WEBVTT

NOTE duration:"01:30:53.0560000" NOTE language:en-us NOTE Confidence: 0.8680402 00:00:00.000 --> 00:00:01.296 Good morning everyone. NOTE Confidence: 0.8680402 00:00:01.296 --> 00:00:04.728 It's great to see so many friendly faces NOTE Confidence: 0.8680402 $00:00:04.728 \longrightarrow 00:00:07.725$ in that bar on the right of my screen. NOTE Confidence: 0.8680402 $00{:}00{:}07{.}730 \dashrightarrow 00{:}00{:}10{.}593$ I have the pleasure and honor of NOTE Confidence: 0.8680402 00:00:10.593 --> 00:00:12.849 introducing Craig Brian this morning. NOTE Confidence: 0.8680402 00:00:12.850 --> 00:00:15.090 I first actually got to know Craig NOTE Confidence: 0.8680402 $00{:}00{:}15{.}090 \dashrightarrow 00{:}00{:}17{.}723$ in 2015 after reading a paper in NOTE Confidence: 0.8680402 00:00:17.723 --> 00:00:19.723 the American Journal of Psychiatry, NOTE Confidence: 0.8680402 $00{:}00{:}19.730 \dashrightarrow 00{:}00{:}21.678$ randomized controlled trial that NOTE Confidence: 0.8680402 $00:00:21.678 \rightarrow 00:00:24.600$ he had done with David Rudd. NOTE Confidence: 0.8680402 $00:00:24.600 \rightarrow 00:00:26.530$ That actually showed a 60%NOTE Confidence: 0.8680402 $00{:}00{:}26.530 \dashrightarrow 00{:}00{:}28.455$ reduction in suicide attempts among NOTE Confidence: 0.8680402 00:00:28.455 --> 00:00:29.995 active duty military personnel, NOTE Confidence: 0.8680402 $00:00:30.000 \rightarrow 00:00:31.930$ which really caught my interest.

- NOTE Confidence: 0.8680402
- 00:00:31.930 --> 00:00:34.786 So I reached out to Craig and David

 $00{:}00{:}34.786 \dashrightarrow 00{:}00{:}36.949$ and started talking with them,

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 $00:00:36.950 \longrightarrow 00:00:39.250$ learning more about their work

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 $00:00:39.250 \longrightarrow 00:00:41.550$ and ultimately became a friend

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 $00:00:41.629 \longrightarrow 00:00:43.439$ and admirer of his work.

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 $00{:}00{:}43.440 \dashrightarrow 00{:}00{:}45.270$ I looking very much looking forward

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 $00{:}00{:}45{.}270 \dashrightarrow 00{:}00{:}47{.}376$ to his talk today because I think

NOTE Confidence: 0.8680402

 $00:00:47.376 \rightarrow 00:00:49.540$ there's data in it I'm not aware of.

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 $00{:}00{:}49.540 \dashrightarrow 00{:}00{:}51.660$ Craig is a clinical psychologist.

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 $00{:}00{:}51.660 \dashrightarrow 00{:}00{:}54.270$ He's the star professor of Psychiatry

NOTE Confidence: 0.8680402

 $00{:}00{:}54.270 \dashrightarrow 00{:}00{:}57.049$ and Behavioral Health at the Ohio

NOTE Confidence: 0.8680402

00:00:57.049 --> 00:00:59.454 State University Wexner Medical Center.

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 $00{:}00{:}59{.}460 \dashrightarrow 00{:}01{:}01{.}782$ And is the division director for

NOTE Confidence: 0.8680402

 $00{:}01{:}01{.}782 \dashrightarrow 00{:}01{:}03{.}330$ Recovery and resilience there.

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 $00{:}01{:}03{.}330 \dashrightarrow 00{:}01{:}05{.}388$ He did his doctorate in Clinical

00:01:05.388 --> 00:01:06.760 Psychiatry at Baylor University,

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 $00:01:06.760 \dashrightarrow 00:01:08.132$ completed clinical residency at

NOTE Confidence: 0.8680402

00:01:08.132 --> 00:01:09.847 the Wilford Hall Medical Center,

NOTE Confidence: 0.8680402

00:01:09.850 --> 00:01:11.262 Lackland Air Force Base,

NOTE Confidence: 0.8680402

 $00:01:11.262 \longrightarrow 00:01:14.227$ and was deployed in Iraq in 2009 and

NOTE Confidence: 0.8680402

 $00{:}01{:}14.227 \dashrightarrow 00{:}01{:}16.549$ was the director of the traumatic

NOTE Confidence: 0.8680402

 $00{:}01{:}16.549 \dashrightarrow 00{:}01{:}18.991$ Brain Injuries Clinic at the Air

NOTE Confidence: 0.8680402

 $00:01:18.991 \rightarrow 00:01:20.587$ Force Theater Hospital there.

NOTE Confidence: 0.8680402

00:01:20.590 --> 00:01:23.005 He left active duty service and started

NOTE Confidence: 0.8680402

 $00{:}01{:}23.005 \dashrightarrow 00{:}01{:}24.929$ researching post traumatic stress disorder,

NOTE Confidence: 0.8680402

00:01:24.930 --> 00:01:26.019 suicidal behaviors and

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00:01:26.019 --> 00:01:27.108 suicide prevention strategies,

NOTE Confidence: 0.8680402

 $00{:}01{:}27.110 \dashrightarrow 00{:}01{:}28.915$ as well as psychological health

NOTE Confidence: 0.8680402

 $00:01:28.915 \longrightarrow 00:01:29.637$ and resiliency.

NOTE Confidence: 0.8680402

 $00{:}01{:}29.640 \dashrightarrow 00{:}01{:}31.450$ He's had faculty appointments at

NOTE Confidence: 0.8680402

00:01:31.450 --> 00:01:33.260 the University of Texas Health,

- NOTE Confidence: 0.8680402
- 00:01:33.260 --> 00:01:35.426 same health system in San Antonio,

 $00:01:35.430 \longrightarrow 00:01:36.706$ the University of Utah,

NOTE Confidence: 0.8680402

00:01:36.706 --> 00:01:39.410 and now at the Ohio State University.

NOTE Confidence: 0.8680402

 $00{:}01{:}39{.}410 \dashrightarrow 00{:}01{:}41{.}902$ He's had 10s of millions of dollars

NOTE Confidence: 0.8680402

 $00{:}01{:}41{.}902 \dashrightarrow 00{:}01{:}44{.}120$ in grants focused on these topics.

NOTE Confidence: 0.8680402

00:01:44.120 --> 00:01:44.842 Suicide prevention,

NOTE Confidence: 0.8680402

 $00{:}01{:}44.842 \dashrightarrow 00{:}01{:}46.647$ PTS di trauma and resilience.

NOTE Confidence: 0.8680402

 $00:01:46.650 \longrightarrow 00:01:48.460$ One has won many awards.

NOTE Confidence: 0.8680402

 $00{:}01{:}48.460 \dashrightarrow 00{:}01{:}51.246$ I won't go into all of them.

NOTE Confidence: 0.8680402

 $00:01:51.250 \longrightarrow 00:01:53.706$ And I'll just let him dive in and

NOTE Confidence: 0.8680402

 $00:01:53.706 \longrightarrow 00:01:54.830$ get right to it.

NOTE Confidence: 0.8680402

 $00{:}01{:}54.830 \dashrightarrow 00{:}01{:}56.909$ So Craig, thanks so much for coming.

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 $00:01:56.910 \dashrightarrow 00:01:58.400$ Thanks for everyone for attending.

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 $00{:}01{:}58{.}400 \dashrightarrow 00{:}01{:}59{.}756$ If you have questions,

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 $00{:}01{:}59{.}756 \dashrightarrow 00{:}02{:}02{.}142$ please enter them into the chat and

 $00:02:02.142 \longrightarrow 00:02:04.406$ when Craig is done we can go through

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 $00:02:04.406 \longrightarrow 00:02:06.446$ them and try to get to them all.

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 $00{:}02{:}06{.}450 \dashrightarrow 00{:}02{:}07{.}040$ So thanks.

NOTE Confidence: 0.888687

 $00:02:09.200 \dashrightarrow 00:02:11.078$ Alright well thanks for the introduction.

NOTE Confidence: 0.888687

 $00:02:11.080 \longrightarrow 00:02:13.663$ It's really great to be able to join all

NOTE Confidence: 0.888687

 $00{:}02{:}13.663 \dashrightarrow 00{:}02{:}16.401$ of you this morning and seeing a little

NOTE Confidence: 0.888687

 $00{:}02{:}16{.}401 \dashrightarrow 00{:}02{:}18{.}896$ bit of windows and in my boxes here,

NOTE Confidence: 0.888687

 $00{:}02{:}18{.}900 \dashrightarrow 00{:}02{:}23{.}170$ it looks like you guys are having a nice day.

NOTE Confidence: 0.888687

00:02:23.170 --> 00:02:25.642 Up there in the Connecticut area and a

NOTE Confidence: 0.888687

 $00:02:25.642 \dashrightarrow 00:02:28.046$ beautiful day here in central Ohio as well.

NOTE Confidence: 0.888687

00:02:28.050 --> 00:02:29.980 So today what I thought

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 $00{:}02{:}29{.}980 \dashrightarrow 00{:}02{:}31{.}910$ I would talk about is.

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 $00{:}02{:}31{.}910$ --> $00{:}02{:}34{.}580$ More of some conceptual work around

NOTE Confidence: 0.888687

 $00:02:34.580 \rightarrow 00:02:37.234$ suicide that we've really been focusing

NOTE Confidence: 0.888687

 $00:02:37.234 \rightarrow 00:02:40.013$ on over the past several years now.

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 $00:02:40.020 \longrightarrow 00:02:42.195$ Certainly present some of the

- NOTE Confidence: 0.888687
- 00:02:42.195 --> 00:02:44.870 empirical findings at our lab and

 $00:02:44.870 \rightarrow 00:02:47.390$ other labs have published in recent

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 $00:02:47.390 \rightarrow 00:02:49.839$ years that really kind of backup.

NOTE Confidence: 0.888687

 $00:02:49.840 \rightarrow 00:02:52.402$ This sort of approach to understanding

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 $00{:}02{:}52{.}402 \dashrightarrow 00{:}02{:}54{.}110$ suicide and suicidal behavior.

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 $00{:}02{:}54{.}110 \dashrightarrow 00{:}02{:}57{.}398$ And then, after we kind of start with

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 $00{:}02{:}57{.}398 \dashrightarrow 00{:}03{:}00{.}340$ more kind of conceptual ideas about

NOTE Confidence: 0.888687

 $00:03:00.340 \longrightarrow 00:03:03.382$ thinking of suicide in new ways.

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00:03:03.390 --> 00:03:03.970 You know,

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 $00{:}03{:}03{.}970 \dashrightarrow 00{:}03{:}06{.}000$ I'll conclude with some of the work

NOTE Confidence: 0.888687

 $00:03:06.000 \longrightarrow 00:03:08.461$ that we've done from an intervention

NOTE Confidence: 0.888687

 $00{:}03{:}08{.}461 \dashrightarrow 00{:}03{:}09{.}724$ and prevention standpoint,

NOTE Confidence: 0.888687

 $00{:}03{:}09{.}730 \dashrightarrow 00{:}03{:}12{.}334$ and how I think this alternative approach

NOTE Confidence: 0.888687

 $00{:}03{:}12.334 \dashrightarrow 00{:}03{:}14.194$ to understanding the emergence of

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 $00{:}03{:}14.194 \dashrightarrow 00{:}03{:}16.588$ suicidal behavior and might lead us to

 $00:03:16.588 \rightarrow 00:03:18.640$ think about a range of interventions

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 $00{:}03{:}18.640 \dashrightarrow 00{:}03{:}22.070$ in a number of strategic ways.

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 $00{:}03{:}22{.}070 \dashrightarrow 00{:}03{:}24{.}233$ So the you know the basis for

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 $00:03:24.233 \rightarrow 00:03:26.710$ this line of research really was,

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 $00{:}03{:}26.710 \dashrightarrow 00{:}03{:}27.986$ you know, founded in.

NOTE Confidence: 0.888687

 $00{:}03{:}27.986 \dashrightarrow 00{:}03{:}29.581$ I think some traditional ideas

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00:03:29.581 --> 00:03:30.999 about suicide prevention.

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 $00{:}03{:}31{.}000 \dashrightarrow 00{:}03{:}32{.}794$ I think some of the traditional

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 $00{:}03{:}32{.}794 \dashrightarrow 00{:}03{:}34{.}531$ ways that we have approached

NOTE Confidence: 0.888687

00:03:34.531 --> 00:03:36.886 our understanding of suicide and

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 $00:03:36.886 \rightarrow 00:03:38.770$ approached prevention efforts are

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 $00:03:38.834 \rightarrow 00:03:40.843$ encapsulated in many ways by a lot

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 $00:03:40.843 \dashrightarrow 00:03:42.781$ of the catch phrases and sayings

NOTE Confidence: 0.888687

 $00:03:42.781 \dashrightarrow 00:03:45.630$ that I have on the screen right now,

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 $00:03:45.630 \rightarrow 00:03:48.843$ that I'm sure many of you are familiar with.

NOTE Confidence: 0.888687

 $00:03:48.850 \rightarrow 00:03:51.616$ You probably heard this plenty often.

00:03:51.620 --> 00:03:54.100 I'm going to maybe you as well as

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 $00{:}03{:}54{.}100 \dashrightarrow 00{:}03{:}55{.}585$ mental health professionals and

NOTE Confidence: 0.888687

00:03:55.585 --> 00:03:58.357 researchers have said one or more of

NOTE Confidence: 0.888687

 $00:03:58.357 \rightarrow 00:04:00.576$ these things as well when talking

NOTE Confidence: 0.888687

00:04:00.576 --> 00:04:03.062 about suicide and I start here because

NOTE Confidence: 0.888687

 $00{:}04{:}03.062 \dashrightarrow 00{:}04{:}05.624$ I kind of think that where we're

NOTE Confidence: 0.888687

 $00:04:05.624 \rightarrow 00:04:08.299$ heading now in in our research on

NOTE Confidence: 0.888687

 $00{:}04{:}08{.}299 \dashrightarrow 00{:}04{:}10{.}496$ suicide prevention is really a mini

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 $00:04:10.496 \dashrightarrow 00:04:13.032$ wasted on the cusp of a paradigm shift.

NOTE Confidence: 0.888687

 $00:04:13.040 \longrightarrow 00:04:15.854$ And I think it's critical for us

NOTE Confidence: 0.888687

 $00{:}04{:}15.854 \dashrightarrow 00{:}04{:}18.190$ to understand where we come from

NOTE Confidence: 0.888687

00:04:18.190 --> 00:04:20.626 as we talk about and think about

NOTE Confidence: 0.888687

 $00:04:20.710 \longrightarrow 00:04:22.258$ where we're heading.

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 $00:04:22.260 \longrightarrow 00:04:25.018$ So one of the challenges, of course,

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 $00:04:25.018 \rightarrow 00:04:26.988$ when it comes to suicide,

 $00:04:26.990 \rightarrow 00:04:29.748$ is that despite decades of fairly consistent,

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00:04:29.750 --> 00:04:32.240 I would argue fairly uniform thinking

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 $00{:}04{:}32{.}240 \dashrightarrow 00{:}04{:}34{.}697$ about suicide over the past two

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 $00{:}04{:}34{.}697 \dashrightarrow 00{:}04{:}37{.}224$ decades since the turn of the century,

NOTE Confidence: 0.888687

 $00{:}04{:}37{.}230 \dashrightarrow 00{:}04{:}39{.}594$ we've seen a steady rise in

NOTE Confidence: 0.888687

 $00:04:39.594 \longrightarrow 00:04:41.170$ suicides in the US,

NOTE Confidence: 0.888687

 $00:04:41.170 \rightarrow 00:04:43.468$ and which is not really mirrored

NOTE Confidence: 0.888687

 $00:04:43.468 \longrightarrow 00:04:45.510$ anywhere else in the world.

NOTE Confidence: 0.888687

00:04:45.510 --> 00:04:47.814 About 3/4 of nations around the

NOTE Confidence: 0.888687

 $00:04:47.814 \rightarrow 00:04:50.229$ world during the same time frame.

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 $00:04:50.230 \rightarrow 00:04:53.198$ If you look at statistics reported too.

NOTE Confidence: 0.888687

 $00:04:53.200 \longrightarrow 00:04:54.670$ Mental Health Organization.

NOTE Confidence: 0.888687

 $00{:}04{:}54.670 \dashrightarrow 00{:}04{:}57.610$ See that most nations are actually

NOTE Confidence: 0.888687

 $00{:}04{:}57.610 \dashrightarrow 00{:}04{:}59.481$ experiencing a decline in suicide

NOTE Confidence: 0.888687

00:04:59.481 --> 00:05:02.229 rates in the United States is one of

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 $00:05:02.229 \rightarrow 00:05:04.383$ the minority that is actually seeing

- NOTE Confidence: 0.888687
- $00:05:04.383 \dashrightarrow 00:05:06.698$ the reverse pattern occur ING in.

 $00{:}05{:}06.698 \dashrightarrow 00{:}05{:}11.368$ On top of that, if we were to rank order.

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 $00{:}05{:}11{.}370 \dashrightarrow 00{:}05{:}13{.}750$ You know all the world's nations in

NOTE Confidence: 0.888687

 $00:05:13.750 \rightarrow 00:05:16.706$ terms of change in suicide rates since 2000,

NOTE Confidence: 0.888687

 $00{:}05{:}16.710 \dashrightarrow 00{:}05{:}18.915$ we see that the United States is

NOTE Confidence: 0.888687

00:05:18.915 --> 00:05:21.490 actually #3 in terms of the fastest

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 $00:05:21.490 \rightarrow 00:05:23.824$ and the largest increase in suicides.

