE Confidence: 0.8251834

00:42:17.220 --> 00:42:19.900 FDA is given breakthrough therapy

NOTE Confidence: 0.8251834

00:42:19.900 --> 00:42:22.580 status designation to two companies

NOTE Confidence: 0.8251834

00:42:22.664 --> 00:42:25.556 that are working now with psilocybin

NOTE Confidence: 0.8251834

00:42:25.556 --> 00:42:28.155 for indications of either treatment

NOTE Confidence: 0.8251834

00:42:28.155 --> 00:42:30.519 resistant depression or MDD.

NOTE Confidence: 0.8251834

00:42:30.520 --> 00:42:34.237 And so if those trials are positive,

NOTE Confidence: 0.8251834

00:42:34.240 --> 00:42:36.322 that's a big.

NOTE Confidence: 0.8251834

00:42:36.322 --> 00:42:41.180 If you know the FDA approval processes.

NOTE Confidence: 0.8251834

00:42:41.180 --> 00:42:42.406 Incredibly involved,

NOTE Confidence: 0.8251834

00:42:42.406 --> 00:42:46.084 but it could result in approval

NOTE Confidence: 0.8251834

00:42:46.084 --> 00:42:48.712 of psilocybin for medical use

NOTE Confidence: 0.8251834

00:42:48.712 --> 00:42:51.764 and I would guess it will take.

NOTE Confidence: 0.8251834

00:42:51.770 --> 00:42:55.466 Four to six years for that to occur.

NOTE Confidence: 0.8251834

00:42:55.470 --> 00:42:59.096 OK, turning now to treatment of addiction.

NOTE Confidence: 0.8251834

00:42:59.100 --> 00:43:03.236 Why would we have even thought of addiction?

NOTE Confidence: 0.8251834

00:43:03.240 --> 00:43:03.813 Well,

NOTE Confidence: 0.8251834

00:43:03.813 --> 00:43:06.678 you know there's anthropological evidence

NOTE Confidence: 0.8251834

00:43:06.678 --> 00:43:09.471 from Native Americans suggesting that

NOTE Confidence: 0.8251834

00:43:09.471 --> 00:43:12.045 addictions of reasonable thing to do,

NOTE Confidence: 0.8251834

00:43:12.050 --> 00:43:14.490 and also again look reflecting

NOTE Confidence: 0.8251834

00:43:14.490 --> 00:43:17.511 back on earlier studies in the

NOTE Confidence: 0.8251834

00:43:17.511 --> 00:43:20.487 1950s and meta analysis and recent

NOTE Confidence: 0.8251834

00:43:20.487 --> 00:43:23.406 study in Alcoholics suggests that

NOTE Confidence: 0.8251834

00:43:23.406 --> 00:43:26.086 addictions are reasonable target.

NOTE Confidence: 0.8251834

00:43:26.090 --> 00:43:27.506 In this case,

NOTE Confidence: 0.8251834

00:43:27.506 --> 00:43:30.810 this study was led by Matt Johnson

NOTE Confidence: 0.8251834

00:43:30.913 --> 00:43:34.147 from our group and our first study

NOTE Confidence: 0.8251834

00:43:34.147 --> 00:43:38.549 was a simple pilot study looking at

NOTE Confidence: 0.8251834

00:43:38.549 --> 00:43:41.461 psilocybin facilitation of treatment

NOTE Confidence: 0.8251834

00:43:41.461 --> 00:43:44.086 cessation with cognitive behavioral

NOTE Confidence: 0.8251834

00:43:44.086 --> 00:43:46.418 therapy for smoking integrated

NOTE Confidence: 0.8251834

00:43:46.418 --> 00:43:48.750 into our standard preparation

NOTE Confidence: 0.8251834

00:43:48.826 --> 00:43:50.770 and support for psilocybin.

NOTE Confidence: 0.8251834

00:43:50.770 --> 00:43:54.697 We offered up to three psilocybin sessions,

NOTE Confidence: 0.8251834

00:43:54.700 --> 00:43:57.052 first one being 20.

NOTE Confidence: 0.8251834

00:43:57.052 --> 00:43:59.992 Milligrams for 70 kilograms that

NOTE Confidence: 0.8251834

00:43:59.992 --> 00:44:02.849 corresponded to the target quit date

NOTE Confidence: 0.8251834

00:44:02.849 --> 00:44:05.705 for smoking and then two subsequent

NOTE Confidence: 0.8251834

00:44:05.705 --> 00:44:08.645 sessions so it's open label.

NOTE Confidence: 0.8251834

00:44:08.650 --> 00:44:11.818 It's very weak in that respect.

NOTE Confidence: 0.8251834

00:44:11.820 --> 00:44:15.000 15 participants mean age 50 years.

NOTE Confidence: 0.8251834

00:44:15.000 --> 00:44:17.112 Males over represented 19

NOTE Confidence: 0.8251834

00:44:17.112 --> 00:44:19.752 cigarettes per day on average.

NOTE Confidence: 0.8251834

00:44:19.760 --> 00:44:20.792 Mean year.

NOTE Confidence: 0.8251834

00:44:20.792 --> 00:44:24.404 Smoking 31 mean previous quitus attempt 6

NOTE Confidence: 0.8251834

00:44:24.404 --> 00:44:28.399 so these are chronic long-term smokers.

NOTE Confidence: 0.8251834

00:44:28.400 --> 00:44:30.620 But the results are astonishingly

NOTE Confidence: 0.8251834

00:44:30.620 --> 00:44:34.119 clear when you look at them like this.

NOTE Confidence: 0.8251834

00:44:34.120 --> 00:44:36.320 This is urinary code, Nina,

NOTE Confidence: 0.8251834

00:44:36.320 --> 00:44:37.200 major metabolite,

NOTE Confidence: 0.8251834

00:44:37.200 --> 00:44:38.520 for for nicotine.

NOTE Confidence: 0.8251834

00:44:38.520 --> 00:44:41.112 And you can see in the left there

NOTE Confidence: 0.8251834

00:44:41.112 --> 00:44:44.117 prior to the target quit date when

NOTE Confidence: 0.8251834

00:44:44.117 --> 00:44:46.392 people are learning the cognitive

NOTE Confidence: 0.8251834

00:44:46.477 --> 00:44:48.640 behavior therapy approaches,

NOTE Confidence: 0.8251834

00:44:48.640 --> 00:44:50.840 code mean is maintained at

NOTE Confidence: 0.8251834

00:44:50.840 --> 00:44:52.160 relatively stable levels.

NOTE Confidence: 0.8251834

00:44:52.160 --> 00:44:55.880 They hit the target quit date

NOTE Confidence: 0.8251834

00:44:55.880 --> 00:44:58.360 corresponding to that first.

NOTE Confidence: 0.8251834

00:44:58.360 --> 00:45:01.020 Session and these are median

NOTE Confidence: 0.8251834

00:45:01.020 --> 00:45:03.148 levels dropped to 0,

NOTE Confidence: 0.8117753

00:45:03.150 --> 00:45:08.020 so there's some. Some variation,

NOTE Confidence: 0.8117753

00:45:08.020 --> 00:45:13.120 but they are sustained at.

NOTE Confidence: 0.8117753

00:45:13.120 --> 00:45:15.405 At very low levels and

NOTE Confidence: 0.8117753

00:45:15.405 --> 00:45:17.690 at six months follow up,

NOTE Confidence: 0.8117753

00:45:17.690 --> 00:45:20.540 we had 80% abstinence, which.

NOTE Confidence: 0.8117753

00:45:20.540 --> 00:45:23.395 In the smoking cessation business

NOTE Confidence: 0.8117753

00:45:23.395 --> 00:45:26.822 is just an absurdly high number

NOTE Confidence: 0.8117753

00:45:26.822 --> 00:45:30.126 and and so really calls on us

NOTE Confidence: 0.8117753

00:45:30.126 --> 00:45:32.747 to continue to look at that.

NOTE Confidence: 0.8117753

00:45:32.750 --> 00:45:36.686 This is some follow up data with Johnson.

NOTE Confidence: 0.8117753

00:45:36.690 --> 00:45:39.552 He has published this that's incorrectly

NOTE Confidence: 0.8117753

00:45:39.552 --> 00:45:42.544 labeled looking at 7 point prevalence

NOTE Confidence: 0.8117753

00:45:42.544 --> 00:45:45.538 abstinence rates out to 30 months,

NOTE Confidence: 0.8117753

00:45:45.540 --> 00:45:48.486 which is still up to 60%.

NOTE Confidence: 0.8274449

00:45:51.180 --> 00:45:55.140 So this whole area I should also say

NOTE Confidence: 0.8274449

00:45:55.140 --> 00:45:59.856 Matt now has moved onto an is a good way

NOTE Confidence: 0.8274449

00:45:59.856 --> 00:46:03.848 through a comparative efficacy trial.

NOTE Confidence: 0.8274449

00:46:03.850 --> 00:46:06.710 Comparing psilocybin to nicotine replacement

NOTE Confidence: 0.8274449

00:46:06.710 --> 00:46:10.469 therapy in the results of that look,

NOTE Confidence: 0.8274449

00:46:10.470 --> 00:46:14.078 very look very promising.

NOTE Confidence: 0.8274449

00:46:14.080 --> 00:46:16.552 So that works that works going on and

NOTE Confidence: 0.8274449

00:46:16.552 --> 00:46:19.191 and we're looking for opportunities to

NOTE Confidence: 0.8274449

00:46:19.191 --> 00:46:21.636 expand the cigarette smoking research,

NOTE Confidence: 0.8274449

00:46:21.640 --> 00:46:24.111 but I just wanted to point out

NOTE Confidence: 0.8274449

00:46:24.111 --> 00:46:26.020 with respect to addiction,

NOTE Confidence: 0.8274449

00:46:26.020 --> 00:46:30.650 Michael Bogen shoots at NYU, you has some.

NOTE Confidence: 0.8274449

00:46:30.650 --> 00:46:33.554 Very promising data with alcohol dependence

NOTE Confidence: 0.8274449

00:46:33.554 --> 00:46:36.539 that we expect should be published.

NOTE Confidence: 0.8274449

00:46:36.540 --> 00:46:40.116 Certainly in the next several months.

NOTE Confidence: 0.8274449

00:46:40.120 --> 00:46:44.384 Um? Peter Hendricks has a small study in

NOTE Confidence: 0.8274449

00:46:44.384 --> 00:46:48.429 cocaine use disorder down in Birmingham,

NOTE Confidence: 0.8274449

00:46:48.430 --> 00:46:51.094 AL, which looks quite promising and

NOTE Confidence: 0.8274449

00:46:51.094 --> 00:46:55.468 we did a cross sectional survey study

NOTE Confidence: 0.8274449

00:46:55.468 --> 00:46:58.518 documenting naturalistic psychedelic use

NOTE Confidence: 0.8274449

00:46:58.518 --> 00:47:01.963 associated with reductions in cessation

NOTE Confidence: 0.8274449

00:47:01.963 --> 00:47:05.809 of opiate cannabis and stimulant use,

NOTE Confidence: 0.8274449

00:47:05.810 --> 00:47:08.474 with substantial decreases and

NOTE Confidence: 0.8274449

00:47:08.474 --> 00:47:11.804 substance use criteria so so.

NOTE Confidence: 0.8274449

00:47:11.810 --> 00:47:16.914 The concept here is that there really could

NOTE Confidence: 0.8274449

00:47:16.914 --> 00:47:21.609 be significant transdiagnostic applicability.

NOTE Confidence: 0.8274449

00:47:21.610 --> 00:47:24.106 So earlier I spoke about the

NOTE Confidence: 0.8274449

00:47:24.106 --> 00:47:25.770 biological mechanism of action.

NOTE Confidence: 0.8274449

00:47:25.770 --> 00:47:30.640 I just now want to kind of pick up on.

NOTE Confidence: 0.8274449

00:47:30.640 --> 00:47:32.288 Psychological or cognitive mechanisms

NOTE Confidence: 0.8274449

00:47:32.288 --> 00:47:35.230 of action and just throw out some

NOTE Confidence: 0.8274449

00:47:35.230 --> 00:47:37.260 ideas floating around about those.

NOTE Confidence: 0.8274449

00:47:37.260 --> 00:47:39.330 So one is mystical experience

NOTE Confidence: 0.8274449

00:47:39.330 --> 00:47:41.400 as as an important component,

NOTE Confidence: 0.8274449

00:47:41.400 --> 00:47:45.621 and I'm going to show you a little bit

NOTE Confidence: 0.8274449

00:47:45.621 --> 00:47:49.480 more data on that in just a second.

NOTE Confidence: 0.8274449

00:47:49.480 --> 00:47:50.998 And these are.

NOTE Confidence: 0.8274449

00:47:50.998 --> 00:47:52.516 These aren't independent,

NOTE Confidence: 0.8274449

00:47:52.520 --> 00:47:55.255 but another of label ontological

NOTE Confidence: 0.8274449

00:47:55.255 --> 00:47:57.990 shock resulting in profound shift

NOTE Confidence: 0.8274449

00:47:58.079 --> 00:48:00.563 and sense of self and worldview

NOTE Confidence: 0.8274449

00:48:00.563 --> 00:48:03.424 that may result in a reconstruction

NOTE Confidence: 0.8274449

00:48:03.424 --> 00:48:06.209 of life story and hallucinate,

NOTE Confidence: 0.8274449

00:48:06.210 --> 00:48:08.274 loosening himself focused narrative.

NOTE Confidence: 0.8274449

00:48:08.274 --> 00:48:11.370 Another is this insight about self

NOTE Confidence: 0.8274449

00:48:11.450 --> 00:48:13.915 or relationships could be experienced

NOTE Confidence: 0.8274449

00:48:13.915 --> 00:48:15.887 as memory or catharsis.

NOTE Confidence: 0.8274449

00:48:15.890 --> 00:48:19.622 I mentioned that we've developed a

NOTE Confidence: 0.8274449

00:48:19.622 --> 00:48:21.488 Psychological insight questionnaire.

