

WEBVTT

NOTE duration: "00:52:25.472"

NOTE Confidence: 0.95513177

00:00:00.240 --> 00:00:01.300 Much, John

NOTE Confidence: 0.78988004

00:00:02.399 --> 00:00:03.379 John and Matt.

NOTE Confidence: 0.8175626

00:00:04.480 --> 00:00:05.839 Appreciate it and,

NOTE Confidence: 0.9987549

00:00:06.559 --> 00:00:08.000 really happy to be with

NOTE Confidence: 0.9987549

00:00:08.000 --> 00:00:09.220 you all today.

NOTE Confidence: 0.9962902

00:00:09.920 --> 00:00:11.619 I'm gonna share my slides.

NOTE Confidence: 0.9879608

00:00:13.200 --> 00:00:14.660 Let me do that now.

NOTE Confidence: 0.9986911

00:00:21.215 --> 00:00:22.595 Can you all see that?

NOTE Confidence: 0.9992033

00:00:23.055 --> 00:00:23.555 Yes.

NOTE Confidence: 0.9998259

00:00:24.494 --> 00:00:24.994 Okay.

NOTE Confidence: 0.9993583

00:00:26.255 --> 00:00:27.795 So it really is

NOTE Confidence: 0.9993324

00:00:29.910 --> 00:00:31.110 an honor to share with

NOTE Confidence: 0.9993324

00:00:31.110 --> 00:00:32.150 you a little bit about

NOTE Confidence: 0.9993324

00:00:32.150 --> 00:00:33.370 our journey today.

NOTE Confidence: 0.9986542

00:00:34.150 --> 00:00:36.010 Let me begin by
NOTE Confidence: 0.99954677

00:00:36.630 --> 00:00:38.390 situating the work we're doing
NOTE Confidence: 0.99954677

00:00:38.390 --> 00:00:39.210 in a broader
NOTE Confidence: 0.9963782

00:00:39.510 --> 00:00:41.350 historical context of work that
NOTE Confidence: 0.9963782

00:00:41.350 --> 00:00:42.170 I've been doing
NOTE Confidence: 0.99986297

00:00:42.470 --> 00:00:43.430 over the course of my
NOTE Confidence: 0.99986297

00:00:43.430 --> 00:00:44.409 entire career.
NOTE Confidence: 0.99977434

00:00:45.265 --> 00:00:46.725 I began my career
NOTE Confidence: 0.99918664

00:00:47.345 --> 00:00:49.045 asking a very simple question.
NOTE Confidence: 0.9896116

00:00:49.745 --> 00:00:51.605 That question is still pertinent
NOTE Confidence: 0.9896116

00:00:51.665 --> 00:00:52.865 to much of what we
NOTE Confidence: 0.9896116

00:00:52.865 --> 00:00:53.685 do today.
NOTE Confidence: 0.9774903

00:00:54.225 --> 00:00:55.665 And the question is, why
NOTE Confidence: 0.9774903

00:00:55.665 --> 00:00:57.605 is it that some people
NOTE Confidence: 0.99833876

00:00:58.520 --> 00:00:59.500 are more vulnerable
NOTE Confidence: 0.9853443

00:01:00.120 --> 00:01:01.960 to life's slings and arrows,

NOTE Confidence: 0.9853443

00:01:01.960 --> 00:01:03.160 and why are others more

NOTE Confidence: 0.9853443

00:01:03.160 --> 00:01:03.660 resilient?

NOTE Confidence: 0.99914116

00:01:04.680 --> 00:01:05.720 In the early part of

NOTE Confidence: 0.99914116

00:01:05.720 --> 00:01:07.479 my career, I focused a

NOTE Confidence: 0.99914116

00:01:07.479 --> 00:01:08.780 lot on the adversity

NOTE Confidence: 0.999805

00:01:09.080 --> 00:01:10.140 side of this

NOTE Confidence: 0.9874992

00:01:10.765 --> 00:01:13.265 equation and studied brain mechanisms

NOTE Confidence: 0.9874992

00:01:13.405 --> 00:01:14.305 that conferred

NOTE Confidence: 0.99908555

00:01:14.765 --> 00:01:15.265 vulnerability

NOTE Confidence: 0.9706957

00:01:15.805 --> 00:01:18.125 to depression and anxiety and

NOTE Confidence: 0.9706957

00:01:18.125 --> 00:01:19.505 stress related disorders.

NOTE Confidence: 0.99522775

00:01:20.365 --> 00:01:20.685 And,

NOTE Confidence: 0.99966735

00:01:21.165 --> 00:01:21.905 my life

NOTE Confidence: 0.9936851

00:01:22.284 --> 00:01:23.345 changed considerably.

NOTE Confidence: 0.96363556

00:01:24.670 --> 00:01:25.950 It went through what one

NOTE Confidence: 0.96363556

00:01:25.950 --> 00:01:27.230 of my dear friends calls
NOTE Confidence: 0.96363556

00:01:27.230 --> 00:01:28.690 an orthogonal rotation,
NOTE Confidence: 0.93079805

00:01:30.110 --> 00:01:30.930 when I,
NOTE Confidence: 0.9966557

00:01:31.790 --> 00:01:33.150 met the Dalai Lama for
NOTE Confidence: 0.9966557

00:01:33.150 --> 00:01:34.350 the first time in nineteen
NOTE Confidence: 0.9966557

00:01:34.350 --> 00:01:35.250 ninety two.
NOTE Confidence: 0.9884681

00:01:36.955 --> 00:01:37.994 And it was at this
NOTE Confidence: 0.9884681

00:01:37.994 --> 00:01:39.215 meeting when,
NOTE Confidence: 0.9770788

00:01:40.075 --> 00:01:41.775 he asked me very innocently,
NOTE Confidence: 0.9994594

00:01:42.314 --> 00:01:43.834 why can't we use the
NOTE Confidence: 0.9994594

00:01:43.834 --> 00:01:44.655 same tools
NOTE Confidence: 0.95924103

00:01:45.354 --> 00:01:46.975 of behavioral and neural,
NOTE Confidence: 0.9887085

00:01:47.835 --> 00:01:49.755 neuroscience that we're using to
NOTE Confidence: 0.9887085

00:01:49.755 --> 00:01:51.774 interrogate anxiety and stress
NOTE Confidence: 0.98903257

00:01:52.110 --> 00:01:54.210 and use those tools to,
NOTE Confidence: 0.9814799

00:01:55.310 --> 00:01:57.390 study the positive qualities of

NOTE Confidence: 0.9814799
00:01:57.390 --> 00:01:58.350 what it means to be
NOTE Confidence: 0.9814799
00:01:58.350 --> 00:01:58.850 human,
NOTE Confidence: 0.99304277
00:01:59.630 --> 00:02:00.930 qualities like kindness
NOTE Confidence: 0.98131675
00:02:01.230 --> 00:02:02.210 and like compassion.
NOTE Confidence: 0.9939237
00:02:02.830 --> 00:02:04.270 And, I did not have
NOTE Confidence: 0.9939237
00:02:04.270 --> 00:02:05.470 a very good answer for
NOTE Confidence: 0.9939237
00:02:05.470 --> 00:02:06.610 him on that day,
NOTE Confidence: 0.99974
00:02:07.185 --> 00:02:08.145 but I did make a
NOTE Confidence: 0.99974
00:02:08.145 --> 00:02:09.665 commitment to him that I
NOTE Confidence: 0.99974
00:02:09.665 --> 00:02:10.725 was going to
NOTE Confidence: 0.98975325
00:02:11.185 --> 00:02:12.965 orient our work toward,
NOTE Confidence: 0.9948841
00:02:13.825 --> 00:02:14.325 these
NOTE Confidence: 0.96751183
00:02:14.705 --> 00:02:16.245 the study of these qualities,
NOTE Confidence: 0.9828107
00:02:16.625 --> 00:02:17.825 and that led to the
NOTE Confidence: 0.9828107
00:02:17.825 --> 00:02:19.345 founding of the Center for
NOTE Confidence: 0.9828107

00:02:19.345 --> 00:02:20.245 Healthy Minds
NOTE Confidence: 0.7404449

00:02:20.865 --> 00:02:21.365 in,
NOTE Confidence: 0.99039257

00:02:24.220 --> 00:02:25.740 in two thousand ten, and
NOTE Confidence: 0.99039257

00:02:25.740 --> 00:02:26.860 the Dalai Lama came out
NOTE Confidence: 0.99039257

00:02:26.860 --> 00:02:28.460 to inaugurate that center in
NOTE Confidence: 0.99039257

00:02:28.460 --> 00:02:29.900 two thousand ten. And the
NOTE Confidence: 0.99039257

00:02:29.900 --> 00:02:31.580 mission of our center is
NOTE Confidence: 0.99039257

00:02:31.580 --> 00:02:32.960 to cultivate well-being
NOTE Confidence: 0.99559975

00:02:33.419 --> 00:02:35.020 and relieve suffering through the
NOTE Confidence: 0.99559975

00:02:35.020 --> 00:02:35.520 scientific
NOTE Confidence: 0.9961784

00:02:35.820 --> 00:02:37.200 understanding of the mind.
NOTE Confidence: 0.9936224

00:02:37.655 --> 00:02:39.495 And in twenty fourteen, as,
NOTE Confidence: 0.90805435

00:02:40.055 --> 00:02:41.514 Matt kindly mentioned,
NOTE Confidence: 0.9868018

00:02:41.974 --> 00:02:44.455 we founded the nonprofit Healthy
NOTE Confidence: 0.9868018

00:02:44.455 --> 00:02:46.555 Minds Innovations to translate
NOTE Confidence: 0.99762154

00:02:47.095 --> 00:02:48.694 insights that were coming from

NOTE Confidence: 0.99762154

00:02:48.694 --> 00:02:49.435 the science

NOTE Confidence: 0.9736834

00:02:49.815 --> 00:02:51.175 into tools that can be

NOTE Confidence: 0.9736834

00:02:51.175 --> 00:02:52.075 used to,

NOTE Confidence: 0.9850148

00:02:52.739 --> 00:02:55.379 both measure and disseminate well-being

NOTE Confidence: 0.9850148

00:02:55.379 --> 00:02:56.120 at scale.

NOTE Confidence: 0.9802792

00:02:56.579 --> 00:02:57.780 So let me begin with

NOTE Confidence: 0.9802792

00:02:57.780 --> 00:02:59.400 a disclaimer. I'm the founder,

NOTE Confidence: 0.9802792

00:02:59.540 --> 00:03:01.139 president, and chief visionary of

NOTE Confidence: 0.9802792

00:03:01.139 --> 00:03:02.280 Healthy Minds Innovations,

NOTE Confidence: 0.99393904

00:03:02.819 --> 00:03:03.799 which is a nonprofit

NOTE Confidence: 0.990228

00:03:04.099 --> 00:03:06.019 organization from which I've never

NOTE Confidence: 0.990228

00:03:06.019 --> 00:03:08.014 received a penny in compensation.

NOTE Confidence: 0.8438228

00:03:10.955 --> 00:03:12.014 This is a,

NOTE Confidence: 0.9094698

00:03:14.875 --> 00:03:15.695 an inspirational

NOTE Confidence: 0.971794

00:03:16.155 --> 00:03:17.835 photograph. This came from,

NOTE Confidence: 0.9791086

00:03:18.555 --> 00:03:19.915 one of the many visits
NOTE Confidence: 0.9791086

00:03:19.915 --> 00:03:21.849 that Dalai Lama made to
NOTE Confidence: 0.9791086

00:03:21.849 --> 00:03:22.510 our center
NOTE Confidence: 0.7687927

00:03:22.810 --> 00:03:23.629 in Madison.
NOTE Confidence: 0.98749644

00:03:24.650 --> 00:03:26.250 We were this was actually
NOTE Confidence: 0.98749644

00:03:26.250 --> 00:03:27.310 taken in,
NOTE Confidence: 0.99696016

00:03:28.090 --> 00:03:29.389 two thousand one.
NOTE Confidence: 0.95740414

00:03:30.970 --> 00:03:31.690 Some of you,
NOTE Confidence: 0.8852353

00:03:32.169 --> 00:03:33.769 might recognize from the little
NOTE Confidence: 0.8852353

00:03:33.769 --> 00:03:34.830 snippet of profile,
NOTE Confidence: 0.9423053

00:03:36.215 --> 00:03:37.254 on the other side of
NOTE Confidence: 0.9423053

00:03:37.254 --> 00:03:38.534 the Dalai Lama, this side
NOTE Confidence: 0.9423053

00:03:38.534 --> 00:03:39.595 away from me.
NOTE Confidence: 0.96578234

00:03:40.215 --> 00:03:41.894 That's Ned Kellen. Some of
NOTE Confidence: 0.96578234

00:03:41.894 --> 00:03:43.334 you may recognize him as
NOTE Confidence: 0.96578234

00:03:43.334 --> 00:03:44.534 the he's the chair of

NOTE Confidence: 0.96578234

00:03:44.534 --> 00:03:46.795 our psychiatry department. He's been

NOTE Confidence: 0.96578234

00:03:46.935 --> 00:03:48.375 also the he's the editor

NOTE Confidence: 0.96578234

00:03:48.375 --> 00:03:49.595 of the American Journal.

NOTE Confidence: 0.98669904

00:03:51.650 --> 00:03:53.330 We were showing him how

NOTE Confidence: 0.98669904

00:03:53.330 --> 00:03:55.250 we can interrogate the structure

NOTE Confidence: 0.98669904

00:03:55.250 --> 00:03:56.550 and function of the brain.

NOTE Confidence: 0.95722634

00:03:56.850 --> 00:03:57.890 This was in the early

NOTE Confidence: 0.95722634

00:03:57.890 --> 00:03:59.730 days of MRI two thousand

NOTE Confidence: 0.95722634

00:03:59.730 --> 00:04:00.230 one,

NOTE Confidence: 0.9937498

00:04:00.610 --> 00:04:02.690 and, this was a very

NOTE Confidence: 0.9937498

00:04:02.690 --> 00:04:04.610 important demonstration for the Dalai

NOTE Confidence: 0.9937498

00:04:04.610 --> 00:04:06.710 Lama because he saw how

NOTE Confidence: 0.9882731

00:04:07.065 --> 00:04:08.525 mental activity actually,

NOTE Confidence: 0.9992906

00:04:09.465 --> 00:04:12.045 was associated with systematic changes

NOTE Confidence: 0.96572584

00:04:12.905 --> 00:04:14.345 in the functional activity of

NOTE Confidence: 0.96572584

00:04:14.345 --> 00:04:15.004 the brain,
NOTE Confidence: 0.96342456
00:04:15.385 --> 00:04:15.785 and,
NOTE Confidence: 0.99972814
00:04:16.425 --> 00:04:17.645 that was an important
NOTE Confidence: 0.99988055
00:04:18.505 --> 00:04:19.005 demonstration
NOTE Confidence: 0.99981886
00:04:19.785 --> 00:04:20.825 for him to be able
NOTE Confidence: 0.99981886
00:04:20.825 --> 00:04:21.565 to witness.
NOTE Confidence: 0.9836291
00:04:23.089 --> 00:04:25.089 Okay. So I wanna begin
NOTE Confidence: 0.9836291
00:04:25.089 --> 00:04:25.990 this presentation
NOTE Confidence: 0.9962105
00:04:26.370 --> 00:04:27.330 with a little bit of
NOTE Confidence: 0.9962105
00:04:27.330 --> 00:04:28.850 bad news. I promise I
NOTE Confidence: 0.9962105
00:04:28.850 --> 00:04:29.670 won't linger
NOTE Confidence: 0.9683411
00:04:30.050 --> 00:04:31.169 on the bad news for
NOTE Confidence: 0.9683411
00:04:31.169 --> 00:04:33.410 too long, but I it's
NOTE Confidence: 0.9683411
00:04:33.410 --> 00:04:34.610 news that all of you
NOTE Confidence: 0.9683411
00:04:34.610 --> 00:04:35.110 know,
NOTE Confidence: 0.9929345
00:04:35.745 --> 00:04:37.205 but I just wanna review

NOTE Confidence: 0.9929345
00:04:37.345 --> 00:04:38.885 a few key data points,
NOTE Confidence: 0.9786895
00:04:39.745 --> 00:04:42.085 that really underscore the importance,
NOTE Confidence: 0.98356
00:04:42.385 --> 00:04:44.225 I think, of the approach
NOTE Confidence: 0.98356
00:04:44.225 --> 00:04:45.365 that we are taking,
NOTE Confidence: 0.99682295
00:04:46.065 --> 00:04:47.745 that well-being is indeed in
NOTE Confidence: 0.99682295
00:04:47.745 --> 00:04:48.645 rapid decline.
NOTE Confidence: 0.99079674
00:04:49.500 --> 00:04:50.539 Some of you might be
NOTE Confidence: 0.99079674
00:04:50.539 --> 00:04:52.139 aware that each year over
NOTE Confidence: 0.99079674
00:04:52.139 --> 00:04:53.759 the last, ten years,
NOTE Confidence: 0.8852705
00:04:54.620 --> 00:04:55.900 there is an a thing
NOTE Confidence: 0.8852705
00:04:55.900 --> 00:04:57.759 called the world happiness report
NOTE Confidence: 0.98373824
00:04:58.060 --> 00:04:59.180 that has been issued in
NOTE Confidence: 0.98373824
00:04:59.180 --> 00:05:00.699 part under the auspices of
NOTE Confidence: 0.98373824
00:05:00.699 --> 00:05:01.759 the United Nations.
NOTE Confidence: 0.9882798
00:05:02.379 --> 00:05:02.779 And,
NOTE Confidence: 0.99941546

00:05:03.259 --> 00:05:04.560 one of the
NOTE Confidence: 0.98662096

00:05:06.085 --> 00:05:08.324 forms of data in this
NOTE Confidence: 0.98662096

00:05:08.324 --> 00:05:10.745 annual report is not simply
NOTE Confidence: 0.98662096

00:05:10.885 --> 00:05:13.305 a cross sectional snapshot of,
NOTE Confidence: 0.99269867

00:05:14.885 --> 00:05:17.305 indicators of happiness across nations
NOTE Confidence: 0.99269867

00:05:17.365 --> 00:05:18.830 in the world, but it's
NOTE Confidence: 0.99269867

00:05:18.830 --> 00:05:20.529 also looking at the longitudinal
NOTE Confidence: 0.9856013

00:05:20.910 --> 00:05:21.410 trend,
NOTE Confidence: 0.994343

00:05:22.349 --> 00:05:24.750 in that is changes in
NOTE Confidence: 0.994343

00:05:24.750 --> 00:05:26.589 these metrics of happiness or
NOTE Confidence: 0.994343

00:05:26.589 --> 00:05:27.089 well-being
NOTE Confidence: 0.98423517

00:05:27.629 --> 00:05:28.449 over time,
NOTE Confidence: 0.9985518

00:05:29.470 --> 00:05:31.629 in different nations throughout the
NOTE Confidence: 0.9985518

00:05:31.629 --> 00:05:32.129 world.
NOTE Confidence: 0.99871784

00:05:32.455 --> 00:05:34.055 And, I'd like to share
NOTE Confidence: 0.99871784

00:05:34.055 --> 00:05:35.495 with you data. This is

NOTE Confidence: 0.99871784
00:05:35.495 --> 00:05:36.795 looking at changes
NOTE Confidence: 0.9683111
00:05:37.415 --> 00:05:38.695 over the course of a,
NOTE Confidence: 0.9683111
00:05:39.095 --> 00:05:40.235 ten year period,
NOTE Confidence: 0.9978802
00:05:41.415 --> 00:05:41.915 from
NOTE Confidence: 0.833531
00:05:42.935 --> 00:05:43.435 around,
NOTE Confidence: 0.99106044
00:05:44.695 --> 00:05:46.955 twenty eleven to thirteen to
NOTE Confidence: 0.8146621
00:05:47.920 --> 00:05:48.420 twenty,
NOTE Confidence: 0.995385
00:05:49.120 --> 00:05:49.620 twenty
NOTE Confidence: 0.8643278
00:05:50.800 --> 00:05:52.100 two to twenty three.
NOTE Confidence: 0.9351925
00:05:53.040 --> 00:05:54.740 And this is,
NOTE Confidence: 0.95169044
00:05:55.760 --> 00:05:56.260 listed,
NOTE Confidence: 0.99140835
00:05:57.360 --> 00:05:59.380 in this table in order,
NOTE Confidence: 0.989086
00:06:00.395 --> 00:06:02.175 in the order of countries,
NOTE Confidence: 0.9953188
00:06:03.675 --> 00:06:05.354 starting with the countries that
NOTE Confidence: 0.9953188
00:06:05.354 --> 00:06:07.775 showed the largest increase in
NOTE Confidence: 0.99914783

00:06:08.474 --> 00:06:09.775 happiness or well-being
NOTE Confidence: 0.9980919

00:06:10.395 --> 00:06:11.995 over the course of this
NOTE Confidence: 0.9980919

00:06:11.995 --> 00:06:12.495 period.
NOTE Confidence: 0.9696754

00:06:12.839 --> 00:06:13.320 And,
NOTE Confidence: 0.9176768

00:06:13.800 --> 00:06:15.400 the data in the world
NOTE Confidence: 0.9176768

00:06:15.400 --> 00:06:16.380 happiness report,
NOTE Confidence: 0.9968084

00:06:17.320 --> 00:06:18.300 is for,
NOTE Confidence: 0.9561675

00:06:19.320 --> 00:06:19.980 I think,
NOTE Confidence: 0.9829064

00:06:20.600 --> 00:06:21.880 a hundred and thirty or
NOTE Confidence: 0.9829064

00:06:21.880 --> 00:06:23.080 a hundred and thirty one
NOTE Confidence: 0.9829064

00:06:23.080 --> 00:06:23.580 countries,
NOTE Confidence: 0.99293387

00:06:24.440 --> 00:06:25.880 across the world. So,
NOTE Confidence: 0.95548856

00:06:26.200 --> 00:06:27.740 I'm now showing you,
NOTE Confidence: 0.99509037

00:06:28.375 --> 00:06:29.915 just a list of countries.
NOTE Confidence: 0.99800944

00:06:30.295 --> 00:06:31.575 This first page goes from
NOTE Confidence: 0.99800944