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 $00:05:23.830 \rightarrow 00:05:26.374$ And so there's something very unique I think

NOTE Confidence: 0.8680026

 $00{:}05{:}26{.}374 \dashrightarrow 00{:}05{:}28{.}553$ about the United States that's different

NOTE Confidence: 0.8680026

00:05:28.553 --> 00:05:31.310 that Bing's very clearly are not working,

NOTE Confidence: 0.8680026

 $00:05:31.310 \rightarrow 00:05:34.870$ at least not in the way that we would like,

NOTE Confidence: 0.8680026

 $00{:}05{:}34{.}870 \dashrightarrow 00{:}05{:}36{.}294$ which has really stimulated

NOTE Confidence: 0.8680026

 $00:05:36.294 \dashrightarrow 00:05:38.430$ me and others to second guess.

NOTE Confidence: 0.8680026

 $00{:}05{:}38{.}430 \dashrightarrow 00{:}05{:}40{.}572$ A lot of those initial assumptions

NOTE Confidence: 0.8680026

 $00:05:40.572 \longrightarrow 00:05:42.340$ that I shared with you.

 $00:05:42.340 \rightarrow 00:05:44.590$ Maybe there's something about the way

NOTE Confidence: 0.8680026

 $00{:}05{:}44.590 \dashrightarrow 00{:}05{:}46.370$ that we've approached suicide and.

NOTE Confidence: 0.8680026

 $00:05:46.370 \longrightarrow 00:05:47.513$ Thought about it.

NOTE Confidence: 0.8680026

 $00:05:47.513 \longrightarrow 00:05:49.037$ That isn't really accurate.

NOTE Confidence: 0.8680026

 $00:05:49.040 \dashrightarrow 00:05:52.469$ Or maybe we're missing the mark in some way.

NOTE Confidence: 0.8680026

 $00{:}05{:}52{.}470 \dashrightarrow 00{:}05{:}55{.}062$ 'cause if we were if we were correct

NOTE Confidence: 0.8680026

 $00{:}05{:}55{.}062 \dashrightarrow 00{:}05{:}57{.}560$ about how we understand suicide in

NOTE Confidence: 0.8680026

 $00{:}05{:}57{.}560 \dashrightarrow 00{:}05{:}59{.}780$ our interventions were as effective

NOTE Confidence: 0.8680026

 $00{:}05{:}59{.}780 \dashrightarrow 00{:}06{:}01{.}988$ as we think they should be,

NOTE Confidence: 0.8680026

 $00:06:01.990 \rightarrow 00:06:04.636$ then probably we would not be seeing

NOTE Confidence: 0.8680026

 $00{:}06{:}04.636 \dashrightarrow 00{:}06{:}06{.}938$ this upward steady rise in suicide.

NOTE Confidence: 0.8680026

 $00{:}06{:}06{.}940 \dashrightarrow 00{:}06{:}09{.}952$ We should be seeing either things

NOTE Confidence: 0.8680026

 $00:06:09.952 \rightarrow 00:06:13.039$ holding steady or even a decrease.

NOTE Confidence: 0.8680026

00:06:13.040 --> 00:06:15.800 So as I think about what are some of those

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 $00:06:15.870 \rightarrow 00:06:18.696$ classic ways that we conceptualize suicide,

NOTE Confidence: 0.8680026

 $00:06:18.700 \longrightarrow 00:06:21.492$ I really think that many of the theories

- NOTE Confidence: 0.8680026
- $00{:}06{:}21.492 \dashrightarrow 00{:}06{:}24.256$ that have been proposed and there are
- NOTE Confidence: 0.8680026
- $00:06:24.256 \dashrightarrow 00:06:26.880$ a multitude of theories about suicide.
- NOTE Confidence: 0.8680026
- $00:06:26.880 \longrightarrow 00:06:28.176$ In many ways,
- NOTE Confidence: 0.8680026
- $00:06:28.176 \rightarrow 00:06:30.336$ conform to this general framework.
- NOTE Confidence: 0.8680026
- $00:06:30.340 \longrightarrow 00:06:32.350$ We could certainly probably quibble
- NOTE Confidence: 0.8680026
- $00{:}06{:}32{.}350 \dashrightarrow 00{:}06{:}34{.}360$ and argue about differences and
- NOTE Confidence: 0.8680026
- $00:06:34.427 \rightarrow 00:06:36.407$ the different theoretical models,
- NOTE Confidence: 0.8680026
- $00{:}06{:}36{.}410 \dashrightarrow 00{:}06{:}39{.}650$ but I think that this this sort of
- NOTE Confidence: 0.8680026
- $00:06:39.650 \longrightarrow 00:06:42.187$ sequence of events, so to speak,
- NOTE Confidence: 0.8680026
- $00:06:42.187 \longrightarrow 00:06:45.137$ kind of serves as a sort of a
- NOTE Confidence: 0.8680026
- $00:06:45.137 \dashrightarrow 00:06:47.557$ foundational way of capturing how
- NOTE Confidence: 0.8680026
- $00{:}06{:}47.557 \dashrightarrow 00{:}06{:}50.260$ we have thought about suicide.
- NOTE Confidence: 0.8680026
- $00:06:50.260 \rightarrow 00:06:52.430$ Where you know someone experiences
- NOTE Confidence: 0.8680026
- $00{:}06{:}52{.}430 \dashrightarrow 00{:}06{:}54{.}600$ an intensification or elevation of
- NOTE Confidence: 0.8680026
- $00{:}06{:}54{.}663 \dashrightarrow 00{:}06{:}57{.}195$ emotional distress and then some things
- NOTE Confidence: 0.8680026

- $00:06:57.195 \rightarrow 00:06:59.069$ happen, certain mechanisms occur.
- NOTE Confidence: 0.8680026
- $00{:}06{:}59{.}069 \dashrightarrow 00{:}07{:}01{.}001$ Different theories would posit
- NOTE Confidence: 0.8680026
- 00:07:01.001 --> 00:07:01.967 different mechanisms,
- NOTE Confidence: 0.8680026
- $00:07:01.970 \longrightarrow 00:07:04.480$ but something is happening whereby
- NOTE Confidence: 0.8680026
- $00{:}07{:}04.480 \dashrightarrow 00{:}07{:}06.488$ emotional distress evolves into
- NOTE Confidence: 0.8680026
- $00{:}07{:}06.488 \dashrightarrow 00{:}07{:}09.209$ suicidal ideations and then at that
- NOTE Confidence: 0.8680026
- $00:07:09.209 \longrightarrow 00:07:10.925$ point individuals were thinking
- NOTE Confidence: 0.8680026
- $00:07:10.925 \longrightarrow 00:07:12.360$ about suicide again.
- NOTE Confidence: 0.8680026
- 00:07:12.360 --> 00:07:15.657 Some kind of mechanisms or processes occur.
- NOTE Confidence: 0.8680026
- 00:07:15.660 -> 00:07:17.073 Different theories, again,
- NOTE Confidence: 0.8680026
- $00:07:17.073 \rightarrow 00:07:18.957$ are proposing different mechanisms,
- NOTE Confidence: 0.8680026
- $00{:}07{:}18.960 \dashrightarrow 00{:}07{:}20.848$ and then individuals transition
- NOTE Confidence: 0.8680026
- $00:07:20.848 \longrightarrow 00:07:22.264$ to suicidal behaviors.
- NOTE Confidence: 0.8680026
- $00:07:22.270 \longrightarrow 00:07:23.662$ So in essence,
- NOTE Confidence: 0.8680026
- $00{:}07{:}23.662 \dashrightarrow 00{:}07{:}26.446$ they act upon the suicidal thoughts
- NOTE Confidence: 0.8680026
- $00:07:26.446 \longrightarrow 00:07:29.827$ and then another sort of typical

- NOTE Confidence: 0.8680026
- $00:07:29.827 \longrightarrow 00:07:30.957$ assumption about.

 $00{:}07{:}30{.}960 \dashrightarrow 00{:}07{:}33{.}648$ The sort of progression from ideations

NOTE Confidence: 0.8680026

 $00:07:33.648 \rightarrow 00:07:36.616$ to action is that relatively soon

NOTE Confidence: 0.8680026

 $00:07:36.616 \rightarrow 00:07:39.356$ before a suicide attempt occurs,

NOTE Confidence: 0.8680026

 $00:07:39.360 \longrightarrow 00:07:42.235$ there are theoretically some observable

NOTE Confidence: 0.8680026

 $00:07:42.235 \longrightarrow 00:07:45.110$ changes are observable variables that

NOTE Confidence: 0.8680026

 $00:07:45.187 \rightarrow 00:07:48.243$ we refer to as warning signs that should,

NOTE Confidence: 0.8680026

 $00:07:48.250 \longrightarrow 00:07:51.112$ in theory signal that a suicide

NOTE Confidence: 0.8680026

 $00:07:51.112 \longrightarrow 00:07:53.680$ attempt is about to occur.

NOTE Confidence: 0.8680026

 $00{:}07{:}53.680 \dashrightarrow 00{:}07{:}57.864$ So I would say despite in many ways

NOTE Confidence: 0.8680026

 $00{:}07{:}57.864 \dashrightarrow 00{:}08{:}01.859$ this serving is kind of a foundational.

NOTE Confidence: 0.8680026

 $00{:}08{:}01{.}860 \dashrightarrow 00{:}08{:}04{.}709$ Assumption about how we think about suicide.

NOTE Confidence: 0.8680026

 $00{:}08{:}04.710 \dashrightarrow 00{:}08{:}07.559$ As I noted on the previous slide,

NOTE Confidence: 0.8680026

 $00:08:07.560 \longrightarrow 00:08:10.409$ we're not really good at preventing suicide,

NOTE Confidence: 0.8680026

 $00:08:10.410 \longrightarrow 00:08:13.259$ at least not in the United States,

 $00{:}08{:}13.260 \dashrightarrow 00{:}08{:}15.480$ and so it's really prompted myself

NOTE Confidence: 0.8680026

 $00{:}08{:}15.480 \dashrightarrow 00{:}08{:}17.802$ and a number of other researchers

NOTE Confidence: 0.8680026

 $00{:}08{:}17.802 \dashrightarrow 00{:}08{:}20.874$ to question a lot of our long held

NOTE Confidence: 0.8680026

 $00{:}08{:}20{.}956$ --> $00{:}08{:}23{.}662$ assumptions about suicide and to start

NOTE Confidence: 0.8680026

 $00:08:23.662 \dashrightarrow 00:08:26.276$ thinking about this in different ways.

NOTE Confidence: 0.8680026

00:08:26.276 --> 00:08:29.500 And so I just want to kind of

NOTE Confidence: 0.8680026

 $00{:}08{:}29{.}592 \dashrightarrow 00{:}08{:}32{.}455$ talk today about some of my own.

NOTE Confidence: 0.8680026

 $00{:}08{:}32{.}460 \dashrightarrow 00{:}08{:}34{.}752$ Halfway my own thinking over the

NOTE Confidence: 0.8680026

00:08:34.752 --> 00:08:37.756 past several years and kind of talk NOTE Confidence: 0.8680026

00:08:37.756 --> 00:08:39.620 about how different experiences

NOTE Confidence: 0.8680026

 $00{:}08{:}39{.}620 \dashrightarrow 00{:}08{:}42{.}591$ different studies have led us to to NOTE Confidence: 0.8680026

 $00{:}08{:}42.591 \dashrightarrow 00{:}08{:}44.091$ really approach our understanding NOTE Confidence: 0.8680026

 $00:08:44.091 \rightarrow 00:08:46.446$ of this emergent process of moving NOTE Confidence: 0.8680026

 $00{:}08{:}46{.}446 \dashrightarrow 00{:}08{:}48{.}441$ twords suicidal behavior that we

NOTE Confidence: 0.8680026

00:08:48.441 --> 00:08:50.591 think can potentially advance our

NOTE Confidence: 0.8680026

 $00:08:50.591 \longrightarrow 00:08:52.279$ ability to prevent suicide.

- NOTE Confidence: 0.8680026
- $00:08:52.280 \rightarrow 00:08:53.932$ And in many ways,

 $00:08:53.932 \longrightarrow 00:08:54.758$ sort of.

NOTE Confidence: 0.8680026

00:08:54.760 --> 00:08:57.040 I would kind of tie the

NOTE Confidence: 0.8680026

 $00:08:57.040 \longrightarrow 00:08:58.560$ origins of my thinking

NOTE Confidence: 0.8329907

 $00{:}08{:}58{.}650 \dashrightarrow 00{:}09{:}00{.}715$ about this to some conversations

NOTE Confidence: 0.8329907

 $00:09:00.715 \dashrightarrow 00:09:04.358$ that I had with a colleague of mine.

NOTE Confidence: 0.8329907

 $00:09:04.360 \dashrightarrow 00:09:08.294$ In Utah. You know the first arrived.

NOTE Confidence: 0.8329907

 $00:09:08.300 \longrightarrow 00:09:10.040$ There's faculty, especially the

NOTE Confidence: 0.8329907

 $00{:}09{:}10.040 \dashrightarrow 00{:}09{:}12.650$ conversations I had with John Buckner,

NOTE Confidence: 0.8329907

 $00:09:12.650 \dashrightarrow 00:09:14.825$ whose social quantitative psychologist his

NOTE Confidence: 0.8329907

 $00:09:14.825 \dashrightarrow 00:09:17.000$ expertise in complex dynamical systems.

NOTE Confidence: 0.8329907

00:09:17.000 --> 00:09:20.906 And we were having coffee one day on campus,

NOTE Confidence: 0.8329907

00:09:20.910 --> 00:09:23.955 just kind of chatting about our respective

NOTE Confidence: 0.8329907

 $00{:}09{:}23.955 \dashrightarrow 00{:}09{:}26.570$ programs, getting to know each other,

NOTE Confidence: 0.8329907

 $00{:}09{:}26.570 \dashrightarrow 00{:}09{:}30.377$ and it so happened that each of us had

 $00:09:30.377 \rightarrow 00:09:33.957$ been funded by NASA to do some work,

NOTE Confidence: 0.8329907

 $00{:}09{:}33{.}960 \dashrightarrow 00{:}09{:}37{.}117$ and in his project in his NASA.

NOTE Confidence: 0.8329907

 $00:09:37.120 \longrightarrow 00:09:39.780$ On the project is kind of interesting.

NOTE Confidence: 0.8329907

 $00:09:39.780 \dashrightarrow 00:09:42.272$ He was being asked to model budget

NOTE Confidence: 0.8329907

 $00{:}09{:}42.272 \dashrightarrow 00{:}09{:}44.718$ overages and what NASA's concern was,

NOTE Confidence: 0.8329907

 $00:09:44.720 \rightarrow 00:09:47.760$ hey, you know we have all these grants.

NOTE Confidence: 0.8329907

 $00{:}09{:}47.760 \dashrightarrow 00{:}09{:}49.660$ We've all these contracts and

NOTE Confidence: 0.8329907

 $00:09:49.660 \longrightarrow 00:09:51.180$ projects that we're funding.

NOTE Confidence: 0.8329907

 $00{:}09{:}51.180 \dashrightarrow 00{:}09{:}53.840$ You know, the vast majority of them.

NOTE Confidence: 0.8329907

 $00:09:53.840 \longrightarrow 00:09:55.740$ They spend money as expected.

NOTE Confidence: 0.8329907

 $00:09:55.740 \longrightarrow 00:09:57.368$ They perform on track,

NOTE Confidence: 0.8329907

 $00:09:57.368 \dashrightarrow 00:10:00.110$ so they're not really issues for us.

NOTE Confidence: 0.8329907

 $00{:}10{:}00{.}110 \dashrightarrow 00{:}10{:}02{.}370$ We obviously don't worry about

NOTE Confidence: 0.8329907

 $00:10:02.370 \longrightarrow 00:10:04.178$ projects that achieve their

NOTE Confidence: 0.8329907

 $00:10:04.178 \longrightarrow 00:10:06.138$ objectives on time and on budget.

NOTE Confidence: 0.8329907

 $00:10:06.140 \longrightarrow 00:10:08.378$ And then there's another pool of

- NOTE Confidence: 0.8329907
- $00:10:08.378 \rightarrow 00:10:10.379$ projects where the projects are

 $00:10:10.379 \rightarrow 00:10:12.167$ fairly consistently over budget.

NOTE Confidence: 0.8329907

 $00:10:12.170 \rightarrow 00:10:14.180$ They're not dramatically over budget,

NOTE Confidence: 0.8329907

 $00:10:14.180 \rightarrow 00:10:16.400$ but they are always spending more

NOTE Confidence: 0.8329907

 $00{:}10{:}16{.}400 \dashrightarrow 00{:}10{:}18{.}600$ than what was initially projected,

NOTE Confidence: 0.8329907

 $00{:}10{:}18{.}600 \dashrightarrow 00{:}10{:}20{.}645$ but there still achieving their

NOTE Confidence: 0.8329907

 $00{:}10{:}20.645 \dashrightarrow 00{:}10{:}23.020$ milestones and an absolute told him,

NOTE Confidence: 0.8329907

00:10:23.020 --> 00:10:23.824 you know,

NOTE Confidence: 0.8329907

 $00:10:23.824 \longrightarrow 00:10:25.432$ we're not really worried

NOTE Confidence: 0.8329907

00:10:25.432 --> 00:10:27.040 about those projects either,

NOTE Confidence: 0.8329907

 $00:10:27.040 \rightarrow 00:10:29.050$ because they're predictably over budget.