NOTE Confidence: 0.8274449

00:48:21.490 --> 00:48:22.384 Another domain,

NOTE Confidence: 0.8274449
00:48:22.384 --> 00:48:24.619 just this sense of increased
NOTE Confidence: 0.8274449
00:48:24.619 --> 00:48:26.550 self efficacy or agency.
NOTE Confidence: 0.8274449
00:48:26.550 --> 00:48:29.930 Openness to.
NOTE Confidence: 0.8274449
00:48:29.930 --> 00:48:32.294 Seeing the world differently
NOTE Confidence: 0.8274449
00:48:32.294 --> 00:48:34.658 to trying alternative things,
NOTE Confidence: 0.8274449
00:48:34.660 --> 00:48:37.615 curiosity about the nature of
NOTE Confidence: 0.8274449
00:48:37.615 --> 00:48:41.060 mind or consciousness, that's.
NOTE Confidence: 0.8274449
00:48:41.060 --> 00:48:42.936 Akin to increased mindfulness.
NOTE Confidence: 0.8274449
00:48:42.936 --> 00:48:46.834 And that may be at play and then
NOTE Confidence: 0.8274449
00:48:46.834 --> 00:48:49.804 this interesting one kind of varied
NOTE Confidence: 0.8274449
00:48:49.804 --> 00:48:52.602 or tolerance for an interest
NOTE Confidence: 0.8274449
00:48:52.602 --> 00:48:54.886 in benefiting from discomfort.
NOTE Confidence: 0.8274449
00:48:54.890 --> 00:48:57.200 Um?
NOTE Confidence: 0.8274449
00:48:57.200 --> 00:48:59.208 Turning to mystical experience,
NOTE Confidence: 0.8274449
00:48:59.208 --> 00:49:03.049 now I just want to show you the.
NOTE Confidence: 0.8274449

00:49:03.050 --> 00:49:06.038 The correlations that have.
NOTE Confidence: 0.8274449

00:49:06.040 --> 00:49:08.728 I that have been demonstrated across a
NOTE Confidence: 0.8274449

00:49:08.728 --> 00:49:11.752 range of studies showing that mystical
NOTE Confidence: 0.8274449

00:49:11.752 --> 00:49:14.148 experience predicts positive outcomes,
NOTE Confidence: 0.8274449

00:49:14.150 --> 00:49:16.970 so this was in healthy volunteers
NOTE Confidence: 0.8274449

00:49:16.970 --> 00:49:19.400 and I already said this.
NOTE Confidence: 0.8274449

00:49:19.400 --> 00:49:21.764 Mystical experience scores predict.
NOTE Confidence: 0.8274449

00:49:21.764 --> 00:49:22.946 The meaningfulness,
NOTE Confidence: 0.8274449

00:49:22.950 --> 00:49:24.354 spiritual significance and
NOTE Confidence: 0.8274449

00:49:24.354 --> 00:49:25.758 openness in personality.
NOTE Confidence: 0.8274449

00:49:25.760 --> 00:49:27.866 14 months later and that's shown
NOTE Confidence: 0.8274449

00:49:27.866 --> 00:49:30.389 in the left panel there there's
NOTE Confidence: 0.8274449

00:49:30.389 --> 00:49:32.469 a mysticism SCORM immediately
NOTE Confidence: 0.8274449

00:49:32.469 --> 00:49:34.549 after psilocybin is correlated
NOTE Confidence: 0.8274449

00:49:34.627 --> 00:49:37.019 significantly and positively with.
NOTE Confidence: 0.8274449

00:49:37.020 --> 00:49:39.828 In this case its rating of

NOTE Confidence: 0.8274449

00:49:39.828 --> 00:49:40.764 spiritual significance.

NOTE Confidence: 0.8274449

00:49:40.770 --> 00:49:44.522 Set at one year or 14 months and

NOTE Confidence: 0.8274449

00:49:44.522 --> 00:49:46.931 that correlation does not hold

NOTE Confidence: 0.8274449

00:49:46.931 --> 00:49:49.673 true in the right hand panel.

NOTE Confidence: 0.8274449

00:49:49.680 --> 00:49:53.355 For the intensity of the psilocybin effect.

NOTE Confidence: 0.8274449

00:49:53.360 --> 00:49:55.286 And so we've seen variations of

NOTE Confidence: 0.8274449

00:49:55.286 --> 00:49:57.329 that across a range of studies,

NOTE Confidence: 0.8274449

00:49:57.330 --> 00:49:58.990 so this is our mystical.

NOTE Confidence: 0.8274449

00:49:58.990 --> 00:50:00.874 This is the can.

NOTE Confidence: 0.8274449

00:50:00.874 --> 00:50:03.229 Search study where mystical experience

NOTE Confidence: 0.8274449

00:50:03.229 --> 00:50:05.250 scores predicting decreases in

NOTE Confidence: 0.8274449

00:50:05.250 --> 00:50:08.190 depression and anxiety at 5 weeks.

NOTE Confidence: 0.8274449

00:50:08.190 --> 00:50:12.565 This is the major depressive disorder study.

NOTE Confidence: 0.8274449

00:50:12.570 --> 00:50:13.298 Again,

NOTE Confidence: 0.8274449

00:50:13.298 --> 00:50:15.482 mystical experience predicting

NOTE Confidence: 0.8274449

00:50:15.482 --> 00:50:17.666 decreases in depression.
NOTE Confidence: 0.847146

00:50:17.670 --> 00:50:20.325 This is mystical experience scores
NOTE Confidence: 0.847146

00:50:20.325 --> 00:50:21.918 predicting decreased smoking,
NOTE Confidence: 0.847146

00:50:21.920 --> 00:50:25.340 craving and smoking is biologically
NOTE Confidence: 0.847146

00:50:25.340 --> 00:50:29.740 measured at 6 and 12 months.
NOTE Confidence: 0.847146

00:50:29.740 --> 00:50:33.516 This is the model that we have actually.
NOTE Confidence: 0.847146

00:50:33.520 --> 00:50:36.080 Currently favoring and thinking about
NOTE Confidence: 0.847146

00:50:36.080 --> 00:50:40.480 this fell out of a large survey study,
NOTE Confidence: 0.847146

00:50:40.480 --> 00:50:45.286 but I think there's some value in this Ann.
NOTE Confidence: 0.847146

00:50:45.290 --> 00:50:48.993 What's showing here is this is a
NOTE Confidence: 0.847146

00:50:48.993 --> 00:50:52.249 path model looking at survey data,
NOTE Confidence: 0.847146

00:50:52.250 --> 00:50:56.036 but when it's showing is that.
NOTE Confidence: 0.847146

00:50:56.040 --> 00:50:59.016 Their their tune fact interactive factors
NOTE Confidence: 0.847146

00:50:59.016 --> 00:51:03.108 that is this acute miskell if it affects
NOTE Confidence: 0.847146

00:51:03.108 --> 00:51:05.633 in this acute insightful effects,
NOTE Confidence: 0.847146

00:51:05.640 --> 00:51:08.482 and they seem to feed into this

NOTE Confidence: 0.847146
00:51:08.482 --> 00:51:10.510 mediating construct of increases
NOTE Confidence: 0.847146
00:51:10.510 --> 00:51:12.709 in psychological flexibility.
NOTE Confidence: 0.847146
00:51:12.710 --> 00:51:16.462 And that's a there solid measures of
NOTE Confidence: 0.847146
00:51:16.462 --> 00:51:20.277 that that have come out of the Act,
NOTE Confidence: 0.847146
00:51:20.280 --> 00:51:21.274 psychotherapy, literature,
NOTE Confidence: 0.847146
00:51:21.274 --> 00:51:23.759 and that accounts for decreases
NOTE Confidence: 0.847146
00:51:23.759 --> 00:51:25.840 and depression and anxiety.
NOTE Confidence: 0.83772856
00:51:28.390 --> 00:51:31.528 So the overall conclusion and implication
NOTE Confidence: 0.83772856
00:51:31.528 --> 00:51:35.829 of this work is under these conditions.
NOTE Confidence: 0.83772856
00:51:35.830 --> 00:51:37.994 Psilocybin occasions, discrete experiences,
NOTE Confidence: 0.83772856
00:51:37.994 --> 00:51:40.699 having marked similarities to classic
NOTE Confidence: 0.83772856
00:51:40.699 --> 00:51:42.690 mystical insightful experiences.
NOTE Confidence: 0.83772856
00:51:42.690 --> 00:51:44.874 These experiences are associated
NOTE Confidence: 0.83772856
00:51:44.874 --> 00:51:47.058 with enduring positive trait
NOTE Confidence: 0.83772856
00:51:47.058 --> 00:51:48.980 changes and attitudes,
NOTE Confidence: 0.83772856

00:51:48.980 --> 00:51:52.370 moods and behaviors in both
NOTE Confidence: 0.83772856

00:51:52.370 --> 00:51:55.082 healthy and patient populations.
NOTE Confidence: 0.83772856

00:51:55.090 --> 00:51:58.576 And then when I find most intriguing,
NOTE Confidence: 0.83772856

00:51:58.580 --> 00:52:02.080 is that the finding that psilocybin can,
NOTE Confidence: 0.83772856

00:52:02.080 --> 00:52:05.248 in most people studied occasion these
NOTE Confidence: 0.83772856

00:52:05.248 --> 00:52:07.360 mystical and insightful experiences
NOTE Confidence: 0.83772856

00:52:07.442 --> 00:52:10.382 that are so similar to those that
NOTE Confidence: 0.83772856

00:52:10.382 --> 00:52:12.827 occur naturally suggests that such
NOTE Confidence: 0.83772856

00:52:12.827 --> 00:52:15.047 experiences are biologically normal.
NOTE Confidence: 0.83772856

00:52:15.050 --> 00:52:18.858 That is where we're wired to have such
NOTE Confidence: 0.83772856

00:52:18.858 --> 00:52:22.460 experiences and the exciting piece of this
NOTE Confidence: 0.83772856

00:52:22.460 --> 00:52:26.260 is that these experiences their consequences.
NOTE Confidence: 0.83772856

00:52:26.260 --> 00:52:28.508 And the basic neuropharmacology
NOTE Confidence: 0.83772856

00:52:28.508 --> 00:52:31.318 are now amenable to systematic
NOTE Confidence: 0.83772856

00:52:31.318 --> 00:52:33.179 prospective scientific study,
NOTE Confidence: 0.83772856

00:52:33.180 --> 00:52:37.146 and they have alluded this to

NOTE Confidence: 0.83772856

00:52:37.146 --> 00:52:41.030 this to this point in time.

NOTE Confidence: 0.83772856

00:52:41.030 --> 00:52:44.870 And I often feel like.

NOTE Confidence: 0.83772856

00:52:44.870 --> 00:52:46.046 And they met.

NOTE Confidence: 0.83772856

00:52:46.046 --> 00:52:49.490 That thought is kind of Rip Van Winkle.

NOTE Confidence: 0.83772856

00:52:49.490 --> 00:52:52.094 This is an opportunity for us all

NOTE Confidence: 0.83772856

00:52:52.094 --> 00:52:53.785 within the scientific community

NOTE Confidence: 0.83772856

00:52:53.785 --> 00:52:55.789 to explore these compounds.

NOTE Confidence: 0.83772856

00:52:55.790 --> 00:52:58.490 The psychedelics that have been put

NOTE Confidence: 0.83772856

00:52:58.490 --> 00:53:01.579 in the deep freeze for a couple

NOTE Confidence: 0.83772856

00:53:01.579 --> 00:53:03.979 of decades and think about think

NOTE Confidence: 0.83772856

00:53:03.979 --> 00:53:07.212 of all the science and all of our

NOTE Confidence: 0.83772856

00:53:07.212 --> 00:53:09.230 the methods that have developed,

NOTE Confidence: 0.83772856

00:53:09.230 --> 00:53:12.590 you know, over over the last 20 years.

NOTE Confidence: 0.83772856

00:53:12.590 --> 00:53:15.845 And so there are so many really

NOTE Confidence: 0.83772856

00:53:15.845 --> 00:53:17.240 interesting questions at.

NOTE Confidence: 0.83772856

00:53:17.240 --> 00:53:20.060 Any different level that can be
NOTE Confidence: 0.83772856

00:53:20.060 --> 00:53:22.529 addressed about these compounds that
NOTE Confidence: 0.83772856

00:53:22.529 --> 00:53:25.079 really could be quite consequential,
NOTE Confidence: 0.83772856

00:53:25.080 --> 00:53:27.530 so biological psychiatry how factors
NOTE Confidence: 0.83772856

00:53:27.530 --> 00:53:29.490 such as personality, genetics,
NOTE Confidence: 0.83772856

00:53:29.490 --> 00:53:30.960 intention affect likelihood,
NOTE Confidence: 0.83772856

00:53:30.960 --> 00:53:32.920 neuroscience, ton of stuff.
NOTE Confidence: 0.83772856

00:53:32.920 --> 00:53:33.900 They're wondering,
NOTE Confidence: 0.83772856

00:53:33.900 --> 00:53:35.676 the structural functional changes
NOTE Confidence: 0.83772856

00:53:35.676 --> 00:53:38.340 in brain that account from this
NOTE Confidence: 0.83772856

00:53:38.413 --> 00:53:39.779 behavioral Sciences.
NOTE Confidence: 0.83772856

00:53:39.780 --> 00:53:42.565 What behaviors are changed with
NOTE Confidence: 0.83772856

00:53:42.565 --> 00:53:44.793 behavioral mechanisms can account
NOTE Confidence: 0.83772856

00:53:44.793 --> 00:53:46.810 for such experiences.
NOTE Confidence: 0.83772856

00:53:46.810 --> 00:53:49.421 Then of course we have the whole
NOTE Confidence: 0.83772856

00:53:49.421 --> 00:53:51.484 area of therapeutics and the

NOTE Confidence: 0.83772856

00:53:51.484 --> 00:53:53.664 exciting prospect that there might

NOTE Confidence: 0.83772856

00:53:53.664 --> 00:53:56.246 be cross diagnostic generality to the

NOTE Confidence: 0.83772856

00:53:56.246 --> 00:53:58.640 efficacy of these of these drugs,

NOTE Confidence: 0.83772856

00:53:58.640 --> 00:54:02.049 but yet is yet to be proven.