00:06:31.575 --> 00:06:32.555 one to thirty

NOTE Confidence: 0.9786316
00:06:33.255 --> 00:06:35.015 thirty six. This goes from
NOTE Confidence: 0.9786316
00:06:35.015 --> 00:06:36.795 thirty seven to sixty six,
NOTE Confidence: 0.9990836
00:06:39.255 --> 00:06:40.935 and then this goes down
NOTE Confidence: 0.9990836
00:06:40.935 --> 00:06:41.435 to
NOTE Confidence: 0.98839176
00:06:41.975 --> 00:06:43.950 ninety seven. And then I
NOTE Confidence: 0.98839176
00:06:44.029 --> 00:06:44.990 wanna show you where the
NOTE Confidence: 0.98839176
00:06:44.990 --> 00:06:46.290 United States falls.
NOTE Confidence: 0.97663003
00:06:46.910 --> 00:06:48.430 United States falls,
NOTE Confidence: 0.99588
00:06:48.830 --> 00:06:50.350 one hundred and twenty out
NOTE Confidence: 0.99588
00:06:50.350 --> 00:06:51.470 of one hundred and thirty
NOTE Confidence: 0.99588
00:06:51.470 --> 00:06:52.590 or one hundred and thirty
NOTE Confidence: 0.99588
00:06:52.590 --> 00:06:53.250 one countries
NOTE Confidence: 0.9570575
00:06:53.630 --> 00:06:55.010 in showing the,
NOTE Confidence: 0.9997634
00:06:55.470 --> 00:06:55.970 largest
NOTE Confidence: 0.9905799
00:06:56.350 --> 00:06:56.850 declines
NOTE Confidence: 0.8810575

00:06:57.974 --> 00:06:58.474 in,
NOTE Confidence: 0.9040391

00:06:59.814 --> 00:07:01.194 happiness or well-being
NOTE Confidence: 0.964481

00:07:01.814 --> 00:07:03.995 over the course of this,
NOTE Confidence: 0.99298155

00:07:04.854 --> 00:07:05.354 decade.
NOTE Confidence: 0.9971936

00:07:06.775 --> 00:07:07.594 We are
NOTE Confidence: 0.9500581

00:07:08.455 --> 00:07:10.294 the two countries that are
NOTE Confidence: 0.9500581

00:07:10.294 --> 00:07:12.235 just above us are Panama
NOTE Confidence: 0.9500581

00:07:12.375 --> 00:07:13.850 and Colombia with,
NOTE Confidence: 0.8630996

00:07:16.070 --> 00:07:18.010 Pakistan just above that.
NOTE Confidence: 0.8137065

00:07:19.350 --> 00:07:20.170 And so,
NOTE Confidence: 0.9997125

00:07:21.030 --> 00:07:23.030 this is just one of
NOTE Confidence: 0.9997125

00:07:23.030 --> 00:07:23.930 many indications
NOTE Confidence: 0.9472865

00:07:24.310 --> 00:07:26.070 that particularly in our country,
NOTE Confidence: 0.9472865

00:07:26.070 --> 00:07:27.770 well-being is in rapid decline.
NOTE Confidence: 0.97694916

00:07:28.195 --> 00:07:29.155 Many of you, I'm sure,
NOTE Confidence: 0.97694916

00:07:29.155 --> 00:07:30.275 are aware of,

NOTE Confidence: 0.98750496
00:07:30.835 --> 00:07:32.455 the surgeon general's
NOTE Confidence: 0.998773
00:07:33.155 --> 00:07:35.415 reports related to mental health.
NOTE Confidence: 0.99071544
00:07:36.435 --> 00:07:38.675 This was from twenty twenty
NOTE Confidence: 0.99071544
00:07:38.675 --> 00:07:40.115 three. It's the first time
NOTE Confidence: 0.99071544
00:07:40.115 --> 00:07:41.895 United States surgeon general
NOTE Confidence: 0.98243713
00:07:42.380 --> 00:07:44.080 ever issued a health advisory
NOTE Confidence: 0.98243713
00:07:44.220 --> 00:07:46.560 on loneliness and social isolation.
NOTE Confidence: 0.9930044
00:07:47.340 --> 00:07:48.860 And, I wanna just show
NOTE Confidence: 0.9930044
00:07:48.860 --> 00:07:50.060 you a few data points
NOTE Confidence: 0.9930044
00:07:50.060 --> 00:07:51.120 from that report.
NOTE Confidence: 0.95025015
00:07:52.700 --> 00:07:53.980 In the upper left hand
NOTE Confidence: 0.95025015
00:07:53.980 --> 00:07:54.480 figure,
NOTE Confidence: 0.99973536
00:07:55.340 --> 00:07:57.760 is a measure of the
NOTE Confidence: 0.99950945
00:07:58.935 --> 00:07:59.435 change
NOTE Confidence: 0.9996268
00:08:00.375 --> 00:08:01.675 in social isolation
NOTE Confidence: 0.96540207

00:08:02.455 --> 00:08:04.235 over the course of a
NOTE Confidence: 0.96540207

00:08:04.535 --> 00:08:05.035 roughly,
NOTE Confidence: 0.9847157

00:08:06.135 --> 00:08:08.135 seventeen year period from two
NOTE Confidence: 0.9847157

00:08:08.135 --> 00:08:10.135 thousand three to two thousand
NOTE Confidence: 0.9847157

00:08:10.135 --> 00:08:10.635 twenty.
NOTE Confidence: 0.96789175

00:08:11.840 --> 00:08:14.320 And, what is indicated here
NOTE Confidence: 0.96789175

00:08:14.320 --> 00:08:15.460 is an increase
NOTE Confidence: 0.99792176

00:08:16.400 --> 00:08:18.160 of twenty four hours per
NOTE Confidence: 0.99792176

00:08:18.160 --> 00:08:18.660 month
NOTE Confidence: 0.99958086

00:08:19.040 --> 00:08:20.340 in the amount of social
NOTE Confidence: 0.99958086

00:08:20.400 --> 00:08:20.900 isolation
NOTE Confidence: 0.99671984

00:08:21.680 --> 00:08:23.840 that, the average citizen in
NOTE Confidence: 0.99671984

00:08:23.840 --> 00:08:24.500 the US
NOTE Confidence: 0.9313809

00:08:25.125 --> 00:08:25.365 is,
NOTE Confidence: 0.99318683

00:08:25.925 --> 00:08:26.425 experiencing.
NOTE Confidence: 0.9917679

00:08:26.965 --> 00:08:28.085 If you look at the

NOTE Confidence: 0.9917679
00:08:28.085 --> 00:08:29.445 panel in the lower left
NOTE Confidence: 0.9917679
00:08:29.445 --> 00:08:30.265 hand corner,
NOTE Confidence: 0.9806059
00:08:30.885 --> 00:08:32.485 that's a metric of social
NOTE Confidence: 0.9806059
00:08:32.485 --> 00:08:33.945 engagement with friends,
NOTE Confidence: 0.999678
00:08:34.645 --> 00:08:36.165 and it's showing a decline
NOTE Confidence: 0.999678
00:08:36.165 --> 00:08:38.120 of twenty hours per month
NOTE Confidence: 0.9975267
00:08:38.500 --> 00:08:39.780 in the amount of time
NOTE Confidence: 0.9975267
00:08:39.780 --> 00:08:41.080 we spend with friends.
NOTE Confidence: 0.97933674
00:08:42.580 --> 00:08:44.520 And these represent
NOTE Confidence: 0.99980116
00:08:44.900 --> 00:08:47.320 changes that are quite significant
NOTE Confidence: 0.98944175
00:08:48.020 --> 00:08:50.340 in the ecology of our
NOTE Confidence: 0.98944175
00:08:50.340 --> 00:08:51.375 social lives,
NOTE Confidence: 0.986568
00:08:52.335 --> 00:08:52.815 and,
NOTE Confidence: 0.9870186
00:08:53.295 --> 00:08:53.795 really,
NOTE Confidence: 0.99974054
00:08:54.895 --> 00:08:55.395 underscore
NOTE Confidence: 0.9778075

00:08:55.934 --> 00:08:56.415 the,
NOTE Confidence: 0.9311188

00:08:56.975 --> 00:08:58.035 the the tremendous,
NOTE Confidence: 0.99976873

00:08:59.455 --> 00:09:00.915 change that has occurred
NOTE Confidence: 0.9527268

00:09:01.455 --> 00:09:03.215 that was not due to
NOTE Confidence: 0.9527268

00:09:03.215 --> 00:09:03.715 COVID.
NOTE Confidence: 0.9252819

00:09:04.429 --> 00:09:05.730 It may have been exacerbated
NOTE Confidence: 0.9864685

00:09:06.110 --> 00:09:07.970 by COVID in particular cases,
NOTE Confidence: 0.97406787

00:09:08.429 --> 00:09:10.290 but, these trends clearly,
NOTE Confidence: 0.9978014

00:09:11.790 --> 00:09:13.970 were present prior to COVID.
NOTE Confidence: 0.9693793

00:09:15.550 --> 00:09:16.370 Now something,
NOTE Confidence: 0.9919306

00:09:16.990 --> 00:09:19.275 that really is quite astounding
NOTE Confidence: 0.9919306

00:09:19.275 --> 00:09:20.475 that was in the surgeon
NOTE Confidence: 0.9919306

00:09:20.475 --> 00:09:22.335 general's report is that,
NOTE Confidence: 0.99897385

00:09:23.035 --> 00:09:25.115 social isolation is a greater
NOTE Confidence: 0.99897385

00:09:25.115 --> 00:09:27.775 risk factor for premature mortality
NOTE Confidence: 0.9805188

00:09:28.235 --> 00:09:30.095 than is smoking fifteen cigarettes

NOTE Confidence: 0.9805188
00:09:30.155 --> 00:09:30.750 a day.
NOTE Confidence: 0.8572775
00:09:31.870 --> 00:09:33.410 These kind of findings,
NOTE Confidence: 0.98625946
00:09:34.030 --> 00:09:35.890 underscore the fact that these,
NOTE Confidence: 0.86864305
00:09:36.830 --> 00:09:37.330 social,
NOTE Confidence: 0.80696476
00:09:38.270 --> 00:09:38.770 changes,
NOTE Confidence: 0.9997423
00:09:39.390 --> 00:09:41.390 changes in the social fabric
NOTE Confidence: 0.9997423
00:09:41.390 --> 00:09:42.210 of our lives
NOTE Confidence: 0.9333639
00:09:42.590 --> 00:09:43.890 get under the skin
NOTE Confidence: 0.9401258
00:09:44.270 --> 00:09:45.570 and affect our biology
NOTE Confidence: 0.9804989
00:09:46.074 --> 00:09:47.615 in ways that are consequential
NOTE Confidence: 0.9804989
00:09:47.755 --> 00:09:48.415 for health.
NOTE Confidence: 0.9972146
00:09:49.195 --> 00:09:50.894 These data show that
NOTE Confidence: 0.9997992
00:09:51.274 --> 00:09:52.334 social isolation
NOTE Confidence: 0.9558956
00:09:52.714 --> 00:09:54.954 is greater than twofold a
NOTE Confidence: 0.9558956
00:09:54.954 --> 00:09:57.134 risk factor compared to obesity
NOTE Confidence: 0.992342

00:09:57.755 --> 00:09:58.255 in,
NOTE Confidence: 0.9635948
00:09:58.714 --> 00:09:59.535 its association
NOTE Confidence: 0.9997916
00:09:59.915 --> 00:10:01.375 with premature mortality.
NOTE Confidence: 0.97859764
00:10:02.450 --> 00:10:02.950 So,
NOTE Confidence: 0.9974693
00:10:03.570 --> 00:10:04.070 remarkably,
NOTE Confidence: 0.99543065
00:10:04.770 --> 00:10:05.970 just a couple of weeks
NOTE Confidence: 0.99543065
00:10:05.970 --> 00:10:07.650 after the surgeon general issued
NOTE Confidence: 0.99543065
00:10:07.650 --> 00:10:09.250 this report, he issued another
NOTE Confidence: 0.99543065
00:10:09.250 --> 00:10:11.170 report on social media and
NOTE Confidence: 0.99543065
00:10:11.170 --> 00:10:12.390 youth mental health.
NOTE Confidence: 0.98713017
00:10:12.850 --> 00:10:15.725 And, I won't, go through
NOTE Confidence: 0.98713017
00:10:15.725 --> 00:10:16.225 extensively
NOTE Confidence: 0.99202734
00:10:16.684 --> 00:10:18.125 the data in this report,
NOTE Confidence: 0.99202734
00:10:18.125 --> 00:10:19.165 but I wanna call your
NOTE Confidence: 0.99202734
00:10:19.165 --> 00:10:20.945 attention to one specific,
NOTE Confidence: 0.98025846
00:10:21.804 --> 00:10:22.785 set of findings.

NOTE Confidence: 0.97748166
00:10:24.365 --> 00:10:26.125 This, was in the surgeon
NOTE Confidence: 0.97748166
00:10:26.125 --> 00:10:27.179 general's report.
NOTE Confidence: 0.9997325
00:10:27.820 --> 00:10:29.339 And if you look on
NOTE Confidence: 0.9997325
00:10:29.339 --> 00:10:31.179 the right hand side of
NOTE Confidence: 0.9997325
00:10:31.179 --> 00:10:31.920 this figure,
NOTE Confidence: 0.9991024
00:10:32.779 --> 00:10:35.279 these are data for comorbid
NOTE Confidence: 0.9997601
00:10:35.740 --> 00:10:36.240 problems
NOTE Confidence: 0.95343167
00:10:36.700 --> 00:10:38.960 combining internalizing and externalizing
NOTE Confidence: 0.85427135
00:10:39.339 --> 00:10:40.640 problems in use.
NOTE Confidence: 0.99934924
00:10:41.415 --> 00:10:43.515 And it's looking at the
NOTE Confidence: 0.9833181
00:10:43.895 --> 00:10:45.434 prevalence of these problems,
NOTE Confidence: 0.9991474
00:10:46.054 --> 00:10:47.735 scaled by the amount of
NOTE Confidence: 0.9991474
00:10:47.735 --> 00:10:49.355 social media per day
NOTE Confidence: 0.992954
00:10:49.735 --> 00:10:51.675 that youth are using.
NOTE Confidence: 0.9972301
00:10:52.054 --> 00:10:53.429 And what you can see
NOTE Confidence: 0.9972301

00:10:53.429 --> 00:10:55.030 is that youth who are
NOTE Confidence: 0.9972301

00:10:55.030 --> 00:10:55.530 spending,
NOTE Confidence: 0.99288654

00:10:56.470 --> 00:10:57.750 six hours or more a
NOTE Confidence: 0.99288654

00:10:57.750 --> 00:10:59.590 day on social media have
NOTE Confidence: 0.99288654

00:10:59.590 --> 00:11:01.910 greater than twenty twenty percent
NOTE Confidence: 0.99288654

00:11:01.910 --> 00:11:02.410 risk
NOTE Confidence: 0.7803104

00:11:02.790 --> 00:11:03.110 for,
NOTE Confidence: 0.96405715

00:11:05.625 --> 00:11:06.365 these comorbid
NOTE Confidence: 0.9976096

00:11:06.665 --> 00:11:08.045 internalizing and externalizing
NOTE Confidence: 0.9519148

00:11:08.505 --> 00:11:09.005 problems.
NOTE Confidence: 0.99804455

00:11:09.945 --> 00:11:11.705 And, there's you can see
NOTE Confidence: 0.99804455

00:11:11.705 --> 00:11:13.085 this linear scaling
NOTE Confidence: 0.9995997

00:11:13.945 --> 00:11:14.925 with the amount
NOTE Confidence: 0.9992898

00:11:15.225 --> 00:11:16.925 of social media consumption.
NOTE Confidence: 0.9873593

00:11:17.490 --> 00:11:19.270 In the US today, teenagers
NOTE Confidence: 0.9873593

00:11:19.330 --> 00:11:20.450 spend an average of three

NOTE Confidence: 0.9873593

00:11:20.450 --> 00:11:21.250 and a half hours a

NOTE Confidence: 0.9873593

00:11:21.250 --> 00:11:22.850 day on social media. And

NOTE Confidence: 0.9873593

00:11:22.850 --> 00:11:24.309 this is not just total

NOTE Confidence: 0.9873593

00:11:24.370 --> 00:11:26.130 screen time. This is just

NOTE Confidence: 0.9873593

00:11:26.130 --> 00:11:28.050 the amount of screen time

NOTE Confidence: 0.9873593

00:11:28.050 --> 00:11:29.029 that is allocated

NOTE Confidence: 0.99918276

00:11:29.490 --> 00:11:30.550 to social media.

NOTE Confidence: 0.9804907

00:11:31.065 --> 00:11:31.565 So,

NOTE Confidence: 0.91513443

00:11:32.665 --> 00:11:34.445 we really have a crisis,

NOTE Confidence: 0.9576292

00:11:35.145 --> 00:11:35.625 and,

NOTE Confidence: 0.97871244

00:11:38.025 --> 00:11:39.885 I think that the standard

NOTE Confidence: 0.97871244

00:11:40.184 --> 00:11:42.125 solutions that we've been applying

NOTE Confidence: 0.97927654

00:11:42.665 --> 00:11:44.045 have been less than,

NOTE Confidence: 0.9997591

00:11:45.065 --> 00:11:45.565 successful.

NOTE Confidence: 0.9857712

00:11:46.610 --> 00:11:47.730 I wanna just show you

NOTE Confidence: 0.9857712

00:11:47.730 --> 00:11:48.850 one other data point, and
NOTE Confidence: 0.9857712

00:11:48.850 --> 00:11:49.970 then I'll stop the bad
NOTE Confidence: 0.9857712

00:11:49.970 --> 00:11:50.470 news.
NOTE Confidence: 0.98261744

00:11:51.170 --> 00:11:53.029 And this is simply a
NOTE Confidence: 0.98261744

00:11:53.089 --> 00:11:54.070 large scale,
NOTE Confidence: 0.9810918

00:11:55.410 --> 00:11:57.250 global study looking at the
NOTE Confidence: 0.9810918

00:11:57.250 --> 00:11:57.750 relation
NOTE Confidence: 0.97348833

00:11:58.225 --> 00:11:58.705 between,
NOTE Confidence: 0.98401713

00:11:59.105 --> 00:12:00.705 the average well-being in a
NOTE Confidence: 0.98401713

00:12:00.705 --> 00:12:02.485 country and life expectancy.
NOTE Confidence: 0.99264973

00:12:03.505 --> 00:12:04.705 And this is looking at
NOTE Confidence: 0.99264973

00:12:04.705 --> 00:12:05.985 a hundred and fifty one
NOTE Confidence: 0.99264973

00:12:05.985 --> 00:12:07.525 countries throughout the world.
NOTE Confidence: 0.97760725

00:12:07.985 --> 00:12:09.184 And what you can see
NOTE Confidence: 0.97760725

00:12:09.184 --> 00:12:10.565 is that there's a very,
NOTE Confidence: 0.9968089

00:12:11.399 --> 00:12:13.240 strong association when you look

NOTE Confidence: 0.9968089
00:12:13.240 --> 00:12:14.360 at it this way between
NOTE Confidence: 0.9968089
00:12:14.360 --> 00:12:15.639 the average well-being of the
NOTE Confidence: 0.9968089
00:12:15.639 --> 00:12:16.139 country
NOTE Confidence: 0.99613446
00:12:16.600 --> 00:12:17.820 and life expectancy.
NOTE Confidence: 0.99942005
00:12:18.440 --> 00:12:19.240 And if you look at
NOTE Confidence: 0.99942005
00:12:19.240 --> 00:12:20.600 the countries in the upper
NOTE Confidence: 0.99942005
00:12:20.600 --> 00:12:22.459 right hand quadrant of this
NOTE Confidence: 0.78004724
00:12:22.760 --> 00:12:23.660 scatter plot
NOTE Confidence: 0.99959713
00:12:24.024 --> 00:12:25.225 and compare them to the
NOTE Confidence: 0.99959713
00:12:25.225 --> 00:12:27.145 countries that are depicted in
NOTE Confidence: 0.99959713
00:12:27.145 --> 00:12:28.205 the lower left
NOTE Confidence: 0.9572533
00:12:28.665 --> 00:12:30.285 quadrant of the scatter plot,
NOTE Confidence: 0.9924898
00:12:30.665 --> 00:12:32.904 these are massive differences in
NOTE Confidence: 0.9924898
00:12:32.904 --> 00:12:34.904 life expectancy. These differences in
NOTE Confidence: 0.9924898
00:12:34.904 --> 00:12:37.404 life expectancy exceed twenty years.
NOTE Confidence: 0.99177194

00:12:38.290 --> 00:12:39.490 And so these are not
NOTE Confidence: 0.99177194

00:12:39.490 --> 00:12:41.730 small statistical differences. These are
NOTE Confidence: 0.99177194

00:12:41.730 --> 00:12:42.709 massive differences
NOTE Confidence: 0.93984646

00:12:43.170 --> 00:12:44.309 that really matter,
NOTE Confidence: 0.9709904

00:12:45.089 --> 00:12:45.589 and,
NOTE Confidence: 0.9992499

00:12:46.850 --> 00:12:48.610 the association with well-being is
NOTE Confidence: 0.9992499

00:12:48.610 --> 00:12:49.429 quite striking.
NOTE Confidence: 0.95383805

00:12:51.684 --> 00:12:52.804 So many of you in
NOTE Confidence: 0.95383805

00:12:52.804 --> 00:12:54.585 this audience, I'm sure, recognize,
NOTE Confidence: 0.9931058

00:12:55.845 --> 00:12:57.285 this person. This is Tom
NOTE Confidence: 0.9931058

00:12:57.285 --> 00:12:59.285 Insel. He was the former
NOTE Confidence: 0.9931058

00:12:59.285 --> 00:13:00.265 director of NIMH,
NOTE Confidence: 0.9987124

00:13:01.125 --> 00:13:01.625 someone
NOTE Confidence: 0.9969841

00:13:01.925 --> 00:13:03.125 that I'm sure many of
NOTE Confidence: 0.9969841

00:13:03.125 --> 00:13:03.945 you know well.
NOTE Confidence: 0.9540923

00:13:04.700 --> 00:13:06.059 He's a friend of mine

NOTE Confidence: 0.9540923
00:13:06.059 --> 00:13:06.559 too.
NOTE Confidence: 0.9659421
00:13:07.260 --> 00:13:08.460 And I wanna read to
NOTE Confidence: 0.9659421
00:13:08.460 --> 00:13:08.960 you,
NOTE Confidence: 0.99641186
00:13:09.500 --> 00:13:11.040 an excerpt from an interview
NOTE Confidence: 0.99641186
00:13:11.260 --> 00:13:11.760 that
NOTE Confidence: 0.934578
00:13:12.300 --> 00:13:12.800 was,
NOTE Confidence: 0.9832996
00:13:15.900 --> 00:13:17.600 was made with with Tom
NOTE Confidence: 0.95859313
00:13:19.225 --> 00:13:20.505 a few years ago. This
NOTE Confidence: 0.95859313
00:13:20.505 --> 00:13:20.825 is,
NOTE Confidence: 0.9576077
00:13:21.465 --> 00:13:23.165 several years after he retired,
NOTE Confidence: 0.9576077
00:13:23.465 --> 00:13:23.965 and,
NOTE Confidence: 0.99772286
00:13:25.145 --> 00:13:25.965 it's quite,
NOTE Confidence: 0.98862594
00:13:26.585 --> 00:13:27.485 I think, provocative
NOTE Confidence: 0.98220795
00:13:27.785 --> 00:13:28.825 what he said in this
NOTE Confidence: 0.98220795
00:13:28.825 --> 00:13:29.325 interview.
NOTE Confidence: 0.99410266