NOTE Confidence: 0.8329907

00:10:29.050 --> 00:10:31.130 We know exactly how much

NOTE Confidence: 0.8329907

 $00{:}10{:}31{.}130 \dashrightarrow 00{:}10{:}32{.}794$ they're going to spend.

NOTE Confidence: 0.8329907

00:10:32.800 --> 00:10:34.816 And probably it's just we we

NOTE Confidence: 0.8329907

 $00:10:34.816 \rightarrow 00:10:36.607$ probably just under estimated the

- $00:10:36.607 \rightarrow 00:10:38.537$ resources needed for those projects,
- NOTE Confidence: 0.8329907
- $00:10:38.540 \longrightarrow 00:10:40.096$ but they're doing OK,
- NOTE Confidence: 0.8329907
- 00:10:40.096 --> 00:10:43.170 But there's this third group of projects.
- NOTE Confidence: 0.8329907
- 00:10:43.170 --> 00:10:46.586 That are really, really problematic for NASA,
- NOTE Confidence: 0.8329907
- $00{:}10{:}46{.}590 \dashrightarrow 00{:}10{:}48{.}105$ and it's because.
- NOTE Confidence: 0.8329907
- $00{:}10{:}48.105 \dashrightarrow 00{:}10{:}51.135$ They initially start on track there,
- NOTE Confidence: 0.8329907
- 00:10:51.140 --> 00:10:53.576 performing well they're spending as expected,
- NOTE Confidence: 0.8329907
- $00{:}10{:}53{.}580 \dashrightarrow 00{:}10{:}56{.}022$ and then all of a sudden
- NOTE Confidence: 0.8329907
- $00{:}10{:}56.022 \dashrightarrow 00{:}10{:}57.650$ they're massively over budget,
- NOTE Confidence: 0.8329907
- $00:10:57.650 \longrightarrow 00:10:59.984$ and then once they seem to
- NOTE Confidence: 0.8329907
- $00:10:59.984 \rightarrow 00:11:02.130$ depart from being on track,
- NOTE Confidence: 0.8329907
- $00:11:02.130 \rightarrow 00:11:05.126$ they have one period where their massively
- NOTE Confidence: 0.8329907
- $00:11:05.126 \rightarrow 00:11:08.239$ over budget things just get worse and worse.
- NOTE Confidence: 0.8329907
- 00:11:08.240 --> 00:11:10.676 They keep coming up over budget,
- NOTE Confidence: 0.8329907
- $00:11:10.680 \rightarrow 00:11:12.710$ over budget over budget dramatically,
- NOTE Confidence: 0.8329907
- $00{:}11{:}12.710 \dashrightarrow 00{:}11{:}15.182$ and so this creates this massive

- NOTE Confidence: 0.8329907
- $00:11:15.182 \longrightarrow 00:11:17.708$ problem for the organization because it
- NOTE Confidence: 0.8329907
- $00:11:17.708 \longrightarrow 00:11:20.138$ shuts down other projects it creates.
- NOTE Confidence: 0.8329907
- 00:11:20.140 --> 00:11:21.910 Budget strain for everybody else.
- NOTE Confidence: 0.8329907
- 00:11:21.910 --> 00:11:23.675 All of the projects depending
- NOTE Confidence: 0.8329907
- $00:11:23.675 \rightarrow 00:11:25.440$ on that one particular project,
- NOTE Confidence: 0.8329907
- $00:11:25.440 \longrightarrow 00:11:27.600$ it slowed down and so NASA
- NOTE Confidence: 0.8329907
- $00:11:27.600 \longrightarrow 00:11:29.670$ had actually a term for it.
- NOTE Confidence: 0.8329907
- $00:11:29.670 \longrightarrow 00:11:30.732$ They called it,
- NOTE Confidence: 0.8329907
- $00:11:30.732 \longrightarrow 00:11:31.440$ performance escapes,
- NOTE Confidence: 0.8329907
- $00:11:31.440 \longrightarrow 00:11:33.806$ and so they wanted John to help
- NOTE Confidence: 0.8329907
- 00:11:33.806 --> 00:11:36.551 figure out how do we know which of
- NOTE Confidence: 0.8329907
- 00:11:36.551 --> 00:11:38.654 our seemingly on track OK projects
- NOTE Confidence: 0.8329907
- $00:11:38.654 \rightarrow 00:11:41.654$ are going to suddenly out of the blue NOTE Confidence: 0.8329907
- $00:11:41.654 \rightarrow 00:11:43.824$ turn into project escapes and and so
- NOTE Confidence: 0.8329907
- $00{:}11{:}43.824$ --> $00{:}11{:}45.910$ John was modeling this mathematically.
- NOTE Confidence: 0.8329907

 $00:11:45.910 \longrightarrow 00:11:48.076$ This is one of the simulations

NOTE Confidence: 0.8329907

 $00{:}11{:}48.076 \dashrightarrow 00{:}11{:}50.657$ that he ran using their data and

NOTE Confidence: 0.8329907

00:11:50.657 --> 00:11:53.128 you see here there's just like 1

NOTE Confidence: 0.8329907

00:11:53.211 --> 00:11:55.617 project that sort of taking off.

NOTE Confidence: 0.8329907

 $00{:}11{:}55{.}620 \dashrightarrow 00{:}11{:}57{.}531$ This is a performance escape as compared

NOTE Confidence: 0.8329907

 $00{:}11{:}57{.}531 \dashrightarrow 00{:}11{:}59{.}985$ to all the other projects that are sort

NOTE Confidence: 0.8329907

 $00:11:59.985 \rightarrow 00:12:01.940$ of clustered on their spending there.

NOTE Confidence: 0.8329907

00:12:01.940 --> 00:12:03.450 They're kind of on track,

NOTE Confidence: 0.8329907

 $00{:}12{:}03{.}450 \dashrightarrow 00{:}12{:}05{.}380$ and as we're talking about

NOTE Confidence: 0.8329907

 $00{:}12{:}05{.}380 \dashrightarrow 00{:}12{:}06{.}538$ these performance escapes.

NOTE Confidence: 0.8329907

00:12:06.540 --> 00:12:07.320 He said,

NOTE Confidence: 0.8329907

00:12:07.320 --> 00:12:08.100 you know,

NOTE Confidence: 0.8329907

 $00{:}12{:}08{.}100 \dashrightarrow 00{:}12{:}10{.}050$ that's interesting that what you're

NOTE Confidence: 0.8329907

 $00{:}12{:}10.050 \dashrightarrow 00{:}12{:}12.647$ doing there because you know I'm a

NOTE Confidence: 0.8329907

 $00{:}12{:}12{.}647 \dashrightarrow 00{:}12{:}14.737$ suicide researcher and one of our

NOTE Confidence: 0.8329907

 $00:12:14.737 \rightarrow 00:12:16.809$ big problems that we run into him.

- NOTE Confidence: 0.8657185
- $00:12:16.810 \rightarrow 00:12:18.928$ Clinicians. We have some family members,
- NOTE Confidence: 0.8657185
- $00:12:18.930 \longrightarrow 00:12:20.695$ lots of people is that
- NOTE Confidence: 0.8657185
- 00:12:20.695 --> 00:12:21.754 suicide seems unpredictable.
- NOTE Confidence: 0.8657185
- 00:12:21.760 --> 00:12:24.296 Patients will seem to be doing OK in
- NOTE Confidence: 0.8657185
- $00:12:24.296 \rightarrow 00:12:26.719$ treatment and then suddenly they're dead.
- NOTE Confidence: 0.8657185
- $00:12:26.720 \rightarrow 00:12:28.132$ Family members say everything
- NOTE Confidence: 0.8657185
- $00:12:28.132 \rightarrow 00:12:29.544$ seemed to be OK.
- NOTE Confidence: 0.8657185
- $00:12:29.550 \longrightarrow 00:12:31.320$ They seem to be fine.
- NOTE Confidence: 0.8657185
- $00{:}12{:}31{.}320 \dashrightarrow 00{:}12{:}33{.}444$ And then all of a sudden
- NOTE Confidence: 0.8657185
- 00:12:33.444 --> 00:12:34.860 they had attempted suicide,
- NOTE Confidence: 0.8657185
- $00{:}12{:}34{.}860 \dashrightarrow 00{:}12{:}37{.}908$ and so there is this sort of subgroup.
- NOTE Confidence: 0.8657185
- $00{:}12{:}37{.}910 \dashrightarrow 00{:}12{:}40{.}934$ Of suicide cases that seem to align with
- NOTE Confidence: 0.8657185
- $00:12:40.934 \rightarrow 00:12:43.509$ this notion of a performance escape,
- NOTE Confidence: 0.8657185
- $00{:}12{:}43{.}510 \dashrightarrow 00{:}12{:}46{.}006$ and we also have known for
- NOTE Confidence: 0.8657185
- $00:12:46.006 \rightarrow 00:12:47.910$ several decades if there's a,
- NOTE Confidence: 0.8657185

 $00:12:47.910 \longrightarrow 00:12:50.226$ there's a significant percentage in some

NOTE Confidence: 0.8657185

 $00{:}12{:}50{.}226 \dashrightarrow 00{:}12{:}53{.}469$ studies up to half of those who attempt

NOTE Confidence: 0.8657185

 $00:12:53.469 \rightarrow 00:12:55.504$ suicide who deny suicidal planning.

NOTE Confidence: 0.8657185

00:12:55.510 --> 00:12:56.704 Severe suicidal ideations,

NOTE Confidence: 0.8657185

 $00:12:56.704 \longrightarrow 00:12:59.490$ where they seem to like skip these

NOTE Confidence: 0.8657185

 $00{:}12{:}59{.}559 \dashrightarrow 00{:}13{:}01{.}799$ intermediate steps that we have long held NOTE Confidence: 0.8657185

 $00:13:01.799 \rightarrow 00:13:05.108$ to be a necessary precondition for suicide.

NOTE Confidence: 0.8657185

 $00:13:05.110 \longrightarrow 00:13:07.966$ The assumption that many of us have.

NOTE Confidence: 0.8657185

00:13:07.970 --> 00:13:10.035 Worked on for many years is that

NOTE Confidence: 0.8657185

 $00:13:10.035 \longrightarrow 00:13:12.076$ will you have to think about

NOTE Confidence: 0.8657185

 $00{:}13{:}12.076 \dashrightarrow 00{:}13{:}14.254$ suicide in order to attempt suicide.

NOTE Confidence: 0.8657185

 $00:13:14.260 \rightarrow 00:13:15.632$ But for whatever reason,

NOTE Confidence: 0.8657185

00:13:15.632 --> 00:13:17.690 there's a significant percentage of suicide

NOTE Confidence: 0.8657185

 $00:13:17.743 \rightarrow 00:13:19.555$ attempt survivors who are saying no.

NOTE Confidence: 0.8657185

00:13:19.560 --> 00:13:19.890 Actually,

NOTE Confidence: 0.8657185

 $00:13:19.890 \longrightarrow 00:13:21.210$ I didn't do that.

- NOTE Confidence: 0.8657185
- $00{:}13{:}21{.}210 \dashrightarrow 00{:}13{:}22.865$ I skipped that step and

 $00:13:22.865 \longrightarrow 00:13:24.520$ so we were really there.

NOTE Confidence: 0.8657185

 $00:13:24.520 \longrightarrow 00:13:26.991$ Seems to be a lot of parallels

NOTE Confidence: 0.8657185

 $00:13:26.991 \rightarrow 00:13:29.500$ between these sort of budget overages.

NOTE Confidence: 0.8657185

 $00{:}13{:}29{.}500 \dashrightarrow 00{:}13{:}30{.}208$ And suicide.

NOTE Confidence: 0.8657185

 $00{:}13{:}30{.}208 \dashrightarrow 00{:}13{:}33{.}040$ And so this is in many ways that

NOTE Confidence: 0.8657185

 $00{:}13{:}33{.}127 \dashrightarrow 00{:}13{:}35{.}890$ sort of the pre genitor of a lot of

NOTE Confidence: 0.8657185

 $00{:}13{:}35{.}890 \dashrightarrow 00{:}13{:}38{.}485$ our collaboration together to start

NOTE Confidence: 0.8657185

 $00:13:38.485 \rightarrow 00:13:41.791$ thinking about suicide in unique ways.

NOTE Confidence: 0.8657185

00:13:41.800 --> 00:13:44.640 And this is where I started to become

NOTE Confidence: 0.8657185

00:13:44.640 --> 00:13:46.659 familiar with dynamical systems theory

NOTE Confidence: 0.8657185

00:13:46.659 --> 00:13:49.536 and one of the key concepts within

NOTE Confidence: 0.8657185

 $00{:}13{:}49.610 \dashrightarrow 00{:}13{:}52.050$ that mathematical sort of branches.

NOTE Confidence: 0.8657185

00:13:52.050 --> 00:13:54.792 This notion of emergence and emergence

NOTE Confidence: 0.8657185

 $00{:}13{:}54.792 \dashrightarrow 00{:}13{:}58.059$ just in general kind of refers to the

 $00:13:58.059 \rightarrow 00:14:00.960$ process of coming to be how something.

NOTE Confidence: 0.8657185

 $00{:}14{:}00{.}960 \dashrightarrow 00{:}14{:}02{.}870$ That was not there before

NOTE Confidence: 0.8657185

00:14:02.870 --> 00:14:04.398 eventually comes into being,

NOTE Confidence: 0.8657185

 $00{:}14{:}04{.}400 \dashrightarrow 00{:}14{:}06{.}220$ and this sort of mathematical

NOTE Confidence: 0.8657185

00:14:06.220 --> 00:14:08.040 concept of emergence is largely

NOTE Confidence: 0.8657185

 $00:14:08.101 \rightarrow 00:14:10.126$ founded upon four key assumptions,

NOTE Confidence: 0.8657185

 $00:14:10.130 \longrightarrow 00:14:12.664$ the first of which is that change

NOTE Confidence: 0.8657185

 $00:14:12.664 \rightarrow 00:14:14.710$ within a system is constant.

NOTE Confidence: 0.8657185

 $00{:}14{:}14{.}710 \dashrightarrow 00{:}14{:}17{.}433$ The second is that the whole is

NOTE Confidence: 0.8657185

 $00{:}14{:}17{.}433 \dashrightarrow 00{:}14{:}20{.}058$ greater than the sum of its parts.

NOTE Confidence: 0.8657185

00:14:20.060 --> 00:14:22.196 The third is that each component

NOTE Confidence: 0.8657185

00:14:22.196 --> 00:14:24.899 of a system depends upon the other

NOTE Confidence: 0.8657185

 $00:14:24.899 \rightarrow 00:14:27.317$ components of that system to function,

NOTE Confidence: 0.8657185

 $00{:}14{:}27{.}320 \dashrightarrow 00{:}14{:}29{.}744$ and then 4th that complex systems

NOTE Confidence: 0.8657185

 $00:14:29.744 \rightarrow 00:14:31.770$ behave in non proportional ways.

NOTE Confidence: 0.8657185

 $00:14:31.770 \longrightarrow 00:14:33.798$ And as John and I started

- NOTE Confidence: 0.8657185
- $00:14:33.798 \rightarrow 00:14:35.620$ working together over the years,

 $00{:}14{:}35{.}620 \dashrightarrow 00{:}14{:}37{.}930$ we started to apply these principles

NOTE Confidence: 0.8657185

 $00:14:37.930 \longrightarrow 00:14:40.235$ of emergence to our study of

NOTE Confidence: 0.8657185

 $00:14:40.235 \rightarrow 00:14:41.955$ suicide and what we're finding

NOTE Confidence: 0.8657185

 $00:14:41.955 \rightarrow 00:14:44.366$ is that it seems to be a very,

NOTE Confidence: 0.8657185

 $00{:}14{:}44{.}370 \dashrightarrow 00{:}14{:}46{.}476$ very useful way to conceptualize and

NOTE Confidence: 0.8657185

 $00:14:46.476 \rightarrow 00:14:48.569$ think about suicide risk in general.

NOTE Confidence: 0.8657185

 $00{:}14{:}48{.}570 \dashrightarrow 00{:}14{:}50{.}670$ And as we'll talk about later

NOTE Confidence: 0.8657185

 $00:14:50.670 \longrightarrow 00:14:52.070$ on in the presentation,

NOTE Confidence: 0.8657185

 $00{:}14{:}52.070 \dashrightarrow 00{:}14{:}54.550$ and I think it is a lot of patients for

NOTE Confidence: 0.8657185

00:14:54.615 --> 00:14:57.285 clinical practice as well as suicide

NOTE Confidence: 0.8657185

 $00{:}14{:}57{.}285 \dashrightarrow 00{:}14{:}59{.}065$ prevention strategies in general.

NOTE Confidence: 0.8657185

 $00{:}14{:}59{.}070 \dashrightarrow 00{:}15{:}01{.}974$ And so I'd like to do is just.

NOTE Confidence: 0.8657185

00:15:01.980 --> 00:15:04.680 Spent some time talking about how

NOTE Confidence: 0.8657185

 $00:15:04.680 \dashrightarrow 00:15:07.748$ these four concepts seem to apply to

 $00:15:07.748 \rightarrow 00:15:10.124$ suicide and how this might change,

NOTE Confidence: 0.8657185

00:15:10.130 --> 00:15:13.000 or at least advance or upgrade our

NOTE Confidence: 0.8657185

 $00:15:13.000 \rightarrow 00:15:14.850$ thinking about preventing suicide.