NOTE Confidence: 0.83772856

00:54:02.050 --> 00:54:05.479 And then and then a piece that I can't

NOTE Confidence: 0.83772856

00:54:05.479 --> 00:54:08.526 help but feel is deeply important,

NOTE Confidence: 0.83772856

00:54:08.530 --> 00:54:10.326 but we don't have.

NOTE Confidence: 0.83772856

00:54:10.326 --> 00:54:12.571 We don't have funding agencies

NOTE Confidence: 0.83772856

00:54:12.571 --> 00:54:15.009 to allow us to pursue it.

NOTE Confidence: 0.83772856

00:54:15.010 --> 00:54:19.026 Is this the fact that these drugs can?

NOTE Confidence: 0.83772856

00:54:19.030 --> 00:54:21.006 Increase these tendencies towards

NOTE Confidence: 0.83772856

00:54:21.006 --> 00:54:23.476 altruism and pro social behavior.

NOTE Confidence: 0.83772856

00:54:23.480 --> 00:54:26.636 It really couple into ethical systems

NOTE Confidence: 0.83772856

00:54:26.636 --> 00:54:29.754 that have been promulgated by major

NOTE Confidence: 0.83772856

00:54:29.754 --> 00:54:32.059 religious traditions and are are

NOTE Confidence: 0.83772856

00:54:32.059 --> 00:54:35.433 so integral to the survival of our

NOTE Confidence: 0.83772856

00:54:35.433 --> 00:54:38.295 culture and ultimately to our species.

NOTE Confidence: 0.83772856

00:54:38.300 --> 00:54:41.258 And I think with these compounds,

NOTE Confidence: 0.83772856

00:54:41.260 --> 00:54:42.402 among others,

NOTE Confidence: 0.83772856

00:54:42.402 --> 00:54:45.828 will allow us to get purchase

NOTE Confidence: 0.83772856

00:54:45.828 --> 00:54:48.400 an unstudied such effects.

NOTE Confidence: 0.83772856

00:54:48.400 --> 00:54:50.880 Song, I think that I think that's it.

NOTE Confidence: 0.83772856

00:54:50.880 --> 00:54:52.120 Thank you very much.

NOTE Confidence: 0.8029672

00:54:54.990 --> 00:54:56.500 Thank you Roland for a

NOTE Confidence: 0.8029672

00:54:56.500 --> 00:54:57.406 wonderful talking edit.

NOTE Confidence: 0.8029672

00:54:57.410 --> 00:54:59.770 It's an overview of this

NOTE Confidence: 0.8029672

00:54:59.770 --> 00:55:01.658 extraordinary body of work.

NOTE Confidence: 0.8029672

00:55:01.660 --> 00:55:02.952 Really exciting to see and

NOTE Confidence: 0.8029672

00:55:02.952 --> 00:55:05.588 to see you synthesize it.

NOTE Confidence: 0.8029672

00:55:05.590 --> 00:55:08.590 We have a good bit of time for

NOTE Confidence: 0.8029672

00:55:08.590 --> 00:55:11.300 questions now and I guess let's see.

NOTE Confidence: 0.8029672

00:55:11.300 --> 00:55:15.590 If I can see if people can raise their hands.

NOTE Confidence: 0.8029672

00:55:15.590 --> 00:55:18.236 And I can call on you, or you're

NOTE Confidence: 0.8029672

00:55:18.236 --> 00:55:20.917 welcome to put questions in the chat.

NOTE Confidence: 0.8029672

00:55:20.920 --> 00:55:25.268 As well. And I want to ask a quick

NOTE Confidence: 0.8029672

00:55:25.268 --> 00:55:28.348 one if I made to get things started,

NOTE Confidence: 0.8029672

00:55:28.350 --> 00:55:30.674 which is you shared at the beginning.

NOTE Confidence: 0.8029672

00:55:30.680 --> 00:55:31.344 This model,

NOTE Confidence: 0.8029672

00:55:31.344 --> 00:55:33.004 which is intuitively quite compelling,

NOTE Confidence: 0.8029672

00:55:33.010 --> 00:55:35.020 especially in light of the default

NOTE Confidence: 0.8029672

00:55:35.020 --> 00:55:37.000 mode network effects of the drugs.

NOTE Confidence: 0.8029672

00:55:37.000 --> 00:55:38.670 That perhaps what's happening is

NOTE Confidence: 0.8029672

00:55:38.670 --> 00:55:40.340 the drugs are acute psilocybin

NOTE Confidence: 0.8029672

00:55:40.396 --> 00:55:41.668 and perhaps other drugs.

NOTE Confidence: 0.8029672

00:55:41.670 --> 00:55:43.134 Other psychedelics are acutely

NOTE Confidence: 0.8029672

00:55:43.134 --> 00:55:44.598 dissociating the mechanisms of

NOTE Confidence: 0.8029672

00:55:44.598 --> 00:55:46.955 sense of self and then they are
NOTE Confidence: 0.8029672

00:55:46.955 --> 00:55:48.211 being reconfigured or reassembling
NOTE Confidence: 0.8029672

00:55:48.211 --> 00:55:50.322 in a more adaptive or positive way.
NOTE Confidence: 0.8029672

00:55:50.322 --> 00:55:52.772 My question is that in the context
NOTE Confidence: 0.8029672

00:55:52.772 --> 00:55:53.498 of psychopathology.
NOTE Confidence: 0.8029672

00:55:53.500 --> 00:55:54.640 If you are turning,
NOTE Confidence: 0.8029672

00:55:54.640 --> 00:55:56.065 if you're rebooting the computer,
NOTE Confidence: 0.8029672

00:55:56.070 --> 00:55:57.897 you know if you're if you're disrupting
NOTE Confidence: 0.8029672

00:55:57.897 --> 00:55:59.661 the sense of the integrative sense
NOTE Confidence: 0.8029672

00:55:59.661 --> 00:56:01.503 of self and then reassembling it.
NOTE Confidence: 0.8029672

00:56:01.510 --> 00:56:02.935 Why should it reassemble in
NOTE Confidence: 0.8029672

00:56:02.935 --> 00:56:04.075 a more adaptive way?
NOTE Confidence: 0.8621744

00:56:06.210 --> 00:56:07.998 But why is that good?
NOTE Confidence: 0.8674193

00:56:12.290 --> 00:56:16.730 I haven't I have. I have no idea.
NOTE Confidence: 0.8674193

00:56:16.730 --> 00:56:19.730 I mean, it's yeah, it's it's,
NOTE Confidence: 0.8674193

00:56:19.730 --> 00:56:23.768 it's highly. Curious that the even

NOTE Confidence: 0.8674193
00:56:23.768 --> 00:56:28.815 that these effects seem to be skewed
NOTE Confidence: 0.8674193
00:56:28.815 --> 00:56:31.799 toward this positive beneficial.
NOTE Confidence: 0.7374405
00:56:34.310 --> 00:56:35.720 You know outcome?
NOTE Confidence: 0.7374405
00:56:35.720 --> 00:56:37.600 I mean it wouldn't.
NOTE Confidence: 0.7374405
00:56:37.600 --> 00:56:39.765 Ah, Priora, you wouldn't think
NOTE Confidence: 0.7374405
00:56:39.765 --> 00:56:42.440 that would need to be true.
NOTE Confidence: 0.7374405
00:56:42.440 --> 00:56:46.560 Yet it is. Yeah, yeah.
NOTE Confidence: 0.7374405
00:56:46.560 --> 00:56:48.720 I don't know, you know,
NOTE Confidence: 0.7374405
00:56:48.720 --> 00:56:51.569 you know other than the thought is
NOTE Confidence: 0.7374405
00:56:51.569 --> 00:56:54.477 that it's it's pretty clear in the
NOTE Confidence: 0.7374405
00:56:54.477 --> 00:56:57.790 context in which we now find ourselves,
NOTE Confidence: 0.7374405
00:56:57.790 --> 00:57:00.382 and in these cultures that that
NOTE Confidence: 0.7374405
00:57:00.382 --> 00:57:03.232 we get entangled in, you know,
NOTE Confidence: 0.7374405
00:57:03.232 --> 00:57:06.037 a web of narrative structures
NOTE Confidence: 0.7374405
00:57:06.037 --> 00:57:09.810 of you know that sets out our.
NOTE Confidence: 0.7374405

00:57:09.810 --> 00:57:11.865 Our our moment to moment
NOTE Confidence: 0.7374405

00:57:11.865 --> 00:57:14.396 priorities in terms of the kind
NOTE Confidence: 0.7374405

00:57:14.396 --> 00:57:16.718 of a narrative context of what
NOTE Confidence: 0.7374405

00:57:16.718 --> 00:57:19.418 of how we're viewing the world,
NOTE Confidence: 0.7374405

00:57:19.420 --> 00:57:21.928 and if you pull back from
NOTE Confidence: 0.7374405

00:57:21.928 --> 00:57:23.182 that very substantially,
NOTE Confidence: 0.7374405

00:57:23.190 --> 00:57:25.700 there can be this shift
NOTE Confidence: 0.7374405

00:57:25.700 --> 00:57:27.708 that occurs that that.
NOTE Confidence: 0.7374405

00:57:27.710 --> 00:57:30.830 Wakes people up to the idea
NOTE Confidence: 0.7374405

00:57:30.830 --> 00:57:32.910 that there's those narrative.
NOTE Confidence: 0.7374405

00:57:32.910 --> 00:57:35.773 Trues are only one aspect of what
NOTE Confidence: 0.7374405

00:57:35.773 --> 00:57:39.746 it is to be aware in a in a in in
NOTE Confidence: 0.7374405

00:57:39.746 --> 00:57:41.869 the fully functioning amazement
NOTE Confidence: 0.7374405

00:57:41.869 --> 00:57:45.274 that we are actually these.
NOTE Confidence: 0.7374405

00:57:45.280 --> 00:57:47.132 Highly evolved.
NOTE Confidence: 0.7374405

00:57:47.132 --> 00:57:50.836 Creatures that have developed

NOTE Confidence: 0.7374405

00:57:50.836 --> 00:57:55.381 this capacity for language and

NOTE Confidence: 0.7374405

00:57:55.381 --> 00:57:58.916 to to change our environment.

NOTE Confidence: 0.7374405

00:57:58.920 --> 00:58:03.060 We've invented mathematics and.

NOTE Confidence: 0.7374405

00:58:03.060 --> 00:58:05.514 And and yet the most astonishing

NOTE Confidence: 0.7374405

00:58:05.514 --> 00:58:08.340 piece of that mystery is that we're

NOTE Confidence: 0.7374405

00:58:08.340 --> 00:58:10.937 aware that we're aware that we had,

NOTE Confidence: 0.7374405

00:58:10.940 --> 00:58:13.698 that that we're in this this awareness,

NOTE Confidence: 0.7374405

00:58:13.700 --> 00:58:16.458 and that needn't necessarily be the case.

NOTE Confidence: 0.7374405

00:58:16.460 --> 00:58:19.284 And so if someone is ripped out of

NOTE Confidence: 0.7374405

00:58:19.284 --> 00:58:21.273 that narrative structure and kind

NOTE Confidence: 0.7374405

00:58:21.273 --> 00:58:23.691 of blinks at the astonishment of

NOTE Confidence: 0.7374405

00:58:23.691 --> 00:58:26.632 what we don't understand but is so

NOTE Confidence: 0.7374405

00:58:26.632 --> 00:58:29.066 compellingly true about the human condition,

NOTE Confidence: 0.7374405

00:58:29.066 --> 00:58:31.424 that we're all in this together.

NOTE Confidence: 0.7374405

00:58:31.430 --> 00:58:34.153 In this mystery of not knowing what

NOTE Confidence: 0.7374405

00:58:34.153 --> 00:58:37.309 the hell is actually going on here.
NOTE Confidence: 0.7374405

00:58:37.310 --> 00:58:41.770 Uh, you know, perhaps there's.
NOTE Confidence: 0.7374405

00:58:41.770 --> 00:58:45.208 Deep potential therapeutic value to that.
NOTE Confidence: 0.7699609

00:58:48.210 --> 00:58:49.400 As you say it empirically, true,
NOTE Confidence: 0.7699609

00:58:49.400 --> 00:58:51.128 yes, so we have. We have a number of
NOTE Confidence: 0.7699609

00:58:51.128 --> 00:58:52.959 hand raised in quite a lot in the chat,
NOTE Confidence: 0.7699609

00:58:52.960 --> 00:58:54.544 so I'm going to call and fill Corlett.
NOTE Confidence: 0.8621551

00:58:55.820 --> 00:58:59.140 Thanks so much for a brilliant talk and
NOTE Confidence: 0.8621551

00:58:59.140 --> 00:59:01.744 beautiful work. I have a question
NOTE Confidence: 0.8621551

00:59:01.744 --> 00:59:04.212 about a potential experiment that you
NOTE Confidence: 0.8621551

00:59:04.212 --> 00:59:07.589 might do to resolve this debate about
NOTE Confidence: 0.8621551

00:59:07.589 --> 00:59:10.604 the necessity of mystical experiences.
NOTE Confidence: 0.8621551

00:59:10.610 --> 00:59:12.946 Are you considered or do you know of
NOTE Confidence: 0.8621551

00:59:12.946 --> 00:59:14.688 anyone who's trying to administer
NOTE Confidence: 0.8621551

00:59:14.688 --> 00:59:16.872 these substances to people who are
NOTE Confidence: 0.8621551

00:59:16.880 --> 00:59:18.183 unconscious under other anesthetics?

NOTE Confidence: 0.8621551

00:59:18.183 --> 00:59:19.122 Because of course,

NOTE Confidence: 0.8621551

00:59:19.122 --> 00:59:22.168 that would be one way of showing that you

NOTE Confidence: 0.8621551

00:59:22.168 --> 00:59:24.013 get these therapeutic improvements in

NOTE Confidence: 0.8621551

00:59:24.013 --> 00:59:26.380 the absence of the mystical experiences.

NOTE Confidence: 0.8621551

00:59:26.380 --> 00:59:27.056 Full disclosure,

NOTE Confidence: 0.8621551

00:59:27.056 --> 00:59:29.084 I'm betting on the mystical experience

NOTE Confidence: 0.8621551

00:59:29.084 --> 00:59:30.670 is actually being a mediator,

NOTE Confidence: 0.8621551

00:59:30.670 --> 00:59:32.650 but but I'm interested in your

NOTE Confidence: 0.8621551

00:59:32.650 --> 00:59:34.710 thoughts there.