00:13:30.505 --> 00:13:32.105 He said he spent thirteen
NOTE Confidence: 0.99410266

00:13:32.105 --> 00:13:33.165 years at NIMH
NOTE Confidence: 0.9999248

00:13:33.899 --> 00:13:34.800 really pushing
NOTE Confidence: 0.9970158

00:13:35.260 --> 00:13:37.019 on the neuroscience and genetics
NOTE Confidence: 0.9970158

00:13:37.019 --> 00:13:38.079 of mental disorders.
NOTE Confidence: 0.96957755

00:13:38.459 --> 00:13:39.500 And when I look back
NOTE Confidence: 0.96957755

00:13:39.500 --> 00:13:41.339 on this, I realized that
NOTE Confidence: 0.96957755

00:13:41.339 --> 00:13:42.720 while I think I succeeded
NOTE Confidence: 0.9990957

00:13:43.179 --> 00:13:44.940 at getting lots of really
NOTE Confidence: 0.9990957

00:13:44.940 --> 00:13:46.940 cool papers published by cool
NOTE Confidence: 0.9990957

00:13:46.940 --> 00:13:47.440 scientists
NOTE Confidence: 0.95942926

00:13:47.975 --> 00:13:50.055 at fairly large costs. I
NOTE Confidence: 0.95942926

00:13:50.055 --> 00:13:52.135 think twenty billion dollars. I
NOTE Confidence: 0.95942926

00:13:52.135 --> 00:13:53.255 don't think we move the
NOTE Confidence: 0.95942926

00:13:53.255 --> 00:13:55.275 needle in reducing suicide,
NOTE Confidence: 0.99935794

00:13:57.335 --> 00:13:58.475 reducing hospitalizations,

NOTE Confidence: 0.9813795
00:13:59.175 --> 00:14:00.315 improving recovery
NOTE Confidence: 0.98265064
00:14:00.650 --> 00:14:01.850 for the tens of millions
NOTE Confidence: 0.98265064
00:14:01.850 --> 00:14:03.050 of people who have mental
NOTE Confidence: 0.98265064
00:14:03.050 --> 00:14:05.309 illness, I hold myself accountable
NOTE Confidence: 0.98265064
00:14:05.370 --> 00:14:06.030 for that.
NOTE Confidence: 0.9975374
00:14:06.410 --> 00:14:08.030 Quite a statement from,
NOTE Confidence: 0.9566924
00:14:08.890 --> 00:14:09.790 from Tom.
NOTE Confidence: 0.96382576
00:14:10.650 --> 00:14:11.130 And,
NOTE Confidence: 0.95877874
00:14:11.610 --> 00:14:13.370 I served on the board
NOTE Confidence: 0.95877874
00:14:13.370 --> 00:14:15.309 of scientific counselors at NIMH,
NOTE Confidence: 0.97028893
00:14:16.315 --> 00:14:18.575 during the time Tom was,
NOTE Confidence: 0.8570637
00:14:19.675 --> 00:14:20.175 director.
NOTE Confidence: 0.98557186
00:14:20.555 --> 00:14:21.055 And,
NOTE Confidence: 0.984227
00:14:22.235 --> 00:14:23.275 I can tell you, and
NOTE Confidence: 0.984227
00:14:23.275 --> 00:14:24.235 I'm sure many of you
NOTE Confidence: 0.984227

00:14:24.235 --> 00:14:25.275 know, that he wasn't a
NOTE Confidence: 0.984227

00:14:25.275 --> 00:14:27.295 big fan of psychosocial
NOTE Confidence: 0.9997664

00:14:27.675 --> 00:14:28.175 interventions
NOTE Confidence: 0.98067194

00:14:28.715 --> 00:14:29.615 at that time.
NOTE Confidence: 0.5634538

00:14:30.440 --> 00:14:30.940 And,
NOTE Confidence: 0.98045576

00:14:33.720 --> 00:14:35.180 a number of years later,
NOTE Confidence: 0.9790986

00:14:35.960 --> 00:14:37.900 twenty fourteen to be exact,
NOTE Confidence: 0.9790986

00:14:38.040 --> 00:14:39.640 he and I appeared on
NOTE Confidence: 0.9790986

00:14:39.640 --> 00:14:41.820 a, in a dialogue together
NOTE Confidence: 0.96988434

00:14:42.535 --> 00:14:44.135 in Davos, Switzerland at the
NOTE Confidence: 0.96988434

00:14:44.135 --> 00:14:46.215 World Economic Forum talking about
NOTE Confidence: 0.96988434

00:14:46.215 --> 00:14:46.715 the,
NOTE Confidence: 0.9959469

00:14:47.095 --> 00:14:48.315 benefits of mindfulness,
NOTE Confidence: 0.9993358

00:14:49.495 --> 00:14:50.395 as a
NOTE Confidence: 0.99975395

00:14:51.015 --> 00:14:53.275 strategy in working with people
NOTE Confidence: 0.99975395

00:14:53.495 --> 00:14:55.595 who have various kinds of

NOTE Confidence: 0.9883322
00:14:57.450 --> 00:14:58.990 mental health symptoms.
NOTE Confidence: 0.9636923
00:15:00.010 --> 00:15:00.830 And so,
NOTE Confidence: 0.94896376
00:15:01.930 --> 00:15:02.590 he really,
NOTE Confidence: 0.969219
00:15:03.450 --> 00:15:04.890 has shifted quite a bit,
NOTE Confidence: 0.969219
00:15:04.890 --> 00:15:05.390 and,
NOTE Confidence: 0.79726255
00:15:07.050 --> 00:15:07.450 I,
NOTE Confidence: 0.9064413
00:15:08.010 --> 00:15:09.550 use that as a
NOTE Confidence: 0.9672997
00:15:10.014 --> 00:15:11.555 a framework to introduce
NOTE Confidence: 0.988095
00:15:12.095 --> 00:15:13.235 the main topic.
NOTE Confidence: 0.9949371
00:15:14.014 --> 00:15:15.615 And the main topic of
NOTE Confidence: 0.9949371
00:15:15.615 --> 00:15:17.375 this talk really can be
NOTE Confidence: 0.9949371
00:15:17.375 --> 00:15:19.875 summarized in this simple claim,
NOTE Confidence: 0.999681
00:15:20.815 --> 00:15:21.315 that
NOTE Confidence: 0.9996918
00:15:22.300 --> 00:15:23.680 is really the conclusion
NOTE Confidence: 0.9998044
00:15:24.060 --> 00:15:25.840 of fifteen years of research
NOTE Confidence: 0.9706129

00:15:26.380 --> 00:15:28.960 in our center and also,
NOTE Confidence: 0.9502587

00:15:29.660 --> 00:15:31.580 supported by findings from many
NOTE Confidence: 0.9502587

00:15:31.580 --> 00:15:32.400 other scientists.
NOTE Confidence: 0.94747394

00:15:33.500 --> 00:15:34.960 And that is that well-being
NOTE Confidence: 0.94747394

00:15:35.020 --> 00:15:36.380 is best regarded as a
NOTE Confidence: 0.94747394

00:15:36.380 --> 00:15:36.880 skill
NOTE Confidence: 0.9991909

00:15:37.245 --> 00:15:38.385 that can be learned.
NOTE Confidence: 0.98916644

00:15:39.165 --> 00:15:39.885 I think that,
NOTE Confidence: 0.9986984

00:15:40.765 --> 00:15:42.445 while simple, this is quite
NOTE Confidence: 0.9986984

00:15:42.445 --> 00:15:43.105 a radical
NOTE Confidence: 0.94993067

00:15:43.725 --> 00:15:45.185 conclusion as well.
NOTE Confidence: 0.9758018

00:15:45.725 --> 00:15:46.045 And,
NOTE Confidence: 0.99160576

00:15:46.685 --> 00:15:48.545 we believe that the evidence
NOTE Confidence: 0.99160576

00:15:48.605 --> 00:15:50.145 really supports this.
NOTE Confidence: 0.9968858

00:15:51.240 --> 00:15:52.860 And if you really believe
NOTE Confidence: 0.9968858

00:15:53.160 --> 00:15:53.820 the data,

NOTE Confidence: 0.99743825
00:15:55.640 --> 00:15:57.740 you will see why we,
NOTE Confidence: 0.9927586
00:15:58.440 --> 00:16:00.540 and we also encourage others,
NOTE Confidence: 0.90125734
00:16:01.400 --> 00:16:03.180 to become activist scientists,
NOTE Confidence: 0.99792564
00:16:03.845 --> 00:16:04.964 in a way that is
NOTE Confidence: 0.99792564
00:16:04.964 --> 00:16:05.944 not too dissimilar
NOTE Confidence: 0.9753472
00:16:06.404 --> 00:16:08.264 from the way climate scientists,
NOTE Confidence: 0.8574716
00:16:08.964 --> 00:16:09.464 are,
NOTE Confidence: 0.99112844
00:16:11.045 --> 00:16:12.264 acting in the world.
NOTE Confidence: 0.940351
00:16:13.524 --> 00:16:15.204 I feel like we if
NOTE Confidence: 0.940351
00:16:15.204 --> 00:16:15.704 this
NOTE Confidence: 0.9965049
00:16:17.100 --> 00:16:18.940 claim is really true, we
NOTE Confidence: 0.9965049
00:16:18.940 --> 00:16:20.160 have a moral obligation,
NOTE Confidence: 0.99498147
00:16:21.500 --> 00:16:23.740 to bring these practices out
NOTE Confidence: 0.99498147
00:16:23.740 --> 00:16:24.940 into the world in a
NOTE Confidence: 0.99498147
00:16:24.940 --> 00:16:26.079 responsible way,
NOTE Confidence: 0.9915679

00:16:27.980 --> 00:16:29.740 given that the world is
NOTE Confidence: 0.9915679

00:16:29.740 --> 00:16:31.579 really falling apart in so
NOTE Confidence: 0.9915679

00:16:31.579 --> 00:16:32.399 many ways.
NOTE Confidence: 0.97147894

00:16:32.805 --> 00:16:34.905 And, a lot of the,
NOTE Confidence: 0.998964

00:16:36.565 --> 00:16:38.085 problems many of the problems
NOTE Confidence: 0.998964

00:16:38.085 --> 00:16:38.805 that we see in the
NOTE Confidence: 0.998964

00:16:38.805 --> 00:16:39.545 world today
NOTE Confidence: 0.95229506

00:16:39.845 --> 00:16:40.985 stem from fundamentally,
NOTE Confidence: 0.98415583

00:16:42.565 --> 00:16:43.945 failures to flourish,
NOTE Confidence: 0.9719256

00:16:44.725 --> 00:16:45.865 and a,
NOTE Confidence: 0.9327264

00:16:46.245 --> 00:16:47.465 a lack of,
NOTE Confidence: 0.99983525

00:16:48.310 --> 00:16:48.810 cultivating
NOTE Confidence: 0.99374634

00:16:49.510 --> 00:16:51.430 the innate capacities that I
NOTE Confidence: 0.99374634

00:16:51.430 --> 00:16:52.810 think every human being,
NOTE Confidence: 0.9737092

00:16:53.670 --> 00:16:54.149 is,
NOTE Confidence: 0.99484676

00:16:54.630 --> 00:16:56.329 endowed with. And so,

NOTE Confidence: 0.9995914
00:16:57.110 --> 00:16:58.389 the rest of this talk
NOTE Confidence: 0.9995914
00:16:58.389 --> 00:16:59.910 will really be focused on
NOTE Confidence: 0.9995914
00:16:59.910 --> 00:17:00.730 these issues.
NOTE Confidence: 0.9594914
00:17:02.735 --> 00:17:03.235 So,
NOTE Confidence: 0.92612386
00:17:04.494 --> 00:17:05.795 one of the insights
NOTE Confidence: 0.99860007
00:17:06.175 --> 00:17:06.994 that we've
NOTE Confidence: 0.9978578
00:17:07.295 --> 00:17:08.734 gleaned from our work is
NOTE Confidence: 0.9978578
00:17:08.734 --> 00:17:10.035 that the same mechanisms
NOTE Confidence: 0.8733704
00:17:10.895 --> 00:17:11.395 that,
NOTE Confidence: 0.7603967
00:17:13.935 --> 00:17:15.234 encode suffering,
NOTE Confidence: 0.9989155
00:17:16.640 --> 00:17:17.700 such as neuroplasticity
NOTE Confidence: 0.9912152
00:17:18.400 --> 00:17:19.220 and epigenetics
NOTE Confidence: 0.9445219
00:17:19.919 --> 00:17:21.200 can be harnessed for the
NOTE Confidence: 0.9445219
00:17:21.200 --> 00:17:23.140 good, and these are mechanisms
NOTE Confidence: 0.999629
00:17:23.520 --> 00:17:24.799 that turn out to be
NOTE Confidence: 0.999629

00:17:24.799 --> 00:17:25.299 engaged
NOTE Confidence: 0.99155444

00:17:26.080 --> 00:17:28.260 when we train our minds,
NOTE Confidence: 0.99964726

00:17:29.119 --> 00:17:30.100 for well-being.
NOTE Confidence: 0.9997564

00:17:31.545 --> 00:17:32.045 So
NOTE Confidence: 0.9994939

00:17:32.345 --> 00:17:33.725 I want to now focus
NOTE Confidence: 0.9994939

00:17:33.785 --> 00:17:34.605 on the
NOTE Confidence: 0.9910858

00:17:35.145 --> 00:17:35.645 constituents
NOTE Confidence: 0.9766525

00:17:36.025 --> 00:17:38.025 of resilience and flourishing, what
NOTE Confidence: 0.9766525

00:17:38.025 --> 00:17:40.365 contributes to them. And here,
NOTE Confidence: 0.9766525

00:17:40.505 --> 00:17:41.565 I'd like to
NOTE Confidence: 0.9991997

00:17:41.865 --> 00:17:43.565 introduce you to a framework
NOTE Confidence: 0.985811

00:17:43.980 --> 00:17:45.419 that we published a few
NOTE Confidence: 0.985811

00:17:45.419 --> 00:17:47.340 years ago in this paper
NOTE Confidence: 0.985811

00:17:47.340 --> 00:17:48.400 called the plasticity
NOTE Confidence: 0.99822855

00:17:48.780 --> 00:17:49.600 of well-being,
NOTE Confidence: 0.9986143

00:17:50.540 --> 00:17:52.059 a training based framework for

NOTE Confidence: 0.9986143

00:17:52.059 --> 00:17:53.919 the cultivation of human flourishing.

NOTE Confidence: 0.9952335

00:17:54.780 --> 00:17:56.320 And, in this

NOTE Confidence: 0.9965443

00:17:56.619 --> 00:17:57.760 paper, we

NOTE Confidence: 0.9206238

00:17:58.505 --> 00:17:59.005 harnessed,

NOTE Confidence: 0.9405099

00:18:02.184 --> 00:18:04.125 the data from both neuroscience

NOTE Confidence: 0.9787119

00:18:04.505 --> 00:18:05.644 as well as,

NOTE Confidence: 0.997001

00:18:06.664 --> 00:18:07.644 from the contemplative

NOTE Confidence: 0.999559

00:18:07.945 --> 00:18:08.445 traditions

NOTE Confidence: 0.883703

00:18:08.984 --> 00:18:09.484 and

NOTE Confidence: 0.9694856

00:18:10.105 --> 00:18:12.205 asked where there are commonalities,

NOTE Confidence: 0.9995773

00:18:13.770 --> 00:18:16.270 across these very different

NOTE Confidence: 0.9243115

00:18:16.730 --> 00:18:17.630 but overlapping

NOTE Confidence: 0.9623106

00:18:18.250 --> 00:18:20.350 Venn diagrams, if you will,

NOTE Confidence: 0.98868686

00:18:21.130 --> 00:18:21.610 and,

NOTE Confidence: 0.99924785

00:18:22.170 --> 00:18:24.030 what are the key constituents

NOTE Confidence: 0.99924785

00:18:24.250 --> 00:18:25.310 that we can identify
NOTE Confidence: 0.9997542

00:18:26.250 --> 00:18:27.390 as necessary
NOTE Confidence: 0.9992973

00:18:27.770 --> 00:18:28.430 and sufficient
NOTE Confidence: 0.98754245

00:18:29.234 --> 00:18:30.755 for the cultivation of human
NOTE Confidence: 0.98754245

00:18:30.755 --> 00:18:31.255 flourishing.
NOTE Confidence: 0.8780794

00:18:31.955 --> 00:18:32.935 And we,
NOTE Confidence: 0.9814629

00:18:34.435 --> 00:18:35.795 came up with four key
NOTE Confidence: 0.9814629

00:18:35.795 --> 00:18:36.295 pillars,
NOTE Confidence: 0.99862504

00:18:37.234 --> 00:18:38.675 and I'd like to introduce
NOTE Confidence: 0.99862504

00:18:38.675 --> 00:18:39.975 you to these pillars.
NOTE Confidence: 0.93226737

00:18:40.275 --> 00:18:41.875 The first pillar we call
NOTE Confidence: 0.93226737

00:18:41.875 --> 00:18:42.375 awareness.
NOTE Confidence: 0.97257245

00:18:46.250 --> 00:18:46.990 And awareness
NOTE Confidence: 0.96184707

00:18:47.609 --> 00:18:48.109 is,
NOTE Confidence: 0.9987868

00:18:48.570 --> 00:18:50.030 excuse me, is fundamentally
NOTE Confidence: 0.99863607

00:18:50.410 --> 00:18:50.910 about

NOTE Confidence: 0.9996262

00:18:51.929 --> 00:18:52.910 being present.

NOTE Confidence: 0.99669

00:18:53.850 --> 00:18:55.770 It is where mindfulness would

NOTE Confidence: 0.99669

00:18:55.770 --> 00:18:57.869 be. It includes self awareness.

NOTE Confidence: 0.99569494

00:18:58.985 --> 00:19:00.365 It also includes

NOTE Confidence: 0.99748427

00:19:00.825 --> 00:19:02.685 what psychologists and neuroscientists

NOTE Confidence: 0.97765994

00:19:03.945 --> 00:19:05.325 have called meta awareness,

NOTE Confidence: 0.9743384

00:19:05.705 --> 00:19:06.445 which is,

NOTE Confidence: 0.9979199

00:19:07.145 --> 00:19:09.065 the capacity to know what

NOTE Confidence: 0.9979199

00:19:09.065 --> 00:19:10.605 our minds are doing,

NOTE Confidence: 0.9363627

00:19:12.750 --> 00:19:14.430 which may sound strange to

NOTE Confidence: 0.9363627

00:19:14.430 --> 00:19:15.170 some people.

NOTE Confidence: 0.9898498

00:19:15.869 --> 00:19:16.850 But I'm sure,

NOTE Confidence: 0.9942986

00:19:17.630 --> 00:19:18.990 that many of you I

NOTE Confidence: 0.9942986

00:19:18.990 --> 00:19:20.590 certainly have had this experience.

NOTE Confidence: 0.9942986

00:19:20.590 --> 00:19:21.470 Many of you had the

NOTE Confidence: 0.9942986

00:19:21.470 --> 00:19:21.970 experience
NOTE Confidence: 0.9784435

00:19:22.430 --> 00:19:24.030 of reading a book where
NOTE Confidence: 0.9784435

00:19:24.030 --> 00:19:25.310 you might be reading each
NOTE Confidence: 0.9784435

00:19:25.310 --> 00:19:26.435 word on a page, and
NOTE Confidence: 0.9784435

00:19:26.435 --> 00:19:28.295 you might be reading one
NOTE Confidence: 0.9784435

00:19:28.595 --> 00:19:30.435 page, a second page, and
NOTE Confidence: 0.9784435

00:19:30.435 --> 00:19:31.734 after a few minutes,
NOTE Confidence: 0.9968374

00:19:32.115 --> 00:19:32.855 you recognize
NOTE Confidence: 0.9860251

00:19:33.155 --> 00:19:34.275 that you have no idea
NOTE Confidence: 0.9860251

00:19:34.275 --> 00:19:35.494 what you've just read.
NOTE Confidence: 0.9976568

00:19:36.115 --> 00:19:37.815 Your mind is elsewhere.
NOTE Confidence: 0.9365367

00:19:39.240 --> 00:19:41.080 The moment we recognize that
NOTE Confidence: 0.9365367

00:19:41.080 --> 00:19:42.119 is a moment of meta
NOTE Confidence: 0.9365367

00:19:42.119 --> 00:19:42.619 awareness,
NOTE Confidence: 0.9996896

00:19:42.920 --> 00:19:44.140 and that is something
NOTE Confidence: 0.98932207

00:19:44.520 --> 00:19:46.380 that indeed can be trained.

NOTE Confidence: 0.98534775

00:19:48.920 --> 00:19:50.520 The second pillar we call

NOTE Confidence: 0.98534775

00:19:50.520 --> 00:19:52.460 connection. Connection is about

NOTE Confidence: 0.98402137

00:19:52.875 --> 00:19:54.635 feeling connected to others. It

NOTE Confidence: 0.98402137

00:19:54.635 --> 00:19:56.635 includes qualities that are important

NOTE Confidence: 0.98402137

00:19:56.635 --> 00:19:57.375 for healthy

NOTE Confidence: 0.9548112

00:19:57.835 --> 00:19:59.055 social relationships,

NOTE Confidence: 0.98496825

00:19:59.835 --> 00:20:01.615 qualities such as appreciation,

NOTE Confidence: 0.9982166

00:20:02.234 --> 00:20:03.295 kindness, compassion.