NOTE Confidence: 0.8657185

00:15:14.850 --> 00:15:16.083 And so first,

NOTE Confidence: 0.8657185

00:15:16.083 --> 00:15:18.138 let's talk about the first

NOTE Confidence: 0.8657185

 $00{:}15{:}18{.}138 \dashrightarrow 00{:}15{:}20{.}430$ assumption that change is constant.

NOTE Confidence: 0.8657185

 $00:15:20.430 \longrightarrow 00:15:22.494$ So this is this notion that

NOTE Confidence: 0.8657185

00:15:22.494 --> 00:15:25.030 suicide risk is a dynamic concept

NOTE Confidence: 0.8657185

 $00{:}15{:}25{.}030 \dashrightarrow 00{:}15{:}27{.}740$ that it's always ever changing

NOTE Confidence: 0.8657185

00:15:27.740 --> 00:15:29.366 really isn't necessarily

NOTE Confidence: 0.8881462

 $00{:}15{:}29{.}449 \dashrightarrow 00{:}15{:}31{.}562$ a new idea. I mean this.

NOTE Confidence: 0.8881462

 $00:15:31.562 \longrightarrow 00:15:33.682$ This is certainly been written

NOTE Confidence: 0.8881462

 $00:15:33.682 \rightarrow 00:15:35.708$ about for many, many decades.

NOTE Confidence: 0.8881462

 $00{:}15{:}35{.}708$ --> $00{:}15{:}38{.}500$ Anyone who's a clinician knows this to be

NOTE Confidence: 0.8881462

 $00:15:38.570 \rightarrow 00:15:41.237$ true that patients are low risk sometimes,

NOTE Confidence: 0.8881462

 $00:15:41.240 \longrightarrow 00:15:44.360$ but then they in turn to a high risk state

- NOTE Confidence: 0.8881462
- $00:15:44.438 \rightarrow 00:15:47.705$ and then they return to a little risk stage.
- NOTE Confidence: 0.8881462
- $00:15:47.710 \longrightarrow 00:15:49.761$ But it's only been within the past
- NOTE Confidence: 0.8881462
- $00:15:49.761 \rightarrow 00:15:52.348$ decade or so that I think technological
- NOTE Confidence: 0.8881462
- $00{:}15{:}52{.}348 \dashrightarrow 00{:}15{:}54{.}814$ advances and data analytic methods have
- NOTE Confidence: 0.8881462
- $00{:}15{:}54.883 \dashrightarrow 00{:}15{:}57.323$ gotten to a point where we're able to
- NOTE Confidence: 0.8881462
- $00{:}15{:}57{.}323 \dashrightarrow 00{:}15{:}59{.}304$ quantify it and describe these change
- NOTE Confidence: 0.8881462
- $00:15:59.304 \rightarrow 00:16:00.668$ processes with sufficient detail.
- NOTE Confidence: 0.8881462
- $00:16:00.670 \longrightarrow 00:16:03.057$ And so, for instance, this is a.
- NOTE Confidence: 0.8881462
- $00{:}16{:}03.060 \dashrightarrow 00{:}16{:}06.070$ This is some of the results from.
- NOTE Confidence: 0.8881462
- $00{:}16{:}06{.}070 \dashrightarrow 00{:}16{:}08{.}800$ Study that Evan Kleiman at Ruckers did
- NOTE Confidence: 0.8881462
- $00{:}16{:}08.800 \dashrightarrow 00{:}16{:}11.344$ using ecological momentary assessment or MA
- NOTE Confidence: 0.8881462
- $00{:}16{:}11{.}344 \dashrightarrow 00{:}16{:}13{.}972$ where they were basically assessing suicidal
- NOTE Confidence: 0.8881462
- $00{:}16{:}13.972 \dashrightarrow 00{:}16{:}16.030$ individuals four to six times per day.
- NOTE Confidence: 0.8881462
- $00{:}16{:}16{.}030 \dashrightarrow 00{:}16{:}17{.}940$ They would assess multiple variables,
- NOTE Confidence: 0.8881462
- $00:16:17.940 \longrightarrow 00:16:21.004$ but this one on the screen right now.
- NOTE Confidence: 0.8881462

 $00{:}16{:}21.010 \dashrightarrow 00{:}16{:}23.677$ Ask them about several aspects of suicidal

NOTE Confidence: 0.8881462

00:16:23.677 --> 00:16:26.831 ideations and so they were able to map

NOTE Confidence: 0.8881462

 $00{:}16{:}26.831 \dashrightarrow 00{:}16{:}28.771$ out fluctuations in suicidal ideations

NOTE Confidence: 0.8881462

 $00:16:28.836 \rightarrow 00:16:30.966$ over the course of several weeks,

NOTE Confidence: 0.8881462

 $00{:}16{:}30{.}970 \dashrightarrow 00{:}16{:}32{.}880$ and what you see here.

NOTE Confidence: 0.8881462

 $00:16:32.880 \longrightarrow 00:16:35.496$ This is all of the participants

NOTE Confidence: 0.8881462

 $00:16:35.496 \longrightarrow 00:16:36.804$ in that study.

NOTE Confidence: 0.8881462

 $00:16:36.810 \rightarrow 00:16:39.400$ Aggregated together in a few of the

NOTE Confidence: 0.8881462

 $00{:}16{:}39{.}400 \dashrightarrow 00{:}16{:}42{.}859$ cases are kind of drawn out and put into

NOTE Confidence: 0.8881462

 $00{:}16{:}42.859 \dashrightarrow 00{:}16{:}45.410$ color to help demonstrate the concepts.

NOTE Confidence: 0.8881462

 $00:16:45.410 \longrightarrow 00:16:48.470$ What you see is that variability.

NOTE Confidence: 0.8881462

 $00{:}16{:}48{.}470 \dashrightarrow 00{:}16{:}51{.}540$ Is the rule not the exception an one of the NOTE Confidence: 0.8881462

00:16:51.620 --> 00:16:54.770 more striking findings from climate studies,

NOTE Confidence: 0.8881462

 $00:16:54.770 \longrightarrow 00:16:57.647$ at about 90% of participants who were

NOTE Confidence: 0.8881462

00:16:57.647 --> 00:17:00.249 suicidal experience to 1 standard deviation

NOTE Confidence: 0.8881462

 $00:17:00.249 \longrightarrow 00:17:03.273$ or larger shift in their suicidal thinking

- NOTE Confidence: 0.8881462
- $00:17:03.341 \rightarrow 00:17:05.805$ within the span of just a few hours.

 $00{:}17{:}05{.}810 \dashrightarrow 00{:}17{:}08{.}627$ And so you can see that here in some

NOTE Confidence: 0.8881462

 $00{:}17{:}08.627 \dashrightarrow 00{:}17{:}11.355$ places where there are these sudden

NOTE Confidence: 0.8881462

00:17:11.355 --> 00:17:13.690 dramatic increases in suicide risk,

NOTE Confidence: 0.8881462

 $00{:}17{:}13.690 \dashrightarrow 00{:}17{:}16.048$ and then sometimes it's the reverse.

NOTE Confidence: 0.8881462

 $00{:}17{:}16.050 \dashrightarrow 00{:}17{:}18.060$ There's a sudden and dramatic

NOTE Confidence: 0.8881462

00:17:18.060 --> 00:17:19.668 drop in suicide risk.

NOTE Confidence: 0.8881462

 $00:17:19.670 \rightarrow 00:17:22.316$ And every so often there's even these,

NOTE Confidence: 0.8881462

 $00{:}17{:}22{.}320 \dashrightarrow 00{:}17{:}24{.}714$ like very brief peaks that seem to

NOTE Confidence: 0.8881462

 $00{:}17{:}24.714$ --> $00{:}17{:}27.228$ correspond with an acute suicidal crisis.

NOTE Confidence: 0.8881462

 $00{:}17{:}27{.}230 \dashrightarrow 00{:}17{:}29{.}432$ And so this this we're seeing

NOTE Confidence: 0.8881462

 $00{:}17{:}29{.}432 \dashrightarrow 00{:}17{:}31{.}769$ this pattern over and over again,

NOTE Confidence: 0.8881462

 $00{:}17{:}31{.}770 \dashrightarrow 00{:}17{:}34{.}650$ not only with the MA studies with some of

NOTE Confidence: 0.8881462

 $00{:}17{:}34.650 \dashrightarrow 00{:}17{:}37.609$ the work that I've done modeling change

NOTE Confidence: 0.8881462

 $00{:}17{:}37.609 \dashrightarrow 00{:}17{:}40.460$ in suicidal ideations on a weekly basis.

- $00{:}17{:}40{.}460 \dashrightarrow 00{:}17{:}42{.}350$ And now a daily basis.
- NOTE Confidence: 0.8881462
- 00:17:42.350 --> 00:17:43.106 You know,
- NOTE Confidence: 0.8881462
- $00:17:43.106 \rightarrow 00:17:44.618$ an intensive outpatient programs,
- NOTE Confidence: 0.8881462
- $00:17:44.620 \rightarrow 00:17:45.532$ inpatient settings,
- NOTE Confidence: 0.8881462
- $00:17:45.532 \longrightarrow 00:17:47.356$ or even outpatient therapy
- NOTE Confidence: 0.8881462
- $00{:}17{:}47.356 \dashrightarrow 00{:}17{:}49.180$ settings that these fluctuations
- NOTE Confidence: 0.8881462
- $00{:}17{:}49.245 \dashrightarrow 00{:}17{:}50.979$ and suicide risk are the rule.
- NOTE Confidence: 0.8881462
- $00{:}17{:}50{.}980 \dashrightarrow 00{:}17{:}53{.}157$ Now why this is sort of important
- NOTE Confidence: 0.8881462
- $00{:}17{:}53.157 \dashrightarrow 00{:}17{:}56.300$ for us to think about from a clinical
- NOTE Confidence: 0.8881462
- $00{:}17{:}56{.}300 \dashrightarrow 00{:}17{:}58{.}965$ perspective is that it provides an
- NOTE Confidence: 0.8881462
- $00{:}17{:}58{.}965 \dashrightarrow 00{:}18{:}01{.}701$ explanation for why suicide risk screening
- NOTE Confidence: 0.8881462
- $00:18:01.701 \rightarrow 00:18:04.279$ and assessment is so notoriously unreliable,
- NOTE Confidence: 0.8881462
- $00{:}18{:}04{.}279 \dashrightarrow 00{:}18{:}06{.}697$ and so here on the screen.
- NOTE Confidence: 0.8881462
- 00:18:06.700 --> 00:18:09.118 Now I have two hypothetical patients,
- NOTE Confidence: 0.8881462
- 00:18:09.120 --> 00:18:10.728 one depicted in Black,
- NOTE Confidence: 0.8881462
- $00:18:10.728 \rightarrow 00:18:12.336$ one depicted in red.

- NOTE Confidence: 0.8881462
- $00:18:12.340 \rightarrow 00:18:15.088$ You see that they are experiencing

 $00:18:15.088 \longrightarrow 00:18:16.920$ fluctuations in suicide risk

NOTE Confidence: 0.8881462

 $00:18:16.993 \longrightarrow 00:18:19.171$ that are comparable to what we

NOTE Confidence: 0.8881462

 $00:18:19.171 \longrightarrow 00:18:21.210$ saw in the previous screen.

NOTE Confidence: 0.8881462

 $00:18:21.210 \rightarrow 00:18:23.914$ Now, if these two patients were to say,

NOTE Confidence: 0.8881462

 $00{:}18{:}23{.}920 \dashrightarrow 00{:}18{:}25{.}610$ come into an emergency Department

NOTE Confidence: 0.8881462

 $00:18:25.610 \longrightarrow 00:18:26.962$ on the same day,

NOTE Confidence: 0.8881462

 $00{:}18{:}26{.}970 \dashrightarrow 00{:}18{:}29{.}343$ and that day correspond to the arrow

NOTE Confidence: 0.8881462

 $00:18:29.343 \longrightarrow 00:18:31.756$ on the left, and we assess them,

NOTE Confidence: 0.8881462

 $00{:}18{:}31.756 \dashrightarrow 00{:}18{:}34.429$ perhaps whatever scale that you use with pH,

NOTE Confidence: 0.8881462

 $00{:}18{:}34{.}430 \dashrightarrow 00{:}18{:}37{.}472$ D 9, the ask the easy save the Columbia,

NOTE Confidence: 0.8881462

 $00{:}18{:}37{.}480 \dashrightarrow 00{:}18{:}38{.}485$ whatever it is,

NOTE Confidence: 0.8881462

00:18:38.485 --> 00:18:40.830 what we would conclude on that day

NOTE Confidence: 0.846541

 $00{:}18{:}40{.}906 \dashrightarrow 00{:}18{:}42{.}754$ is that the person in black

NOTE Confidence: 0.846541

 $00{:}18{:}42{.}754 \dashrightarrow 00{:}18{:}44{.}600$ is higher risk for suicide.

 $00:18:44.600 \rightarrow 00:18:47.668$ Been the person in red, and so we might.

NOTE Confidence: 0.846541

00:18:47.668 --> 00:18:49.036 Perhaps we would consider

NOTE Confidence: 0.846541

 $00:18:49.036 \rightarrow 00:18:50.698$ hospitalizing the person in black,

NOTE Confidence: 0.846541

 $00:18:50.700 \longrightarrow 00:18:52.060$ but may be discharged.

NOTE Confidence: 0.846541

 $00{:}18{:}52.060 \dashrightarrow 00{:}18{:}53.760$ Person in red to home.

NOTE Confidence: 0.846541

 $00{:}18{:}53.760 \dashrightarrow 00{:}18{:}56.040$ Now if we slide to the right of

NOTE Confidence: 0.846541

 $00:18:56.040 \rightarrow 00:18:58.107$ this graph to that second arrow,

NOTE Confidence: 0.846541

 $00:18:58.110 \rightarrow 00:19:00.231$ if those same two individuals had come

NOTE Confidence: 0.846541

00:19:00.231 $\operatorname{-->}$ 00:19:02.137 into the emergency Department at a

NOTE Confidence: 0.846541

 $00{:}19{:}02{.}137 \dashrightarrow 00{:}19{:}04.015$ different point in their time series,

NOTE Confidence: 0.846541

 $00{:}19{:}04.020 \dashrightarrow 00{:}19{:}05.874$ we would conclude the exact reverse

NOTE Confidence: 0.846541

 $00:19:05.874 \longrightarrow 00:19:07.787$ person in red is the higher

NOTE Confidence: 0.846541

 $00{:}19{:}07{.}787 \dashrightarrow 00{:}19{:}09{.}617$ risk than the person in black.

NOTE Confidence: 0.846541

 $00{:}19{:}09{.}620 \dashrightarrow 00{:}19{:}11{.}964$ And so maybe we would hospital as a

NOTE Confidence: 0.846541

 $00:19:11.964 \rightarrow 00:19:14.894$ person in red instead of the person in black.

NOTE Confidence: 0.846541

 $00:19:14.900 \longrightarrow 00:19:16.832$ Now if we look at the entire

- NOTE Confidence: 0.846541
- $00:19:16.832 \rightarrow 00:19:18.950$ T of the time series, however,

00:19:18.950 --> 00:19:20.810 what you would see is that

NOTE Confidence: 0.846541

 $00:19:20.810 \longrightarrow 00:19:22.459$ they actually do not really.

NOTE Confidence: 0.846541

 $00:19:22.460 \rightarrow 00:19:23.840$ Differentiate from each other.

NOTE Confidence: 0.846541

 $00:19:23.840 \longrightarrow 00:19:26.233$ There's not a whole way a real

NOTE Confidence: 0.846541

 $00{:}19{:}26{.}233 \dashrightarrow 00{:}19{:}28{.}305$ way to kind of say that one person

NOTE Confidence: 0.846541

 $00:19:28.305 \longrightarrow 00:19:30.290$ is higher risk than the other.

NOTE Confidence: 0.846541

00:19:30.290 --> 00:19:31.538 They're both experiencing these

NOTE Confidence: 0.846541

 $00{:}19{:}31{.}538 \dashrightarrow 00{:}19{:}33{.}098$ Upson Downs and this is,

NOTE Confidence: 0.846541

00:19:33.100 --> 00:19:35.320 I think a critical new.

NOTE Confidence: 0.846541

 $00{:}19{:}35{.}320 \dashrightarrow 00{:}19{:}37{.}672$ I dea that many of us are starting

NOTE Confidence: 0.846541

 $00{:}19{:}37.672 \dashrightarrow 00{:}19{:}40.384$ to find in our studies over and

NOTE Confidence: 0.846541

 $00:19:40.384 \rightarrow 00:19:42.814$ over again is that suicide risk,

NOTE Confidence: 0.846541

 $00{:}19{:}42.820 \dashrightarrow 00{:}19{:}44.071$ especially suicidal ideations,

NOTE Confidence: 0.846541

 $00{:}19{:}44.071 \dashrightarrow 00{:}19{:}46.573$ isn't really all that useful for

 $00:19:46.573 \rightarrow 00:19:47.680$ distinguishing between patients

NOTE Confidence: 0.846541

00:19:47.680 --> 00:19:49.564 who are higher and lower risk.

NOTE Confidence: 0.846541

 $00{:}19{:}49{.}570 \dashrightarrow 00{:}19{:}50{.}950$ And that's largely because

NOTE Confidence: 0.846541

00:19:50.950 --> 00:19:52.330 suicidal ideations suicide risk

NOTE Confidence: 0.846541

 $00:19:52.330 \longrightarrow 00:19:54.450$ is a within person phenomenon.