NOTE Confidence: 0.82420444

00:59:34.710 --> 00:59:38.376 Yeah, well, thanks for asking that.

NOTE Confidence: 0.82420444

00:59:38.380 --> 00:59:41.240 So this viewpoint article we

NOTE Confidence: 0.82420444

00:59:41.240 --> 00:59:45.504 actually proposed that as the as the

NOTE Confidence: 0.82420444

00:59:45.504 --> 00:59:48.759 critical question to disprove the

NOTE Confidence: 0.82420444

00:59:48.759 --> 00:59:51.900 importance of psychedelic experience.

NOTE Confidence: 0.82420444

00:59:51.900 --> 00:59:54.790 It might be an impossibility

NOTE Confidence: 0.82420444

00:59:54.790 --> 00:59:57.102 difficult experiment to run
NOTE Confidence: 0.82420444

00:59:57.102 --> 01:00:00.568 to come to any final conclude.
NOTE Confidence: 0.82420444

01:00:00.570 --> 01:00:02.706 But yeah, the idea is yeah,
NOTE Confidence: 0.82420444

01:00:02.710 --> 01:00:05.070 if you fully anesthetize someone.
NOTE Confidence: 0.82420444

01:00:05.070 --> 01:00:08.430 And then give them a full on psychedelic.
NOTE Confidence: 0.82420444

01:00:08.430 --> 01:00:11.166 Maintain the anesthesia past the point
NOTE Confidence: 0.82420444

01:00:11.166 --> 01:00:14.197 that the psychedelic is no longer active
NOTE Confidence: 0.82420444

01:00:14.197 --> 01:00:16.822 and then allow people to come out.
NOTE Confidence: 0.82420444

01:00:16.830 --> 01:00:18.930 They have no memory of
NOTE Confidence: 0.82420444

01:00:18.930 --> 01:00:20.190 having gotten psilocybin.
NOTE Confidence: 0.82420444

01:00:20.190 --> 01:00:23.130 And then the question is, are they?
NOTE Confidence: 0.82420444

01:00:23.130 --> 01:00:24.390 Are they therapeutically?
NOTE Confidence: 0.82420444

01:00:24.390 --> 01:00:26.895 You know benefited from that
NOTE Confidence: 0.82420444

01:00:26.895 --> 01:00:29.988 and if this is all. Uh.
NOTE Confidence: 0.82420444

01:00:29.988 --> 01:00:33.786 If this is all neurogenesis, and then,
NOTE Confidence: 0.82420444

01:00:33.786 --> 01:00:36.782 then you're going to have full on

NOTE Confidence: 0.82420444

01:00:36.782 --> 01:00:41.158 therapeutic effects, and we think that's.

NOTE Confidence: 0.82420444

01:00:41.160 --> 01:00:43.850 Incredibly unlikely.

NOTE Confidence: 0.82420444

01:00:43.850 --> 01:00:47.385 But you know the problem with that

NOTE Confidence: 0.82420444

01:00:47.385 --> 01:00:51.478 is that even if you didn't show the.

NOTE Confidence: 0.82420444

01:00:51.480 --> 01:00:52.070 Uh.

NOTE Confidence: 0.8518434

01:00:54.130 --> 01:00:59.170 The. That in during effects of.

NOTE Confidence: 0.76660234

01:01:01.410 --> 01:01:03.231 The the psychedelic.

NOTE Confidence: 0.76660234

01:01:03.231 --> 01:01:06.873 It could be argued that whatever

NOTE Confidence: 0.76660234

01:01:06.873 --> 01:01:09.974 anesthetic you gave interrupted that

NOTE Confidence: 0.76660234

01:01:09.974 --> 01:01:12.974 you know whatever narrow genic.

NOTE Confidence: 0.80260164

01:01:15.100 --> 01:01:16.747 Neural processes underlying

NOTE Confidence: 0.80260164

01:01:16.747 --> 01:01:19.492 neural processes and would have

NOTE Confidence: 0.80260164

01:01:19.492 --> 01:01:22.973 under undermine those, and so you

NOTE Confidence: 0.80260164

01:01:22.973 --> 01:01:27.320 wouldn't have a final Test of that.

NOTE Confidence: 0.80260164

01:01:27.320 --> 01:01:29.959 But it does. It seems to me

NOTE Confidence: 0.80260164

01:01:29.959 --> 01:01:31.960 that there's there's something.
NOTE Confidence: 0.80260164

01:01:31.960 --> 01:01:35.450 Profoundly important.
NOTE Confidence: 0.80260164

01:01:35.450 --> 01:01:38.126 About this shift in narrative structure,
NOTE Confidence: 0.80260164

01:01:38.130 --> 01:01:41.690 'cause if you if you think of it,
NOTE Confidence: 0.80260164

01:01:41.690 --> 01:01:44.819 you know for for our cigarette smokers,
NOTE Confidence: 0.80260164

01:01:44.820 --> 01:01:45.630 for instance,
NOTE Confidence: 0.80260164

01:01:45.630 --> 01:01:48.060 they come in and they identify
NOTE Confidence: 0.80260164

01:01:48.060 --> 01:01:50.278 as being addicted to cigarette
NOTE Confidence: 0.80260164

01:01:50.278 --> 01:01:52.936 smoking and they and for good
NOTE Confidence: 0.80260164

01:01:52.936 --> 01:01:55.356 reason they've they've quit numerous
NOTE Confidence: 0.80260164

01:01:55.356 --> 01:01:58.200 times and an failed and relapse,
NOTE Confidence: 0.80260164

01:01:58.200 --> 01:02:02.897 they know that they concede to craving.
NOTE Confidence: 0.80260164

01:02:02.900 --> 01:02:05.826 And if they hold themselves as addicted,
NOTE Confidence: 0.80260164

01:02:05.830 --> 01:02:08.770 then that's that's exactly what they are.
NOTE Confidence: 0.80260164

01:02:08.770 --> 01:02:10.865 I mean, they're never going
NOTE Confidence: 0.80260164

01:02:10.865 --> 01:02:12.960 to get out of that,

NOTE Confidence: 0.80260164

01:02:12.960 --> 01:02:15.230 but you change that narrative

NOTE Confidence: 0.80260164

01:02:15.230 --> 01:02:17.923 structure and make it plausible to

NOTE Confidence: 0.80260164

01:02:17.923 --> 01:02:20.317 them that they they have a sense

NOTE Confidence: 0.80260164

01:02:20.317 --> 01:02:22.873 of freedom and efficacy that they

NOTE Confidence: 0.80260164

01:02:22.873 --> 01:02:25.108 didn't imagine they had before.

NOTE Confidence: 0.80260164

01:02:25.110 --> 01:02:27.200 And then everything ships here.

NOTE Confidence: 0.80260164

01:02:27.200 --> 01:02:28.038 You really,

NOTE Confidence: 0.80260164

01:02:28.038 --> 01:02:30.133 it's almost like you're rewriting

NOTE Confidence: 0.80260164

01:02:30.133 --> 01:02:31.390 the operating system.

NOTE Confidence: 0.80260164

01:02:31.390 --> 01:02:33.710 If you can change that.

NOTE Confidence: 0.80260164

01:02:33.710 --> 01:02:35.850 Narrative structure because the self

NOTE Confidence: 0.80260164

01:02:35.850 --> 01:02:37.990 instructions that they're going to

NOTE Confidence: 0.80260164

01:02:38.051 --> 01:02:39.706 be giving themselves going forward

NOTE Confidence: 0.80260164

01:02:39.706 --> 01:02:42.030 are going to be very different,

NOTE Confidence: 0.80260164

01:02:42.030 --> 01:02:45.585 and my guess is that that's at play in,

NOTE Confidence: 0.80260164

01:02:45.590 --> 01:02:46.328 you know,
NOTE Confidence: 0.80260164

01:02:46.328 --> 01:02:48.911 in a lot of the therapeutic kinds
NOTE Confidence: 0.80260164

01:02:48.911 --> 01:02:51.930 of effects that we're going to see.
NOTE Confidence: 0.8091643

01:02:54.880 --> 01:02:56.700 Jerry, I think your sister next and
NOTE Confidence: 0.8091643

01:02:56.700 --> 01:02:58.260 I saw. Yep, can you hear
NOTE Confidence: 0.8091643

01:02:58.260 --> 01:02:59.560 Chris so role in great.
NOTE Confidence: 0.8091643

01:02:59.560 --> 01:03:01.380 Great job and just sorry you couldn't
NOTE Confidence: 0.8091643

01:03:01.380 --> 01:03:05.670 be there in person to to be with you.
NOTE Confidence: 0.8091643

01:03:05.670 --> 01:03:07.266 Just a very quick comment on.
NOTE Confidence: 0.8091643

01:03:07.270 --> 01:03:08.610 Yeah, I think anesthetize Ng
NOTE Confidence: 0.8091643

01:03:08.610 --> 01:03:10.474 somebody in doing it could be a
NOTE Confidence: 0.8091643

01:03:10.474 --> 01:03:12.078 real problem even with cada mean.
NOTE Confidence: 0.8091643

01:03:12.080 --> 01:03:13.868 We can see if.
NOTE Confidence: 0.8091643

01:03:13.870 --> 01:03:16.290 If we give high enough dose even we
NOTE Confidence: 0.8091643

01:03:16.290 --> 01:03:17.810 don't get these physiologic changes,
NOTE Confidence: 0.8091643

01:03:17.810 --> 01:03:19.707 so I think that's a problem,

NOTE Confidence: 0.8091643

01:03:19.707 --> 01:03:22.029 but that wasn't the main point.

NOTE Confidence: 0.8091643

01:03:22.030 --> 01:03:24.970 The big point I have is I don't

NOTE Confidence: 0.8091643

01:03:24.970 --> 01:03:27.196 see maybe the discrepancy or seems

NOTE Confidence: 0.8091643

01:03:27.196 --> 01:03:29.100 like a false dichotomy between

NOTE Confidence: 0.8091643

01:03:29.100 --> 01:03:31.780 all sending you in terms of.

NOTE Confidence: 0.8091643

01:03:31.780 --> 01:03:33.660 Yeah, what?

NOTE Confidence: 0.8091643

01:03:33.660 --> 01:03:35.795 Is going on in terms of the

NOTE Confidence: 0.8091643

01:03:35.795 --> 01:03:36.712 psychological and biological.

NOTE Confidence: 0.8091643

01:03:36.712 --> 01:03:39.150 If you look at it in terms of.

NOTE Confidence: 0.8369162

01:03:39.970 --> 01:03:41.996 Just these drugs, including you know

NOTE Confidence: 0.8369162

01:03:41.996 --> 01:03:44.030 all the psilocybin and keta mean

NOTE Confidence: 0.8369162

01:03:44.030 --> 01:03:45.038 actually having this

NOTE Confidence: 0.8369162

01:03:45.040 --> 01:03:46.388 ability to induce cognitive

NOTE Confidence: 0.8369162

01:03:46.390 --> 01:03:47.410 flexibility. Then there's

NOTE Confidence: 0.8369162

01:03:47.410 --> 01:03:49.140 this huge component of expectation

NOTE Confidence: 0.8369162

01:03:49.140 --> 01:03:51.120 and how you build this up.
NOTE Confidence: 0.8369162

01:03:51.120 --> 01:03:52.810 And I'm not sure I.
NOTE Confidence: 0.8369162

01:03:52.810 --> 01:03:55.176 I guess what my question to you
NOTE Confidence: 0.8369162

01:03:55.176 --> 01:03:57.882 is how sure are we that it's the
NOTE Confidence: 0.8369162

01:03:57.882 --> 01:03:59.577 mystical experience part of it?
NOTE Confidence: 0.8369162

01:03:59.577 --> 01:04:01.601 'cause all these people are prepped
NOTE Confidence: 0.8369162

01:04:01.601 --> 01:04:03.966 for it to have this mystical experience
NOTE Confidence: 0.8369162

01:04:03.966 --> 01:04:05.994 in the prep sessions usually correct?
NOTE Confidence: 0.8369162

01:04:06.000 --> 01:04:07.684 Where in Europe they usually
NOTE Confidence: 0.8369162

01:04:07.684 --> 01:04:10.050 don't prep them so much and they
NOTE Confidence: 0.878219085714286

01:04:10.050 --> 01:04:12.465 don't. Report so much of the mystical
NOTE Confidence: 0.8851029

01:04:12.470 --> 01:04:13.445 experience. Could you
NOTE Confidence: 0.8851029

01:04:13.445 --> 01:04:15.070 just comment on, you know,
NOTE Confidence: 0.8851029

01:04:15.070 --> 01:04:17.669 is that the critical thing? Or is it
NOTE Confidence: 0.8851029

01:04:17.670 --> 01:04:19.295 the fact that you're getting
NOTE Confidence: 0.8851029

01:04:19.295 --> 01:04:20.920 a drug that induces cognitive

NOTE Confidence: 0.8851029
01:04:20.920 --> 01:04:22.220 flexibility and you're doing
NOTE Confidence: 0.8851029
01:04:22.220 --> 01:04:25.210 something to reinforce that?
NOTE Confidence: 0.8851029
01:04:25.210 --> 01:04:27.676 Yeah, let's see. So I mean,
NOTE Confidence: 0.8851029
01:04:27.680 --> 01:04:30.380 there's no question that the seven
NOTE Confidence: 0.8851029
01:04:30.380 --> 01:04:32.180 setting conditions are primary
NOTE Confidence: 0.8851029
01:04:32.258 --> 01:04:34.373 determinants of of what people
NOTE Confidence: 0.8851029
01:04:34.373 --> 01:04:36.488 come out of these experiences.
NOTE Confidence: 0.8851029
01:04:36.490 --> 01:04:41.145 And it is the case that our.
NOTE Confidence: 0.8851029
01:04:41.150 --> 01:04:44.468 Set and setting conditions and preparation
NOTE Confidence: 0.8851029
01:04:44.468 --> 01:04:48.029 conditions are optimized to provide support.
NOTE Confidence: 0.8851029
01:04:48.030 --> 01:04:51.864 You know for this deeply introspective
NOTE Confidence: 0.8851029
01:04:51.864 --> 01:04:54.420 introvertive kind of experience.
NOTE Confidence: 0.8851029
01:04:54.420 --> 01:04:56.346 Our initial studies.
NOTE Confidence: 0.8851029
01:04:56.346 --> 01:05:00.840 We actually bent over backwards not to.
NOTE Confidence: 0.8851029
01:05:00.840 --> 01:05:02.148 Matt to provide.
NOTE Confidence: 0.8673154