NOTE Confidence: 0.99288625

00:20:03.755 --> 00:20:04.734 This is really,

NOTE Confidence: 0.9932111

00:20:05.275 --> 00:20:05.775 the

NOTE Confidence: 0.99898297

00:20:07.000 --> 00:20:07.500 antithesis

NOTE Confidence: 0.90884686

00:20:07.880 --> 00:20:08.619 of loneliness,

NOTE Confidence: 0.97108907

00:20:09.720 --> 00:20:10.200 and,

NOTE Confidence: 0.99764544

00:20:10.760 --> 00:20:12.600 we there's a wealth of

NOTE Confidence: 0.99764544

00:20:12.600 --> 00:20:13.100 evidence

NOTE Confidence: 0.99927324

00:20:13.640 --> 00:20:14.700 to suggest
NOTE Confidence: 0.90628815

00:20:15.080 --> 00:20:15.559 that,
NOTE Confidence: 0.9650713

00:20:16.280 --> 00:20:18.460 this is, a critical element
NOTE Confidence: 0.9650713

00:20:18.600 --> 00:20:19.580 of well-being.
NOTE Confidence: 0.97873783

00:20:20.875 --> 00:20:22.635 The third pillar we call
NOTE Confidence: 0.97873783

00:20:22.635 --> 00:20:24.715 insight. Insight is about a
NOTE Confidence: 0.97873783

00:20:24.715 --> 00:20:25.215 curiosity
NOTE Confidence: 0.9987233

00:20:25.674 --> 00:20:26.174 driven
NOTE Confidence: 0.9923725

00:20:26.794 --> 00:20:27.294 self
NOTE Confidence: 0.95228887

00:20:27.595 --> 00:20:28.734 knowledge, and,
NOTE Confidence: 0.9902971

00:20:29.434 --> 00:20:30.975 it's a knowledge specifically
NOTE Confidence: 0.9997247

00:20:31.355 --> 00:20:32.494 about the narrative
NOTE Confidence: 0.99876857

00:20:32.875 --> 00:20:33.695 of ourselves
NOTE Confidence: 0.9991744

00:20:34.075 --> 00:20:35.850 that every human
NOTE Confidence: 0.9911224

00:20:36.390 --> 00:20:36.890 has.
NOTE Confidence: 0.9832527

00:20:37.429 --> 00:20:38.950 We all carry around this

NOTE Confidence: 0.9832527

00:20:38.950 --> 00:20:41.109 narrative, and we know that

NOTE Confidence: 0.9832527

00:20:41.109 --> 00:20:42.150 there are some people who

NOTE Confidence: 0.9832527

00:20:42.150 --> 00:20:43.990 have a negative narrative, who

NOTE Confidence: 0.9832527

00:20:43.990 --> 00:20:46.010 have negative beliefs about themselves,

NOTE Confidence: 0.95191437

00:20:46.549 --> 00:20:48.250 low expectations of themselves.

NOTE Confidence: 0.9959241

00:20:48.625 --> 00:20:49.744 And, of course, we know

NOTE Confidence: 0.9959241

00:20:49.744 --> 00:20:51.205 that that is associated

NOTE Confidence: 0.9286672

00:20:51.585 --> 00:20:52.085 with,

NOTE Confidence: 0.9969842

00:20:54.304 --> 00:20:56.304 depression and other forms of

NOTE Confidence: 0.9969842

00:20:56.304 --> 00:20:56.804 psychopathology.

NOTE Confidence: 0.9937836

00:20:58.065 --> 00:21:00.404 And what we have learned,

NOTE Confidence: 0.9997528

00:21:01.025 --> 00:21:02.244 from a lot of work

NOTE Confidence: 0.99572384

00:21:02.705 --> 00:21:03.684 is that

NOTE Confidence: 0.9742069

00:21:04.150 --> 00:21:06.010 what's really important for well-being,

NOTE Confidence: 0.9742069

00:21:06.309 --> 00:21:07.369 particularly initially,

NOTE Confidence: 0.98565614

00:21:07.750 --> 00:21:09.109 is not so much changing
NOTE Confidence: 0.98565614

00:21:09.109 --> 00:21:11.050 the narrative, but it's changing
NOTE Confidence: 0.98565614

00:21:11.109 --> 00:21:12.970 our relationship to this narrative
NOTE Confidence: 0.98565614

00:21:13.190 --> 00:21:14.230 so that we can see
NOTE Confidence: 0.98565614

00:21:14.230 --> 00:21:15.510 the narrative for what it
NOTE Confidence: 0.98565614

00:21:15.510 --> 00:21:16.010 is,
NOTE Confidence: 0.8995143

00:21:16.470 --> 00:21:18.650 essentially a constellation of thoughts,
NOTE Confidence: 0.998641

00:21:19.575 --> 00:21:20.315 and beliefs.
NOTE Confidence: 0.9784941

00:21:20.695 --> 00:21:22.455 And, again, this is something
NOTE Confidence: 0.9784941

00:21:22.455 --> 00:21:23.595 that can be trained,
NOTE Confidence: 0.9993442

00:21:24.054 --> 00:21:25.734 and we know that when
NOTE Confidence: 0.9993442

00:21:25.734 --> 00:21:26.794 it is trained,
NOTE Confidence: 0.9234517

00:21:27.655 --> 00:21:29.095 there is an improvement in
NOTE Confidence: 0.9234517

00:21:29.095 --> 00:21:29.835 their well-being.
NOTE Confidence: 0.9789579

00:21:30.695 --> 00:21:32.475 And finally, the last pillar
NOTE Confidence: 0.9789579

00:21:32.630 --> 00:21:34.310 we call purpose. Purpose is

NOTE Confidence: 0.9789579

00:21:34.310 --> 00:21:35.530 about staying motivated.

NOTE Confidence: 0.99974996

00:21:35.990 --> 00:21:37.930 It's about clarifying our

NOTE Confidence: 0.97981507

00:21:38.310 --> 00:21:40.250 true north in life, clarifying

NOTE Confidence: 0.97981507

00:21:40.310 --> 00:21:40.970 our values.

NOTE Confidence: 0.9965207

00:21:41.350 --> 00:21:42.550 And it's not so much

NOTE Confidence: 0.9965207

00:21:42.550 --> 00:21:44.390 about finding something, quote, more

NOTE Confidence: 0.9965207

00:21:44.390 --> 00:21:46.390 purposeful to do, but how

NOTE Confidence: 0.9965207

00:21:46.390 --> 00:21:47.750 can we find meaning and

NOTE Confidence: 0.9965207

00:21:47.750 --> 00:21:48.250 purpose

NOTE Confidence: 0.9994316

00:21:48.595 --> 00:21:50.535 in even the most pedestrian

NOTE Confidence: 0.9625094

00:21:50.835 --> 00:21:52.615 activities of daily living?

NOTE Confidence: 0.98217475

00:21:53.475 --> 00:21:54.935 In taking out the garbage,

NOTE Confidence: 0.97465897

00:21:55.315 --> 00:21:56.595 be connected to your sense

NOTE Confidence: 0.97465897

00:21:56.595 --> 00:21:57.255 of purpose.

NOTE Confidence: 0.9901437

00:21:57.635 --> 00:21:58.675 And, of course, it could

NOTE Confidence: 0.9901437

00:21:58.675 --> 00:21:59.175 be.
NOTE Confidence: 0.98477584
00:21:59.715 --> 00:22:01.555 It simply requires a little
NOTE Confidence: 0.98477584
00:22:01.555 --> 00:22:02.375 bit of reframing.
NOTE Confidence: 0.9712111
00:22:02.675 --> 00:22:03.075 And,
NOTE Confidence: 0.98790777
00:22:04.580 --> 00:22:05.859 this is an area which
NOTE Confidence: 0.98790777
00:22:05.859 --> 00:22:06.680 is particularly
NOTE Confidence: 0.8789792
00:22:07.380 --> 00:22:09.320 interesting and illuminating because,
NOTE Confidence: 0.9137584
00:22:10.020 --> 00:22:11.160 even the,
NOTE Confidence: 0.9920119
00:22:11.780 --> 00:22:13.800 chores, the so called chores
NOTE Confidence: 0.9920119
00:22:13.940 --> 00:22:15.140 that we do on a
NOTE Confidence: 0.9920119
00:22:15.140 --> 00:22:17.380 regular basis can be real
NOTE Confidence: 0.9920119
00:22:17.380 --> 00:22:17.880 opportunities
NOTE Confidence: 0.9707458
00:22:18.835 --> 00:22:20.615 for growth and for,
NOTE Confidence: 0.9581331
00:22:22.835 --> 00:22:23.335 flourishing,
NOTE Confidence: 0.99951255
00:22:24.195 --> 00:22:26.055 with this really simple
NOTE Confidence: 0.99821043
00:22:26.355 --> 00:22:27.655 kind of reframing

NOTE Confidence: 0.9994027
00:22:27.955 --> 00:22:29.635 that is quite easy to
NOTE Confidence: 0.9994027
00:22:29.635 --> 00:22:30.135 do.
NOTE Confidence: 0.9994326
00:22:31.220 --> 00:22:31.720 Okay.
NOTE Confidence: 0.9473463
00:22:32.100 --> 00:22:33.480 So I'm now gonna,
NOTE Confidence: 0.97859555
00:22:34.100 --> 00:22:36.040 take a deeper dive and,
NOTE Confidence: 0.9899633
00:22:38.020 --> 00:22:40.340 introduce you to some key
NOTE Confidence: 0.9899633
00:22:40.340 --> 00:22:41.780 findings in each of these
NOTE Confidence: 0.9899633
00:22:41.780 --> 00:22:42.280 areas.
NOTE Confidence: 0.8773464
00:22:43.140 --> 00:22:43.880 The first,
NOTE Confidence: 0.9997538
00:22:44.385 --> 00:22:44.885 pillar
NOTE Confidence: 0.8929837
00:22:45.185 --> 00:22:45.685 awareness,
NOTE Confidence: 0.99907494
00:22:46.145 --> 00:22:46.805 of course,
NOTE Confidence: 0.9852968
00:22:48.145 --> 00:22:49.425 has been around for a
NOTE Confidence: 0.9852968
00:22:49.425 --> 00:22:50.165 long time.
NOTE Confidence: 0.98758185
00:22:50.625 --> 00:22:51.845 One of my heroes,
NOTE Confidence: 0.9994213

00:22:52.945 --> 00:22:54.325 is William James,
NOTE Confidence: 0.96965444

00:22:55.025 --> 00:22:56.965 who you see here. And,
NOTE Confidence: 0.99989384

00:22:57.825 --> 00:22:58.725 William James
NOTE Confidence: 0.9892499

00:22:59.400 --> 00:23:01.340 had a two volume tome,
NOTE Confidence: 0.9666519

00:23:02.040 --> 00:23:03.800 published in eighteen ninety called
NOTE Confidence: 0.9666519

00:23:03.800 --> 00:23:05.180 the principles of psychology.
NOTE Confidence: 0.9669905

00:23:05.640 --> 00:23:07.000 He has a whole chapter
NOTE Confidence: 0.9669905

00:23:07.000 --> 00:23:08.140 in there on attention.
NOTE Confidence: 0.94168806

00:23:09.160 --> 00:23:09.560 And,
NOTE Confidence: 0.96700823

00:23:10.280 --> 00:23:11.480 I wanna read to you,
NOTE Confidence: 0.96582043

00:23:12.875 --> 00:23:14.715 one of the passages from
NOTE Confidence: 0.96582043

00:23:14.715 --> 00:23:16.335 this chapter, which is really,
NOTE Confidence: 0.9989638

00:23:16.794 --> 00:23:18.075 one of my all time
NOTE Confidence: 0.9989638

00:23:18.075 --> 00:23:19.835 favorite quotes in the,
NOTE Confidence: 0.98915845

00:23:20.955 --> 00:23:22.154 in in the study of
NOTE Confidence: 0.98915845

00:23:22.154 --> 00:23:22.815 the mind.

NOTE Confidence: 0.94276834
00:23:23.595 --> 00:23:25.530 And, William James said the
NOTE Confidence: 0.94276834
00:23:25.690 --> 00:23:27.150 faculty of voluntarily
NOTE Confidence: 0.9996271
00:23:27.530 --> 00:23:28.430 bringing back
NOTE Confidence: 0.8668582
00:23:28.810 --> 00:23:30.030 a wandering intention
NOTE Confidence: 0.99268353
00:23:30.330 --> 00:23:32.010 over and over again is
NOTE Confidence: 0.99268353
00:23:32.010 --> 00:23:33.710 the very root of judgment,
NOTE Confidence: 0.99268353
00:23:33.770 --> 00:23:34.910 character, and will.
NOTE Confidence: 0.9990192
00:23:35.450 --> 00:23:36.350 No one is
NOTE Confidence: 0.8692339
00:23:36.970 --> 00:23:38.350 if you have it not.
NOTE Confidence: 0.95741093
00:23:38.695 --> 00:23:40.535 An education which should improve
NOTE Confidence: 0.95741093
00:23:40.535 --> 00:23:41.275 this faculty
NOTE Confidence: 0.998917
00:23:41.655 --> 00:23:43.035 would be the education
NOTE Confidence: 0.9178259
00:23:43.415 --> 00:23:44.315 par excellence,
NOTE Confidence: 0.9991119
00:23:44.775 --> 00:23:46.215 but it is easier to
NOTE Confidence: 0.9991119
00:23:46.215 --> 00:23:47.355 define this ideal
NOTE Confidence: 0.99685997

00:23:47.815 --> 00:23:49.435 than to give practical directions

NOTE Confidence: 0.99685997

00:23:49.494 --> 00:23:50.715 for bringing it about.

NOTE Confidence: 0.9984934

00:23:51.310 --> 00:23:52.750 The italics, by the way,

NOTE Confidence: 0.9984934

00:23:52.750 --> 00:23:54.190 are in the original William

NOTE Confidence: 0.9984934

00:23:54.190 --> 00:23:54.690 James.

NOTE Confidence: 0.96550995

00:23:55.550 --> 00:23:57.070 This is really quite an

NOTE Confidence: 0.96550995

00:23:57.070 --> 00:23:59.070 extraordinary passage and, I think,

NOTE Confidence: 0.96550995

00:23:59.070 --> 00:23:59.970 very visionary,

NOTE Confidence: 0.9993869

00:24:00.830 --> 00:24:02.990 and underscores the value that

NOTE Confidence: 0.9993869

00:24:02.990 --> 00:24:04.450 he attached to

NOTE Confidence: 0.99986696

00:24:05.044 --> 00:24:05.625 the possibility

NOTE Confidence: 0.962522

00:24:06.565 --> 00:24:07.865 of educating attention.

NOTE Confidence: 0.9782838

00:24:08.484 --> 00:24:09.785 And we know,

NOTE Confidence: 0.9683309

00:24:10.885 --> 00:24:12.085 I should put it this

NOTE Confidence: 0.9683309

00:24:12.085 --> 00:24:13.205 way. If there is one

NOTE Confidence: 0.9683309

00:24:13.205 --> 00:24:14.484 thing we know from the

NOTE Confidence: 0.9683309
00:24:14.484 --> 00:24:15.705 empirical study
NOTE Confidence: 0.9997195
00:24:16.085 --> 00:24:17.065 of meditation
NOTE Confidence: 0.9995639
00:24:17.365 --> 00:24:19.285 and related practices over the
NOTE Confidence: 0.9995639
00:24:19.285 --> 00:24:19.785 last
NOTE Confidence: 0.9719347
00:24:20.130 --> 00:24:22.310 fifteen years, it is that
NOTE Confidence: 0.9988004
00:24:22.850 --> 00:24:24.150 attention can be educated.
NOTE Confidence: 0.9776777
00:24:25.570 --> 00:24:26.050 And,
NOTE Confidence: 0.99542224
00:24:27.010 --> 00:24:29.350 if we really believe this,
NOTE Confidence: 0.99542224
00:24:29.490 --> 00:24:30.609 this is one area where
NOTE Confidence: 0.99542224
00:24:30.609 --> 00:24:31.830 I think we especially
NOTE Confidence: 0.9997214
00:24:32.210 --> 00:24:34.150 have a moral obligation
NOTE Confidence: 0.9986872
00:24:34.609 --> 00:24:35.109 to
NOTE Confidence: 0.99474454
00:24:35.445 --> 00:24:37.304 introduce this in a widespread
NOTE Confidence: 0.99474454
00:24:37.445 --> 00:24:39.144 way into our society,
NOTE Confidence: 0.99471927
00:24:39.524 --> 00:24:40.825 particularly for children.
NOTE Confidence: 0.9994881

00:24:41.845 --> 00:24:43.205 We know that if kids
NOTE Confidence: 0.9994881

00:24:43.205 --> 00:24:44.904 are not attending to
NOTE Confidence: 0.9995426

00:24:45.365 --> 00:24:45.865 information
NOTE Confidence: 0.9996393

00:24:46.325 --> 00:24:47.625 that is presented,
NOTE Confidence: 0.9834654

00:24:48.609 --> 00:24:50.609 their capacity to learn that
NOTE Confidence: 0.9834654

00:24:50.609 --> 00:24:52.869 material will be significantly compromised.
NOTE Confidence: 0.99701875

00:24:53.809 --> 00:24:55.570 And so this is a
NOTE Confidence: 0.99701875

00:24:55.570 --> 00:24:56.070 huge
NOTE Confidence: 0.9999422

00:24:56.450 --> 00:24:56.950 opportunity
NOTE Confidence: 0.8657531

00:24:57.649 --> 00:24:59.190 that I think, has,
NOTE Confidence: 0.98911685

00:24:59.890 --> 00:25:01.270 we now know about,
NOTE Confidence: 0.98822606

00:25:01.755 --> 00:25:03.615 and, we are insufficiently
NOTE Confidence: 0.99678373

00:25:03.994 --> 00:25:04.494 harnessing.
NOTE Confidence: 0.9966999

00:25:05.595 --> 00:25:07.215 Let me just give you,
NOTE Confidence: 0.9591985

00:25:08.315 --> 00:25:09.695 you know, one little,
NOTE Confidence: 0.9960622

00:25:10.155 --> 00:25:11.755 or two little data points

NOTE Confidence: 0.9960622
00:25:11.755 --> 00:25:12.255 about
NOTE Confidence: 0.9970047
00:25:13.195 --> 00:25:15.055 the study of these qualities.
NOTE Confidence: 0.9537404
00:25:15.670 --> 00:25:16.630 And one of the ways
NOTE Confidence: 0.9537404
00:25:16.630 --> 00:25:18.090 we began to do this,
NOTE Confidence: 0.9869584
00:25:18.710 --> 00:25:20.230 soon after the Dalai Lama
NOTE Confidence: 0.9869584
00:25:20.230 --> 00:25:21.830 was encouraging us to,
NOTE Confidence: 0.998083
00:25:22.390 --> 00:25:24.970 study practices in his tradition
NOTE Confidence: 0.99571586
00:25:25.830 --> 00:25:26.970 that might be
NOTE Confidence: 0.9984542
00:25:30.775 --> 00:25:31.275 transformed
NOTE Confidence: 0.93646526
00:25:31.655 --> 00:25:32.795 to be more secular.
NOTE Confidence: 0.9851251
00:25:33.415 --> 00:25:34.715 And, he
NOTE Confidence: 0.9262245
00:25:35.175 --> 00:25:37.255 specifically told us that to
NOTE Confidence: 0.9262245
00:25:37.255 --> 00:25:38.375 do that and if we
NOTE Confidence: 0.9262245
00:25:38.375 --> 00:25:39.595 find that they're valuable,
NOTE Confidence: 0.9940925
00:25:39.975 --> 00:25:41.595 to disseminate them widely.
NOTE Confidence: 0.995824

00:25:42.295 --> 00:25:43.734 And so this is just
NOTE Confidence: 0.995824

00:25:43.734 --> 00:25:45.195 a picture of a
NOTE Confidence: 0.992336

00:25:45.600 --> 00:25:47.220 Tibetan monk in our lab,
NOTE Confidence: 0.9154887

00:25:48.400 --> 00:25:49.920 and someone who actually is
NOTE Confidence: 0.9154887

00:25:49.920 --> 00:25:51.840 quite well known. He is
NOTE Confidence: 0.9154887

00:25:51.840 --> 00:25:53.679 a young Tibetan monk by
NOTE Confidence: 0.9154887

00:25:53.679 --> 00:25:54.559 the name of Meeg Gyor
NOTE Confidence: 0.9154887

00:25:54.559 --> 00:25:55.059 Rinpoche,
NOTE Confidence: 0.998765

00:25:56.160 --> 00:25:56.660 and
NOTE Confidence: 0.96749663

00:25:57.705 --> 00:25:58.684 he generously,
NOTE Confidence: 0.9916045

00:25:59.784 --> 00:26:01.304 spent many, many hours in
NOTE Confidence: 0.9916045

00:26:01.304 --> 00:26:02.125 our lab,
NOTE Confidence: 0.9387214

00:26:02.904 --> 00:26:03.404 over,
NOTE Confidence: 0.99649906

00:26:03.865 --> 00:26:05.404 the last fifteen years.
NOTE Confidence: 0.9697706

00:26:05.865 --> 00:26:07.164 And this is,
NOTE Confidence: 0.9953505

00:26:07.865 --> 00:26:09.865 during an early session with

NOTE Confidence: 0.9953505
00:26:09.865 --> 00:26:10.684 him in
NOTE Confidence: 0.99440336
00:26:11.200 --> 00:26:12.260 two thousand two,
NOTE Confidence: 0.9959575
00:26:13.200 --> 00:26:15.119 where we were recording brain
NOTE Confidence: 0.9959575
00:26:15.119 --> 00:26:16.900 electrical activity from him,
NOTE Confidence: 0.97153276
00:26:17.440 --> 00:26:19.040 while he was meditating and
NOTE Confidence: 0.97153276
00:26:19.040 --> 00:26:20.100 during different,
NOTE Confidence: 0.9598346
00:26:20.720 --> 00:26:23.140 states, or tasks of attention.
NOTE Confidence: 0.9573256
00:26:23.835 --> 00:26:24.335 And,
NOTE Confidence: 0.9995811
00:26:25.034 --> 00:26:26.015 one of the
NOTE Confidence: 0.97827464
00:26:26.554 --> 00:26:27.994 things that we observed, and
NOTE Confidence: 0.97827464
00:26:27.994 --> 00:26:29.914 this came from a paper
NOTE Confidence: 0.97827464
00:26:29.914 --> 00:26:31.115 that was published in two
NOTE Confidence: 0.97827464
00:26:31.115 --> 00:26:32.015 thousand four.
NOTE Confidence: 0.99379355
00:26:32.635 --> 00:26:33.835 This was the very first
NOTE Confidence: 0.99379355
00:26:33.835 --> 00:26:35.914 paper on meditation ever published
NOTE Confidence: 0.99379355

00:26:35.914 --> 00:26:36.655 in PNAS.
NOTE Confidence: 0.9282508

00:26:38.359 --> 00:26:38.859 And,
NOTE Confidence: 0.99873793

00:26:39.639 --> 00:26:41.799 what these data show is
NOTE Confidence: 0.99873793

00:26:41.799 --> 00:26:42.539 an elevation
NOTE Confidence: 0.9875632

00:26:42.840 --> 00:26:44.059 in gamma oscillations,
NOTE Confidence: 0.96558446

00:26:45.320 --> 00:26:46.759 that we record from the
NOTE Confidence: 0.96558446

00:26:46.759 --> 00:26:47.659 scalp surface.
NOTE Confidence: 0.9045814

00:26:50.774 --> 00:26:51.274 And,
NOTE Confidence: 0.99537116

00:26:51.975 --> 00:26:53.355 these gamma oscillations
NOTE Confidence: 0.9970098

00:26:53.895 --> 00:26:55.515 are especially pronounced
NOTE Confidence: 0.99860024