NOTE Confidence: 0.846541

00:19:54.450 - 00:19:57.068 People have good days and bad days,

NOTE Confidence: 0.846541

 $00:19:57.070 \rightarrow 00:20:00.230$ and so we perhaps need to start shifting.

NOTE Confidence: 0.846541

 $00:20:00.230 \rightarrow 00:20:02.366$ I'm thinking away from some of

NOTE Confidence: 0.846541

 $00{:}20{:}02{.}366 \dashrightarrow 00{:}20{:}04{.}336$ our research models of clinical

NOTE Confidence: 0.846541

 $00{:}20{:}04{.}336 \dashrightarrow 00{:}20{:}06{.}721$ decision rubrics that are trying

NOTE Confidence: 0.846541

 $00{:}20{:}06{.}721 \dashrightarrow 00{:}20{:}09{.}026$ to distinguish which patients are

NOTE Confidence: 0.846541

00:20:09.026 --> 00:20:11.000 going to attempt suicide in which

NOTE Confidence: 0.846541

 $00{:}20{:}11.000 \dashrightarrow 00{:}20{:}13.490$ are not and move towards a thinking

NOTE Confidence: 0.846541

 $00:20:13.490 \longrightarrow 00:20:15.740$ of when is a given individual

NOTE Confidence: 0.846541

00:20:15.816 --> 00:20:17.976 vulnerable or in high probability

NOTE Confidence: 0.846541

 $00:20:17.976 \rightarrow 00:20:20.562$ state to engage in suicidal behaviors

- NOTE Confidence: 0.846541
- $00{:}20{:}20{.}562 \dashrightarrow 00{:}20{:}23{.}394$ and so along this line of sort of

 $00{:}20{:}23{.}394 \dashrightarrow 00{:}20{:}25{.}172$ within person change processes.

NOTE Confidence: 0.846541

 $00{:}20{:}25{.}172 \dashrightarrow 00{:}20{:}28{.}016$ We started to now conduct several

NOTE Confidence: 0.846541

 $00:20:28.016 \longrightarrow 00:20:30.871$ studies to really map out and

NOTE Confidence: 0.846541

 $00:20:30.871 \longrightarrow 00:20:32.251$ mathematically model these

NOTE Confidence: 0.846541

 $00:20:32.251 \rightarrow 00:20:34.828$ fluctuations in suicide risk overtime,

NOTE Confidence: 0.846541

 $00{:}20{:}34.830 \dashrightarrow 00{:}20{:}37.095$ under the assumption that may be

NOTE Confidence: 0.846541

 $00{:}20{:}37.095 \dashrightarrow 00{:}20{:}39.932$ there are certain patterns of change

NOTE Confidence: 0.846541

 $00{:}20{:}39{.}932 \dashrightarrow 00{:}20{:}42{.}417$ within individuals that might signal

NOTE Confidence: 0.846541

00:20:42.417 --> 00:20:45.301 the near term emergence of suicidal

NOTE Confidence: 0.846541

 $00:20:45.301 \longrightarrow 00:20:47.341$ behavior such that the concept

NOTE Confidence: 0.846541

 $00{:}20{:}47{.}341 \dashrightarrow 00{:}20{:}50{.}223$ of a warning sign, for instance,

NOTE Confidence: 0.846541

 $00:20:50.223 \rightarrow 00:20:52.978$ isn't necessarily the occurrence or

NOTE Confidence: 0.846541

 $00{:}20{:}52{.}978 \dashrightarrow 00{:}20{:}56{.}634$ the existence of a given variable or a given.

NOTE Confidence: 0.846541

00:20:56.640 --> 00:20:56.996 Behavior,
$00{:}20{:}56{.}996 \dashrightarrow 00{:}20{:}59{.}488$ but perhaps the warning sign is a

NOTE Confidence: 0.846541

 $00{:}20{:}59{.}488 \dashrightarrow 00{:}21{:}02{.}038$ change process that departs from in

NOTE Confidence: 0.846541

00:21:02.038 --> 00:21:04.253 individual standard baseline change process.

NOTE Confidence: 0.846541

 $00{:}21{:}04{.}260 \dashrightarrow 00{:}21{:}05{.}864$ So on the screen.

NOTE Confidence: 0.846541

 $00:21:05.864 \longrightarrow 00:21:07.869$ Here I give an example.

NOTE Confidence: 0.846541

 $00{:}21{:}07{.}870 \dashrightarrow 00{:}21{:}11{.}029$ This on the left hand side of this time

NOTE Confidence: 0.846541

 $00{:}21{:}11{.}029 \dashrightarrow 00{:}21{:}14{.}277$ series we see fluctuations and suicide risk.

NOTE Confidence: 0.846541

 $00:21:14.280 \longrightarrow 00:21:16.285$ Then at about the midpoint

NOTE Confidence: 0.846541

 $00:21:16.285 \longrightarrow 00:21:17.889$ of the time series,

NOTE Confidence: 0.846541

 $00:21:17.890 \rightarrow 00:21:20.620$ what you see is those fluctuations in

NOTE Confidence: 0.846541

 $00{:}21{:}20.620 \dashrightarrow 00{:}21{:}23.509$ suicide risk become more and more prominent.

NOTE Confidence: 0.846541

 $00:21:23.510 \longrightarrow 00:21:26.688$ The amplitude of the Upson Downs increase.

NOTE Confidence: 0.846541

00:21:26.690 --> 00:21:27.474 In magnitude,

NOTE Confidence: 0.846541

 $00:21:27.474 \longrightarrow 00:21:29.826$ this is actually a pattern that

NOTE Confidence: 0.846541

00:21:29.826 --> 00:21:31.991 we've seen down to separate

NOTE Confidence: 0.846541

 $00:21:31.991 \rightarrow 00:21:34.176$ studies that have been published,

- NOTE Confidence: 0.846541
- $00{:}21{:}34{.}180 \dashrightarrow 00{:}21{:}36{.}994$ that it serves as an indicator that

 $00:21:36.994 \rightarrow 00:21:40.000$ suicidal behavior is coming where in essence,

NOTE Confidence: 0.846541

 $00:21:40.000 \rightarrow 00:21:41.620$ from a mathematical perspective.

NOTE Confidence: 0.846541

 $00:21:41.620 \longrightarrow 00:21:44.050$ What this signals is a loss

NOTE Confidence: 0.846541

 $00:21:44.125 \longrightarrow 00:21:45.409$ of self regulation.

NOTE Confidence: 0.846541

 $00{:}21{:}45{.}410 \dashrightarrow 00{:}21{:}47{.}811$ The system is breaking down in the

NOTE Confidence: 0.846541

 $00:21:47.811 \rightarrow 00:21:50.869$ system is no longer able to contain

NOTE Confidence: 0.846541

 $00:21:50.869 \rightarrow 00:21:53.304$ and preserve its homeostatic balance,

NOTE Confidence: 0.8598196

 $00:21:53.310 \longrightarrow 00:21:55.010$ and so it's getting

NOTE Confidence: 0.8598196

 $00:21:55.010 \longrightarrow 00:21:56.710$ agitated which signals and.

NOTE Confidence: 0.8598196

 $00{:}21{:}56{.}710 \dashrightarrow 00{:}21{:}59{.}008$ Upcoming emergent shift in states we've

NOTE Confidence: 0.8598196

00:21:59.008 --> 00:22:01.799 also found in some of our research

NOTE Confidence: 0.8598196

 $00{:}22{:}01{.}799 \dashrightarrow 00{:}22{:}04{.}175$ that a different but related pattern

NOTE Confidence: 0.8598196

 $00{:}22{:}04.175 \dashrightarrow 00{:}22{:}06.759$ relates to the frequency of fluctuation.

NOTE Confidence: 0.8598196

 $00:22:06.760 \longrightarrow 00:22:09.488$ So again, here on the left hand side

 $00:22:09.488 \longrightarrow 00:22:12.391$ of the time series we see these

NOTE Confidence: 0.8598196

00:22:12.391 --> 00:22:15.035 periodic spikes that occur in suicide

NOTE Confidence: 0.8598196

 $00{:}22{:}15{.}035 \dashrightarrow 00{:}22{:}17{.}975$ risk and then at the midpoint those NOTE Confidence: 0.8598196

00:22:17.975 --> 00:22:20.424 spikes in suicide risk occur much,

NOTE Confidence: 0.8598196

00:22:20.424 --> 00:22:21.627 much more often.

NOTE Confidence: 0.8598196

 $00{:}22{:}21.630 \dashrightarrow 00{:}22{:}24.174$ This is a second dimension of

NOTE Confidence: 0.8598196

 $00:22:24.174 \longrightarrow 00:22:25.870$ dys regulation such that perhaps

NOTE Confidence: 0.8598196

 $00{:}22{:}25{.}944 \dashrightarrow 00{:}22{:}28{.}170$ sometimes we see an increase in.

NOTE Confidence: 0.8598196

 $00{:}22{:}28.170 \dashrightarrow 00{:}22{:}29.418$ Amplitude of fluctuations.

NOTE Confidence: 0.8598196

 $00:22:29.418 \rightarrow 00:22:31.498$ Sometimes we'll see an increasing

NOTE Confidence: 0.8598196

00:22:31.498 --> 00:22:33.020 frequency of amplitudes,

NOTE Confidence: 0.8598196

 $00{:}22{:}33{.}020 \dashrightarrow 00{:}22{:}36{.}107$ and we might also see a combination

NOTE Confidence: 0.8598196

 $00:22:36.107 \longrightarrow 00:22:37.430$ of the two.

NOTE Confidence: 0.8598196

 $00:22:37.430 \longrightarrow 00:22:40.195$ So if we were to then apply

NOTE Confidence: 0.8598196

 $00{:}22{:}40.195 \dashrightarrow 00{:}22{:}42.280$ this to clinical practice,

NOTE Confidence: 0.8598196

 $00:22:42.280 \longrightarrow 00:22:44.440$ what this would indicate is

- NOTE Confidence: 0.8598196
- $00:22:44.440 \longrightarrow 00:22:46.168$ that repeated assessments of

00:22:46.168 --> 00:22:48.019 suicide risk overtime state,

NOTE Confidence: 0.8598196

 $00:22:48.020 \rightarrow 00:22:50.220$ like every single therapy session,

NOTE Confidence: 0.8598196

 $00:22:50.220 \rightarrow 00:22:51.820$ every single Med monitoring

NOTE Confidence: 0.8598196

 $00{:}22{:}51{.}820 \dashrightarrow 00{:}22{:}54{.}220$ session might be able to detect

NOTE Confidence: 0.8598196

 $00{:}22{:}54{.}288 \dashrightarrow 00{:}22{:}56{.}388$ within person change processes,

NOTE Confidence: 0.8598196

 $00:22:56.390 \longrightarrow 00:22:58.600$ which could then signal hey,

NOTE Confidence: 0.8598196

 $00{:}22{:}58{.}600 \dashrightarrow 00{:}23{:}01{.}918$ this is a departure from the norm.

NOTE Confidence: 0.8598196

 $00:23:01.920 \longrightarrow 00:23:04.391$ This is not a typical change pattern

NOTE Confidence: 0.8598196

 $00{:}23{:}04{.}391 \dashrightarrow 00{:}23{:}06{.}210$ for this particular individual.

NOTE Confidence: 0.8598196

 $00{:}23{:}06{.}210 \dashrightarrow 00{:}23{:}08{.}448$ They're becoming more dys regulated and so

NOTE Confidence: 0.8598196

 $00{:}23{:}08{.}448 \dashrightarrow 00{:}23{:}10{.}889$ perhaps that would prompt an intervention.

NOTE Confidence: 0.8598196

 $00:23:10.890 \longrightarrow 00:23:12.450$ We're actually working now.

NOTE Confidence: 0.8598196

 $00{:}23{:}12{.}450 \dashrightarrow 00{:}23{:}14{.}400$ We have a narrow one.

NOTE Confidence: 0.8598196

 $00{:}23{:}14{.}400 \dashrightarrow 00{:}23{:}17{.}320$ This is kind of the key idea behind

 $00:23:17.320 \longrightarrow 00:23:19.352$ the work that we're currently

NOTE Confidence: 0.8598196

 $00{:}23{:}19{.}352 \dashrightarrow 00{:}23{:}22{.}194$ doing on a grant to look at.

NOTE Confidence: 0.8598196

 $00:23:22.200 \longrightarrow 00:23:24.190$ Could you potentially develop novel

NOTE Confidence: 0.8598196

 $00{:}23{:}24.190 \dashrightarrow 00{:}23{:}26.180$ detection and a lert systems that

NOTE Confidence: 0.8598196

 $00{:}23{:}26{.}244 \dashrightarrow 00{:}23{:}28{.}029$ could be implemented in clinical

NOTE Confidence: 0.8598196

 $00{:}23{:}28{.}029 \dashrightarrow 00{:}23{:}29{.}814$ practice that now takes into

NOTE Confidence: 0.8598196

 $00{:}23{:}29{.}879 \dashrightarrow 00{:}23{:}31{.}959$ account multiple time points in

NOTE Confidence: 0.8598196

 $00:23:31.959 \rightarrow 00:23:33.623$ applies new mathematical models?

NOTE Confidence: 0.8598196

 $00{:}23{:}33{.}630 \dashrightarrow 00{:}23{:}36{.}148$ To look at within person, change to signal.

NOTE Confidence: 0.8598196

00:23:36.148 --> 00:23:36.474 Hey,

NOTE Confidence: 0.8598196

 $00:23:36.474 \longrightarrow 00:23:38.971$ this patient is now at a higher

NOTE Confidence: 0.8598196

00:23:38.971 $\operatorname{-->}$ 00:23:41.296 probability risk state and we

NOTE Confidence: 0.8598196

 $00:23:41.296 \longrightarrow 00:23:43.580$ should probably intervene with them.

NOTE Confidence: 0.8598196

 $00:23:43.580 \rightarrow 00:23:45.897$ Now the 2nd two concepts of emergency.

NOTE Confidence: 0.8598196

 $00{:}23{:}45{.}900 \dashrightarrow 00{:}23{:}48{.}252$ I want to talk about here is the

NOTE Confidence: 0.8598196

 $00:23:48.252 \rightarrow 00:23:51.111$ whole is greater than the sum of its

- NOTE Confidence: 0.8598196
- $00:23:51.111 \rightarrow 00:23:53.509$ parts in each component of a system.

 $00:23:53.510 \rightarrow 00:23:55.827$ Depends on the other components to function,

NOTE Confidence: 0.8598196

 $00{:}23{:}55{.}830 \dashrightarrow 00{:}23{:}56{.}982$ and so this is.

NOTE Confidence: 0.8598196

 $00{:}23{:}56{.}982 \dashrightarrow 00{:}23{:}59{.}088$ These are sort of two related ideas

NOTE Confidence: 0.8598196

 $00{:}23{:}59{.}088 \dashrightarrow 00{:}24{:}01{.}279$ that I think is also highly relevant

NOTE Confidence: 0.8598196

 $00{:}24{:}01{.}279 \dashrightarrow 00{:}24{:}03{.}769$ to our work and suicide prevention.

NOTE Confidence: 0.8598196

 $00{:}24{:}03.770 \dashrightarrow 00{:}24{:}05.756$ And to demonstrate these two concepts,

NOTE Confidence: 0.8598196

 $00:24:05.760 \longrightarrow 00:24:07.909$ I'm actually going to share with you

NOTE Confidence: 0.8598196

 $00{:}24{:}07{.}909 \dashrightarrow 00{:}24{:}10{.}501$ a video that I found very sort of

NOTE Confidence: 0.8598196

 $00{:}24{:}10.501 \dashrightarrow 00{:}24{:}12.618$ informative in my own thinking about

NOTE Confidence: 0.8598196

 $00{:}24{:}12.618 \dashrightarrow 00{:}24{:}14.868$ systems theory and dynamical systems.

NOTE Confidence: 0.8598196

00:24:14.870 --> 00:24:18.083 So in this video I want to say maybe

NOTE Confidence: 0.8598196

 $00:24:18.083 \longrightarrow 00:24:20.709$ like a minute and a half long.

NOTE Confidence: 0.8598196

 $00{:}24{:}20.710 \dashrightarrow 00{:}24{:}22.852$ It's sort of outlines the process

NOTE Confidence: 0.8598196

 $00:24:22.852 \rightarrow 00:24:25.079$ of emergence for hurricane and so

00:24:25.079 - 00:24:26.547 hurricanes go through several.

NOTE Confidence: 0.8598196

 $00:24:26.550 \rightarrow 00:24:28.740$ We've sort of classified different stages,

NOTE Confidence: 0.8598196

 $00{:}24{:}28.740 \dashrightarrow 00{:}24{:}30.470$ whether that's tropical depression to

NOTE Confidence: 0.8598196

 $00:24:30.470 \rightarrow 00:24:33.489$ a tropical storm to a full blown hurricane,

NOTE Confidence: 0.8598196

 $00{:}24{:}33{.}490 \dashrightarrow 00{:}24{:}35{.}315$ and then we have different

NOTE Confidence: 0.8598196

 $00:24:35.315 \longrightarrow 00:24:36.410$ categories of hurricanes.

NOTE Confidence: 0.8598196

 $00:24:36.410 \longrightarrow 00:24:39.021$ But even though there are these unique

NOTE Confidence: 0.8598196

 $00:24:39.021 \rightarrow 00:24:41.973$ sort of stages that we have just sort

NOTE Confidence: 0.8598196

 $00{:}24{:}41{.}973 \dashrightarrow 00{:}24{:}44{.}510$ of arbitrarily come up with as humans.