01:05:04.500 --> 01:05:07.416 The suggestion that people are going
NOTE Confidence: 0.8673154

01:05:07.416 --> 01:05:09.944 to have mystical experiences. Um?
NOTE Confidence: 0.8673154

01:05:09.944 --> 01:05:13.474 But nonetheless they did, and that was,
NOTE Confidence: 0.8673154

01:05:13.474 --> 01:05:16.058 I think, what was so compelling
NOTE Confidence: 0.8673154

01:05:16.058 --> 01:05:19.265 to me about that initial work is
NOTE Confidence: 0.8673154

01:05:19.265 --> 01:05:21.845 how that really was falling out.
NOTE Confidence: 0.8673154

01:05:21.850 --> 01:05:23.940 Now, however, it's totally unavoidable.
NOTE Confidence: 0.8673154

01:05:23.940 --> 01:05:26.436 I mean, the word is out.
NOTE Confidence: 0.8673154

01:05:26.440 --> 01:05:30.184 It's in their culture, and we and we can't.
NOTE Confidence: 0.8673154

01:05:30.190 --> 01:05:32.280 We can't, possibly, you know,
NOTE Confidence: 0.8673154

01:05:32.280 --> 01:05:33.944 pull back that expectancy.
NOTE Confidence: 0.8673154

01:05:33.944 --> 01:05:35.608 And so that's you.
NOTE Confidence: 0.8673154

01:05:35.610 --> 01:05:39.354 Know that that is a real challenge in
NOTE Confidence: 0.8673154

01:05:39.354 --> 01:05:43.267 terms of how you know what controls you
NOTE Confidence: 0.8673154

01:05:43.267 --> 01:05:48.037 want and how you tease out the role of that.
NOTE Confidence: 0.8673154

01:05:48.040 --> 01:05:51.118 But I do think you know,

NOTE Confidence: 0.8673154

01:05:51.120 --> 01:05:52.863 with mystical experiences,

NOTE Confidence: 0.8673154

01:05:52.863 --> 01:05:56.349 still that there's something about this.

NOTE Confidence: 0.8673154

01:05:56.350 --> 01:06:01.678 Dissolving of a worldview.

NOTE Confidence: 0.8673154

01:06:01.680 --> 01:06:05.690 As a sense of worldview and a sense of self.

NOTE Confidence: 0.8673154

01:06:05.690 --> 01:06:07.614 And getting a different

NOTE Confidence: 0.8673154

01:06:07.614 --> 01:06:09.538 perceptual set on that.

NOTE Confidence: 0.8673154

01:06:09.540 --> 01:06:13.388 That is as I described as ontological shock.

NOTE Confidence: 0.8673154

01:06:13.390 --> 01:06:15.790 It's like wait a second.

NOTE Confidence: 0.8673154

01:06:15.790 --> 01:06:18.676 What I thought to be true.

NOTE Confidence: 0.8673154

01:06:18.680 --> 01:06:20.860 I no longer no.

NOTE Confidence: 0.8673154

01:06:20.860 --> 01:06:23.772 To be true, you know everything's

NOTE Confidence: 0.8673154

01:06:23.772 --> 01:06:26.316 on the on the table here,

NOTE Confidence: 0.8673154

01:06:26.320 --> 01:06:28.344 and for whatever reason.

NOTE Confidence: 0.8673154

01:06:28.344 --> 01:06:31.900 People feel empowered by that it's it's.

NOTE Confidence: 0.8673154

01:06:31.900 --> 01:06:33.754 It's not scary.

NOTE Confidence: 0.8673154

01:06:33.754 --> 01:06:37.462 It's it's an opening to change.
NOTE Confidence: 0.8673154

01:06:37.470 --> 01:06:39.899 How we move forward to tease those
NOTE Confidence: 0.8673154

01:06:39.899 --> 01:06:42.149 you know kinds of things apart.
NOTE Confidence: 0.8673154

01:06:42.150 --> 01:06:46.838 You know for that matter I mean yeah.
NOTE Confidence: 0.8673154

01:06:46.840 --> 01:06:49.210 What does FDA do in terms?
NOTE Confidence: 0.8673154

01:06:49.210 --> 01:06:50.000 Yeah, exactly.
NOTE Confidence: 0.8673154

01:06:50.000 --> 01:06:52.766 That's where it really comes down to
NOTE Confidence: 0.8673154

01:06:52.766 --> 01:06:55.140 is when you go to implementation.
NOTE Confidence: 0.8673154

01:06:55.140 --> 01:06:57.160 This this is.
NOTE Confidence: 0.8673154

01:06:57.160 --> 01:06:59.742 To do it the way it's currently
NOTE Confidence: 0.8673154

01:06:59.742 --> 01:07:01.590 done would be incredibly expensive.
NOTE Confidence: 0.8673154

01:07:01.590 --> 01:07:03.058 We see how difficult
NOTE Confidence: 0.85097337

01:07:03.060 --> 01:07:04.910 it is to implement esketamine
NOTE Confidence: 0.85097337

01:07:04.910 --> 01:07:07.121 treatment because of the cost and
NOTE Confidence: 0.85097337

01:07:07.121 --> 01:07:08.230 the Accessibility limitations.
NOTE Confidence: 0.85097337

01:07:08.230 --> 01:07:11.180 This you know, until we can really figure

NOTE Confidence: 0.85097337

01:07:11.180 --> 01:07:13.400 out what the critical component is,

NOTE Confidence: 0.85097337

01:07:13.400 --> 01:07:15.610 it's going to be a major

NOTE Confidence: 0.85097337

01:07:15.610 --> 01:07:17.192 problem in implementing this.

NOTE Confidence: 0.85097337

01:07:17.192 --> 01:07:20.020 Yeah, I mean that I can imagine

NOTE Confidence: 0.85097337

01:07:20.105 --> 01:07:22.547 there may be group that there's.

NOTE Confidence: 0.85097337

01:07:22.550 --> 01:07:27.302 Could be elements of group preparation

NOTE Confidence: 0.85097337

01:07:27.302 --> 01:07:31.989 and certainly subtracting out some of the.

NOTE Confidence: 0.85097337

01:07:31.990 --> 01:07:34.080 Incredible support that we're providing

NOTE Confidence: 0.85097337

01:07:34.080 --> 01:07:36.528 with two, you know, folded full-time.

NOTE Confidence: 0.85097337

01:07:36.528 --> 01:07:37.734 Essentially therapists there

NOTE Confidence: 0.85097337

01:07:37.734 --> 01:07:39.530 you know for duration.

NOTE Confidence: 0.85097337

01:07:39.530 --> 01:07:42.610 I mean, that's just that's not going

NOTE Confidence: 0.85097337

01:07:42.610 --> 01:07:45.399 to be workable in the long run,

NOTE Confidence: 0.85097337

01:07:45.400 --> 01:07:47.908 but you know, I'm imagining there,

NOTE Confidence: 0.85097337

01:07:47.910 --> 01:07:50.238 you know there there could be

NOTE Confidence: 0.85097337

01:07:50.238 --> 01:07:53.791 changes of that sort and we have yet
NOTE Confidence: 0.85097337

01:07:53.791 --> 01:07:56.196 to investigate the shorter acting
NOTE Confidence: 0.85097337

01:07:56.196 --> 01:07:58.616 psychedelics and whether they are going
NOTE Confidence: 0.85097337

01:07:58.616 --> 01:08:01.480 to have some of these same affects.
NOTE Confidence: 0.85097337

01:08:01.480 --> 01:08:03.480 That's that's all open.
NOTE Confidence: 0.85097337

01:08:03.480 --> 01:08:06.032 Uh, so there's I mean there's so much
NOTE Confidence: 0.85097337

01:08:06.032 --> 01:08:09.000 to tease apart that's but that's why
NOTE Confidence: 0.85097337

01:08:09.000 --> 01:08:11.255 this is so astonishingly interesting,
NOTE Confidence: 0.85097337

01:08:11.260 --> 01:08:13.630 I, I think.
NOTE Confidence: 0.85097337

01:08:13.630 --> 01:08:13.840 Well,
NOTE Confidence: 0.85097337

01:08:13.840 --> 01:08:15.480 it's great to have stuff to tease apart.
NOTE Confidence: 0.8191498

01:08:17.970 --> 01:08:20.588 And that's what we that's what we've
NOTE Confidence: 0.8191498

01:08:20.588 --> 01:08:23.232 been bred to do right? As scientists,
NOTE Confidence: 0.8191498

01:08:23.232 --> 01:08:25.488 that's you know, this is fun.
NOTE Confidence: 0.9289776

01:08:27.880 --> 01:08:31.391 Congratulations. There's a lot of
NOTE Confidence: 0.9289776

01:08:31.391 --> 01:08:33.680 questions in the chat too that I'm

NOTE Confidence: 0.86373943

01:08:33.759 --> 01:08:35.507 going to lump together.

NOTE Confidence: 0.86373943

01:08:35.510 --> 01:08:38.058 Here are about predictors of non response.

NOTE Confidence: 0.86373943

01:08:38.060 --> 01:08:40.040 Have you any factors associated with

NOTE Confidence: 0.86373943

01:08:40.040 --> 01:08:42.236 people who experience fear or have

NOTE Confidence: 0.86373943

01:08:42.236 --> 01:08:43.876 negative experiences during psilocybin?

NOTE Confidence: 0.86373943

01:08:43.880 --> 01:08:46.250 And are there any predictors or

NOTE Confidence: 0.86373943

01:08:46.250 --> 01:08:48.799 characteristics of those who have a

NOTE Confidence: 0.86373943

01:08:48.799 --> 01:08:50.599 relatively poor clinical response?

NOTE Confidence: 0.86373943

01:08:50.600 --> 01:08:52.289 Not during but

NOTE Confidence: 0.80688894

01:08:52.290 --> 01:08:56.220 after. Yeah, you know in our hands,

NOTE Confidence: 0.80688894

01:08:56.220 --> 01:09:00.063 sadly no, we don't have predictors of

NOTE Confidence: 0.80688894

01:09:00.063 --> 01:09:02.959 difficult experiences or non response.

NOTE Confidence: 0.80688894

01:09:02.960 --> 01:09:07.100 We need to look for that.

NOTE Confidence: 0.80688894

01:09:07.100 --> 01:09:09.160 Um? You know, but.

NOTE Confidence: 0.80688894

01:09:09.160 --> 01:09:14.076 You know all of our subject groups have been

NOTE Confidence: 0.80688894

01:09:14.076 --> 01:09:18.970 highly selected and and so I think it has.
NOTE Confidence: 0.80688894

01:09:18.970 --> 01:09:21.260 Is this gets dispersed over
NOTE Confidence: 0.80688894

01:09:21.260 --> 01:09:23.092 a much larger population,
NOTE Confidence: 0.80688894

01:09:23.100 --> 01:09:25.860 we're going to learn a lot,
NOTE Confidence: 0.80688894

01:09:25.860 --> 01:09:28.150 alot more about that were.
NOTE Confidence: 0.80688894

01:09:28.150 --> 01:09:30.898 Yeah, we've been doing our long-term.
NOTE Confidence: 0.80688894

01:09:30.900 --> 01:09:34.127 Follow up now and our depression study
NOTE Confidence: 0.80688894

01:09:34.127 --> 01:09:37.734 and just try looking as best we can
NOTE Confidence: 0.80688894

01:09:37.734 --> 01:09:40.431 for predictors of of non response
NOTE Confidence: 0.80688894

01:09:40.431 --> 01:09:43.756 and so far nothing is showing up.
NOTE Confidence: 0.80688894

01:09:43.760 --> 01:09:48.864 I mean you could make the guess that.
NOTE Confidence: 0.80688894

01:09:48.870 --> 01:09:50.837 A number of the kinds of people
NOTE Confidence: 0.80688894

01:09:50.837 --> 01:09:52.870 that we would have screened out.
NOTE Confidence: 0.80688894

01:09:52.870 --> 01:09:56.704 Under concern about our inability to
NOTE Confidence: 0.80688894

01:09:56.704 --> 01:10:00.530 develop significant trust and report with.
NOTE Confidence: 0.80688894

01:10:00.530 --> 01:10:05.605 Then you know said borderline

NOTE Confidence: 0.80688894

01:10:05.605 --> 01:10:07.635 personality types,

NOTE Confidence: 0.80688894

01:10:07.640 --> 01:10:10.016 for instance,

NOTE Confidence: 0.80688894

01:10:10.016 --> 01:10:15.956 or people who hold incredibly

NOTE Confidence: 0.80688894

01:10:15.956 --> 01:10:18.332 rigid worldviews.

NOTE Confidence: 0.80688894

01:10:18.340 --> 01:10:20.746 You know those people would would

NOTE Confidence: 0.80688894

01:10:20.746 --> 01:10:22.830 likely be screened out because

NOTE Confidence: 0.80688894

01:10:22.830 --> 01:10:25.278 we would feel like we couldn't

NOTE Confidence: 0.80688894

01:10:25.278 --> 01:10:27.433 couldn't work with them and so

NOTE Confidence: 0.80688894

01:10:27.433 --> 01:10:30.045 it may very well be that you know

NOTE Confidence: 0.80688894

01:10:30.045 --> 01:10:34.280 populations of that type are going to.

NOTE Confidence: 0.80688894

01:10:34.280 --> 01:10:36.114 Are going to have more difficult times

NOTE Confidence: 0.80688894

01:10:36.114 --> 01:10:38.577 or or be less responsive to treatment?