00:26:56.215 --> 00:26:57.274 during meditation
NOTE Confidence: 0.92488956

00:26:57.815 --> 00:26:58.315 when,
NOTE Confidence: 0.9996445

00:26:59.015 --> 00:27:00.315 attention is
NOTE Confidence: 0.96162415

00:27:00.615 --> 00:27:01.914 specifically enhanced.
NOTE Confidence: 0.97258496

00:27:03.800 --> 00:27:04.840 And you can see with
NOTE Confidence: 0.97258496

00:27:04.840 --> 00:27:05.980 the naked eye

NOTE Confidence: 0.58078986
00:27:06.359 --> 00:27:06.859 the
NOTE Confidence: 0.9939044
00:27:07.160 --> 00:27:08.859 enhancement of gamma oscillations.
NOTE Confidence: 0.99747944
00:27:09.400 --> 00:27:11.320 There's also increased synchrony of
NOTE Confidence: 0.99747944
00:27:11.320 --> 00:27:12.140 these oscillations
NOTE Confidence: 0.99463993
00:27:12.600 --> 00:27:15.000 over widespread regions of the
NOTE Confidence: 0.99463993
00:27:15.000 --> 00:27:15.500 cortex.
NOTE Confidence: 0.9223199
00:27:17.325 --> 00:27:17.825 And,
NOTE Confidence: 0.9568522
00:27:18.765 --> 00:27:20.365 in addition, in this first
NOTE Confidence: 0.9568522
00:27:20.365 --> 00:27:22.284 paper, we showed that these
NOTE Confidence: 0.9568522
00:27:22.284 --> 00:27:23.184 gamma oscillations
NOTE Confidence: 0.96942556
00:27:23.965 --> 00:27:25.105 were significantly,
NOTE Confidence: 0.9992323
00:27:26.445 --> 00:27:28.385 more prevalent in the brains
NOTE Confidence: 0.9992323
00:27:28.525 --> 00:27:30.065 of these long term meditators
NOTE Confidence: 0.9531479
00:27:30.990 --> 00:27:32.590 than in the brains of
NOTE Confidence: 0.9531479
00:27:32.590 --> 00:27:34.530 age and gender match controls,
NOTE Confidence: 0.9992341

00:27:36.670 --> 00:27:37.170 revealing
NOTE Confidence: 0.9979004

00:27:37.869 --> 00:27:38.609 a possible
NOTE Confidence: 0.96166146

00:27:38.910 --> 00:27:39.810 trait difference,
NOTE Confidence: 0.99977905

00:27:40.990 --> 00:27:41.490 between
NOTE Confidence: 0.99338263

00:27:42.109 --> 00:27:43.710 the long term meditators and
NOTE Confidence: 0.99338263

00:27:43.710 --> 00:27:44.450 the controls.
NOTE Confidence: 0.97193015

00:27:45.815 --> 00:27:47.175 And this was really our
NOTE Confidence: 0.97193015

00:27:47.175 --> 00:27:48.075 first indication
NOTE Confidence: 0.9857735

00:27:48.855 --> 00:27:49.895 that there was a there
NOTE Confidence: 0.9857735

00:27:49.895 --> 00:27:51.255 there, that there was something
NOTE Confidence: 0.9857735

00:27:51.255 --> 00:27:51.755 different
NOTE Confidence: 0.9972089

00:27:52.215 --> 00:27:53.494 about the brains of these
NOTE Confidence: 0.9972089

00:27:53.494 --> 00:27:54.395 long term meditators.
NOTE Confidence: 0.99568206

00:27:54.855 --> 00:27:56.234 And I should say that
NOTE Confidence: 0.9937318

00:27:56.855 --> 00:27:58.215 this group of long term
NOTE Confidence: 0.9937318

00:27:58.215 --> 00:27:58.715 meditators

NOTE Confidence: 0.96983296
00:27:59.255 --> 00:28:00.695 was a group of really
NOTE Confidence: 0.96983296
00:28:00.695 --> 00:28:01.470 long term meditators.
NOTE Confidence: 0.90156657
00:28:04.243 --> 00:28:05.869 Number of hours of lifetime
NOTE Confidence: 0.90156657
00:28:05.869 --> 00:28:07.770 practice in this group that
NOTE Confidence: 0.90156657
00:28:07.789 --> 00:28:09.309 was published in this paper
NOTE Confidence: 0.90156657
00:28:09.309 --> 00:28:11.310 in two thousand four was
NOTE Confidence: 0.90156657
00:28:11.310 --> 00:28:12.770 thirty four thousand hours.
NOTE Confidence: 0.9884213
00:28:13.549 --> 00:28:14.609 You can do the arithmetic
NOTE Confidence: 0.9884213
00:28:14.909 --> 00:28:16.365 at home, but thirty four
NOTE Confidence: 0.9884213
00:28:16.365 --> 00:28:17.645 thousand hours is a big
NOTE Confidence: 0.9884213
00:28:17.645 --> 00:28:18.145 number.
NOTE Confidence: 0.9056294
00:28:18.845 --> 00:28:19.825 These are,
NOTE Confidence: 0.9653495
00:28:20.605 --> 00:28:21.825 people who've spent,
NOTE Confidence: 0.9461935
00:28:23.005 --> 00:28:24.705 the better part of their,
NOTE Confidence: 0.9991344
00:28:25.325 --> 00:28:26.385 adult lifetime
NOTE Confidence: 0.9981422

00:28:27.165 --> 00:28:27.665 meditating.
NOTE Confidence: 0.69857055

00:28:29.255 --> 00:28:29.755 So
NOTE Confidence: 0.9866155

00:28:30.679 --> 00:28:32.679 this was very interesting, but,
NOTE Confidence: 0.9994233

00:28:33.080 --> 00:28:33.960 you know, I don't have
NOTE Confidence: 0.9994233

00:28:33.960 --> 00:28:35.720 to tell this audience that
NOTE Confidence: 0.9994233

00:28:35.720 --> 00:28:37.400 while these kinds of findings
NOTE Confidence: 0.9994233

00:28:37.400 --> 00:28:38.140 are intriguing,
NOTE Confidence: 0.9985757

00:28:38.679 --> 00:28:40.299 they're far from definitive.
NOTE Confidence: 0.97359437

00:28:41.400 --> 00:28:41.880 They,
NOTE Confidence: 0.9914567

00:28:42.360 --> 00:28:43.900 there there's so many differences
NOTE Confidence: 0.9914567

00:28:44.120 --> 00:28:44.620 between
NOTE Confidence: 0.99925923

00:28:45.095 --> 00:28:46.615 a person who elects to
NOTE Confidence: 0.99925923

00:28:46.615 --> 00:28:47.735 spend their life in this
NOTE Confidence: 0.99925923

00:28:47.735 --> 00:28:48.235 way
NOTE Confidence: 0.97400606

00:28:48.615 --> 00:28:49.515 compared to,
NOTE Confidence: 0.9617419

00:28:50.055 --> 00:28:51.675 age and gender match controls.

NOTE Confidence: 0.7656791
00:28:52.775 --> 00:28:53.835 These these
NOTE Confidence: 0.95725805
00:28:55.655 --> 00:28:57.175 groups differ in so many
NOTE Confidence: 0.95725805
00:28:57.175 --> 00:28:59.195 different ways, and a skeptic
NOTE Confidence: 0.99649966
00:28:59.860 --> 00:29:02.120 might claim that these differences
NOTE Confidence: 0.99649966
00:29:02.179 --> 00:29:02.980 might have been there in
NOTE Confidence: 0.99649966
00:29:02.980 --> 00:29:03.880 the first place.
NOTE Confidence: 0.99944705
00:29:04.340 --> 00:29:06.020 They might be associated with
NOTE Confidence: 0.99944705
00:29:06.020 --> 00:29:07.960 factors that predispose a person
NOTE Confidence: 0.9517951
00:29:08.260 --> 00:29:09.460 to choose a life of
NOTE Confidence: 0.9517951
00:29:09.460 --> 00:29:10.200 this kind,
NOTE Confidence: 0.9834963
00:29:10.580 --> 00:29:11.539 and they may not have
NOTE Confidence: 0.9834963
00:29:11.539 --> 00:29:13.000 anything to do with meditation.
NOTE Confidence: 0.90274215
00:29:13.460 --> 00:29:14.360 Although we,
NOTE Confidence: 0.99955493
00:29:14.895 --> 00:29:16.175 did find that there were
NOTE Confidence: 0.99955493
00:29:16.175 --> 00:29:16.675 associations
NOTE Confidence: 0.9996493

00:29:17.135 --> 00:29:17.635 between
NOTE Confidence: 0.9996655

00:29:17.935 --> 00:29:19.715 the magnitude of gamma oscillations
NOTE Confidence: 0.9996655

00:29:19.935 --> 00:29:20.835 that we saw
NOTE Confidence: 0.9675906

00:29:21.215 --> 00:29:22.835 and the number of lifetime
NOTE Confidence: 0.9675906

00:29:22.975 --> 00:29:23.875 hours of practice,
NOTE Confidence: 0.99672127

00:29:24.575 --> 00:29:26.575 but even that is simply
NOTE Confidence: 0.99672127

00:29:26.575 --> 00:29:27.235 a correlation.
NOTE Confidence: 0.9872753

00:29:27.695 --> 00:29:28.735 And so we needed to
NOTE Confidence: 0.9872753

00:29:28.735 --> 00:29:31.130 do other kinds of designs,
NOTE Confidence: 0.9959501

00:29:32.310 --> 00:29:34.630 and that's exemplified in work
NOTE Confidence: 0.9959501

00:29:34.630 --> 00:29:36.070 we did related to the
NOTE Confidence: 0.9959501

00:29:36.070 --> 00:29:36.570 connection,
NOTE Confidence: 0.99904025

00:29:37.590 --> 00:29:38.090 pillar.
NOTE Confidence: 0.9788883

00:29:39.510 --> 00:29:40.490 So I wanna
NOTE Confidence: 0.93314856

00:29:41.030 --> 00:29:42.010 share with you,
NOTE Confidence: 0.9634656

00:29:43.315 --> 00:29:45.635 a, an important early study

NOTE Confidence: 0.9634656
00:29:45.635 --> 00:29:47.235 that we did looking at
NOTE Confidence: 0.9634656
00:29:47.475 --> 00:29:49.495 in a randomized controlled trial,
NOTE Confidence: 0.9634656
00:29:49.715 --> 00:29:50.915 looking at people who never
NOTE Confidence: 0.9634656
00:29:50.915 --> 00:29:51.415 meditated,
NOTE Confidence: 0.9798725
00:29:52.275 --> 00:29:53.735 and teaching them,
NOTE Confidence: 0.9883656
00:29:54.275 --> 00:29:56.275 a very simple practice to
NOTE Confidence: 0.9883656
00:29:56.275 --> 00:29:57.255 cultivate compassion.
NOTE Confidence: 0.7798811
00:29:58.380 --> 00:29:58.860 And,
NOTE Confidence: 0.9846962
00:29:59.340 --> 00:30:01.260 we taught them that practice
NOTE Confidence: 0.9846962
00:30:01.260 --> 00:30:02.780 for two weeks, only two
NOTE Confidence: 0.9846962
00:30:02.780 --> 00:30:03.280 weeks,
NOTE Confidence: 0.9849278
00:30:03.740 --> 00:30:05.180 and we looked at changes
NOTE Confidence: 0.9849278
00:30:05.180 --> 00:30:06.540 in their brain over this
NOTE Confidence: 0.9849278
00:30:06.540 --> 00:30:08.080 very short period of time.
NOTE Confidence: 0.9991166
00:30:08.700 --> 00:30:10.300 So let me just say
NOTE Confidence: 0.9991166

00:30:10.300 --> 00:30:11.740 a little bit about what
NOTE Confidence: 0.9991166

00:30:11.740 --> 00:30:12.915 we taught them.
NOTE Confidence: 0.99926

00:30:13.555 --> 00:30:15.395 In this particular study, we
NOTE Confidence: 0.99926

00:30:15.395 --> 00:30:16.375 recruited participants
NOTE Confidence: 0.9986551

00:30:16.675 --> 00:30:18.675 who were told that they
NOTE Confidence: 0.9986551

00:30:18.675 --> 00:30:20.055 were going to be randomly
NOTE Confidence: 0.9986551

00:30:20.115 --> 00:30:20.615 assigned
NOTE Confidence: 0.9948457

00:30:20.995 --> 00:30:22.535 to one of two conditions,
NOTE Confidence: 0.9948457

00:30:22.755 --> 00:30:23.815 both of which,
NOTE Confidence: 0.99909574

00:30:24.755 --> 00:30:26.535 we have reason to believe
NOTE Confidence: 0.9976004

00:30:26.835 --> 00:30:28.215 should improve their well-being.
NOTE Confidence: 0.9965822

00:30:28.770 --> 00:30:30.370 In one condition, we taught
NOTE Confidence: 0.9965822

00:30:30.370 --> 00:30:31.970 them a simple practice to
NOTE Confidence: 0.9965822

00:30:31.970 --> 00:30:33.110 cultivate compassion.
NOTE Confidence: 0.9988769

00:30:33.570 --> 00:30:35.510 And in this practice, participants
NOTE Confidence: 0.9992906

00:30:35.890 --> 00:30:36.630 were invited

NOTE Confidence: 0.99881035

00:30:37.810 --> 00:30:38.470 to bring

NOTE Confidence: 0.9789027

00:30:39.410 --> 00:30:41.030 a person into their mind,

NOTE Confidence: 0.9218949

00:30:42.275 --> 00:30:43.395 and we begin with a

NOTE Confidence: 0.9218949

00:30:43.395 --> 00:30:44.135 loved one,

NOTE Confidence: 0.9939508

00:30:44.914 --> 00:30:47.154 bring a person who is

NOTE Confidence: 0.9939508

00:30:47.154 --> 00:30:48.275 close to you. It could

NOTE Confidence: 0.9939508

00:30:48.275 --> 00:30:49.575 be a family member,

NOTE Confidence: 0.98547256

00:30:49.875 --> 00:30:51.255 a very close friend.

NOTE Confidence: 0.9720815

00:30:52.034 --> 00:30:53.715 Bring that person into your

NOTE Confidence: 0.9720815

00:30:53.715 --> 00:30:55.174 mind and your heart.

NOTE Confidence: 0.99848527

00:30:55.635 --> 00:30:56.135 And

NOTE Confidence: 0.9828776

00:30:56.580 --> 00:30:57.460 think of a time in

NOTE Confidence: 0.9828776

00:30:57.460 --> 00:30:58.419 their life when they may

NOTE Confidence: 0.9828776

00:30:58.419 --> 00:30:59.860 have been having some challenge

NOTE Confidence: 0.9828776

00:30:59.860 --> 00:31:00.600 or difficulty,

NOTE Confidence: 0.9966982

00:31:01.059 --> 00:31:02.840 and then cultivate the genuine

NOTE Confidence: 0.9966982

00:31:03.059 --> 00:31:03.559 aspiration

NOTE Confidence: 0.9854082

00:31:04.020 --> 00:31:05.299 that they'd be relieved of

NOTE Confidence: 0.9854082

00:31:05.299 --> 00:31:06.039 that suffering.

NOTE Confidence: 0.99357367

00:31:06.740 --> 00:31:08.500 And we taught them simple

NOTE Confidence: 0.99357367

00:31:08.500 --> 00:31:10.485 phrases to use that they

NOTE Confidence: 0.99357367

00:31:10.485 --> 00:31:12.085 repeat silently in their mind

NOTE Confidence: 0.99357367

00:31:12.085 --> 00:31:13.465 to remind them of this.

NOTE Confidence: 0.94150674

00:31:14.245 --> 00:31:15.945 May you be happy.

NOTE Confidence: 0.9880199

00:31:17.045 --> 00:31:18.245 May you be free of

NOTE Confidence: 0.9880199

00:31:18.245 --> 00:31:19.685 suffering and the causes of

NOTE Confidence: 0.9880199

00:31:19.685 --> 00:31:20.185 suffering,

NOTE Confidence: 0.9695108

00:31:21.125 --> 00:31:22.665 phrases of that kind.

NOTE Confidence: 0.99458903

00:31:23.045 --> 00:31:23.940 And they were

NOTE Confidence: 0.96330774

00:31:24.259 --> 00:31:26.340 encouraged to choose their own

NOTE Confidence: 0.96330774

00:31:26.340 --> 00:31:28.279 phrase if they wish, whatever

NOTE Confidence: 0.96330774
00:31:28.340 --> 00:31:28.840 words
NOTE Confidence: 0.99929
00:31:29.220 --> 00:31:29.720 felt
NOTE Confidence: 0.93276244
00:31:30.100 --> 00:31:31.620 appropriate to them that conveyed
NOTE Confidence: 0.93276244
00:31:31.620 --> 00:31:32.759 a similar meaning.
NOTE Confidence: 0.9873887
00:31:33.139 --> 00:31:34.259 And they began with a
NOTE Confidence: 0.9873887
00:31:34.259 --> 00:31:35.460 loved one. They and then
NOTE Confidence: 0.9873887
00:31:35.460 --> 00:31:36.679 moved on to themselves.
NOTE Confidence: 0.97711176
00:31:37.975 --> 00:31:39.174 They then moved on to
NOTE Confidence: 0.97711176
00:31:39.174 --> 00:31:40.695 a category that we call
NOTE Confidence: 0.97711176
00:31:40.695 --> 00:31:42.534 a stranger, a person whose
NOTE Confidence: 0.97711176
00:31:42.534 --> 00:31:43.975 face you recognize, but you
NOTE Confidence: 0.97711176
00:31:43.975 --> 00:31:45.575 don't know them well, could
NOTE Confidence: 0.97711176
00:31:45.575 --> 00:31:46.934 be someone who works in
NOTE Confidence: 0.97711176
00:31:46.934 --> 00:31:48.294 the same office that you
NOTE Confidence: 0.97711176
00:31:48.294 --> 00:31:49.674 work in the same building,
NOTE Confidence: 0.97711176

00:31:49.815 --> 00:31:50.774 but you don't know much
NOTE Confidence: 0.97711176

00:31:50.774 --> 00:31:51.755 about their lives.
NOTE Confidence: 0.9760628

00:31:52.060 --> 00:31:53.420 And imagine a time in
NOTE Confidence: 0.9760628

00:31:53.420 --> 00:31:54.300 their life when they may
NOTE Confidence: 0.9760628

00:31:54.300 --> 00:31:55.900 have been having some difficulty
NOTE Confidence: 0.9760628

00:31:55.900 --> 00:31:56.940 even if you don't know
NOTE Confidence: 0.9760628

00:31:56.940 --> 00:31:58.460 much about their life, and
NOTE Confidence: 0.9760628

00:31:58.460 --> 00:32:00.060 then go through the same
NOTE Confidence: 0.9760628

00:32:00.060 --> 00:32:01.120 kind of process.
NOTE Confidence: 0.97117513

00:32:01.500 --> 00:32:03.500 And finally, we end with
NOTE Confidence: 0.97117513

00:32:03.500 --> 00:32:04.000 a
NOTE Confidence: 0.96601725

00:32:04.380 --> 00:32:06.460 difficult person, someone who pushes
NOTE Confidence: 0.96601725

00:32:06.460 --> 00:32:07.280 your buttons.
NOTE Confidence: 0.92101836

00:32:09.645 --> 00:32:10.945 And we encourage
NOTE Confidence: 0.9995204

00:32:11.405 --> 00:32:12.145 the participant
NOTE Confidence: 0.99963725

00:32:12.605 --> 00:32:13.664 to genuinely

NOTE Confidence: 0.9974759
00:32:14.125 --> 00:32:16.285 bring that person into their
NOTE Confidence: 0.9974759
00:32:16.285 --> 00:32:16.785 life,
NOTE Confidence: 0.99932265
00:32:18.285 --> 00:32:19.184 in a
NOTE Confidence: 0.94986993
00:32:19.565 --> 00:32:21.960 sincere way and cultivate the
NOTE Confidence: 0.94986993
00:32:21.960 --> 00:32:23.720 aspiration that they'd be relieved
NOTE Confidence: 0.94986993
00:32:23.720 --> 00:32:24.380 of suffering.
NOTE Confidence: 0.99928683
00:32:25.320 --> 00:32:26.680 So they do that for
NOTE Confidence: 0.99928683
00:32:26.680 --> 00:32:27.960 thirty minutes a day for
NOTE Confidence: 0.99928683
00:32:27.960 --> 00:32:28.620 two weeks.
NOTE Confidence: 0.9983895
00:32:29.240 --> 00:32:30.600 We have a control group
NOTE Confidence: 0.9983895
00:32:30.600 --> 00:32:32.620 that's taught simple practices
NOTE Confidence: 0.99712884
00:32:33.000 --> 00:32:35.100 derived from cognitive therapy.
NOTE Confidence: 0.9431398
00:32:36.695 --> 00:32:38.475 They are taught to cognitively
NOTE Confidence: 0.9431398
00:32:38.695 --> 00:32:39.195 reappraise
NOTE Confidence: 0.9995214
00:32:39.495 --> 00:32:39.995 situations
NOTE Confidence: 0.9530072

00:32:40.295 --> 00:32:41.595 to render them,
NOTE Confidence: 0.9129349

00:32:43.415 --> 00:32:45.195 more positive in outcome,
NOTE Confidence: 0.9783866

00:32:46.135 --> 00:32:47.655 and they are taught for
NOTE Confidence: 0.9783866

00:32:47.655 --> 00:32:49.035 the same amount of time.
NOTE Confidence: 0.9832691

00:32:49.690 --> 00:32:50.350 And these,
NOTE Confidence: 0.9957198

00:32:50.810 --> 00:32:52.910 this training is delivered online
NOTE Confidence: 0.9957198

00:32:53.130 --> 00:32:54.030 to these people,
NOTE Confidence: 0.9949612

00:32:54.330 --> 00:32:55.850 and we scan them before
NOTE Confidence: 0.9949612

00:32:55.850 --> 00:32:57.290 and after they go through
NOTE Confidence: 0.9949612

00:32:57.290 --> 00:32:58.890 this training. We also, at
NOTE Confidence: 0.9949612

00:32:58.890 --> 00:32:59.930 the end of the training,
NOTE Confidence: 0.9949612

00:32:59.930 --> 00:33:00.910 give them a
NOTE Confidence: 0.9942325

00:33:02.665 --> 00:33:03.485 a task
NOTE Confidence: 0.99969876

00:33:03.865 --> 00:33:04.365 from
NOTE Confidence: 0.9797618

00:33:04.825 --> 00:33:06.125 behavioral and neuroeconomics,
NOTE Confidence: 0.9956682