NOTE Confidence: 0.8598196

 $00{:}24{:}44{.}510 \dashrightarrow 00{:}24{:}46{.}676$ There are these sort of continuous

NOTE Confidence: 0.8598196

 $00{:}24{:}46.676 \dashrightarrow 00{:}24{:}48.829$ change processes that lead you know

NOTE Confidence: 0.8598196

 $00:24:48.829 \rightarrow 00:24:51.104$ weather patterns to kind of move through

NOTE Confidence: 0.8598196

 $00{:}24{:}51{.}104 \dashrightarrow 00{:}24{:}53{.}088$ these different arbitrary stages.

NOTE Confidence: 0.8598196

 $00:24:53.090 \rightarrow 00:24:55.328$ So as we watch this video,

NOTE Confidence: 0.8598196

 $00:24:55.330 \rightarrow 00:24:57.930$ the thing I wanted to just pay attention

NOTE Confidence: 0.8598196

 $00:24:57.930 \rightarrow 00:25:00.916$ to is again this notion of complexity.

- NOTE Confidence: 0.8598196
- $00:25:00.920 \longrightarrow 00:25:02.440$ How different variables are

 $00{:}25{:}02{.}440 \dashrightarrow 00{:}25{:}04{.}340$ interacting with each other and

NOTE Confidence: 0.8598196

 $00:25:04.340 \longrightarrow 00:25:06.439$ also pay attention to it will

NOTE Confidence: 0.8598196

 $00:25:06.439 \longrightarrow 00:25:08.099$ show different arrows moving in

NOTE Confidence: 0.8720984

 $00:25:08.164 \longrightarrow 00:25:09.764$ different directions to to

NOTE Confidence: 0.8720984

 $00:25:09.764 \longrightarrow 00:25:11.364$ convey some these concepts.

NOTE Confidence: 0.85696006

 $00:25:14.380 \longrightarrow 00:25:16.616$ Depends upon the following conditions

NOTE Confidence: 0.85696006

00:25:16.616 --> 00:25:19.310 coinciding Alarge still and warm ocean

NOTE Confidence: 0.85696006

 $00{:}25{:}19{.}380 \dashrightarrow 00{:}25{:}21{.}590$ area with the surface temperature

NOTE Confidence: 0.85696006

 $00:25:21.590 \longrightarrow 00:25:23.358$ that exceeds 26.5 degrees

NOTE Confidence: 0.85696006

 $00{:}25{:}23.358 \dashrightarrow 00{:}25{:}25.458$ Celsius over an extended period.

NOTE Confidence: 0.85696006

 $00{:}25{:}25{.}460 \dashrightarrow 00{:}25{:}29{.}588$ This allows a body of warm air to

NOTE Confidence: 0.85696006

 $00{:}25{:}29{.}588 \dashrightarrow 00{:}25{:}32{.}710$ develop above the ocean surface.

NOTE Confidence: 0.85696006

 $00{:}25{:}32{.}710 \dashrightarrow 00{:}25{:}35{.}045$ Low altitude winds are also

NOTE Confidence: 0.85696006

 $00{:}25{:}35{.}045 \dashrightarrow 00{:}25{:}38{.}180$ needed to form a tropical cyclone.

 $00:25:38.180 \longrightarrow 00:25:40.406$ As air warms over the ocean,

NOTE Confidence: 0.85696006

 $00{:}25{:}40{.}410 \dashrightarrow 00{:}25{:}42{.}630$ it expands, becomes lighter and rises.

NOTE Confidence: 0.85696006

 $00:25:42.630 \longrightarrow 00:25:44.808$ Other local winds blow in to

NOTE Confidence: 0.85696006

 $00:25:44.808 \longrightarrow 00:25:47.080$ replace the air that has risen.

NOTE Confidence: 0.85696006

 $00{:}25{:}47.080 \dashrightarrow 00{:}25{:}51.656$ Then this air is also warmed and rises.

NOTE Confidence: 0.85696006

 $00{:}25{:}51.660 \dashrightarrow 00{:}25{:}54.467$ The rising air contains huge amounts of

NOTE Confidence: 0.85696006

 $00:25:54.467 \rightarrow 00:25:56.860$ moisture evaporated from the ocean surface.

NOTE Confidence: 0.85696006

00:25:56.860 --> 00:25:58.860 As it rises, it cools,

NOTE Confidence: 0.85696006

 $00{:}25{:}58.860 \dashrightarrow 00{:}26{:}01.500$ condensing to form huge clouds about

NOTE Confidence: 0.85696006

 $00:26:01.500 \rightarrow 00:26:04.600$ 10 kilometers up in the troposphere.

NOTE Confidence: 0.85696006

 $00{:}26{:}04{.}600 \dashrightarrow 00{:}26{:}07{.}300$ More warm air rushes in and

NOTE Confidence: 0.85696006

 $00:26:07.300 \longrightarrow 00:26:10.380$ rises drawn by the draft above.

NOTE Confidence: 0.85696006

 $00{:}26{:}10.380 \dashrightarrow 00{:}26{:}12.912$ The amazing drafts are there carrying

NOTE Confidence: 0.85696006

 $00:26:12.912 \rightarrow 00:26:15.123$ moisture high into the atmosphere

NOTE Confidence: 0.85696006

 $00:26:15.123 \rightarrow 00:26:17.373$ so that these clouds eventually

NOTE Confidence: 0.85696006

 $00:26:17.373 \longrightarrow 00:26:19.670$ become very thick and heavy.

- NOTE Confidence: 0.85696006
- $00:26:19.670 \longrightarrow 00:26:21.710$ Condensation then releases the latent

 $00{:}26{:}21.710 \dashrightarrow 00{:}26{:}24.600$ heat energy stored in the water vapor,

NOTE Confidence: 0.85696006

 $00:26:24.600 \rightarrow 00:26:27.066$ providing the cyclone with more power.

NOTE Confidence: 0.85696006

 $00:26:27.070 \rightarrow 00:26:31.235$ This creates a self sustaining heat cycle.

NOTE Confidence: 0.85696006

 $00:26:31.240 \longrightarrow 00:26:33.150$ Drawn further upwards by the

NOTE Confidence: 0.85696006

00:26:33.150 --> 00:26:34.678 new release of Energy,

NOTE Confidence: 0.85696006

 $00{:}26{:}34{.}680 \dashrightarrow 00{:}26{:}37{.}866$ the clouds can grow to 12

NOTE Confidence: 0.85696006

 $00{:}26{:}37.866 \dashrightarrow 00{:}26{:}39.990$ to 15 kilometers high.

NOTE Confidence: 0.85696006

 $00:26:39.990 \rightarrow 00:26:42.330$ The force created by the Earth's

NOTE Confidence: 0.85696006

 $00:26:42.330 \longrightarrow 00:26:44.340$ rotation on a tilted axis,

NOTE Confidence: 0.85696006

 $00:26:44.340 \longrightarrow 00:26:45.690$ the Coriolis effect,

NOTE Confidence: 0.85696006

 $00{:}26{:}45.690 \dashrightarrow 00{:}26{:}48.840$ causes rising currents of air to spiral

NOTE Confidence: 0.85696006

 $00{:}26{:}48.924 \dashrightarrow 00{:}26{:}52.074$ around the center of the tropical cyclone.

NOTE Confidence: 0.85696006

 $00{:}26{:}52{.}080 \dashrightarrow 00{:}26{:}55{.}248$ It is at this stage that the cyclone matures

NOTE Confidence: 0.85696006

 $00{:}26{:}55{.}248 \dashrightarrow 00{:}26{:}58{.}024$ and the eye of the storm is created.

 $00:26:58.030 \longrightarrow 00:27:00.130$ As the air rises and cools.

NOTE Confidence: 0.85696006

 $00{:}27{:}00{.}130 \dashrightarrow 00{:}27{:}02{.}230$ Some of this dense air descends

NOTE Confidence: 0.85696006

 $00:27:02.230 \longrightarrow 00:27:03.630$ to form the clear.

NOTE Confidence: 0.85696006

00:27:03.630 --> 00:27:03.980 Still,

NOTE Confidence: 0.85696006

 $00:27:03.980 \longrightarrow 00:27:06.430$ I as the cyclone rages around it.

NOTE Confidence: 0.8620242

 $00{:}27{:}10{.}110 \dashrightarrow 00{:}27{:}14{.}540$ So a couple of key ideas in here is that

NOTE Confidence: 0.8620242

 $00{:}27{:}14.656 \dashrightarrow 00{:}27{:}18.870$ as the hurricane is a cyclone emerges.

NOTE Confidence: 0.8620242

 $00:27:18.870 \longrightarrow 00:27:21.432$ It's not simply that you have to

NOTE Confidence: 0.8620242

 $00{:}27{:}21.432 \dashrightarrow 00{:}27{:}24.263$ have wind speed at a certain level

NOTE Confidence: 0.8620242

00:27:24.263 --> 00:27:26.735 temperature at a certain level have

NOTE Confidence: 0.8620242

 $00{:}27{:}26.819 \dashrightarrow 00{:}27{:}29.563$ to be over a suitable body of water.

NOTE Confidence: 0.8620242

 $00{:}27{:}29.570 \dashrightarrow 00{:}27{:}31.475$ There's a lot of conditional

NOTE Confidence: 0.8620242

 $00:27:31.475 \rightarrow 00:27:32.999$ interdependence amongst these variables.

NOTE Confidence: 0.8620242

00:27:33.000 --> 00:27:35.632 It's the right wind speed at the

NOTE Confidence: 0.8620242

 $00{:}27{:}35{.}632 \dashrightarrow 00{:}27{:}37{.}968$ right temperature in the right place,

NOTE Confidence: 0.8620242

 $00:27:37.970 \rightarrow 00:27:39.658$ under the right conditions,

- NOTE Confidence: 0.8620242
- $00{:}27{:}39.658 \dashrightarrow 00{:}27{:}42.596$ and if any of these variables shift

 $00:27:42.596 \longrightarrow 00:27:45.228$ or are they off just a little bit,

NOTE Confidence: 0.8620242

 $00:27:45.230 \longrightarrow 00:27:47.175$ it can actually dissolve the

NOTE Confidence: 0.8620242

 $00:27:47.175 \rightarrow 00:27:49.120$ entire system when aspect about.

NOTE Confidence: 0.8620242

00:27:49.120 --> 00:27:50.985 Hurricane formation that I learned

NOTE Confidence: 0.8620242

 $00{:}27{:}50{.}985 \dashrightarrow 00{:}27{:}53{.}658$ about in the past few years doing

NOTE Confidence: 0.8620242

 $00:27:53.658 \longrightarrow 00:27:55.860$ this work is that wind speeds

NOTE Confidence: 0.8620242

 $00:27:55.860 \rightarrow 00:27:57.928$ Tradewinds at very high altitude.

NOTE Confidence: 0.8620242

 $00{:}27{:}57{.}930 \dashrightarrow 00{:}28{:}00{.}012$ Have to actually be in this

NOTE Confidence: 0.8620242

00:28:00.012 --> 00:28:02.140 very narrow band of velocity.

NOTE Confidence: 0.8620242

 $00{:}28{:}02{.}140 \dashrightarrow 00{:}28{:}05{.}204$ If the trade winds are not fast enough,

NOTE Confidence: 0.8620242

00:28:05.210 --> 00:28:07.466 it does not provide enough momentum

NOTE Confidence: 0.8620242

 $00{:}28{:}07{.}466 \dashrightarrow 00{:}28{:}10{.}189$ for the hurricane to actually move in.

NOTE Confidence: 0.8620242

 $00{:}28{:}10{.}190 \dashrightarrow 00{:}28{:}11{.}336$ Things break apart.

NOTE Confidence: 0.8620242

 $00:28:11.336 \longrightarrow 00:28:12.864$ Conversely, if the wind,

 $00:28:12.870 \longrightarrow 00:28:15.168$ the trade wind speeds are too

NOTE Confidence: 0.8620242

 $00{:}28{:}15.168 \dashrightarrow 00{:}28{:}16.700$ high of a velocity,

NOTE Confidence: 0.8620242

 $00{:}28{:}16.700 \dashrightarrow 00{:}28{:}19.213$ it doesn't allow enough time for all

NOTE Confidence: 0.8620242

 $00:28:19.213 \rightarrow 00:28:21.850$ of these other processes to congeal.

NOTE Confidence: 0.8620242

 $00{:}28{:}21.850 \dashrightarrow 00{:}28{:}23.008$ And for man,

NOTE Confidence: 0.8620242

00:28:23.008 $-\!>$ 00:28:25.324 it basically breaks up the system

NOTE Confidence: 0.8620242

 $00{:}28{:}25{.}324 \dashrightarrow 00{:}28{:}27{.}795$ and So what we have here then.

NOTE Confidence: 0.8620242

 $00{:}28{:}27.800 \dashrightarrow 00{:}28{:}30.628$ Is a system where lots of variables

NOTE Confidence: 0.8620242

 $00{:}28{:}30{.}628 \dashrightarrow 00{:}28{:}32{.}699$ are interacting with each other

NOTE Confidence: 0.8620242

 $00{:}28{:}32.699 \dashrightarrow 00{:}28{:}35.039$ in those variables are changing in

NOTE Confidence: 0.8620242

 $00{:}28{:}35{.}039 \dashrightarrow 00{:}28{:}37{.}928$ very key ways that we start to see NOTE Confidence: 0.8620242

 $00:28:37.928 \rightarrow 00:28:39.970$ feedback loops and if those feedback

NOTE Confidence: 0.8620242

 $00{:}28{:}39{.}970 \dashrightarrow 00{:}28{:}41{.}670$ loops in those change processes

NOTE Confidence: 0.8620242

 $00{:}28{:}41.670 \dashrightarrow 00{:}28{:}43.890$ aren't in the right configuration,

NOTE Confidence: 0.8620242

 $00{:}28{:}43.890 \dashrightarrow 00{:}28{:}46.212$ then in essence the hurricane doesn't

NOTE Confidence: 0.8620242

 $00:28:46.212 \longrightarrow 00:28:49.143$ emerge and so this seems to be

- NOTE Confidence: 0.8620242
- $00:28:49.143 \rightarrow 00:28:51.323$ something comperable to suicide that

 $00{:}28{:}51{.}323 \dashrightarrow 00{:}28{:}53{.}198$ the conceptual theoretical model that

NOTE Confidence: 0.8620242

 $00:28:53.198 \longrightarrow 00:28:56.144$ we use in a lot of our research is

NOTE Confidence: 0.8620242

 $00:28:56.144 \rightarrow 00:28:58.436$ referred to as the suicidal mode,

NOTE Confidence: 0.8620242

 $00:28:58.440 \longrightarrow 00:29:01.888$ and this is a graphic depiction of that.

NOTE Confidence: 0.8620242

 $00:29:01.890 \longrightarrow 00:29:04.277$ And so a lot of people have

NOTE Confidence: 0.8620242

 $00:29:04.277 \rightarrow 00:29:05.660$ sometimes commented clinicians like,

NOTE Confidence: 0.8620242

 $00:29:05.660 \longrightarrow 00:29:05.970$ well,

NOTE Confidence: 0.8620242

 $00:29:05.970 \longrightarrow 00:29:07.830$ they're like all these sort of

NOTE Confidence: 0.8620242

 $00:29:07.830 \longrightarrow 00:29:09.779$ arrows pointing to different pieces.

NOTE Confidence: 0.8620242

00:29:09.780 --> 00:29:10.358 You know,

NOTE Confidence: 0.8620242

00:29:10.358 --> 00:29:12.092 it's sort of like a complicated

NOTE Confidence: 0.8620242

 $00{:}29{:}12.092 \dashrightarrow 00{:}29{:}14.743$ model is compared to some of the more

NOTE Confidence: 0.8620242

 $00{:}29{:}14.743 \dashrightarrow 00{:}29{:}16.590$ classic like cognitive models or

NOTE Confidence: 0.8620242

 $00{:}29{:}16{.}590 \dashrightarrow 00{:}29{:}18{.}350$ the biomedical biobehavioral model,

- $00:29:18.350 \longrightarrow 00:29:19.256$ so I've seen.
- NOTE Confidence: 0.8620242
- $00{:}29{:}19{.}256 \dashrightarrow 00{:}29{:}21{.}068$ But what this really captures in
- NOTE Confidence: 0.8620242
- $00:29:21.068 \longrightarrow 00:29:22.470$ the suicidal motives,
- NOTE Confidence: 0.8620242
- $00{:}29{:}22{.}470 \dashrightarrow 00{:}29{:}24{.}396$ this notion of a network that
- NOTE Confidence: 0.8620242
- $00{:}29{:}24.396 \dashrightarrow 00{:}29{:}26.126$ lots of different variables are
- NOTE Confidence: 0.8620242
- $00{:}29{:}26.126 \dashrightarrow 00{:}29{:}27.269$ influencing each other,
- NOTE Confidence: 0.8620242
- $00:29:27.270 \longrightarrow 00:29:29.839$ and they have to influence each other
- NOTE Confidence: 0.8620242
- $00:29:29.839 \rightarrow 00:29:32.637$ in the right way at the right time.
- NOTE Confidence: 0.8620242
- 00:29:32.640 --> 00:29:35.335 In order for the conditions to be
- NOTE Confidence: 0.8620242
- $00{:}29{:}35{.}335 \dashrightarrow 00{:}29{:}37{.}830$ right for suicidal crisis to emerge,
- NOTE Confidence: 0.8620242
- $00:29:37.830 \longrightarrow 00:29:39.820$ and then critically for suicidal
- NOTE Confidence: 0.8620242
- $00:29:39.820 \longrightarrow 00:29:41.014$ behaviors to emerge,
- NOTE Confidence: 0.8620242
- $00{:}29{:}41.020 \dashrightarrow 00{:}29{:}43.426$ and some of the newer research
- NOTE Confidence: 0.8620242
- $00:29:43.426 \longrightarrow 00:29:45.410$ that's being done right now,
- NOTE Confidence: 0.8620242
- $00{:}29{:}45{.}410 \dashrightarrow 00{:}29{:}47{.}400$ particularly IMA researchers that are
- NOTE Confidence: 0.8620242
- $00:29:47.400 \rightarrow 00:29:48.992$ using network computational models,

- NOTE Confidence: 0.8620242
- $00:29:49.000 \rightarrow 00:29:51.394$ is showing us that there actually

 $00{:}29{:}51{.}394 \dashrightarrow 00{:}29{:}52{.}990$ are multiple pathways suicide.