NOTE Confidence: 0.8697198

01:10:40.340 --> 01:10:41.875 And there was actually the

NOTE Confidence: 0.8697198

01:10:41.875 --> 01:10:43.410 next question in the chat.

NOTE Confidence: 0.8697198

01:10:43.410 --> 01:10:44.738 Was about borderline personality

NOTE Confidence: 0.8697198

01:10:44.738 --> 01:10:46.398 and whether you or anyone
NOTE Confidence: 0.8697198

01:10:46.398 --> 01:10:48.017 has done work in that area.
NOTE Confidence: 0.8697198

01:10:48.020 --> 01:10:50.009 And I hear what you say about it may
NOTE Confidence: 0.8697198

01:10:50.009 --> 01:10:52.058 be difficult to form the bond and
NOTE Confidence: 0.8697198

01:10:52.058 --> 01:10:54.152 that maybe maybe have a qualitatively
NOTE Confidence: 0.8697198

01:10:54.152 --> 01:10:56.297 different experience because of that.
NOTE Confidence: 0.8697198

01:10:56.300 --> 01:10:57.328 On the other hand,
NOTE Confidence: 0.8697198

01:10:57.328 --> 01:10:58.613 your theory about rewriting the
NOTE Confidence: 0.8697198

01:10:58.613 --> 01:11:00.185 self narrative being the core
NOTE Confidence: 0.8697198

01:11:00.185 --> 01:11:01.453 therapeutic component that might
NOTE Confidence: 0.8697198

01:11:01.453 --> 01:11:03.215 be exactly what people with
NOTE Confidence: 0.8697198

01:11:03.215 --> 01:11:04.289 borderline personality needs.
NOTE Confidence: 0.8697198

01:11:04.290 --> 01:11:06.738 And so I wonder if you have any
NOTE Confidence: 0.8697198

01:11:06.740 --> 01:11:07.658 comments on that.
NOTE Confidence: 0.83410126

01:11:09.910 --> 01:11:12.238 Let's see well.
NOTE Confidence: 0.83410126

01:11:12.240 --> 01:11:15.048 Yeah, I think that's exactly right.

NOTE Confidence: 0.83410126

01:11:15.050 --> 01:11:18.248 It's it's unknown and God bless

NOTE Confidence: 0.83410126

01:11:18.248 --> 01:11:22.540 you if you want to undertake that.

NOTE Confidence: 0.83410126

01:11:22.540 --> 01:11:25.930 Big big big because yeah,

NOTE Confidence: 0.83410126

01:11:25.930 --> 01:11:29.927 we you know we have had a

NOTE Confidence: 0.83410126

01:11:29.927 --> 01:11:31.640 Kate occasional volunteers

NOTE Confidence: 0.83410126

01:11:31.753 --> 01:11:35.353 who we subsequently recognize

NOTE Confidence: 0.83410126

01:11:35.353 --> 01:11:38.953 have strong tendency toward

NOTE Confidence: 0.83410126

01:11:38.953 --> 01:11:41.749 borderline personalities and and.

NOTE Confidence: 0.83410126

01:11:41.750 --> 01:11:44.396 And you can imagine that they are.

NOTE Confidence: 0.8313816

01:11:47.240 --> 01:11:49.436 Can be very difficult to deal

NOTE Confidence: 0.8313816

01:11:49.436 --> 01:11:50.900 with and particularly under

NOTE Confidence: 0.8313816

01:11:50.964 --> 01:11:52.760 these conditions where you've

NOTE Confidence: 0.8313816

01:11:52.760 --> 01:11:54.556 given them something very.

NOTE Confidence: 0.8313816

01:11:54.560 --> 01:11:56.416 You know? Very potent,

NOTE Confidence: 0.8313816

01:11:56.416 --> 01:11:58.736 and if they interpreted as

NOTE Confidence: 0.8313816

01:11:58.736 --> 01:12:01.038 not having been helpful,
NOTE Confidence: 0.8313816

01:12:01.040 --> 01:12:03.220 you have your hands full.
NOTE Confidence: 0.77214557

01:12:06.110 --> 01:12:07.568 Want to come back to the
NOTE Confidence: 0.77214557

01:12:07.568 --> 01:12:08.550 raised hands? Colin LK.
NOTE Confidence: 0.82827723

01:12:10.840 --> 01:12:12.855 Thank you so wonderful talk in
NOTE Confidence: 0.82827723

01:12:12.855 --> 01:12:14.500 thinking about kind of relating
NOTE Confidence: 0.82827723

01:12:14.564 --> 01:12:16.328 to psychological mechanisms of
NOTE Confidence: 0.82827723

01:12:16.330 --> 01:12:17.428 the mystical experience
NOTE Confidence: 0.82827723

01:12:17.430 --> 01:12:18.528 that you talked
NOTE Confidence: 0.82827723

01:12:18.530 --> 01:12:20.010 about to biological mechanisms.
NOTE Confidence: 0.82827723

01:12:20.010 --> 01:12:22.639 I was thinking about the study from
NOTE Confidence: 0.82827723

01:12:22.639 --> 01:12:24.379 the Kobayakawa Group in Osaka,
NOTE Confidence: 0.82827723

01:12:24.380 --> 01:12:26.246 where they show that.
NOTE Confidence: 0.82827723

01:12:26.246 --> 01:12:28.380 Serotonin 2A receptor effects
NOTE Confidence: 0.82827723

01:12:28.380 --> 01:12:30.091 should decrease innate fear
NOTE Confidence: 0.82827723

01:12:30.091 --> 01:12:32.226 behavior but not learn fear.

NOTE Confidence: 0.82827723

01:12:32.230 --> 01:12:35.230 Through this central amygdala.

NOTE Confidence: 0.82827723

01:12:35.230 --> 01:12:36.460 Subpopulation of neurons.

NOTE Confidence: 0.83339834

01:12:37.200 --> 01:12:39.594 And I was wondering to what extent

NOTE Confidence: 0.83339834

01:12:39.600 --> 01:12:41.656 you could speculate on the relationship

NOTE Confidence: 0.83339834

01:12:41.656 --> 01:12:43.710 between a kind of suppression of

NOTE Confidence: 0.83339834

01:12:43.710 --> 01:12:45.780 innate fear or innate fear responses

NOTE Confidence: 0.83339834

01:12:45.780 --> 01:12:47.490 and that kind of ontological

NOTE Confidence: 0.83339834

01:12:47.490 --> 01:12:49.210 shock that you were describing.

NOTE Confidence: 0.8457571

01:12:51.940 --> 01:12:53.488 That's an interesting question.

NOTE Confidence: 0.7764668

01:12:57.230 --> 01:13:00.582 So you know we have not looked for

NOTE Confidence: 0.7764668

01:13:00.582 --> 01:13:03.587 instance at psilocybin and for treatment

NOTE Confidence: 0.7764668

01:13:03.587 --> 01:13:07.250 of PTSD not that's an innate fear,

NOTE Confidence: 0.7764668

01:13:07.250 --> 01:13:12.409 but it's an acquired very significant fear.

NOTE Confidence: 0.7764668

01:13:12.410 --> 01:13:16.218 Until we suspect when we have some

NOTE Confidence: 0.7764668

01:13:16.218 --> 01:13:19.380 funding to look at at PTS di,

NOTE Confidence: 0.7764668

01:13:19.380 --> 01:13:21.870 we suspect it might be,
NOTE Confidence: 0.7764668

01:13:21.870 --> 01:13:25.590 you know, quite quite helpful.
NOTE Confidence: 0.7764668

01:13:25.590 --> 01:13:29.510 But 111 concern is that is it possible
NOTE Confidence: 0.7764668

01:13:29.510 --> 01:13:32.777 that these kinds of experiences
NOTE Confidence: 0.7764668

01:13:32.777 --> 01:13:36.407 could actually re traumatized people,
NOTE Confidence: 0.7764668

01:13:36.410 --> 01:13:39.410 and so it's it's unknown.
NOTE Confidence: 0.7707051

01:13:41.610 --> 01:13:43.864 I don't think I don't think I
NOTE Confidence: 0.7707051

01:13:43.864 --> 01:13:45.365 have any particular thoughts
NOTE Confidence: 0.7707051

01:13:45.365 --> 01:13:47.209 about innate innate fears.
NOTE Confidence: 0.7707051

01:13:47.210 --> 01:13:49.075 What? What would an example
NOTE Confidence: 0.7707051

01:13:49.075 --> 01:13:50.940 of that innate fear be?
NOTE Confidence: 0.7707051

01:13:50.940 --> 01:13:53.546 So in this study they used kind
NOTE Confidence: 0.7707051

01:13:53.546 --> 01:13:55.409 of predator odorant. And what
NOTE Confidence: 0.7707051

01:13:55.410 --> 01:13:58.870 they show basically is that.
NOTE Confidence: 0.7707051

01:13:58.870 --> 01:14:01.607 That kind of fear would be suppressed
NOTE Confidence: 0.7707051

01:14:01.607 --> 01:14:03.649 by the serotonin 2A agonism,

NOTE Confidence: 0.7707051
01:14:03.650 --> 01:14:05.640 whereas learn fear would be
NOTE Confidence: 0.73953843
01:14:05.640 --> 01:14:06.828 the opposite, yeah?
NOTE Confidence: 0.84390444
01:14:10.290 --> 01:14:11.670 Interesting question.
NOTE Confidence: 0.84390444
01:14:11.670 --> 01:14:15.670 I don't have any. Any thoughts?
NOTE Confidence: 0.84390444
01:14:15.670 --> 01:14:20.630 I wonder how if innate fears were some.
NOTE Confidence: 0.84390444
01:14:20.630 --> 01:14:23.456 Somehow suppressed in during Lee what?
NOTE Confidence: 0.84390444
01:14:23.460 --> 01:14:26.286 How would that show up clinically?
NOTE Confidence: 0.84390444
01:14:26.290 --> 01:14:29.440 I mean, these individuals are.
NOTE Confidence: 0.84390444
01:14:29.440 --> 01:14:34.120 You know who report positive experiences?
NOTE Confidence: 0.84390444
01:14:34.120 --> 01:14:41.584 Appear to be well adjusted in engaged and.
NOTE Confidence: 0.84390444
01:14:41.590 --> 01:14:43.180 And and not.
NOTE Confidence: 0.90694845
01:14:46.110 --> 01:14:49.830 And not compromised in any sense.
NOTE Confidence: 0.90694845
01:14:49.830 --> 01:14:51.978 But we could be missing something.
NOTE Confidence: 0.8866373
01:14:55.630 --> 01:14:57.256 I have several questions in
NOTE Confidence: 0.8866373
01:14:57.256 --> 01:14:59.200 the chat that are speaking to
NOTE Confidence: 0.8866373

01:14:59.265 --> 01:15:01.299 the demographics of the samples in
NOTE Confidence: 0.8866373

01:15:01.299 --> 01:15:03.150 your study, which you acknowledged
NOTE Confidence: 0.8866373

01:15:03.150 --> 01:15:05.490 are large majority white and large
NOTE Confidence: 0.8866373

01:15:05.490 --> 01:15:08.034 majority highly educated. And as I said,
NOTE Confidence: 0.8866373

01:15:08.034 --> 01:15:09.750 there are several questions on this,
NOTE Confidence: 0.8866373

01:15:09.750 --> 01:15:12.038 but if you could speak to the gender,
NOTE Confidence: 0.8866373

01:15:12.040 --> 01:15:13.470 how that may limit the
NOTE Confidence: 0.8866373

01:15:13.470 --> 01:15:14.328 generalizability of this,
NOTE Confidence: 0.8866373

01:15:14.330 --> 01:15:15.760 what you are doing practically,
NOTE Confidence: 0.8866373

01:15:15.760 --> 01:15:17.622 and what other groups can do practically
NOTE Confidence: 0.8866373

01:15:17.622 --> 01:15:19.758 to try to mitigate it going forward
NOTE Confidence: 0.8866373

01:15:19.760 --> 01:15:23.328 and what you see the role of these.
NOTE Confidence: 0.8866373

01:15:23.330 --> 01:15:25.870 These approaches being to address
NOTE Confidence: 0.8866373

01:15:25.870 --> 01:15:28.410 difficulties that may be specific
NOTE Confidence: 0.8866373

01:15:28.495 --> 01:15:29.710 to other groups.
NOTE Confidence: 0.8866373

01:15:29.710 --> 01:15:30.646 For example,

NOTE Confidence: 0.8866373

01:15:30.646 --> 01:15:33.454 the experience of racial trauma and

NOTE Confidence: 0.8866373

01:15:33.454 --> 01:15:36.100 chronic stress source associated with

NOTE Confidence: 0.836240377777778

01:15:36.100 --> 01:15:38.164 minority status, yeah, well.

NOTE Confidence: 0.836240377777778

01:15:38.164 --> 01:15:40.744 Let's say it's it's unknown,

NOTE Confidence: 0.836240377777778

01:15:40.750 --> 01:15:43.802 so it's a you know a significant

NOTE Confidence: 0.836240377777778

01:15:43.802 --> 01:15:45.927 limitation of what we have

NOTE Confidence: 0.836240377777778

01:15:45.927 --> 01:15:48.454 done to date and and you know,

NOTE Confidence: 0.836240377777778

01:15:48.460 --> 01:15:52.018 I've wondered a lot about that.

NOTE Confidence: 0.836240377777778

01:15:52.020 --> 01:15:55.188 Peter Hendricks is doing this work.

NOTE Confidence: 0.836240377777778

01:15:55.190 --> 01:15:57.840 The time that I referenced

NOTE Confidence: 0.836240377777778

01:15:57.840 --> 01:16:00.151 in burning Birmingham, AL.

NOTE Confidence: 0.836240377777778

01:16:00.151 --> 01:16:02.314 On cocaine dependence.