00:33:08.025 --> 00:33:09.625 a task that is designed

NOTE Confidence: 0.9956682
00:33:09.625 --> 00:33:10.765 to assess altruism,
NOTE Confidence: 0.9970443
00:33:11.785 --> 00:33:12.925 costly altruism.
NOTE Confidence: 0.98820335
00:33:13.465 --> 00:33:15.225 And, these are data from
NOTE Confidence: 0.98820335
00:33:15.225 --> 00:33:15.690 the
NOTE Confidence: 0.94867265
00:33:16.090 --> 00:33:17.950 economic decision making task,
NOTE Confidence: 0.99252766
00:33:18.570 --> 00:33:20.830 simply showing that the participants
NOTE Confidence: 0.99252766
00:33:20.970 --> 00:33:23.149 randomly assigned to compassion training
NOTE Confidence: 0.9784964
00:33:23.610 --> 00:33:25.389 behave significantly more altruistically
NOTE Confidence: 0.99820495
00:33:25.769 --> 00:33:27.070 compared to their counterparts
NOTE Confidence: 0.9929526
00:33:27.690 --> 00:33:29.549 assigned to the cognitive reappraisal
NOTE Confidence: 0.9929526
00:33:29.690 --> 00:33:31.885 training. And we also find
NOTE Confidence: 0.9929526
00:33:31.885 --> 00:33:33.325 that there are differences in
NOTE Confidence: 0.9929526
00:33:33.325 --> 00:33:33.985 the brain,
NOTE Confidence: 0.9975619
00:33:34.765 --> 00:33:36.125 and these differences in the
NOTE Confidence: 0.9975619
00:33:36.125 --> 00:33:37.585 brain actually predict,
NOTE Confidence: 0.9963657

00:33:38.285 --> 00:33:40.125 the change in behavior on
NOTE Confidence: 0.9963657

00:33:40.125 --> 00:33:42.625 the economic decision making task.
NOTE Confidence: 0.98052186

00:33:42.970 --> 00:33:44.890 And here, we're specifically showing
NOTE Confidence: 0.98052186

00:33:44.890 --> 00:33:46.030 changes in connectivity
NOTE Confidence: 0.9539155

00:33:46.490 --> 00:33:48.750 between a region in dorsolateral
NOTE Confidence: 0.9539155

00:33:48.970 --> 00:33:50.030 prefrontal cortex
NOTE Confidence: 0.9320038

00:33:50.490 --> 00:33:52.110 and in the ventral striatum,
NOTE Confidence: 0.9320038

00:33:52.330 --> 00:33:53.950 particularly in the nucleus accumbens
NOTE Confidence: 0.9320038

00:33:54.090 --> 00:33:54.590 here.
NOTE Confidence: 0.99737364

00:33:55.290 --> 00:33:56.910 And increases in connectivity
NOTE Confidence: 0.9995225

00:33:57.210 --> 00:33:58.430 between these regions
NOTE Confidence: 0.9994377

00:33:58.995 --> 00:34:00.755 predict the increase that we
NOTE Confidence: 0.9994377

00:34:00.755 --> 00:34:01.975 see in altruistic
NOTE Confidence: 0.99950445

00:34:02.275 --> 00:34:02.775 behavior
NOTE Confidence: 0.98363405

00:34:03.475 --> 00:34:05.315 on the economic decision making
NOTE Confidence: 0.98363405

00:34:05.315 --> 00:34:05.815 task

NOTE Confidence: 0.9925942
00:34:06.195 --> 00:34:07.095 in the participants
NOTE Confidence: 0.99897957
00:34:07.395 --> 00:34:09.094 who are trained in compassion.
NOTE Confidence: 0.97664464
00:34:09.715 --> 00:34:10.215 So,
NOTE Confidence: 0.9979078
00:34:10.835 --> 00:34:12.195 this is simply a proof
NOTE Confidence: 0.9979078
00:34:12.195 --> 00:34:13.430 of concept that,
NOTE Confidence: 0.9994034
00:34:14.210 --> 00:34:16.050 it really doesn't take much.
NOTE Confidence: 0.9994034
00:34:16.050 --> 00:34:17.250 This is after two weeks
NOTE Confidence: 0.9994034
00:34:17.250 --> 00:34:17.910 of training.
NOTE Confidence: 0.9773188
00:34:18.210 --> 00:34:19.809 It's a maximum of seven
NOTE Confidence: 0.9773188
00:34:19.809 --> 00:34:20.309 hours,
NOTE Confidence: 0.9900548
00:34:20.690 --> 00:34:21.890 thirty minutes a day for
NOTE Confidence: 0.9900548
00:34:21.890 --> 00:34:22.630 two weeks.
NOTE Confidence: 0.9858185
00:34:23.329 --> 00:34:23.730 And,
NOTE Confidence: 0.9858936
00:34:24.130 --> 00:34:26.150 it's simply just to illustrate
NOTE Confidence: 0.9041475
00:34:26.930 --> 00:34:27.405 that,
NOTE Confidence: 0.99901986

00:34:27.965 --> 00:34:29.565 you can actually see changes
NOTE Confidence: 0.99901986

00:34:29.565 --> 00:34:31.165 in the brain with as
NOTE Confidence: 0.99901986

00:34:31.165 --> 00:34:32.925 little as seven hours of
NOTE Confidence: 0.99901986

00:34:32.925 --> 00:34:33.425 training.
NOTE Confidence: 0.99283946

00:34:33.805 --> 00:34:35.105 I'm not in any way
NOTE Confidence: 0.99283946

00:34:35.165 --> 00:34:36.385 meaning to imply
NOTE Confidence: 0.9941103

00:34:36.685 --> 00:34:38.445 that these changes are gonna
NOTE Confidence: 0.9941103

00:34:38.445 --> 00:34:38.945 persist.
NOTE Confidence: 0.9964285

00:34:40.210 --> 00:34:41.570 If you did two weeks
NOTE Confidence: 0.9964285

00:34:41.570 --> 00:34:43.250 of physical exercise with a
NOTE Confidence: 0.9964285

00:34:43.250 --> 00:34:43.750 trainer
NOTE Confidence: 0.9924518

00:34:44.050 --> 00:34:46.050 and noticed improvements in how
NOTE Confidence: 0.9924518

00:34:46.050 --> 00:34:47.969 your body is feeling, nobody
NOTE Confidence: 0.9924518

00:34:47.969 --> 00:34:49.570 would expect those changes to
NOTE Confidence: 0.9924518

00:34:49.570 --> 00:34:51.590 persist if you stopped exercising.
NOTE Confidence: 0.9998776

00:34:52.515 --> 00:34:53.174 Our conjecture

NOTE Confidence: 0.98495334

00:34:54.035 --> 00:34:54.994 is that in all of

NOTE Confidence: 0.98495334

00:34:54.994 --> 00:34:55.815 this, we're,

NOTE Confidence: 0.96370095

00:34:56.515 --> 00:34:58.775 teaching people these simple practices,

NOTE Confidence: 0.9748389

00:34:59.075 --> 00:35:01.494 which hopefully can become lifelong

NOTE Confidence: 0.9748389

00:35:01.635 --> 00:35:02.135 practices,

NOTE Confidence: 0.9780886

00:35:02.994 --> 00:35:04.114 that then will,

NOTE Confidence: 0.9998167

00:35:04.515 --> 00:35:05.015 enable

NOTE Confidence: 0.99956524

00:35:05.474 --> 00:35:07.174 these changes to endure.

NOTE Confidence: 0.9858244

00:35:09.670 --> 00:35:10.950 Actually, I'm gonna skip this

NOTE Confidence: 0.9858244

00:35:10.950 --> 00:35:12.250 in the interest of time

NOTE Confidence: 0.9177643

00:35:12.630 --> 00:35:12.950 and,

NOTE Confidence: 0.9943756

00:35:13.430 --> 00:35:15.450 move on to insight.

NOTE Confidence: 0.93395895

00:35:16.550 --> 00:35:18.090 Insight, as I,

NOTE Confidence: 0.9930188

00:35:19.430 --> 00:35:21.910 mentioned earlier, is insight into

NOTE Confidence: 0.9930188

00:35:21.910 --> 00:35:23.050 the nature of

NOTE Confidence: 0.9931012

00:35:23.510 --> 00:35:24.944 the the self,
NOTE Confidence: 0.999823

00:35:25.405 --> 00:35:26.224 the entity
NOTE Confidence: 0.93793774

00:35:26.525 --> 00:35:27.005 that,
NOTE Confidence: 0.9850627

00:35:27.885 --> 00:35:29.265 we all carry around,
NOTE Confidence: 0.9724982

00:35:30.204 --> 00:35:30.944 our narrative
NOTE Confidence: 0.99260587

00:35:31.244 --> 00:35:31.744 self.
NOTE Confidence: 0.9841981

00:35:32.444 --> 00:35:32.844 And,
NOTE Confidence: 0.9819639

00:35:33.405 --> 00:35:35.825 one of the interesting ways
NOTE Confidence: 0.9819639

00:35:35.885 --> 00:35:37.085 to probe this,
NOTE Confidence: 0.9713184

00:35:37.405 --> 00:35:37.905 rigorously,
NOTE Confidence: 0.94304866

00:35:38.285 --> 00:35:38.785 experimentally,
NOTE Confidence: 0.82832956

00:35:40.440 --> 00:35:42.140 is with challenging,
NOTE Confidence: 0.98148906

00:35:43.880 --> 00:35:45.420 the self, if you will.
NOTE Confidence: 0.99615663

00:35:45.960 --> 00:35:47.340 And one of the ways
NOTE Confidence: 0.99615663

00:35:47.400 --> 00:35:48.920 that we can challenge it
NOTE Confidence: 0.99615663

00:35:48.920 --> 00:35:49.420 is,

NOTE Confidence: 0.96310663
00:35:50.040 --> 00:35:51.500 with physical pain.
NOTE Confidence: 0.95793116
00:35:51.800 --> 00:35:53.660 And I liken this to,
NOTE Confidence: 0.91824925
00:35:55.094 --> 00:35:57.195 to a cardiac stress test,
NOTE Confidence: 0.99751365
00:35:57.815 --> 00:36:00.295 to evaluate the functional status
NOTE Confidence: 0.99751365
00:36:00.295 --> 00:36:01.035 of the heart.
NOTE Confidence: 0.9995324
00:36:01.735 --> 00:36:02.395 A cardiologist
NOTE Confidence: 0.99980193
00:36:02.855 --> 00:36:04.315 would often have
NOTE Confidence: 0.92817116
00:36:04.614 --> 00:36:05.195 a patient,
NOTE Confidence: 0.9988266
00:36:06.375 --> 00:36:07.950 do a stress test to
NOTE Confidence: 0.9988266
00:36:07.950 --> 00:36:08.989 look at the functioning of
NOTE Confidence: 0.9988266
00:36:08.989 --> 00:36:10.450 the heart under these
NOTE Confidence: 0.99987054
00:36:10.830 --> 00:36:11.330 stressful
NOTE Confidence: 0.7893915
00:36:11.710 --> 00:36:12.210 challenges.
NOTE Confidence: 0.98815334
00:36:12.910 --> 00:36:14.030 In a set in a
NOTE Confidence: 0.98815334
00:36:14.030 --> 00:36:15.310 very similar way, we can
NOTE Confidence: 0.98815334

00:36:15.310 --> 00:36:16.590 challenge the mind and the
NOTE Confidence: 0.98815334

00:36:16.590 --> 00:36:18.609 brain with physical pain.
NOTE Confidence: 0.95653284

00:36:20.325 --> 00:36:21.065 And so,
NOTE Confidence: 0.99131304

00:36:21.445 --> 00:36:23.045 in these studies, we use
NOTE Confidence: 0.99131304

00:36:23.045 --> 00:36:23.545 heat,
NOTE Confidence: 0.9817819

00:36:24.085 --> 00:36:25.605 as a physical pain. It's
NOTE Confidence: 0.9817819

00:36:25.605 --> 00:36:27.685 very realistic. It's actual heat.
NOTE Confidence: 0.9817819

00:36:27.685 --> 00:36:29.145 We use a thermode,
NOTE Confidence: 0.9992724

00:36:30.005 --> 00:36:30.744 that involves
NOTE Confidence: 0.99010223

00:36:31.285 --> 00:36:33.224 rapidly circulating water,
NOTE Confidence: 0.96902543

00:36:33.844 --> 00:36:34.344 where,
NOTE Confidence: 0.99677753

00:36:35.030 --> 00:36:36.410 in which we can control
NOTE Confidence: 0.99677753

00:36:36.550 --> 00:36:38.170 the temperature very precisely.
NOTE Confidence: 0.986093

00:36:38.869 --> 00:36:40.630 And, I wanna share data
NOTE Confidence: 0.986093

00:36:40.630 --> 00:36:41.430 with you from,
NOTE Confidence: 0.9825666

00:36:42.070 --> 00:36:42.969 one experiment,

NOTE Confidence: 0.99878347
00:36:43.590 --> 00:36:45.690 with long term meditation practitioners
NOTE Confidence: 0.9545204
00:36:45.989 --> 00:36:47.190 that was a very simple
NOTE Confidence: 0.9545204
00:36:47.190 --> 00:36:47.690 study.
NOTE Confidence: 0.99321765
00:36:48.355 --> 00:36:50.055 And in this study, we
NOTE Confidence: 0.99321765
00:36:50.114 --> 00:36:50.614 gave,
NOTE Confidence: 0.99824977
00:36:51.315 --> 00:36:53.175 both meditators and controls
NOTE Confidence: 0.9976248
00:36:53.715 --> 00:36:55.815 a sample of this
NOTE Confidence: 0.99928266
00:36:56.275 --> 00:36:56.775 heat
NOTE Confidence: 0.82786095
00:36:57.235 --> 00:36:57.735 stimulus,
NOTE Confidence: 0.99766314
00:36:58.675 --> 00:37:00.535 before they began the experiment.
NOTE Confidence: 0.97826344
00:37:00.960 --> 00:37:02.400 The heat is forty nine
NOTE Confidence: 0.97826344
00:37:02.400 --> 00:37:03.219 degrees centigrade,
NOTE Confidence: 0.9615724
00:37:03.680 --> 00:37:05.140 delivered for ten seconds.
NOTE Confidence: 0.9861634
00:37:05.440 --> 00:37:06.400 I've had it done to
NOTE Confidence: 0.9861634
00:37:06.400 --> 00:37:07.920 myself on many occasions. I
NOTE Confidence: 0.9861634

00:37:07.920 --> 00:37:09.359 can tell you that it
NOTE Confidence: 0.9861634

00:37:09.359 --> 00:37:11.219 is indeed extremely painful,
NOTE Confidence: 0.97989154

00:37:12.560 --> 00:37:13.040 and,
NOTE Confidence: 0.8601624

00:37:13.760 --> 00:37:14.420 you can,
NOTE Confidence: 0.9811807

00:37:16.364 --> 00:37:17.885 most people can tolerate it
NOTE Confidence: 0.9811807

00:37:17.885 --> 00:37:18.844 pretty well for the first
NOTE Confidence: 0.9811807

00:37:18.844 --> 00:37:20.065 few seconds, but,
NOTE Confidence: 0.96171945

00:37:20.925 --> 00:37:21.725 getting toward,
NOTE Confidence: 0.96206504

00:37:22.205 --> 00:37:22.705 seconds,
NOTE Confidence: 0.98870236

00:37:23.565 --> 00:37:25.805 seven and higher, it's really
NOTE Confidence: 0.98870236

00:37:25.805 --> 00:37:26.785 very intense.
NOTE Confidence: 0.9972392

00:37:27.325 --> 00:37:28.525 But we can deliver this
NOTE Confidence: 0.9972392

00:37:28.525 --> 00:37:29.565 in a way which is
NOTE Confidence: 0.9972392

00:37:29.565 --> 00:37:31.450 safe, doesn't cause any tissue
NOTE Confidence: 0.9972392

00:37:31.450 --> 00:37:31.950 damage,
NOTE Confidence: 0.97712135

00:37:32.730 --> 00:37:33.210 and,

NOTE Confidence: 0.9856005
00:37:33.610 --> 00:37:36.270 is, very compelling and realistic.
NOTE Confidence: 0.9936199
00:37:38.170 --> 00:37:39.710 When you think about pain,
NOTE Confidence: 0.97358024
00:37:41.050 --> 00:37:42.489 we often use a phrase
NOTE Confidence: 0.97358024
00:37:42.489 --> 00:37:44.270 like, I'm in pain.
NOTE Confidence: 0.9974853
00:37:44.744 --> 00:37:46.844 And, it's helpful to reflect
NOTE Confidence: 0.9974853
00:37:46.904 --> 00:37:48.605 on a sentence like that,
NOTE Confidence: 0.9659326
00:37:49.384 --> 00:37:50.904 because it really helps to
NOTE Confidence: 0.9659326
00:37:50.904 --> 00:37:52.904 reveal what this insight pillar
NOTE Confidence: 0.9659326
00:37:52.904 --> 00:37:53.565 is about.
NOTE Confidence: 0.99910545
00:37:53.864 --> 00:37:55.884 When a person says something
NOTE Confidence: 0.90269697
00:37:56.265 --> 00:37:57.644 like I am in pain
NOTE Confidence: 0.90269697
00:37:57.704 --> 00:37:58.605 or even,
NOTE Confidence: 0.9869283
00:37:59.060 --> 00:38:00.420 you can think of this
NOTE Confidence: 0.9869283
00:38:00.420 --> 00:38:01.619 kind of phrase with any
NOTE Confidence: 0.9869283
00:38:01.619 --> 00:38:03.080 emotion, I am sad,
NOTE Confidence: 0.98633075

00:38:03.940 --> 00:38:05.060 what does it mean to
NOTE Confidence: 0.98633075

00:38:05.060 --> 00:38:06.500 say that? Does it when
NOTE Confidence: 0.98633075

00:38:06.500 --> 00:38:07.619 a person says I am
NOTE Confidence: 0.98633075

00:38:07.619 --> 00:38:08.660 in pain or I am
NOTE Confidence: 0.98633075

00:38:08.660 --> 00:38:10.260 sad, does that mean all
NOTE Confidence: 0.98633075

00:38:10.260 --> 00:38:11.940 of you are sad, all
NOTE Confidence: 0.98633075

00:38:11.940 --> 00:38:13.140 of you are in pain?
NOTE Confidence: 0.98633075

00:38:13.140 --> 00:38:14.040 Is there any,
NOTE Confidence: 0.99931926

00:38:14.505 --> 00:38:15.944 is there any place in
NOTE Confidence: 0.99931926

00:38:15.944 --> 00:38:16.444 you
NOTE Confidence: 0.9505584

00:38:16.825 --> 00:38:18.265 which is not feeling sad
NOTE Confidence: 0.9505584

00:38:18.265 --> 00:38:19.704 or not feeling pain? What
NOTE Confidence: 0.9505584

00:38:19.704 --> 00:38:21.644 is the I actually mean
NOTE Confidence: 0.9961303

00:38:21.944 --> 00:38:23.224 when we use that kind
NOTE Confidence: 0.9961303

00:38:23.224 --> 00:38:23.885 of sentence?
NOTE Confidence: 0.96070683

00:38:24.744 --> 00:38:26.505 And so that's really what

NOTE Confidence: 0.96070683

00:38:26.505 --> 00:38:27.404 this inside

NOTE Confidence: 0.94958544

00:38:27.785 --> 00:38:29.710 pillar is about. And there

NOTE Confidence: 0.94958544

00:38:29.710 --> 00:38:30.290 are specific

NOTE Confidence: 0.999387

00:38:30.830 --> 00:38:31.969 meditation practices

NOTE Confidence: 0.99975854

00:38:32.430 --> 00:38:34.210 that are designed to interrogate

NOTE Confidence: 0.99552315

00:38:34.590 --> 00:38:35.650 and to undermine,

NOTE Confidence: 0.99092686

00:38:36.190 --> 00:38:37.650 if you will, this,

NOTE Confidence: 0.99897075

00:38:38.430 --> 00:38:38.930 constructed

NOTE Confidence: 0.95410246

00:38:39.310 --> 00:38:39.810 eye.

NOTE Confidence: 0.96770465

00:38:40.989 --> 00:38:41.489 So,

NOTE Confidence: 0.95569485

00:38:41.950 --> 00:38:43.010 in this experiment,

NOTE Confidence: 0.9847747

00:38:44.110 --> 00:38:45.285 and, actually, let me just

NOTE Confidence: 0.9847747

00:38:45.285 --> 00:38:46.265 say give

NOTE Confidence: 0.900592

00:38:48.085 --> 00:38:50.025 another introduction to this experiment

NOTE Confidence: 0.99799824

00:38:50.325 --> 00:38:51.525 before I share the actual

NOTE Confidence: 0.99799824

00:38:51.525 --> 00:38:52.025 data.
NOTE Confidence: 0.9994459

00:38:53.045 --> 00:38:54.565 We have spent a lot
NOTE Confidence: 0.9994459

00:38:54.565 --> 00:38:56.025 of time in our lab
NOTE Confidence: 0.97719383

00:38:56.405 --> 00:38:58.405 looking at how people respond
NOTE Confidence: 0.97719383

00:38:58.405 --> 00:38:59.145 to adversity,
NOTE Confidence: 0.9022659

00:38:59.844 --> 00:39:00.244 and,
NOTE Confidence: 0.9922429

00:39:00.890 --> 00:39:02.010 I wanna just show you
NOTE Confidence: 0.9922429

00:39:02.010 --> 00:39:03.630 two hypothetical curves.
NOTE Confidence: 0.9839949

00:39:04.090 --> 00:39:05.530 Imagine that at time point
NOTE Confidence: 0.9839949

00:39:05.530 --> 00:39:06.030 three,
NOTE Confidence: 0.99219906

00:39:06.810 --> 00:39:08.810 some stressful event is introduced,
NOTE Confidence: 0.99219906

00:39:08.810 --> 00:39:10.489 and you can see how
NOTE Confidence: 0.99219906

00:39:10.489 --> 00:39:12.090 this person responds to it.
NOTE Confidence: 0.99219906

00:39:12.090 --> 00:39:13.690 And on the ordinate, you
NOTE Confidence: 0.99219906

00:39:13.690 --> 00:39:15.630 can plot your favorite dependent
NOTE Confidence: 0.99219906

00:39:15.770 --> 00:39:16.270 measure.