NOTE Confidence: 0.8620242

 $00:29:52.990 \longrightarrow 00:29:55.692$ One of the limitations of a lot

NOTE Confidence: 0.8620242

 $00{:}29{:}55{.}692 \dashrightarrow 00{:}29{:}57{.}759$ of our traditional thinking about

NOTE Confidence: 0.8620242

 $00:29:57.759 \longrightarrow 00:30:00.249$ suicide is that we focus on.

NOTE Confidence: 0.8620242

 $00:30:00.250 \dashrightarrow 00:30:03.330$ One or two risk variables or factors.

NOTE Confidence: 0.8620242

00:30:03.330 --> 00:30:04.210 Hopelessness, perceived,

NOTE Confidence: 0.8620242

 $00:30:04.210 \rightarrow 00:30:05.530$ burdensomeness thwarted belonging.

NOTE Confidence: 0.8620242

 $00{:}30{:}05{.}530 \dashrightarrow 00{:}30{:}07{.}730$ This fearlessness about death or

NOTE Confidence: 0.8620242

 $00:30:07.730 \longrightarrow 00:30:10.877$ some of the ones that are more

NOTE Confidence: 0.8620242

00:30:10.877 -> 00:30:13.445 popular that are more well known.

NOTE Confidence: 0.8620242

 $00{:}30{:}13.450 \dashrightarrow 00{:}30{:}16.586$ But what we're seeing now using these

NOTE Confidence: 0.8620242

 $00{:}30{:}16.586 \dashrightarrow 00{:}30{:}19.169$ more complex dynamic models is that,

NOTE Confidence: 0.8620242

00:30:19.170 --> 00:30:20.010 you know,

NOTE Confidence: 0.8620242

 $00:30:20.010 \rightarrow 00:30:22.110$ hopeless hopelessness is a primary

 $00:30:22.110 \rightarrow 00:30:24.889$ factor in firmly some suicidal people.

NOTE Confidence: 0.8620242

 $00{:}30{:}24.890 \dashrightarrow 00{:}30{:}26.610$ Perceived Burdensomeness is an

NOTE Confidence: 0.8620242

 $00{:}30{:}26{.}610 \dashrightarrow 00{:}30{:}29{.}190$ important variable for a different group

NOTE Confidence: 0.8442645

 $00:30:29.260 \longrightarrow 00:30:31.022$ of individuals, but in essence.

NOTE Confidence: 0.8442645

 $00{:}30{:}31.022 \dashrightarrow 00{:}30{:}33.010$ The reason may be that we haven't

NOTE Confidence: 0.8442645

 $00{:}30{:}33.072 \dashrightarrow 00{:}30{:}34.897$ been better at preventing suicide

NOTE Confidence: 0.8442645

 $00{:}30{:}34.897 \dashrightarrow 00{:}30{:}36.722$ as we create these monolithic

NOTE Confidence: 0.8442645

 $00{:}30{:}36{.}787 \dashrightarrow 00{:}30{:}38{.}817$ models that don't have sufficient

NOTE Confidence: 0.8442645

 $00{:}30{:}38{.}817 \dashrightarrow 00{:}30{:}40{.}847$ complexity and therefore don't allow

NOTE Confidence: 0.8442645

 $00{:}30{:}40.850 \dashrightarrow 00{:}30{:}43.130$ us to fully understand the different

NOTE Confidence: 0.8442645

 $00{:}30{:}43{.}130 \dashrightarrow 00{:}30{:}45{.}333$ processes by which suicide might be

NOTE Confidence: 0.8442645

 $00{:}30{:}45{.}333 \dashrightarrow 00{:}30{:}47{.}489$ a common endpoint of another way of

NOTE Confidence: 0.8442645

 $00{:}30{:}47{.}489 \dashrightarrow 00{:}30{:}49{.}485$ saying this is sort of like there.

NOTE Confidence: 0.8442645

 $00:30:49.490 \rightarrow 00:30:51.807$ There might be multiple roads to Rome,

NOTE Confidence: 0.8442645

 $00{:}30{:}51.810 \dashrightarrow 00{:}30{:}53.470$ but because we assume there's

NOTE Confidence: 0.8442645

 $00:30:53.470 \longrightarrow 00:30:55.130$ only one Rd to Rome,

- NOTE Confidence: 0.8442645
- $00:30:55.130 \rightarrow 00:30:57.468$ we're not doing a good job setting

 $00:30:57.468 \longrightarrow 00:30:59.856$ up the barriers on all of the

NOTE Confidence: 0.8442645

00:30:59.856 --> 00:31:01.496 many different roads to block

NOTE Confidence: 0.8442645

 $00:31:01.496 \longrightarrow 00:31:03.430$ their pathway to get to room.

NOTE Confidence: 0.85339206

 $00:31:05.830 \longrightarrow 00:31:07.894$ I'll say one other point about

NOTE Confidence: 0.85339206

 $00{:}31{:}07{.}894 \dashrightarrow 00{:}31{:}10{.}761$ that that I didn't mention is that

NOTE Confidence: 0.85339206

 $00:31:10.761 \rightarrow 00:31:12.649$ this notion of interdependence,

NOTE Confidence: 0.85339206

 $00:31:12.650 \rightarrow 00:31:15.492$ where all of these many different factors

NOTE Confidence: 0.85339206

 $00:31:15.492 \rightarrow 00:31:17.459$ and variables influence each other,

NOTE Confidence: 0.85339206

 $00:31:17.460 \longrightarrow 00:31:19.460$ and so you know depression.

NOTE Confidence: 0.85339206

00:31:19.460 --> 00:31:20.549 Hopelessness, for instance,

NOTE Confidence: 0.85339206

00:31:20.549 --> 00:31:22.364 if you experience an increase

NOTE Confidence: 0.85339206

00:31:22.364 --> 00:31:23.880 in your hopelessness,

NOTE Confidence: 0.85339206

 $00:31:23.880 \longrightarrow 00:31:25.480$ we might reasonably expect

NOTE Confidence: 0.85339206

 $00:31:25.480 \longrightarrow 00:31:27.080$ an increase in depression.

 $00:31:27.080 \rightarrow 00:31:28.935$ Conversely, an increase in depression

NOTE Confidence: 0.85339206

00:31:28.935 --> 00:31:30.419 might reasonably be expected

NOTE Confidence: 0.85339206

00:31:30.419 --> 00:31:32.299 to increase once hopelessness,

NOTE Confidence: 0.85339206

 $00:31:32.300 \longrightarrow 00:31:34.478$ and so we really can't sort

NOTE Confidence: 0.85339206

 $00:31:34.478 \longrightarrow 00:31:36.760$ of parse out and separate.

NOTE Confidence: 0.85339206

 $00{:}31{:}36{.}760 \dashrightarrow 00{:}31{:}39{.}004$ The notion of depression and hopelessness

NOTE Confidence: 0.85339206

 $00:31:39.004 \rightarrow 00:31:40.848$ and other risk variables because

NOTE Confidence: 0.85339206

 $00:31:40.848 \rightarrow 00:31:42.871$ they all depend upon each other and

NOTE Confidence: 0.85339206

 $00{:}31{:}42.871 \dashrightarrow 00{:}31{:}44.783$ we have a study under review right

NOTE Confidence: 0.85339206

 $00:31:44.783 \longrightarrow 00:31:47.300$ now or what we did is we use the

NOTE Confidence: 0.85339206

 $00:31:47.300 \dashrightarrow 00:31:48.850$ best scale for suicidal ideations.

NOTE Confidence: 0.85339206

 $00{:}31{:}48.850 \dashrightarrow 00{:}31{:}51.062$ And instead of modeling the scale for

NOTE Confidence: 0.85339206

 $00:31:51.062 \rightarrow 00:31:53.189$ suicidal ideations as a single total score,

NOTE Confidence: 0.85339206

 $00{:}31{:}53{.}190 \dashrightarrow 00{:}31{:}55{.}502$ which is how most of us are traditionally

NOTE Confidence: 0.85339206

 $00{:}31{:}55{.}502 \dashrightarrow 00{:}31{:}58{.}146$ used it in looking at that change process.

NOTE Confidence: 0.85339206

00:31:58.150 --> 00:31:58.466 Overtime,

- NOTE Confidence: 0.85339206
- $00:31:58.466 \rightarrow 00:32:00.362$ what we've done is we actually

 $00:32:00.362 \longrightarrow 00:32:02.263$ took each of the individual items

NOTE Confidence: 0.85339206

 $00:32:02.263 \longrightarrow 00:32:04.349$ and we said all of the items.

NOTE Confidence: 0.85339206

 $00:32:04.350 \longrightarrow 00:32:06.270$ In a sense they can change

NOTE Confidence: 0.85339206

 $00:32:06.270 \longrightarrow 00:32:08.010$ in any way they want.

NOTE Confidence: 0.85339206

 $00{:}32{:}08.010 \dashrightarrow 00{:}32{:}10.326$ Independence of each other and let's

NOTE Confidence: 0.85339206

 $00{:}32{:}10{.}326 \dashrightarrow 00{:}32{:}12{.}982$ see what happens in what we found

NOTE Confidence: 0.85339206

 $00{:}32{:}12{.}982 \dashrightarrow 00{:}32{:}15{.}397$ was that can sort of consistent with

NOTE Confidence: 0.85339206

 $00:32:15.470 \longrightarrow 00:32:17.680$ the notion of emergency complexity NOTE Confidence: 0.85339206

 $00{:}32{:}17.680 \dashrightarrow 00{:}32{:}20.359$ be different asset aspects or facets

NOTE Confidence: 0.85339206

 $00{:}32{:}20{.}359 \dashrightarrow 00{:}32{:}22{.}704$ of suicidal ideations under some

NOTE Confidence: 0.85339206

 $00{:}32{:}22.704 \dashrightarrow 00{:}32{:}24.580$ conditions were tightly correlated

NOTE Confidence: 0.85339206

 $00{:}32{:}24.647 \dashrightarrow 00{:}32{:}26.817$ with each other such that an increase NOTE Confidence: 0.85339206

 $00{:}32{:}26.817 \dashrightarrow 00{:}32{:}29.394$ in the wish to die corresponded with

NOTE Confidence: 0.85339206

 $00{:}32{:}29{.}394 \dashrightarrow 00{:}32{:}31{.}364$ an increase in suicidal intent.

 $00:32:31.370 \longrightarrow 00:32:33.554$ But there are other cases in

NOTE Confidence: 0.85339206

 $00{:}32{:}33{.}554 \dashrightarrow 00{:}32{:}35{.}010$ other circumstances where there

NOTE Confidence: 0.85339206

 $00{:}32{:}35{.}076 \dashrightarrow 00{:}32{:}37{.}316$ was no relationship between these

NOTE Confidence: 0.85339206

00:32:37.316 --> 00:32:38.660 two otherwise supposedly.

NOTE Confidence: 0.85339206

 $00:32:38.660 \rightarrow 00:32:40.660$ Correlated facets of suicidal ideations,

NOTE Confidence: 0.85339206

 $00:32:40.660 \rightarrow 00:32:43.446$ and So what we're starting to see,

NOTE Confidence: 0.85339206

00:32:43.450 --> 00:32:43.813 then,

NOTE Confidence: 0.85339206

 $00:32:43.813 \rightarrow 00:32:46.354$ is that there might be these sort

NOTE Confidence: 0.85339206

 $00{:}32{:}46{.}354 \dashrightarrow 00{:}32{:}48{.}476$ of different networks and Inter

NOTE Confidence: 0.85339206

 $00{:}32{:}48.476 \dashrightarrow 00{:}32{:}51.116$ related webs of risk variables and

NOTE Confidence: 0.85339206

 $00:32:51.116 \rightarrow 00:32:53.240$ processes that have implications.

NOTE Confidence: 0.85339206

 $00:32:53.240 \rightarrow 00:32:56.089$ For prevention is from a network perspective.

NOTE Confidence: 0.85339206

 $00:32:56.090 \rightarrow 00:32:58.407$ We can identify some of the key

NOTE Confidence: 0.85339206

00:32:58.407 - 00:33:00.384 variables that are most tightly

NOTE Confidence: 0.85339206

 $00{:}33{:}00{.}384 \dashrightarrow 00{:}33{:}01{.}755$ influential and interconnected

NOTE Confidence: 0.85339206

 $00:33:01.755 \rightarrow 00:33:04.640$ with other aspects of the network.

- NOTE Confidence: 0.85339206
- $00:33:04.640 \rightarrow 00:33:07.825$ What we could start doing, then is targeting.
- NOTE Confidence: 0.85339206
- $00:33:07.825 \longrightarrow 00:33:11.036$ This is the one thing that if we
- NOTE Confidence: 0.85339206
- 00:33:11.036 00:33:13.176 can change this one variable,
- NOTE Confidence: 0.85339206
- $00{:}33{:}13.180 \dashrightarrow 00{:}33{:}15.568$ it has this downstream effect that
- NOTE Confidence: 0.85339206
- $00:33:15.568 \dashrightarrow 00:33:18.052$ ripples out and starts to impact
- NOTE Confidence: 0.85339206
- $00:33:18.052 \longrightarrow 00:33:20.097$ other risk factors for suicide,
- NOTE Confidence: 0.85339206
- $00:33:20.100 \longrightarrow 00:33:22.335$ leading to a more efficient
- NOTE Confidence: 0.85339206
- $00:33:22.335 \longrightarrow 00:33:24.123$ reduction in suicidal crises.
- NOTE Confidence: 0.85339206
- 00:33:24.130 --> 00:33:24.499 Conversely,
- NOTE Confidence: 0.85339206
- $00:33:24.499 \longrightarrow 00:33:26.344$ if we're not targeting the
- NOTE Confidence: 0.85339206
- 00:33:26.344 --> 00:33:28.410 right piece of the network,
- NOTE Confidence: 0.85339206
- $00:33:28.410 \longrightarrow 00:33:31.126$ we might have interventions that are really,
- NOTE Confidence: 0.85339206
- $00:33:31.130 \longrightarrow 00:33:33.070$ really good at changing a
- NOTE Confidence: 0.85339206
- 00:33:33.070 --> 00:33:34.234 particular risk variable,
- NOTE Confidence: 0.85339206
- $00:33:34.240 \rightarrow 00:33:36.180$ but that change isn't sufficiently
- NOTE Confidence: 0.85339206

 $00{:}33{:}36{.}180 \dashrightarrow 00{:}33{:}38{.}910$ connected to other members of the network,

NOTE Confidence: 0.85339206

 $00{:}33{:}38{.}910 \dashrightarrow 00{:}33{:}42{.}648$ and so we don't see that downstream

NOTE Confidence: 0.85339206

 $00{:}33{:}42.648 \dashrightarrow 00{:}33{:}45.908$ effect in reduction in suicide risk.

NOTE Confidence: 0.85339206

00:33:45.910 --> 00:33:48.510 So the 4th concept that I wanted to

NOTE Confidence: 0.85339206

 $00:33:48.510 \dashrightarrow 00:33:50.901$ talk about is that complex systems

NOTE Confidence: 0.85339206

 $00{:}33{:}50{.}901$ --> $00{:}33{:}53{.}403$ behave in non proportional ways and NOTE Confidence: 0.85339206

 $00{:}33{:}53{.}475 \dashrightarrow 00{:}33{:}56{.}019$ what this refers to is that you can.

NOTE Confidence: 0.85339206

 $00:33:56.020 \rightarrow 00:33:58.484$ You can sometimes put a whole lot

NOTE Confidence: 0.85339206

 $00{:}33{:}58{.}484 \dashrightarrow 00{:}34{:}01{.}051$ of stuff into a system to change

NOTE Confidence: 0.85339206

00:34:01.051 --> 00:34:03.639 that system and in the system just

NOTE Confidence: 0.85339206

 $00:34:03.639 \rightarrow 00:34:06.124$ sort of ignores all of the input.

NOTE Confidence: 0.85339206

00:34:06.130 --> 00:34:08.650 It doesn't really change how it behaves.

NOTE Confidence: 0.85339206

 $00{:}34{:}08.650 \dashrightarrow 00{:}34{:}10.565$ Conversely you see the opposite

NOTE Confidence: 0.85339206

 $00{:}34{:}10.565 \dashrightarrow 00{:}34{:}13.607$ where we don't really do a whole lot

NOTE Confidence: 0.85339206

 $00{:}34{:}13.607 \dashrightarrow 00{:}34{:}15.707$ in terms of input or intervention.