NOTE Confidence: 0.836240377777778

01:16:02.314 --> 01:16:03.756 And Interestingly,

NOTE Confidence: 0.836240377777778

01:16:03.760 --> 01:16:05.440 the demographics of the

NOTE Confidence: 0.836240377777778

01:16:05.440 --> 01:16:07.540 group that he's looking at,

NOTE Confidence: 0.836240377777778

01:16:07.540 --> 01:16:10.480 and it's just been a small number,
NOTE Confidence: 0.836240377777778

01:16:10.480 --> 01:16:12.160 but it's it's mostly.
NOTE Confidence: 0.77899605

01:16:14.680 --> 01:16:18.024 Very underprivileged minority communities.
NOTE Confidence: 0.77899605

01:16:18.024 --> 01:16:21.940 Large, largely black.
NOTE Confidence: 0.77899605

01:16:21.940 --> 01:16:25.668 And and yet his reports to date have
NOTE Confidence: 0.77899605

01:16:25.668 --> 01:16:28.948 been that the intervention with
NOTE Confidence: 0.77899605

01:16:28.948 --> 01:16:32.683 psilocybin has been hugely effective.
NOTE Confidence: 0.8625302

01:16:34.870 --> 01:16:38.965 His his group, it actually gets to
NOTE Confidence: 0.8625302

01:16:38.965 --> 01:16:43.660 the expectancy question. Curious too.
NOTE Confidence: 0.8625302

01:16:43.660 --> 01:16:47.244 His group is such that he claims a
NOTE Confidence: 0.8625302

01:16:47.244 --> 01:16:50.731 number of the individuals who have
NOTE Confidence: 0.8625302

01:16:50.731 --> 01:16:53.836 enrolled in treatment haven't had
NOTE Confidence: 0.8625302

01:16:53.836 --> 01:16:57.826 no idea what a psychedelic even is,
NOTE Confidence: 0.8625302

01:16:57.830 --> 01:17:02.191 and so somewhere there they're coming in
NOTE Confidence: 0.8625302

01:17:02.191 --> 01:17:05.550 with zero expectancies in that score.
NOTE Confidence: 0.8625302

01:17:05.550 --> 01:17:06.951 Yet they feel.

NOTE Confidence: 0.8625302

01:17:06.951 --> 01:17:09.753 Are there yet the results appear

NOTE Confidence: 0.8625302

01:17:09.753 --> 01:17:11.910 to be very positive,

NOTE Confidence: 0.8625302

01:17:11.910 --> 01:17:14.808 so I so I simply don't know I I

NOTE Confidence: 0.8625302

01:17:14.808 --> 01:17:17.178 actually was astonished when Peter

NOTE Confidence: 0.8625302

01:17:17.178 --> 01:17:20.124 initially told me of those results,

NOTE Confidence: 0.8625302

01:17:20.130 --> 01:17:22.914 'cause I I think I would have predicted

NOTE Confidence: 0.8625302

01:17:22.914 --> 01:17:26.481 that so much of this is about cut

NOTE Confidence: 0.8625302

01:17:26.481 --> 01:17:28.345 cognitive meaning and interpretation,

NOTE Confidence: 0.8625302

01:17:28.350 --> 01:17:30.965 and that that's less likely

NOTE Confidence: 0.8625302

01:17:30.965 --> 01:17:33.580 going to be the case.

NOTE Confidence: 0.8625302

01:17:33.580 --> 01:17:36.788 In underprivileged population,

NOTE Confidence: 0.8625302

01:17:36.788 --> 01:17:39.896 you know, and then in terms of,

NOTE Confidence: 0.8625302

01:17:39.900 --> 01:17:41.672 you know, racial trauma.

NOTE Confidence: 0.8625302

01:17:41.672 --> 01:17:43.887 You know of some type.

NOTE Confidence: 0.8625302

01:17:43.890 --> 01:17:47.434 I mean that that kind of fits with,

NOTE Confidence: 0.8625302

01:17:47.440 --> 01:17:50.110 you know, perhaps the PTSD question.

NOTE Confidence: 0.8625302

01:17:50.110 --> 01:17:54.550 I think it just remains to be to be examined.

NOTE Confidence: 0.7444054333333333

01:17:57.240 --> 01:18:00.852 Thanks. I'm gonna go back to the

NOTE Confidence: 0.7444054333333333

01:18:00.852 --> 01:18:03.669 raised hand Zoncolan and reading.

NOTE Confidence: 0.7444054333333333

01:18:03.670 --> 01:18:05.712 Hi, thanks for your work,

NOTE Confidence: 0.7444054333333333

01:18:05.712 --> 01:18:06.528 Doctor Griffiths.

NOTE Confidence: 0.7444054333333333

01:18:06.530 --> 01:18:09.381 I remember reading some of it in

NOTE Confidence: 0.7444054333333333

01:18:09.381 --> 01:18:11.830 College in 2007 and never thinking

NOTE Confidence: 0.7444054333333333

01:18:11.830 --> 01:18:14.686 that this could ever be related to

NOTE Confidence: 0.7444054333333333

01:18:14.686 --> 01:18:17.540 my career and as a resident now.

NOTE Confidence: 0.7444054333333333

01:18:17.540 --> 01:18:19.582 It's amazing to see the

NOTE Confidence: 0.7444054333333333

01:18:19.582 --> 01:18:20.802 possibilities that exist.

NOTE Confidence: 0.7444054333333333

01:18:20.802 --> 01:18:23.660 So my question was you mentioned the

NOTE Confidence: 0.7444054333333333

01:18:23.660 --> 01:18:24.890 overlapping perspectives fostered

NOTE Confidence: 0.7444054333333333

01:18:24.890 --> 01:18:27.334 by psilocybin and those of major

NOTE Confidence: 0.7444054333333333

01:18:27.334 --> 01:18:29.368 religious and spiritual traditions? To

NOTE Confidence: 0.858812

01:18:29.370 --> 01:18:31.410 what degree has I guess

NOTE Confidence: 0.858812

01:18:31.410 --> 01:18:32.634 spiritually or emergently

NOTE Confidence: 0.858812

01:18:32.640 --> 01:18:33.550 oriented thinking?

NOTE Confidence: 0.858812

01:18:33.550 --> 01:18:35.370 Kind of driven your.

NOTE Confidence: 0.858812

01:18:35.370 --> 01:18:38.040 Hard science, so to speak,

NOTE Confidence: 0.858812

01:18:38.040 --> 01:18:39.110 hypothesis generation.

NOTE Confidence: 0.81482196

01:18:42.450 --> 01:18:46.662 Yeah, I don't think I'm quite

NOTE Confidence: 0.81482196

01:18:46.662 --> 01:18:50.178 catching what. Restate the question to

NOTE Confidence: 0.772068

01:18:50.180 --> 01:18:51.770 what extent, to

NOTE Confidence: 0.772068

01:18:51.770 --> 01:18:55.460 what extent has like I guess more

NOTE Confidence: 0.772068

01:18:55.460 --> 01:18:58.200 spiritually oriented thinking?

NOTE Confidence: 0.772068

01:18:58.200 --> 01:19:03.020 As a lot of this kind of reminds me of kind

NOTE Confidence: 0.772068

01:19:03.020 --> 01:19:05.348 of Eastern spiritual constructs driven,

NOTE Confidence: 0.772068

01:19:05.348 --> 01:19:08.180 your creation of hypothesis within a

NOTE Confidence: 0.772068

01:19:08.247 --> 01:19:10.900 more kind of Western hard science system.

NOTE Confidence: 0.86864847

01:19:12.690 --> 01:19:16.722 Well, let's say so my my personal story
NOTE Confidence: 0.86864847

01:19:16.722 --> 01:19:20.701 is that I was doing psychopharmacology
NOTE Confidence: 0.86864847

01:19:20.701 --> 01:19:24.276 for decades at Johns Hopkins.
NOTE Confidence: 0.86864847

01:19:24.280 --> 01:19:26.540 Mostly on mood altering drugs.
NOTE Confidence: 0.86864847

01:19:26.540 --> 01:19:30.156 Most of my research is funded by Hnyda,
NOTE Confidence: 0.86864847

01:19:30.160 --> 01:19:33.664 so I was really interested in mood altering
NOTE Confidence: 0.86864847

01:19:33.664 --> 01:19:36.140 drugs and measurement of subjective
NOTE Confidence: 0.86864847

01:19:36.140 --> 01:19:40.242 effects and then about 25 years ago I
NOTE Confidence: 0.86864847

01:19:40.242 --> 01:19:43.146 started a meditation practice that was.
NOTE Confidence: 0.86864847

01:19:43.150 --> 01:19:45.768 Pivotal to me it just got me
NOTE Confidence: 0.86864847

01:19:45.768 --> 01:19:47.973 asking questions about changes and
NOTE Confidence: 0.86864847

01:19:47.973 --> 01:19:50.488 worldview with nature of meditation.
NOTE Confidence: 0.86864847

01:19:50.490 --> 01:19:53.088 What you know? What is this?
NOTE Confidence: 0.86864847

01:19:53.090 --> 01:19:56.107 How does this fit in with spirituality?
NOTE Confidence: 0.86864847

01:19:56.110 --> 01:19:59.998 You know more broadly and I I had no.
NOTE Confidence: 0.8410594

01:20:02.500 --> 01:20:04.399 Particular religious affiliation,

NOTE Confidence: 0.8410594

01:20:04.399 --> 01:20:07.564 or even grounding in spirituality.

NOTE Confidence: 0.8410594

01:20:07.570 --> 01:20:11.651 So so so I got it intellectually

NOTE Confidence: 0.8410594

01:20:11.651 --> 01:20:14.550 interested in that question,

NOTE Confidence: 0.8410594

01:20:14.550 --> 01:20:18.393 and that actually prompted me to start

NOTE Confidence: 0.8410594

01:20:18.393 --> 01:20:22.790 reading the older literature on psychedelics.

NOTE Confidence: 0.8410594

01:20:22.790 --> 01:20:25.622 An an you know,

NOTE Confidence: 0.8410594

01:20:25.622 --> 01:20:28.454 eventually proposing to do.

NOTE Confidence: 0.8410594

01:20:28.460 --> 01:20:29.940 A study with psilocybin.

NOTE Confidence: 0.8410594

01:20:29.940 --> 01:20:34.127 So I was I was moved to to initiate this

NOTE Confidence: 0.8410594

01:20:34.127 --> 01:20:36.941 research because I was deeply curious

NOTE Confidence: 0.8410594

01:20:37.031 --> 01:20:39.749 about transformative experiences.

NOTE Confidence: 0.8410594

01:20:39.750 --> 01:20:43.512 And that and that continues to be the case.

NOTE Confidence: 0.8410594

01:20:43.520 --> 01:20:46.124 I mean, I'm I'm I'm very interested

NOTE Confidence: 0.8410594

01:20:46.124 --> 01:20:48.761 in my own exploration of the

NOTE Confidence: 0.8410594

01:20:48.761 --> 01:20:51.635 nature of experiences and then and

NOTE Confidence: 0.8410594

01:20:51.635 --> 01:20:54.531 then nature of what is true at
NOTE Confidence: 0.8410594

01:20:54.531 --> 01:20:57.344 the deepest level and and how to.
NOTE Confidence: 0.8410594

01:20:57.344 --> 01:20:59.434 How do I interpret that?
NOTE Confidence: 0.8410594

01:20:59.440 --> 01:21:02.216 And so that has led us to this
NOTE Confidence: 0.8410594

01:21:02.216 --> 01:21:04.994 series of studies that I didn't
NOTE Confidence: 0.8410594

01:21:04.994 --> 01:21:06.990 talk about an beginning,
NOTE Confidence: 0.8410594

01:21:06.990 --> 01:21:08.762 meditators and long term
NOTE Confidence: 0.8410594

01:21:08.762 --> 01:21:11.420 meditators in the study were just.
NOTE Confidence: 0.8410594

01:21:11.420 --> 01:21:14.744 Concluding in religious clergy.
NOTE Confidence: 0.8410594

01:21:14.744 --> 01:21:18.899 Because I'm really interested in
NOTE Confidence: 0.8410594

01:21:18.899 --> 01:21:23.640 the interplay between those things.
NOTE Confidence: 0.8410594

01:21:23.640 --> 01:21:26.860 But so I guess the answer to
NOTE Confidence: 0.8410594

01:21:26.860 --> 01:21:29.389 the question is that that.
NOTE Confidence: 0.8410594

01:21:29.390 --> 01:21:32.715 I'm interested in that, but I don't.
NOTE Confidence: 0.8410594

01:21:32.720 --> 01:21:36.630 I don't think that has.
NOTE Confidence: 0.8410594

01:21:36.630 --> 01:21:38.115 Impacted this in.

NOTE Confidence: 0.8410594

01:21:38.115 --> 01:21:41.580 The the core of a science that

NOTE Confidence: 0.8410594

01:21:41.686 --> 01:21:45.493 I want to do and how I want to

NOTE Confidence: 0.8410594

01:21:45.493 --> 01:21:47.721 understand the mechanisms that

NOTE Confidence: 0.8410594

01:21:47.721 --> 01:21:51.450 whether the reason I ask is because

NOTE Confidence: 0.8410594

01:21:51.450 --> 01:21:54.128 it seems like the cross disease

NOTE Confidence: 0.82041794

01:21:54.130 --> 01:21:57.259 or the fact that it affects a

NOTE Confidence: 0.82041794

01:21:57.259 --> 01:21:59.481 variety of diseases that might

NOTE Confidence: 0.82041794

01:21:59.481 --> 01:22:01.636 not from a more reductionist

NOTE Confidence: 0.82041794

01:22:01.636 --> 01:22:03.970 perspective seem to be linked.

NOTE Confidence: 0.82041794

01:22:03.970 --> 01:22:07.085 It makes much more, so to speak,

NOTE Confidence: 0.82041794

01:22:07.090 --> 01:22:09.367 common sense from a more

NOTE Confidence: 0.82041794

01:22:09.367 --> 01:22:10.828 like spirituals psycho.