NOTE Confidence: 0.978048
00:39:16.725 --> 00:39:17.845 It could be a behavioral
NOTE Confidence: 0.978048
00:39:17.845 --> 00:39:19.125 measure. It could be something
NOTE Confidence: 0.978048
00:39:19.125 --> 00:39:19.945 like cortisol.
NOTE Confidence: 0.92047185
00:39:20.405 --> 00:39:21.925 It could be a heart
NOTE Confidence: 0.92047185
00:39:21.925 --> 00:39:23.625 rate. It could even be,
NOTE Confidence: 0.94195056
00:39:24.245 --> 00:39:25.605 a response in the brain,
NOTE Confidence: 0.94195056
00:39:25.605 --> 00:39:26.965 which we've looked at such
NOTE Confidence: 0.94195056
00:39:26.965 --> 00:39:28.025 as bold signal,
NOTE Confidence: 0.98477584
00:39:28.965 --> 00:39:30.805 to, in the amygdala, for
NOTE Confidence: 0.98477584
00:39:30.805 --> 00:39:31.305 example.
NOTE Confidence: 0.9205788
00:39:33.320 --> 00:39:34.920 But contrast this with the
NOTE Confidence: 0.9205788
00:39:34.920 --> 00:39:35.739 second person
NOTE Confidence: 0.9754149
00:39:36.120 --> 00:39:36.940 who responds
NOTE Confidence: 0.99355775
00:39:37.239 --> 00:39:38.460 with the same amplitude,
NOTE Confidence: 0.9549051
00:39:38.760 --> 00:39:40.520 but they come back down
NOTE Confidence: 0.9549051

00:39:40.520 --> 00:39:41.980 to baseline more quickly.
NOTE Confidence: 0.99906

00:39:42.760 --> 00:39:44.200 We would say that person
NOTE Confidence: 0.99906

00:39:44.200 --> 00:39:44.700 b
NOTE Confidence: 0.9951935

00:39:45.000 --> 00:39:46.600 is more resilient compared to
NOTE Confidence: 0.9951935

00:39:46.600 --> 00:39:48.165 person a. You can think
NOTE Confidence: 0.9951935

00:39:48.165 --> 00:39:49.925 of resilience in part as
NOTE Confidence: 0.9951935

00:39:49.925 --> 00:39:50.745 the rapidity
NOTE Confidence: 0.99239844

00:39:51.205 --> 00:39:52.725 with which you recover from
NOTE Confidence: 0.99239844

00:39:52.725 --> 00:39:53.225 adversity.
NOTE Confidence: 0.99294424

00:39:53.685 --> 00:39:54.485 And so,
NOTE Confidence: 0.9990092

00:39:54.965 --> 00:39:56.005 this is one of the
NOTE Confidence: 0.9990092

00:39:56.005 --> 00:39:56.505 parameters
NOTE Confidence: 0.9808379

00:39:56.885 --> 00:39:58.165 that we're looking at in
NOTE Confidence: 0.9808379

00:39:58.165 --> 00:40:00.130 this experiment. So in this
NOTE Confidence: 0.9808379

00:40:00.130 --> 00:40:01.730 experiment, we bring long term
NOTE Confidence: 0.9808379

00:40:01.730 --> 00:40:03.650 meditators and controls into the

NOTE Confidence: 0.9808379
00:40:03.650 --> 00:40:05.969 lab. We introduce them to
NOTE Confidence: 0.9808379
00:40:05.969 --> 00:40:07.650 the heat pain, but we
NOTE Confidence: 0.9808379
00:40:07.650 --> 00:40:08.690 do it in a way
NOTE Confidence: 0.9808379
00:40:08.690 --> 00:40:10.130 where we precede it with
NOTE Confidence: 0.9808379
00:40:10.130 --> 00:40:10.790 a stimulus
NOTE Confidence: 0.9873191
00:40:11.170 --> 00:40:12.930 that denotes that the pain
NOTE Confidence: 0.9873191
00:40:12.930 --> 00:40:14.390 is coming on. So,
NOTE Confidence: 0.99381876
00:40:14.955 --> 00:40:16.495 in this case, an auditory
NOTE Confidence: 0.99381876
00:40:16.635 --> 00:40:17.135 stimulus,
NOTE Confidence: 0.9870942
00:40:18.075 --> 00:40:20.335 is presented, and it denotes
NOTE Confidence: 0.9870942
00:40:20.555 --> 00:40:21.855 that in ten seconds,
NOTE Confidence: 0.97914505
00:40:22.155 --> 00:40:23.995 they're gonna get zapped with
NOTE Confidence: 0.97914505
00:40:23.995 --> 00:40:24.495 a,
NOTE Confidence: 0.997915
00:40:25.835 --> 00:40:26.895 this noxious
NOTE Confidence: 0.9699737
00:40:27.275 --> 00:40:27.775 heat.
NOTE Confidence: 0.9965399

00:40:28.960 --> 00:40:30.800 And we're specifically looking at
NOTE Confidence: 0.9965399

00:40:30.800 --> 00:40:32.000 the pain matrix in the
NOTE Confidence: 0.9965399

00:40:32.000 --> 00:40:32.500 brain.
NOTE Confidence: 0.99365616

00:40:33.200 --> 00:40:34.960 Many of you know that,
NOTE Confidence: 0.94939727

00:40:37.040 --> 00:40:38.320 the set of regions in
NOTE Confidence: 0.94939727

00:40:38.320 --> 00:40:39.840 the brain that responds to
NOTE Confidence: 0.94939727

00:40:39.840 --> 00:40:41.620 physical pain like heat
NOTE Confidence: 0.994815

00:40:41.945 --> 00:40:44.105 is fairly well characterized. We
NOTE Confidence: 0.994815

00:40:44.105 --> 00:40:45.085 know where to look.
NOTE Confidence: 0.9528853

00:40:45.705 --> 00:40:47.405 And so in non meditators,
NOTE Confidence: 0.9528853

00:40:47.545 --> 00:40:48.285 we present,
NOTE Confidence: 0.99654263

00:40:49.785 --> 00:40:51.485 a simple tone that denotes
NOTE Confidence: 0.99654263

00:40:51.625 --> 00:40:52.905 that pain is about to
NOTE Confidence: 0.99654263

00:40:52.905 --> 00:40:54.665 occur. And in the pain
NOTE Confidence: 0.99654263

00:40:54.665 --> 00:40:56.020 matrix, we see
NOTE Confidence: 0.9935245

00:40:56.320 --> 00:40:58.079 that non meditators begin to

NOTE Confidence: 0.9935245
00:40:58.079 --> 00:40:59.060 respond immediately.
NOTE Confidence: 0.9973955
00:40:59.839 --> 00:41:01.119 This is simply to the
NOTE Confidence: 0.9973955
00:41:01.119 --> 00:41:02.180 auditory stimulus.
NOTE Confidence: 0.9818559
00:41:03.119 --> 00:41:05.200 No heat stimulus has been
NOTE Confidence: 0.9818559
00:41:05.200 --> 00:41:07.119 presented at this time, but
NOTE Confidence: 0.9818559
00:41:07.119 --> 00:41:08.420 simply in anticipation
NOTE Confidence: 0.9964038
00:41:08.960 --> 00:41:10.739 of the painful stimulus,
NOTE Confidence: 0.9996679
00:41:11.325 --> 00:41:12.844 the pain matrix begins to
NOTE Confidence: 0.9996679
00:41:12.844 --> 00:41:13.344 respond.
NOTE Confidence: 0.9798354
00:41:13.645 --> 00:41:15.105 When the heat comes on,
NOTE Confidence: 0.9798354
00:41:15.165 --> 00:41:16.465 the response continues,
NOTE Confidence: 0.9997934
00:41:17.005 --> 00:41:18.065 and the
NOTE Confidence: 0.9998168
00:41:18.525 --> 00:41:20.385 recovery is quite slow.
NOTE Confidence: 0.96942747
00:41:21.805 --> 00:41:23.325 When you bring long term
NOTE Confidence: 0.96942747
00:41:23.325 --> 00:41:25.265 meditators into the lab, you
NOTE Confidence: 0.96942747

00:41:25.530 --> 00:41:27.450 show them you introduce the
NOTE Confidence: 0.96942747

00:41:27.450 --> 00:41:28.350 same parameters.
NOTE Confidence: 0.9542627

00:41:28.890 --> 00:41:30.430 They hear beep.
NOTE Confidence: 0.9994989

00:41:30.730 --> 00:41:32.430 And what you see is
NOTE Confidence: 0.9994989

00:41:32.489 --> 00:41:32.989 absolutely
NOTE Confidence: 0.9997629

00:41:33.290 --> 00:41:35.950 no significant activation in any
NOTE Confidence: 0.9035581

00:41:36.489 --> 00:41:37.950 region of the pain matrix.
NOTE Confidence: 0.9035581

00:41:38.090 --> 00:41:38.590 Absolutely
NOTE Confidence: 0.80292964

00:41:38.890 --> 00:41:39.390 no,
NOTE Confidence: 0.9982611

00:41:40.164 --> 00:41:41.305 significant activation.
NOTE Confidence: 0.9808789

00:41:42.325 --> 00:41:43.605 You do see, of course,
NOTE Confidence: 0.9808789

00:41:43.605 --> 00:41:45.605 activation in auditory cortex in
NOTE Confidence: 0.9808789

00:41:45.605 --> 00:41:47.704 response to the tone.
NOTE Confidence: 0.9932881

00:41:48.404 --> 00:41:49.444 But then when the heat
NOTE Confidence: 0.9932881

00:41:49.444 --> 00:41:50.184 comes on,
NOTE Confidence: 0.975315

00:41:50.805 --> 00:41:52.325 the meditators show a very

NOTE Confidence: 0.975315
00:41:52.325 --> 00:41:53.790 large response. And in fact,
NOTE Confidence: 0.975315
00:41:53.790 --> 00:41:55.070 in some regions of the
NOTE Confidence: 0.975315
00:41:55.070 --> 00:41:55.570 pain
NOTE Confidence: 0.94789505
00:41:55.950 --> 00:41:57.010 matrix, including
NOTE Confidence: 0.99469507
00:41:57.390 --> 00:41:57.890 somatosensory
NOTE Confidence: 0.9992479
00:41:58.270 --> 00:41:58.770 cortex,
NOTE Confidence: 0.9991924
00:41:59.150 --> 00:42:01.010 they actually show a larger
NOTE Confidence: 0.9574843
00:42:01.310 --> 00:42:01.810 response,
NOTE Confidence: 0.99952126
00:42:02.110 --> 00:42:02.610 significantly
NOTE Confidence: 0.92947376
00:42:02.910 --> 00:42:04.450 larger than in controls,
NOTE Confidence: 0.99369156
00:42:05.405 --> 00:42:07.005 but they come right back
NOTE Confidence: 0.99369156
00:42:07.005 --> 00:42:07.984 down to baseline.
NOTE Confidence: 0.9713652
00:42:08.605 --> 00:42:10.364 And we think of this
NOTE Confidence: 0.9713652
00:42:10.364 --> 00:42:12.045 as the normal signature of
NOTE Confidence: 0.9713652
00:42:12.045 --> 00:42:12.545 resilience,
NOTE Confidence: 0.9853945

00:42:13.165 --> 00:42:15.505 having very little anticipatory response,
NOTE Confidence: 0.9853945

00:42:15.565 --> 00:42:16.925 a big response to the
NOTE Confidence: 0.9853945

00:42:16.925 --> 00:42:17.825 actual stimulus,
NOTE Confidence: 0.99962294

00:42:18.285 --> 00:42:19.744 and a very rapid
NOTE Confidence: 0.9978504

00:42:20.190 --> 00:42:21.650 return to baseline.
NOTE Confidence: 0.9821114

00:42:22.910 --> 00:42:24.349 Okay. Let me say a
NOTE Confidence: 0.9821114

00:42:24.349 --> 00:42:25.730 few things about purpose.
NOTE Confidence: 0.97602504

00:42:28.030 --> 00:42:29.570 Purpose, as I
NOTE Confidence: 0.96040034

00:42:30.030 --> 00:42:32.770 suggested earlier, is about finding
NOTE Confidence: 0.96040034

00:42:32.910 --> 00:42:34.369 our true north,
NOTE Confidence: 0.97695327

00:42:35.275 --> 00:42:36.795 in life. And there's a
NOTE Confidence: 0.97695327

00:42:36.795 --> 00:42:39.055 whole cottage industry of
NOTE Confidence: 0.9895775

00:42:39.355 --> 00:42:41.855 research that indicates that purpose
NOTE Confidence: 0.9895775

00:42:41.915 --> 00:42:42.415 is,
NOTE Confidence: 0.99806553

00:42:43.594 --> 00:42:45.695 probably the single most important
NOTE Confidence: 0.99806553

00:42:45.755 --> 00:42:46.255 psychological

NOTE Confidence: 0.9997334
00:42:46.635 --> 00:42:47.135 factor
NOTE Confidence: 0.9996883
00:42:47.594 --> 00:42:48.975 in predicting longevity
NOTE Confidence: 0.9941139
00:42:50.850 --> 00:42:53.090 among people who are in
NOTE Confidence: 0.9941139
00:42:53.090 --> 00:42:55.270 their latter decades of life.
NOTE Confidence: 0.9930445
00:42:56.050 --> 00:42:57.570 And, I wanna just show
NOTE Confidence: 0.9930445
00:42:57.570 --> 00:42:59.090 you one example from this
NOTE Confidence: 0.9930445
00:42:59.090 --> 00:42:59.990 kind of study.
NOTE Confidence: 0.9181063
00:43:00.850 --> 00:43:01.650 This is,
NOTE Confidence: 0.99907607
00:43:01.970 --> 00:43:02.630 a study
NOTE Confidence: 0.9991919
00:43:03.225 --> 00:43:05.485 classifying people into the ninetieth
NOTE Confidence: 0.9991919
00:43:05.545 --> 00:43:07.305 or the tenth percentile in
NOTE Confidence: 0.9991919
00:43:07.305 --> 00:43:07.805 having
NOTE Confidence: 0.9756251
00:43:08.105 --> 00:43:09.785 a strong or weak sense
NOTE Confidence: 0.9756251
00:43:09.785 --> 00:43:10.445 of purpose,
NOTE Confidence: 0.9995286
00:43:11.225 --> 00:43:12.745 following them over the course
NOTE Confidence: 0.9995286

00:43:12.745 --> 00:43:13.725 of five years.
NOTE Confidence: 0.9955748

00:43:14.505 --> 00:43:15.705 These are people in their
NOTE Confidence: 0.9955748

00:43:15.705 --> 00:43:16.205 seventies,
NOTE Confidence: 0.9836117

00:43:16.809 --> 00:43:17.609 and it's,
NOTE Confidence: 0.9715268

00:43:18.010 --> 00:43:19.730 matching people at the out
NOTE Confidence: 0.9715268

00:43:19.849 --> 00:43:20.969 at the outset of this
NOTE Confidence: 0.9715268

00:43:20.969 --> 00:43:21.950 study in,
NOTE Confidence: 0.9735967

00:43:22.489 --> 00:43:24.890 preexisting medical conditions and then
NOTE Confidence: 0.9735967

00:43:24.890 --> 00:43:26.190 looking at them longitudinally.
NOTE Confidence: 0.99170196

00:43:26.969 --> 00:43:28.329 And what you can see
NOTE Confidence: 0.99170196

00:43:28.329 --> 00:43:29.869 is that people who
NOTE Confidence: 0.9371477

00:43:30.344 --> 00:43:32.265 have the lowest sense of
NOTE Confidence: 0.9371477

00:43:32.265 --> 00:43:33.225 purpose who are in the
NOTE Confidence: 0.9371477

00:43:33.225 --> 00:43:34.125 tenth percentile,
NOTE Confidence: 0.98007804

00:43:34.984 --> 00:43:36.505 on the ordinate is the
NOTE Confidence: 0.98007804

00:43:36.505 --> 00:43:38.285 hazard ratio for death.

NOTE Confidence: 0.99970025

00:43:38.984 --> 00:43:40.025 You can see that they're

NOTE Confidence: 0.99970025

00:43:40.025 --> 00:43:40.844 dying sooner

NOTE Confidence: 0.9416855

00:43:41.225 --> 00:43:42.905 compared to their counterparts who

NOTE Confidence: 0.9416855

00:43:42.905 --> 00:43:44.285 are in their the ninetieth

NOTE Confidence: 0.9416855

00:43:44.344 --> 00:43:44.844 percentile

NOTE Confidence: 0.9947328

00:43:45.710 --> 00:43:47.549 in the dotted line. And

NOTE Confidence: 0.9947328

00:43:47.549 --> 00:43:49.710 this basic finding has been

NOTE Confidence: 0.9947328

00:43:49.710 --> 00:43:50.210 replicated

NOTE Confidence: 0.9840428

00:43:50.510 --> 00:43:51.650 many, many times,

NOTE Confidence: 0.9300746

00:43:52.430 --> 00:43:52.910 and,

NOTE Confidence: 0.9975378

00:43:53.549 --> 00:43:55.890 is quite a strong finding,

NOTE Confidence: 0.99836814

00:43:56.910 --> 00:43:57.410 underscoring

NOTE Confidence: 0.9831071

00:43:57.950 --> 00:43:59.710 the importance of purpose in

NOTE Confidence: 0.9831071

00:43:59.710 --> 00:44:00.210 life,

NOTE Confidence: 0.58474

00:44:01.695 --> 00:44:03.075 and its correlates

NOTE Confidence: 0.98175216

00:44:03.695 --> 00:44:04.355 in suggesting
NOTE Confidence: 0.9994297

00:44:04.735 --> 00:44:05.875 that it is
NOTE Confidence: 0.9818311

00:44:06.415 --> 00:44:07.875 something that is,
NOTE Confidence: 0.9908761

00:44:08.735 --> 00:44:10.815 embodied. It's a quality that
NOTE Confidence: 0.9908761

00:44:10.815 --> 00:44:12.035 gets under the skin
NOTE Confidence: 0.998262

00:44:12.335 --> 00:44:14.094 and affects our biology in
NOTE Confidence: 0.998262

00:44:14.094 --> 00:44:15.855 ways that are consequential for
NOTE Confidence: 0.998262

00:44:15.855 --> 00:44:16.355 health.
NOTE Confidence: 0.9934602

00:44:18.060 --> 00:44:19.260 Okay. Now in the last
NOTE Confidence: 0.9934602

00:44:19.260 --> 00:44:20.940 few minutes, I wanna just
NOTE Confidence: 0.9934602

00:44:20.940 --> 00:44:22.540 talk a little bit about
NOTE Confidence: 0.9934602

00:44:22.540 --> 00:44:23.760 scaling well-being.
NOTE Confidence: 0.97689736

00:44:25.420 --> 00:44:26.640 And this is something,
NOTE Confidence: 0.998224

00:44:28.220 --> 00:44:29.280 about which we're
NOTE Confidence: 0.9941932

00:44:29.580 --> 00:44:31.840 extremely passionate these days.
NOTE Confidence: 0.99839604

00:44:32.915 --> 00:44:34.355 When people ask me what

NOTE Confidence: 0.99839604
00:44:34.355 --> 00:44:36.295 I'm really most excited about,
NOTE Confidence: 0.99839604
00:44:36.355 --> 00:44:37.575 it's really the opportunity
NOTE Confidence: 0.96738917
00:44:37.875 --> 00:44:38.935 to scale well-being.
NOTE Confidence: 0.94996
00:44:40.755 --> 00:44:42.594 Given that I think most
NOTE Confidence: 0.94996
00:44:42.594 --> 00:44:43.655 people would agree
NOTE Confidence: 0.9413655
00:44:44.114 --> 00:44:45.770 as we talked about at
NOTE Confidence: 0.9413655
00:44:45.770 --> 00:44:47.210 the very beginning of this
NOTE Confidence: 0.9413655
00:44:47.210 --> 00:44:47.710 presentation,
NOTE Confidence: 0.9459701
00:44:49.130 --> 00:44:51.130 our well-being is in such
NOTE Confidence: 0.9459701
00:44:51.130 --> 00:44:51.630 rapid
NOTE Confidence: 0.9906683
00:44:51.930 --> 00:44:52.430 decline.
NOTE Confidence: 0.9934967
00:44:53.450 --> 00:44:54.750 And so we
NOTE Confidence: 0.99227643
00:44:55.130 --> 00:44:56.750 developed a curriculum,
NOTE Confidence: 0.9465958
00:44:57.050 --> 00:44:58.090 if you will, that we
NOTE Confidence: 0.9465958
00:44:58.090 --> 00:44:59.790 call the Healthy Minds program
NOTE Confidence: 0.99490047

00:45:00.255 --> 00:45:00.994 that trains
NOTE Confidence: 0.99859285

00:45:01.375 --> 00:45:02.654 each of these four pillars
NOTE Confidence: 0.99859285

00:45:02.654 --> 00:45:03.315 of well-being.
NOTE Confidence: 0.99904746

00:45:03.775 --> 00:45:04.974 And one of the things
NOTE Confidence: 0.99904746

00:45:04.974 --> 00:45:06.094 that we've done is we've
NOTE Confidence: 0.99904746

00:45:06.094 --> 00:45:07.375 put this into a form
NOTE Confidence: 0.99904746

00:45:07.375 --> 00:45:08.674 of a mobile app,
NOTE Confidence: 0.992839

00:45:09.295 --> 00:45:10.914 called the Healthy Minds program.
NOTE Confidence: 0.9555171

00:45:11.694 --> 00:45:13.555 This app is freely available,
NOTE Confidence: 0.999111

00:45:14.015 --> 00:45:14.994 totally free.
NOTE Confidence: 0.9252973

00:45:15.950 --> 00:45:18.029 There's no paperwork whatsoever. It's
NOTE Confidence: 0.9252973

00:45:18.029 --> 00:45:19.329 produced by our nonprofit
NOTE Confidence: 0.8777166

00:45:19.630 --> 00:45:20.849 Healthy Minds Innovations,
NOTE Confidence: 0.96352166

00:45:21.549 --> 00:45:22.750 and the New York Times
NOTE Confidence: 0.96352166

00:45:22.750 --> 00:45:24.670 Wirecutter just named it as
NOTE Confidence: 0.96352166

00:45:24.670 --> 00:45:25.890 one of the three best

NOTE Confidence: 0.96352166
00:45:26.029 --> 00:45:27.469 meditation apps for the fourth
NOTE Confidence: 0.96352166
00:45:27.469 --> 00:45:28.450 year in a row.
NOTE Confidence: 0.8909558
00:45:28.989 --> 00:45:29.890 And in,
NOTE Confidence: 0.8463775
00:45:30.635 --> 00:45:31.135 my,
NOTE Confidence: 0.95205
00:45:33.035 --> 00:45:33.535 admittedly,
NOTE Confidence: 0.9586151
00:45:34.795 --> 00:45:35.855 biased opinion,
NOTE Confidence: 0.97351557
00:45:37.355 --> 00:45:38.474 this is the only app
NOTE Confidence: 0.97351557
00:45:38.474 --> 00:45:39.755 of its kind that actually
NOTE Confidence: 0.97351557
00:45:39.755 --> 00:45:41.055 is evidence based.
NOTE Confidence: 0.9667486
00:45:41.835 --> 00:45:43.695 There are two published randomized
NOTE Confidence: 0.9667486
00:45:43.835 --> 00:45:44.815 controlled trials
NOTE Confidence: 0.96294296
00:45:45.290 --> 00:45:46.810 using this app and and,
NOTE Confidence: 0.96294296
00:45:47.130 --> 00:45:48.430 at least two more
NOTE Confidence: 0.9954529
00:45:48.730 --> 00:45:50.170 about to be published very
NOTE Confidence: 0.9954529
00:45:50.170 --> 00:45:50.670 soon.
NOTE Confidence: 0.9704177

00:45:51.530 --> 00:45:52.030 And,
NOTE Confidence: 0.9583333

00:45:53.369 --> 00:45:54.750 what we see,
NOTE Confidence: 0.9566628

00:45:55.450 --> 00:45:56.250 and by the way, you
NOTE Confidence: 0.9566628

00:45:56.250 --> 00:45:57.450 can go to this website,
NOTE Confidence: 0.9566628

00:45:57.450 --> 00:45:59.469 try healthy minds dot org,
NOTE Confidence: 0.9566628

00:45:59.625 --> 00:46:00.825 to learn more about it,
NOTE Confidence: 0.9566628

00:46:00.825 --> 00:46:02.025 and you can download it
NOTE Confidence: 0.9566628

00:46:02.025 --> 00:46:02.525 from,
NOTE Confidence: 0.90134776

00:46:03.465 --> 00:46:05.005 the App Store either,
NOTE Confidence: 0.99647236

00:46:05.545 --> 00:46:07.005 iOS or Google.
NOTE Confidence: 0.9600478

00:46:08.825 --> 00:46:10.185 These are just data from
NOTE Confidence: 0.9600478

00:46:10.185 --> 00:46:11.625 two of the randomized controlled
NOTE Confidence: 0.9600478

00:46:11.625 --> 00:46:12.925 trials that have been published,
NOTE Confidence: 0.9600478

00:46:13.065 --> 00:46:14.585 one with a sample size
NOTE Confidence: 0.9600478

00:46:14.585 --> 00:46:14.665 of,
NOTE Confidence: 0.98681414

00:46:15.600 --> 00:46:16.960 three hundred and forty three,

NOTE Confidence: 0.98681414

00:46:16.960 --> 00:46:18.239 another with a sample size

NOTE Confidence: 0.98681414

00:46:18.239 --> 00:46:19.680 of six hundred and sixty

NOTE Confidence: 0.98681414

00:46:19.680 --> 00:46:20.180 two.

NOTE Confidence: 0.99226075

00:46:21.120 --> 00:46:21.620 The

NOTE Confidence: 0.998052

00:46:22.880 --> 00:46:24.340 the figure on the right

NOTE Confidence: 0.9600765

00:46:25.200 --> 00:46:26.400 comes from a study of

NOTE Confidence: 0.9600765

00:46:26.400 --> 00:46:27.700 public school teachers.

NOTE Confidence: 0.81947386

00:46:28.720 --> 00:46:28.880 And,

NOTE Confidence: 0.945716

00:46:30.555 --> 00:46:31.295 it is,

NOTE Confidence: 0.76204115

00:46:32.955 --> 00:46:33.614 showing a,

NOTE Confidence: 0.99962544

00:46:34.315 --> 00:46:35.855 quite a dramatic reduction

NOTE Confidence: 0.9975932

00:46:36.155 --> 00:46:38.494 on standardized measures of distress.

NOTE Confidence: 0.99940836

00:46:38.954 --> 00:46:40.895 This is a composite measure

NOTE Confidence: 0.99940836

00:46:41.114 --> 00:46:43.214 that includes measures of depression,

NOTE Confidence: 0.99940836

00:46:43.355 --> 00:46:43.855 anxiety,

NOTE Confidence: 0.8166516

00:46:44.234 --> 00:46:44.474 and,
NOTE Confidence: 0.98423004

00:46:45.620 --> 00:46:46.680 perceived stress.
NOTE Confidence: 0.998163

00:46:47.540 --> 00:46:48.900 And what you can see
NOTE Confidence: 0.998163

00:46:48.900 --> 00:46:50.980 is that these changes begin
NOTE Confidence: 0.998163

00:46:50.980 --> 00:46:51.800 to rapidly
NOTE Confidence: 0.9458209

00:46:52.100 --> 00:46:52.600 occur,
NOTE Confidence: 0.998156

00:46:53.460 --> 00:46:54.660 over the course of four
NOTE Confidence: 0.998156

00:46:54.660 --> 00:46:55.640 weeks of training.
NOTE Confidence: 0.9928803

00:46:56.580 --> 00:46:57.940 So this is a twenty
NOTE Confidence: 0.9928803

00:46:57.940 --> 00:46:58.920 eight day program,
NOTE Confidence: 0.99977

00:46:59.715 --> 00:47:01.715 where people are doing each
NOTE Confidence: 0.99977

00:47:01.715 --> 00:47:02.215 pillar
NOTE Confidence: 0.97059524

00:47:02.515 --> 00:47:04.755 for one week. That is
NOTE Confidence: 0.97059524

00:47:04.755 --> 00:47:07.175 awareness, connection, insight, and purpose.
NOTE Confidence: 0.99968636

00:47:07.555 --> 00:47:08.855 And in this app,
NOTE Confidence: 0.96949327

00:47:09.315 --> 00:47:11.415 they are presented with didactic

NOTE Confidence: 0.96949327
00:47:11.635 --> 00:47:13.315 information about the science of
NOTE Confidence: 0.96949327
00:47:13.315 --> 00:47:14.835 each of these pillars in
NOTE Confidence: 0.96949327
00:47:14.835 --> 00:47:15.930 what you can think of
NOTE Confidence: 0.96949327
00:47:15.930 --> 00:47:17.150 as many podcasts.
NOTE Confidence: 0.94978005
00:47:17.770 --> 00:47:19.770 And they're given really simple
NOTE Confidence: 0.94978005
00:47:19.770 --> 00:47:20.510 short practices
NOTE Confidence: 0.9907054
00:47:21.369 --> 00:47:22.430 to cultivate,
NOTE Confidence: 0.9819529
00:47:23.369 --> 00:47:24.270 these qualities,
NOTE Confidence: 0.9890043
00:47:25.210 --> 00:47:26.489 using a kind of what
NOTE Confidence: 0.9890043
00:47:26.489 --> 00:47:27.869 we think of as procedural
NOTE Confidence: 0.9890043
00:47:28.010 --> 00:47:28.510 learning,
NOTE Confidence: 0.9202843
00:47:28.835 --> 00:47:31.075 skill based and acquired through
NOTE Confidence: 0.9202843
00:47:31.075 --> 00:47:31.575 practice.
NOTE Confidence: 0.9933003
00:47:32.434 --> 00:47:33.875 And these data are showing
NOTE Confidence: 0.9933003
00:47:33.875 --> 00:47:35.094 that these gains
NOTE Confidence: 0.9949356

00:47:35.474 --> 00:47:37.894 in reductions in psychological distress

NOTE Confidence: 0.9949356

00:47:38.114 --> 00:47:38.855 are preserved

NOTE Confidence: 0.99113846

00:47:39.315 --> 00:47:40.835 at three months follow-up. Now

NOTE Confidence: 0.99113846

00:47:40.835 --> 00:47:42.055 here's the real kicker.

NOTE Confidence: 0.96150994

00:47:42.840 --> 00:47:44.280 We get from the app

NOTE Confidence: 0.96150994

00:47:44.280 --> 00:47:45.480 the amount of time people

NOTE Confidence: 0.96150994

00:47:45.480 --> 00:47:46.220 are spending,

NOTE Confidence: 0.99791527

00:47:47.080 --> 00:47:48.680 engaging with the app, and

NOTE Confidence: 0.99791527

00:47:48.680 --> 00:47:51.020 the average use is approximately

NOTE Confidence: 0.9997524

00:47:51.320 --> 00:47:52.700 five minutes per day.

NOTE Confidence: 0.99968463

00:47:53.400 --> 00:47:54.760 Five minutes per day for

NOTE Confidence: 0.99968463

00:47:54.760 --> 00:47:55.820 twenty eight days

NOTE Confidence: 0.99967504

00:47:56.120 --> 00:47:56.780 is sufficient

NOTE Confidence: 0.9975572

00:47:57.225 --> 00:47:59.625 to produce robust reductions on

NOTE Confidence: 0.9975572

00:47:59.625 --> 00:48:01.085 these measures of distress.

NOTE Confidence: 0.9440273

00:48:03.385 --> 00:48:04.285 So we've

NOTE Confidence: 0.82985634

00:48:05.065 --> 00:48:06.285 just replicated

NOTE Confidence: 0.99869615

00:48:06.585 --> 00:48:08.525 this in yet another study

NOTE Confidence: 0.97592384

00:48:08.985 --> 00:48:09.805 on the right.

NOTE Confidence: 0.9988469

00:48:10.745 --> 00:48:12.605 This is data from

NOTE Confidence: 0.9963078

00:48:13.280 --> 00:48:15.280 another school system. This actually

NOTE Confidence: 0.9963078

00:48:15.280 --> 00:48:16.099 comes from,

NOTE Confidence: 0.97586185

00:48:17.040 --> 00:48:19.359 the Jefferson County Public School

NOTE Confidence: 0.97586185

00:48:19.359 --> 00:48:20.980 District in Louisville, Kentucky,

NOTE Confidence: 0.9455731

00:48:22.000 --> 00:48:23.219 and it's showing,

NOTE Confidence: 0.9997061

00:48:24.480 --> 00:48:27.219 similar data with a longer

NOTE Confidence: 0.99933445

00:48:27.520 --> 00:48:28.500 follow-up period.

NOTE Confidence: 0.87200034

00:48:29.375 --> 00:48:30.175 This is,

NOTE Confidence: 0.8388078

00:48:31.935 --> 00:48:32.435 at,

NOTE Confidence: 0.963868

00:48:34.175 --> 00:48:35.954 twenty eight weeks follow-up,

NOTE Confidence: 0.9788172

00:48:36.895 --> 00:48:38.175 and it's showing that the

NOTE Confidence: 0.9788172

00:48:38.175 --> 00:48:39.315 Healthy Minds program,
NOTE Confidence: 0.9751966

00:48:40.895 --> 00:48:42.734 compared to a more active
NOTE Confidence: 0.9751966

00:48:42.734 --> 00:48:44.275 control in this case,
NOTE Confidence: 0.9348394

00:48:45.080 --> 00:48:46.200 rather than a wait list
NOTE Confidence: 0.9348394

00:48:46.200 --> 00:48:47.420 control is showing,
NOTE Confidence: 0.99624646

00:48:48.360 --> 00:48:49.340 these benefits.
NOTE Confidence: 0.9963891

00:48:49.880 --> 00:48:51.820 We also see benefits extending
NOTE Confidence: 0.9963891

00:48:52.040 --> 00:48:53.660 to the entire school system,
NOTE Confidence: 0.94076073

00:48:54.360 --> 00:48:55.660 in this case where,
NOTE Confidence: 0.99965715

00:48:56.440 --> 00:48:57.660 measures of appreciation
NOTE Confidence: 0.99048346

00:48:57.960 --> 00:48:59.500 and trust in school administrators
NOTE Confidence: 0.99978423

00:49:00.444 --> 00:49:01.184 is enhanced
NOTE Confidence: 0.98770165

00:49:01.885 --> 00:49:03.025 in, participants
NOTE Confidence: 0.9957043

00:49:03.325 --> 00:49:04.864 who are randomly assigned
NOTE Confidence: 0.94903296

00:49:05.325 --> 00:49:06.145 to the,
NOTE Confidence: 0.9967507

00:49:06.765 --> 00:49:08.045 control group. And I don't

NOTE Confidence: 0.9967507
00:49:08.045 --> 00:49:09.244 have a slide of this,
NOTE Confidence: 0.9967507
00:49:09.244 --> 00:49:10.704 but we just finished,
NOTE Confidence: 0.9998313
00:49:11.724 --> 00:49:12.224 analyzing
NOTE Confidence: 0.9425782
00:49:13.310 --> 00:49:14.590 a set of data just,
NOTE Confidence: 0.9240878
00:49:16.430 --> 00:49:17.489 very, very recently
NOTE Confidence: 0.90216136
00:49:17.950 --> 00:49:18.770 where we
NOTE Confidence: 0.998042
00:49:19.070 --> 00:49:21.170 have data on the
NOTE Confidence: 0.94232273
00:49:22.350 --> 00:49:23.650 students' performance
NOTE Confidence: 0.9895107
00:49:24.030 --> 00:49:25.170 who are taught
NOTE Confidence: 0.99967253
00:49:25.469 --> 00:49:26.290 by teachers
NOTE Confidence: 0.98863673
00:49:26.830 --> 00:49:27.969 randomly assigned
NOTE Confidence: 0.99667835
00:49:28.485 --> 00:49:30.245 to our well-being training compared
NOTE Confidence: 0.99667835
00:49:30.245 --> 00:49:31.765 to teachers randomly assigned to
NOTE Confidence: 0.99667835
00:49:31.765 --> 00:49:33.525 the control group. And,
NOTE Confidence: 0.99432147
00:49:34.085 --> 00:49:36.425 for students who start off,
NOTE Confidence: 0.98922265

00:49:37.205 --> 00:49:38.745 at a more disadvantaged
NOTE Confidence: 0.99488103

00:49:39.125 --> 00:49:39.625 level,
NOTE Confidence: 0.9858673

00:49:40.910 --> 00:49:42.510 When they are taught by
NOTE Confidence: 0.9858673

00:49:42.510 --> 00:49:44.770 teachers who are randomly assigned
NOTE Confidence: 0.9943769

00:49:45.150 --> 00:49:46.910 to the well-being training, those
NOTE Confidence: 0.9943769

00:49:46.910 --> 00:49:48.530 students perform significantly
NOTE Confidence: 0.9998965

00:49:48.830 --> 00:49:49.330 better
NOTE Confidence: 0.99962735

00:49:49.710 --> 00:49:51.010 on standardized
NOTE Confidence: 0.9986959

00:49:51.790 --> 00:49:52.610 math tests.
NOTE Confidence: 0.9981516

00:49:53.255 --> 00:49:54.235 These are statewide
NOTE Confidence: 0.98730004

00:49:54.695 --> 00:49:56.955 standardized tests compared to students
NOTE Confidence: 0.98730004

00:49:57.015 --> 00:49:57.995 taught by teachers
NOTE Confidence: 0.9975317

00:49:58.375 --> 00:49:59.895 randomly assigned to the control
NOTE Confidence: 0.9975317

00:49:59.895 --> 00:50:00.395 group.
NOTE Confidence: 0.9968313

00:50:01.015 --> 00:50:02.935 And so this is the
NOTE Confidence: 0.9968313

00:50:02.935 --> 00:50:03.675 first time

NOTE Confidence: 0.99878484

00:50:03.975 --> 00:50:06.075 that we know of that

NOTE Confidence: 0.99878484

00:50:06.339 --> 00:50:08.359 this kind of ripple effect

NOTE Confidence: 0.9998036

00:50:08.739 --> 00:50:09.800 has been demonstrated

NOTE Confidence: 0.85823244

00:50:10.180 --> 00:50:10.680 rigorously,

NOTE Confidence: 0.95097464

00:50:11.059 --> 00:50:11.559 empirically,

NOTE Confidence: 0.9747036

00:50:12.420 --> 00:50:14.819 and, we're super excited about

NOTE Confidence: 0.9747036

00:50:14.819 --> 00:50:15.559 these findings,

NOTE Confidence: 0.94305736

00:50:16.180 --> 00:50:16.579 and,

NOTE Confidence: 0.99966604

00:50:17.780 --> 00:50:19.800 they will be published soon.

NOTE Confidence: 0.9809734

00:50:20.205 --> 00:50:21.725 But in another study, which

NOTE Confidence: 0.9809734

00:50:21.725 --> 00:50:23.325 has just been published, we've

NOTE Confidence: 0.9809734

00:50:23.325 --> 00:50:23.825 shown,

NOTE Confidence: 0.949829

00:50:24.445 --> 00:50:25.485 this is a study that

NOTE Confidence: 0.949829

00:50:25.485 --> 00:50:27.325 we did before COVID where

NOTE Confidence: 0.949829

00:50:27.325 --> 00:50:29.265 we train teachers in this,

NOTE Confidence: 0.9394561

00:50:30.925 --> 00:50:32.445 using this approach. We follow

NOTE Confidence: 0.9394561

00:50:32.445 --> 00:50:34.029 them during COVID, and we

NOTE Confidence: 0.9394561

00:50:34.029 --> 00:50:35.309 ask the simple question, how

NOTE Confidence: 0.9394561

00:50:35.309 --> 00:50:36.190 many of you are still

NOTE Confidence: 0.9394561

00:50:36.190 --> 00:50:37.329 teaching full time

NOTE Confidence: 0.98736936

00:50:37.630 --> 00:50:38.989 three years later? And we

NOTE Confidence: 0.98736936

00:50:38.989 --> 00:50:41.170 find that teachers randomly assigned

NOTE Confidence: 0.98736936

00:50:41.390 --> 00:50:43.230 to our well-being training are

NOTE Confidence: 0.98736936

00:50:43.230 --> 00:50:44.670 six times more likely to

NOTE Confidence: 0.98736936

00:50:44.670 --> 00:50:45.650 still be teaching,

NOTE Confidence: 0.9796665

00:50:46.475 --> 00:50:48.155 three years later compared to

NOTE Confidence: 0.9796665

00:50:48.155 --> 00:50:49.594 those assigned to a control

NOTE Confidence: 0.9796665

00:50:49.594 --> 00:50:50.094 group,

NOTE Confidence: 0.96325386

00:50:50.715 --> 00:50:51.195 and,

NOTE Confidence: 0.97198576

00:50:51.594 --> 00:50:53.375 doing a cost benefit analysis

NOTE Confidence: 0.97198576

00:50:53.594 --> 00:50:56.015 based on retention data alone

NOTE Confidence: 0.97198576
00:50:56.155 --> 00:50:57.755 for each dollar invested in
NOTE Confidence: 0.97198576
00:50:57.755 --> 00:50:58.415 an intervention.
NOTE Confidence: 0.97650826
00:50:58.940 --> 00:51:00.060 Three years later, there's the
NOTE Confidence: 0.97650826
00:51:00.060 --> 00:51:01.580 three dollar and thirty four
NOTE Confidence: 0.97650826
00:51:01.580 --> 00:51:03.600 cent return on that investment
NOTE Confidence: 0.9894343
00:51:04.060 --> 00:51:05.120 three years later.
NOTE Confidence: 0.9898964
00:51:06.380 --> 00:51:08.060 So let me end by
NOTE Confidence: 0.9898964
00:51:08.060 --> 00:51:09.180 saying we view this as
NOTE Confidence: 0.9898964
00:51:09.180 --> 00:51:11.040 an urgent public health need.
NOTE Confidence: 0.9898964
00:51:11.260 --> 00:51:12.540 One of the things that
NOTE Confidence: 0.9898964
00:51:12.540 --> 00:51:13.200 I often,
NOTE Confidence: 0.9997191
00:51:14.275 --> 00:51:14.775 remind
NOTE Confidence: 0.99290264
00:51:15.555 --> 00:51:17.075 us of is that when
NOTE Confidence: 0.99290264
00:51:17.075 --> 00:51:18.835 we all first evolved as
NOTE Confidence: 0.99290264
00:51:18.835 --> 00:51:20.195 humans, none of us were
NOTE Confidence: 0.99290264

00:51:20.195 --> 00:51:21.255 brushing our teeth.
NOTE Confidence: 0.98697543

00:51:21.635 --> 00:51:22.915 And all of us now
NOTE Confidence: 0.98697543

00:51:22.915 --> 00:51:24.275 spend a few minutes every
NOTE Confidence: 0.98697543

00:51:24.275 --> 00:51:25.795 day, virtually every human being
NOTE Confidence: 0.98697543

00:51:25.795 --> 00:51:27.315 on the planet, brushing their
NOTE Confidence: 0.98697543

00:51:27.315 --> 00:51:27.815 teeth.
NOTE Confidence: 0.95615405

00:51:28.760 --> 00:51:29.800 This is not part of
NOTE Confidence: 0.95615405

00:51:29.800 --> 00:51:31.079 our genome. This is something
NOTE Confidence: 0.95615405

00:51:31.079 --> 00:51:32.380 we've learned to do.
NOTE Confidence: 0.9806087

00:51:32.760 --> 00:51:34.200 And the data show that
NOTE Confidence: 0.9806087

00:51:34.200 --> 00:51:35.719 if we spend even as
NOTE Confidence: 0.9806087

00:51:35.719 --> 00:51:36.680 short a time as we
NOTE Confidence: 0.9806087

00:51:36.680 --> 00:51:37.960 spend each day brushing our
NOTE Confidence: 0.9806087

00:51:37.960 --> 00:51:40.119 teeth, nourishing our mind, this
NOTE Confidence: 0.9806087

00:51:40.119 --> 00:51:42.275 world would really be a
NOTE Confidence: 0.9806087

00:51:42.275 --> 00:51:43.094 different place.

NOTE Confidence: 0.99943393

00:51:43.555 --> 00:51:44.995 So please join us on

NOTE Confidence: 0.99943393

00:51:44.995 --> 00:51:45.655 this journey

NOTE Confidence: 0.964772

00:51:45.955 --> 00:51:47.075 where we can change the

NOTE Confidence: 0.964772

00:51:47.075 --> 00:51:48.775 world by nourishing our mind.

NOTE Confidence: 0.964772

00:51:48.995 --> 00:51:50.515 And let me end with

NOTE Confidence: 0.964772

00:51:50.515 --> 00:51:51.635 a quote from the Dalai

NOTE Confidence: 0.964772

00:51:51.635 --> 00:51:52.535 Lama himself,

NOTE Confidence: 0.9374288

00:51:53.395 --> 00:51:54.675 where he said in his

NOTE Confidence: 0.9374288

00:51:54.675 --> 00:51:56.055 book, The Art of Happiness,

NOTE Confidence: 0.9936954

00:51:56.500 --> 00:51:58.100 the systematic training of the

NOTE Confidence: 0.9936954

00:51:58.100 --> 00:52:00.360 mind, the cultivation of happiness,

NOTE Confidence: 0.9975649

00:52:00.900 --> 00:52:02.600 the genuine inner transformation

NOTE Confidence: 0.9899948

00:52:03.219 --> 00:52:05.400 by deliberately selecting and focusing

NOTE Confidence: 0.9899948

00:52:05.540 --> 00:52:07.700 on positive mental states and

NOTE Confidence: 0.9899948

00:52:07.700 --> 00:52:09.640 challenging negative mental states

NOTE Confidence: 0.9609243

00:52:09.945 --> 00:52:11.545 is possible because the very
NOTE Confidence: 0.9609243

00:52:11.545 --> 00:52:12.665 structure and function of the
NOTE Confidence: 0.9609243

00:52:12.665 --> 00:52:13.165 brain.
NOTE Confidence: 0.99928707

00:52:13.545 --> 00:52:14.665 But the wiring in our
NOTE Confidence: 0.99928707

00:52:14.665 --> 00:52:16.125 brains is not static,
NOTE Confidence: 0.99962604

00:52:16.585 --> 00:52:17.485 not irrevocably
NOTE Confidence: 0.9887578

00:52:17.864 --> 00:52:18.364 fixed.
NOTE Confidence: 0.9996772

00:52:18.825 --> 00:52:19.725 Our brains
NOTE Confidence: 0.99973977

00:52:20.025 --> 00:52:20.765 are also
NOTE Confidence: 0.9997256

00:52:21.225 --> 00:52:21.725 adaptable.
NOTE Confidence: 0.9996365

00:52:22.265 --> 00:52:23.885 Thank you very much.