NOTE Confidence: 0.82041794

01:22:10.830 --> 01:22:12.296 Dynamic respective issues like

NOTE Confidence: 0.82041794

01:22:12.296 --> 01:22:13.760 personal narrative and spirituality

NOTE Confidence: 0.82041794

01:22:13.760 --> 01:22:15.585 with regard to like addiction

NOTE Confidence: 0.82041794

01:22:15.585 --> 01:22:17.414 and depression and so forth.
NOTE Confidence: 0.82041794

01:22:17.414 --> 01:22:18.520 Yeah, I mean,
NOTE Confidence: 0.8785192

01:22:18.520 --> 01:22:20.782 but you wouldn't. You wouldn't need
NOTE Confidence: 0.8785192

01:22:20.782 --> 01:22:22.540 to bring spirituality into it.
NOTE Confidence: 0.8785192

01:22:22.540 --> 01:22:25.310 I mean, it could be.
NOTE Confidence: 0.8785192

01:22:25.310 --> 01:22:27.295 Yeah, it could be changed
NOTE Confidence: 0.8785192

01:22:27.295 --> 01:22:28.486 in narrative structure,
NOTE Confidence: 0.8785192

01:22:28.490 --> 01:22:30.878 and in that sort of thing,
NOTE Confidence: 0.8785192

01:22:30.880 --> 01:22:33.268 but I am interested in that.
NOTE Confidence: 0.8785192

01:22:33.270 --> 01:22:36.056 I just want to comment on the
NOTE Confidence: 0.8785192

01:22:36.056 --> 01:22:38.129 your initial comment about you.
NOTE Confidence: 0.8785192

01:22:38.130 --> 01:22:42.146 Having read about this in 2007 and thought
NOTE Confidence: 0.8785192

01:22:42.146 --> 01:22:45.905 there's no way that you would touch it.
NOTE Confidence: 0.8785192

01:22:45.910 --> 01:22:48.276 We have a couple of postdocs who
NOTE Confidence: 0.8785192

01:22:48.276 --> 01:22:50.850 are in our who were residents
NOTE Confidence: 0.8785192

01:22:50.850 --> 01:22:53.310 in psychiatry at Johns Hopkins,

NOTE Confidence: 0.8785192

01:22:53.310 --> 01:22:55.446 and now have gotten very involved

NOTE Confidence: 0.8785192

01:22:55.446 --> 01:22:58.385 in our work and are doing some

NOTE Confidence: 0.8785192

01:22:58.385 --> 01:23:00.297 some really interesting things.

NOTE Confidence: 0.8785192

01:23:00.300 --> 01:23:03.692 An just earlier this week they gave a

NOTE Confidence: 0.8785192

01:23:03.692 --> 01:23:06.197 presentation to GW medical students and

NOTE Confidence: 0.8785192

01:23:06.197 --> 01:23:10.157 I asked him what was that like and they said,

NOTE Confidence: 0.8785192

01:23:10.160 --> 01:23:11.864 you know there were.

NOTE Confidence: 0.8785192

01:23:11.864 --> 01:23:15.908 They have 40 students on the line and I said,

NOTE Confidence: 0.8785192

01:23:15.910 --> 01:23:18.358 well. Was there skepticism because I

NOTE Confidence: 0.8785192

01:23:18.358 --> 01:23:21.059 haven't gotten into this work initially?

NOTE Confidence: 0.8785192

01:23:21.060 --> 01:23:23.160 There was plenty of skepticism

NOTE Confidence: 0.8785192

01:23:23.160 --> 01:23:24.840 within the psychiatric community,

NOTE Confidence: 0.8785192

01:23:24.840 --> 01:23:27.780 and they said no, not at all.

NOTE Confidence: 0.8785192

01:23:27.780 --> 01:23:29.880 There's a lot of enthusiasm,

NOTE Confidence: 0.8785192

01:23:29.880 --> 01:23:32.680 and then one of them reflected that

NOTE Confidence: 0.8785192

01:23:32.680 --> 01:23:35.759 when when she was in medical school.
NOTE Confidence: 0.8785192

01:23:35.760 --> 01:23:38.280 Like you, she actually had this
NOTE Confidence: 0.8785192

01:23:38.280 --> 01:23:39.540 curiosity about psychedelics,
NOTE Confidence: 0.8785192

01:23:39.540 --> 01:23:41.856 but she felt like she needed
NOTE Confidence: 0.8785192

01:23:41.856 --> 01:23:44.160 to keep it a secret,
NOTE Confidence: 0.8785192

01:23:44.160 --> 01:23:46.788 and so she should go out.
NOTE Confidence: 0.8785192

01:23:46.790 --> 01:23:49.010 On the Internet and kind of
NOTE Confidence: 0.8785192

01:23:49.010 --> 01:23:51.030 explore this kind of stuff,
NOTE Confidence: 0.8785192

01:23:51.030 --> 01:23:54.710 but it was not a topic that she was even
NOTE Confidence: 0.8785192

01:23:54.808 --> 01:23:58.287 willing to broach with her mentors at
NOTE Confidence: 0.8785192

01:23:58.287 --> 01:24:02.176 the time because it was it was considered.
NOTE Confidence: 0.8785192

01:24:02.180 --> 01:24:03.640 Ascentia a taboo subject,
NOTE Confidence: 0.8785192

01:24:03.640 --> 01:24:06.822 so so the that the shift within psychiatry
NOTE Confidence: 0.8785192

01:24:06.822 --> 01:24:10.007 and the culture is just been profound.
NOTE Confidence: 0.8785192

01:24:10.010 --> 01:24:11.243 In that sense,
NOTE Confidence: 0.8785192

01:24:11.243 --> 01:24:12.887 I felt that way.

NOTE Confidence: 0.8785192

01:24:12.890 --> 01:24:15.363 So thank you for making that

NOTE Confidence: 0.8785192

01:24:15.363 --> 01:24:17.010 less of a concern.

NOTE Confidence: 0.86800593

01:24:19.660 --> 01:24:21.361 I think we're going to have to

NOTE Confidence: 0.86800593

01:24:21.361 --> 01:24:22.819 make this next. The last question

NOTE Confidence: 0.86800593

01:24:22.819 --> 01:24:24.277 I want to call Angela Heating.

NOTE Confidence: 0.83214056

01:24:28.680 --> 01:24:30.410 Oh yes, well you kind of

NOTE Confidence: 0.83214056

01:24:30.410 --> 01:24:31.562 asked my question earlier,

NOTE Confidence: 0.83214056

01:24:31.570 --> 01:24:33.215 but I was just wondering if you

NOTE Confidence: 0.83214056

01:24:33.215 --> 01:24:35.374 could talk a little bit about the

NOTE Confidence: 0.83214056

01:24:35.374 --> 01:24:36.766 roots of psychedelic treatment.

NOTE Confidence: 0.83214056

01:24:36.770 --> 01:24:37.914 An traditional healing practices

NOTE Confidence: 0.83214056

01:24:37.914 --> 01:24:39.630 in communities of color and one

NOTE Confidence: 0.83214056

01:24:39.680 --> 01:24:41.210 of your colleagues, Alan Davis,

NOTE Confidence: 0.83214056

01:24:41.210 --> 01:24:43.250 just recently published a paper in

NOTE Confidence: 0.83214056

01:24:43.250 --> 01:24:45.189 collaboration with Doctor Monica Williams.

NOTE Confidence: 0.83214056

01:24:45.190 --> 01:24:47.745 Um on a secondary or data collection.
NOTE Confidence: 0.83214056

01:24:47.750 --> 01:24:49.718 Looking at the effects of racial
NOTE Confidence: 0.83214056

01:24:49.718 --> 01:24:51.491 trauma and reduce the effects
NOTE Confidence: 0.83214056

01:24:51.491 --> 01:24:53.466 of psychedelic use in reducing
NOTE Confidence: 0.83214056

01:24:53.466 --> 01:24:55.046 racial trauma among black,
NOTE Confidence: 0.83214056

01:24:55.050 --> 01:24:57.240 indigenous and other people of color.
NOTE Confidence: 0.82965714

01:24:59.590 --> 01:25:00.934 Yeah, let's see.
NOTE Confidence: 0.82965714

01:25:00.934 --> 01:25:04.068 So I yeah, I think that's it.
NOTE Confidence: 0.82965714

01:25:04.068 --> 01:25:05.856 Certainly open area investigation.
NOTE Confidence: 0.82965714

01:25:05.860 --> 01:25:09.883 There's a lot that can be done with that.
NOTE Confidence: 0.82965714

01:25:09.890 --> 01:25:13.162 You know in terms of where how this
NOTE Confidence: 0.82965714

01:25:13.162 --> 01:25:15.270 interfaces with Indigenous use.
NOTE Confidence: 0.8154143

01:25:17.280 --> 01:25:21.000 I I kind of deeply conflicted
NOTE Confidence: 0.8154143

01:25:21.000 --> 01:25:22.860 feelings about that.
NOTE Confidence: 0.8154143

01:25:22.860 --> 01:25:27.600 I mean, there's there's a lot
NOTE Confidence: 0.8154143

01:25:27.600 --> 01:25:32.010 of wisdom that's come out of.

NOTE Confidence: 0.8154143

01:25:32.010 --> 01:25:33.696 Indigenous communities that

NOTE Confidence: 0.8154143

01:25:33.696 --> 01:25:36.506 have used these sorts of.

NOTE Confidence: 0.8154143

01:25:36.510 --> 01:25:40.498 Substance I'm sure but.

NOTE Confidence: 0.8154143

01:25:40.500 --> 01:25:45.316 But we we get into, you know very.

NOTE Confidence: 0.8154143

01:25:45.316 --> 01:25:49.426 Tricky an as yet unresolved.

NOTE Confidence: 0.8154143

01:25:49.430 --> 01:25:55.814 No set of ethical questions about how.

NOTE Confidence: 0.8154143

01:25:55.820 --> 01:25:59.334 What is the world view that the

NOTE Confidence: 0.8154143

01:25:59.334 --> 01:26:02.798 therapist holds an an and what is

NOTE Confidence: 0.8154143

01:26:02.798 --> 01:26:06.442 the world view that we're going to

NOTE Confidence: 0.8154143

01:26:06.442 --> 01:26:09.498 structure these experiences around?

NOTE Confidence: 0.8154143

01:26:09.500 --> 01:26:12.988 And I did and I have and I

NOTE Confidence: 0.8154143

01:26:12.988 --> 01:26:15.650 have concern because of the.

NOTE Confidence: 0.8154143

01:26:15.650 --> 01:26:19.082 Ontological shock characteristics of

NOTE Confidence: 0.8154143

01:26:19.082 --> 01:26:24.230 these kinds of experiences that under.

NOTE Confidence: 0.8154143

01:26:24.230 --> 01:26:27.044 Set and setting conditions you know

NOTE Confidence: 0.8154143

01:26:27.044 --> 01:26:30.136 that would encourage a very radically
NOTE Confidence: 0.8154143

01:26:30.136 --> 01:26:32.966 different and alternative worldview that
NOTE Confidence: 0.8154143

01:26:32.966 --> 01:26:36.530 you might open people up to that Ann.
NOTE Confidence: 0.8154143

01:26:36.530 --> 01:26:39.518 And I'm not wise enough to
NOTE Confidence: 0.8154143

01:26:39.518 --> 01:26:41.940 understand what the consequences are,
NOTE Confidence: 0.8154143

01:26:41.940 --> 01:26:46.710 but, but to the extent that.
NOTE Confidence: 0.8154143

01:26:46.710 --> 01:26:50.082 It disconnected from some of the
NOTE Confidence: 0.8154143

01:26:50.082 --> 01:26:52.836 understandings that we hold in
NOTE Confidence: 0.8154143

01:26:52.836 --> 01:26:55.308 our current culture that I see
NOTE Confidence: 0.8154143

01:26:55.308 --> 01:26:58.420 that as as deeply problematic.
NOTE Confidence: 0.8154143

01:26:58.420 --> 01:27:00.555 So I think there are some really
NOTE Confidence: 0.8154143

01:27:00.555 --> 01:27:02.328 interesting questions to be asked there,
NOTE Confidence: 0.8154143

01:27:02.330 --> 01:27:05.340 but to get to get back to your point yet,
NOTE Confidence: 0.8154143

01:27:05.340 --> 01:27:07.805 yes, certainly there are going
NOTE Confidence: 0.8154143

01:27:07.805 --> 01:27:09.777 to be opportunities for.
NOTE Confidence: 0.8154143

01:27:09.780 --> 01:27:11.756 To address.

NOTE Confidence: 0.8154143
01:27:11.756 --> 01:27:14.720 Psychological problems that
NOTE Confidence: 0.8154143
01:27:14.720 --> 01:27:18.672 come out of trauma.
NOTE Confidence: 0.8154143
01:27:18.680 --> 01:27:19.736 Do too.
NOTE Confidence: 0.8154143
01:27:19.736 --> 01:27:22.376 Minority status in the line.
NOTE Confidence: 0.8872028
01:27:24.630 --> 01:27:27.120 Alright. So we do have questions
NOTE Confidence: 0.8872028
01:27:27.120 --> 01:27:28.820 continuing to come in in the chat,
NOTE Confidence: 0.8715859
01:27:28.820 --> 01:27:30.030 but I think we're at
NOTE Confidence: 0.8715859
01:27:30.030 --> 01:27:30.998 where it's time boundary.
NOTE Confidence: 0.8715859
01:27:31.000 --> 01:27:32.440 I haven't managed to convey every
NOTE Confidence: 0.8715859
01:27:32.440 --> 01:27:33.660 single question in the chat,
NOTE Confidence: 0.8715859
01:27:33.660 --> 01:27:35.298 but I think we've hit on
NOTE Confidence: 0.8715859
01:27:35.298 --> 01:27:36.890 the majority of the themes.
NOTE Confidence: 0.8715859
01:27:36.890 --> 01:27:39.002 And this has been a wonderful
NOTE Confidence: 0.8715859
01:27:39.002 --> 01:27:39.706 rich discussion.
NOTE Confidence: 0.8715859
01:27:39.710 --> 01:27:41.828 I want to thank you again,
NOTE Confidence: 0.8715859

01:27:41.830 --> 01:27:42.889 rolling for coming.

NOTE Confidence: 0.8715859

01:27:42.889 --> 01:27:45.360 Being with us today in our last

NOTE Confidence: 0.8715859

01:27:45.438 --> 01:27:47.273 grand rounds of this remarkable

NOTE Confidence: 0.8715859

01:27:47.273 --> 01:27:49.600 year and ending it on such a

NOTE Confidence: 0.8715859

01:27:49.600 --> 01:27:51.364 high note with this beautiful

NOTE Confidence: 0.8715859

01:27:51.364 --> 01:27:53.696 talk and rich discussions.