NOTE Confidence: 0.85339206

 $00:34:15.710 \longrightarrow 00:34:18.158$ And then the system will

- NOTE Confidence: 0.85339206
- 00:34:18.158 --> 00:34:19.790 dramatically change in how
- NOTE Confidence: 0.87778085
- $00{:}34{:}19{.}864 \dashrightarrow 00{:}34{:}23{.}330$ it behaves, and so a little bit
- NOTE Confidence: 0.87778085
- $00:34:23.330 \rightarrow 00:34:25.980$ and sometimes paying big dividends.
- NOTE Confidence: 0.87778085
- $00:34:25.980 \longrightarrow 00:34:27.856$ Is a whole lot of input doesn't
- NOTE Confidence: 0.87778085
- $00:34:27.856 \longrightarrow 00:34:29.658$ really seem to have any effect.
- NOTE Confidence: 0.87778085
- $00:34:29.660 \longrightarrow 00:34:31.571$ This is like one of those really
- NOTE Confidence: 0.87778085
- 00:34:31.571 --> 00:34:33.016 frustrating aspects of clinical practice
- NOTE Confidence: 0.87778085
- $00:34:33.016 \rightarrow 00:34:35.320$ where some of our patients that come in.
- NOTE Confidence: 0.87778085
- $00:34:35.320 \longrightarrow 00:34:37.867$ We just really hit them with a lot of
- NOTE Confidence: 0.87778085
- $00:34:37.867 \rightarrow 00:34:39.282$ interventions. We really are group,
- NOTE Confidence: 0.87778085
- $00{:}34{:}39{.}282 \dashrightarrow 00{:}34{:}40{.}697$ you know they do the rapy.
- NOTE Confidence: 0.87778085
- $00{:}34{:}40.700 \dashrightarrow 00{:}34{:}41.501$ They do meds.
- NOTE Confidence: 0.87778085
- $00{:}34{:}41{.}501 \dashrightarrow 00{:}34{:}43{.}370$ Did you all sorts of stuff and
- NOTE Confidence: 0.87778085
- $00:34:43.440 \longrightarrow 00:34:45.505$ then we don't really see a change,
- NOTE Confidence: 0.87778085
- 00:34:45.510 00:34:46.638 whereas other patients it
- NOTE Confidence: 0.87778085

 $00:34:46.638 \rightarrow 00:34:48.048$ seems like they come in.

NOTE Confidence: 0.87778085

00:34:48.050 --> 00:34:49.765 We have clinicians or like I didn't

NOTE Confidence: 0.87778085

00:34:49.765 --> 00:34:51.973 really even do anything and now all of NOTE Confidence: 0.87778085

00:34:51.973 --> 00:34:53.757 a sudden there dramatically better and NOTE Confidence: 0.87778085

 $00{:}34{:}53.757 \dashrightarrow 00{:}34{:}55.611$ we really don't understand why there

NOTE Confidence: 0.87778085

00:34:55.611 --> 00:34:57.290 are these differential response patterns.

NOTE Confidence: 0.87778085

 $00{:}34{:}57{.}290 \dashrightarrow 00{:}35{:}00{.}290$ In one of the possibilities of that well,

NOTE Confidence: 0.87778085

 $00:35:00.290 \longrightarrow 00:35:01.334$ complex systems behave

NOTE Confidence: 0.87778085

 $00{:}35{:}01{.}334 \dashrightarrow 00{:}35{:}02{.}726$ in non proportional ways.

NOTE Confidence: 0.87778085

 $00:35:02.730 \dashrightarrow 00:35:04.928$ There isn't any guarantee that what you

NOTE Confidence: 0.87778085

 $00{:}35{:}04{.}928 \dashrightarrow 00{:}35{:}07{.}600$ put in will have a proportional output,

NOTE Confidence: 0.87778085

00:35:07.600 --> 00:35:10.516 and so I have another video to kind of

NOTE Confidence: 0.87778085

 $00:35:10.516 \dashrightarrow 00:35:12.820$ display and highlight some of this.

NOTE Confidence: 0.87778085

00:35:12.820 --> 00:35:14.555 This is a gymnastics example

NOTE Confidence: 0.87778085

 $00{:}35{:}14.555 \dashrightarrow 00{:}35{:}15.943$ before I introduces further.

NOTE Confidence: 0.87778085

 $00:35:15.950 \rightarrow 00:35:18.470$ I'll encourage you might want to adjust

- NOTE Confidence: 0.87778085
- $00:35:18.470 \longrightarrow 00:35:21.520$ your volume a little bit down on this one.

 $00:35:21.520 \longrightarrow 00:35:23.774$ The volume on this video tends to

NOTE Confidence: 0.87778085

 $00:35:23.774 \rightarrow 00:35:26.736$ be a lot louder than the last one,

NOTE Confidence: 0.87778085

 $00:35:26.740 \dashrightarrow 00:35:29.344$ and so perhaps we can avert some

NOTE Confidence: 0.87778085

 $00{:}35{:}29{.}344 \dashrightarrow 00{:}35{:}30{.}979$ panic attacks here if we.

NOTE Confidence: 0.87778085

 $00:35:30.980 \rightarrow 00:35:33.325$ Give you a little bit of warning.

NOTE Confidence: 0.87778085

 $00:35:33.330 \longrightarrow 00:35:35.346$ This is a 30 second video.

NOTE Confidence: 0.87778085

00:35:35.350 - 00:35:36.826 This is Simone Biles.

NOTE Confidence: 0.87778085

 $00:35:36.826 \dashrightarrow 00:35:38.671$ I'm sure everybody recognizes her

NOTE Confidence: 0.87778085

 $00:35:38.671 \dashrightarrow 00:35:40.907$ and she's doing one of her routines

NOTE Confidence: 0.87778085

 $00{:}35{:}40{.}907 \dashrightarrow 00{:}35{:}43{.}474$ and I found that as I was really

NOTE Confidence: 0.87778085

00:35:43.474 --> 00:35:45.424 trying to understand the concepts of

NOTE Confidence: 0.87778085

 $00{:}35{:}45{.}430 \dashrightarrow 00{:}35{:}46{.}770$ non proportionality that gymnastics

NOTE Confidence: 0.87778085

 $00{:}35{:}46.770 \dashrightarrow 00{:}35{:}47.775$ was like this.

NOTE Confidence: 0.87778085

 $00{:}35{:}47.780 \dashrightarrow 00{:}35{:}49.790$ Really really great way of kind

- $00:35:49.790 \longrightarrow 00:35:50.795$ of capturing it.
- NOTE Confidence: 0.87778085
- $00{:}35{:}50{.}800$ --> $00{:}35{:}52{.}816$ Embodying this notion of non proportionality.
- NOTE Confidence: 0.87778085
- $00:35:52.820 \dashrightarrow 00:35:55.508$ So let's let's watch your 32nd routine here.
- NOTE Confidence: 0.8524369
- $00{:}36{:}18{.}570 \dashrightarrow 00{:}36{:}20{.}718$ That's I warned a second Trisha
- NOTE Confidence: 0.8524369
- $00:36:20.718 \longrightarrow 00:36:22.691$ that usually this video and
- NOTE Confidence: 0.8524369
- $00{:}36{:}22.691 \dashrightarrow 00{:}36{:}24.567$ practice runs works beautifully.
- NOTE Confidence: 0.8524369
- $00:36:24.570 \longrightarrow 00:36:26.570$ And then during the live
- NOTE Confidence: 0.8524369
- $00:36:26.570 \longrightarrow 00:36:27.770$ presentation this happens.
- NOTE Confidence: 0.8524369
- $00{:}36{:}27.770 \dashrightarrow 00{:}36{:}30.170$ Let me try an alternative approach.
- NOTE Confidence: 0.8524369
- $00:36:30.170 \longrightarrow 00:36:33.310$ Going to switch to you.
- NOTE Confidence: 0.8524369
- $00:36:33.310 \longrightarrow 00:36:34.579$ Another video here.
- NOTE Confidence: 0.8524369
- $00:36:34.579 \longrightarrow 00:36:37.117$ Let's see if this works better.
- NOTE Confidence: 0.7750368
- $00:36:44.830 \longrightarrow 00:36:47.119$ Share this instead.
- NOTE Confidence: 0.8875589
- $00:36:49.280 \longrightarrow 00:36:51.672$ The same video I'm just going to use
- NOTE Confidence: 0.8875589
- $00{:}36{:}51{.}672 \dashrightarrow 00{:}36{:}54{.}106$ the raw video and maybe that will.
- NOTE Confidence: 0.8875589
- $00:36:54.110 \rightarrow 00:36:56.217$ Correct the problem, right? Let's try now.

 $00:37:32.480 \rightarrow 00:37:35.742$ Right, so I shared that video because

NOTE Confidence: 0.875974060000001

00:37:35.742 --> 00:37:39.689 I think it really helps to capture

NOTE Confidence: 0.875974060000001

 $00:37:39.689 \rightarrow 00:37:43.361$ that notion of that non proportionality

NOTE Confidence: 0.875974060000001

 $00:37:43.459 \rightarrow 00:37:46.855$ where here we have this undisputed,

NOTE Confidence: 0.875974060000001

00:37:46.860 --> 00:37:47.934 very accomplished.

NOTE Confidence: 0.875974060000001

 $00:37:47.934 \dashrightarrow 00:37:52.230$ Athlete who's very good at what she does.

NOTE Confidence: 0.875974060000001

 $00:37:52.230 \longrightarrow 00:37:55.810$ Ann is 1 lots of medals and is very very

NOTE Confidence: 0.87597406000001

 $00:37:55.901 \rightarrow 00:37:59.837$ accomplished and is doing quite well on her.

NOTE Confidence: 0.875974060000001

 $00{:}37{:}59{.}840 \dashrightarrow 00{:}38{:}02{.}388$ Routine for the first 29 1/2 seconds

NOTE Confidence: 0.875974060000001

 $00{:}38{:}02{.}388 \dashrightarrow 00{:}38{:}05{.}392$ and then she does a split an she lands

NOTE Confidence: 0.875974060000001

 $00:38:05.392 \rightarrow 00:38:08.289$ on the beam and up until that moment is

NOTE Confidence: 0.875974060000001

 $00{:}38{:}08{.}289 \dashrightarrow 00{:}38{:}11{.}274$ sort of like we had absolutely no way of

NOTE Confidence: 0.875974060000001

 $00:38:11.274 \rightarrow 00:38:13.909$ knowing that she was actually going to fall.

NOTE Confidence: 0.875974060000001

00:38:13.910 $\operatorname{-->}$ 00:38:16.558 And from the time that we see her

NOTE Confidence: 0.875974060000001

 $00{:}38{:}16{.}558 \dashrightarrow 00{:}38{:}18{.}880$ legs shooting up for her trying to

 $00:38:18.880 \rightarrow 00:38:21.225$ touch her balance to her feet being

NOTE Confidence: 0.87597406000001

 $00{:}38{:}21{.}225 \dashrightarrow 00{:}38{:}23{.}283$ on the ground with the fall,

NOTE Confidence: 0.87597406000001

 $00{:}38{:}23.290 \dashrightarrow 00{:}38{:}25.300$ it's about half of a second

NOTE Confidence: 0.875974060000001

 $00:38:25.300 \rightarrow 00:38:26.640$ so it's very dramatic.

NOTE Confidence: 0.875974060000001

 $00:38:26.640 \longrightarrow 00:38:27.384$ Very rapid,

NOTE Confidence: 0.875974060000001

 $00:38:27.384 \rightarrow 00:38:30.360$ seemed to come out of the blue despite.

NOTE Confidence: 0.875974060000001

 $00:38:30.360 \longrightarrow 00:38:32.270$ All of this good performance

NOTE Confidence: 0.875974060000001

00:38:32.270 --> 00:38:33.798 up until that point.

NOTE Confidence: 0.875974060000001

 $00:38:33.800 \rightarrow 00:38:36.418$ And so this really sort of aligns

NOTE Confidence: 0.875974060000001

 $00:38:36.418 \longrightarrow 00:38:38.766$ with that notion of the projects

NOTE Confidence: 0.875974060000001

00:38:38.766 --> 00:38:41.440 that John was working on with NASA,

NOTE Confidence: 0.875974060000001

 $00:38:41.440 \longrightarrow 00:38:43.729$ as well as some of what we

NOTE Confidence: 0.875974060000001

 $00:38:43.729 \longrightarrow 00:38:46.399$ know to be true with suicide.

NOTE Confidence: 0.875974060000001

 $00{:}38{:}46{.}400 \dashrightarrow 00{:}38{:}49{.}008$ That it seems to sometimes come out of

NOTE Confidence: 0.875974060000001

 $00:38:49.008 \dashrightarrow 00:38:51.747$ the blue without much advanced notice.

NOTE Confidence: 0.875974060000001

 $00:38:51.750 \longrightarrow 00:38:54.288$ Well that in essence this fall

- NOTE Confidence: 0.875974060000001
- $00:38:54.288 \rightarrow 00:38:57.330$ here that we saw in gymnastics.
- NOTE Confidence: 0.875974060000001
- $00:38:57.330 \longrightarrow 00:38:59.871$ It's sort of like we don't really
- NOTE Confidence: 0.87597406000001
- $00:38:59.871 \longrightarrow 00:39:01.429$ know what contributed to it.
- NOTE Confidence: 0.875974060000001
- $00:39:01.430 \dashrightarrow 00:39:03.922$ We can probably infer that maybe she
- NOTE Confidence: 0.875974060000001
- $00:39:03.922 \rightarrow 00:39:06.804$ just landed in a way where her center
- NOTE Confidence: 0.875974060000001
- $00:39:06.804 \rightarrow 00:39:09.233$ of gravity was perhaps just a little
- NOTE Confidence: 0.875974060000001
- $00:39:09.233 \dashrightarrow 00:39:11.999$ bit off from where she wanted it to be.
- NOTE Confidence: 0.875974060000001
- $00:39:11.999 \longrightarrow 00:39:12.617$ Maybe her,
- NOTE Confidence: 0.875974060000001
- $00:39:12.617 \rightarrow 00:39:15.587$ maybe her foot was just twisted in a slightly
- NOTE Confidence: 0.875974060000001
- $00:39:15.587 \rightarrow 00:39:18.184$ different way than what she was expecting.
- NOTE Confidence: 0.875974060000001
- $00:39:18.190 \longrightarrow 00:39:20.584$ We really don't know, but a very,
- NOTE Confidence: 0.875974060000001
- $00{:}39{:}20.590 \dashrightarrow 00{:}39{:}22.788$ very slight shift in the mechanics of
- NOTE Confidence: 0.875974060000001
- $00:39:22.788 \dashrightarrow 00:39:25.370$ the move led to this dramatic outcome,
- NOTE Confidence: 0.875974060000001
- $00{:}39{:}25{.}370 \dashrightarrow 00{:}39{:}27{.}170$ and suicide seems to function
- NOTE Confidence: 0.875974060000001
- $00:39:27.170 \longrightarrow 00:39:28.610$ in the same way.
- NOTE Confidence: 0.875974060000001

 $00:39:28.610 \rightarrow 00:39:29.498$ So mathematically,

NOTE Confidence: 0.875974060000001

00:39:29.498 --> 00:39:32.606 this is referred to as a catastrophic

NOTE Confidence: 0.87597406000001

 $00:39:32.606 \rightarrow 00:39:34.781$ change where the system suddenly

NOTE Confidence: 0.875974060000001

 $00:39:34.781 \longrightarrow 00:39:37.942$ shifts from its prior behavior to a

NOTE Confidence: 0.875974060000001

00:39:37.942 --> 00:39:40.310 completely different behavioral pattern,

NOTE Confidence: 0.875974060000001

 $00{:}39{:}40{.}310 \dashrightarrow 00{:}39{:}43{.}232$ and we've started to think about

NOTE Confidence: 0.875974060000001

 $00:39:43.232 \rightarrow 00:39:45.692$ catastrophic change processes and apply

NOTE Confidence: 0.875974060000001

 $00:39:45.692 \dashrightarrow 00:39:48.723$ it to our work with suicidal individuals.

NOTE Confidence: 0.875974060000001

 $00{:}39{:}48{.}730 \dashrightarrow 00{:}39{:}51{.}070$ And we're actually finding it.

NOTE Confidence: 0.875974060000001

00:39:51.070 - 00:39:53.410 It's a very useful model,

NOTE Confidence: 0.875974060000001

 $00{:}39{:}53{.}410 \dashrightarrow 00{:}39{:}57{.}001$ and the reason we think this is

NOTE Confidence: 0.875974060000001

 $00{:}39{:}57{.}001 \dashrightarrow 00{:}39{:}59{.}260$ the case is that.

NOTE Confidence: 0.875974060000001

00:39:59.260 --> 00:40:00.322 Again, from assistance.

NOTE Confidence: 0.875974060000001

 $00:40:00.322 \rightarrow 00:40:02.446$ Perspective to have these sort of

NOTE Confidence: 0.875974060000001

00:40:02.446 --> 00:40:04.020 sudden catastrophic changes,

NOTE Confidence: 0.875974060000001

 $00{:}40{:}04{.}020 \dashrightarrow 00{:}40{:}05{.}664$ there's another inherent assumption

 $00:40:05.664 \rightarrow 00:40:07.308$ embedded within non proportionality,

NOTE Confidence: 0.875974060000001

 $00:40:07.310 \longrightarrow 00:40:09.830$ which is the notion of a tipping

NOTE Confidence: 0.875974060000001

 $00:40:09.830 \longrightarrow 00:40:12.349$ point where there exists two distinct

NOTE Confidence: 0.875974060000001

 $00{:}40{:}12.349 \dashrightarrow 00{:}40{:}15.073$ distinct and discrete States and in

NOTE Confidence: 0.875974060000001

00:40:15.073 --> 00:40:17.617 between these two separate states of

NOTE Confidence: 0.875974060000001

 $00{:}40{:}17.617 \dashrightarrow 00{:}40{:}20.422$ being is this tipping point such that

NOTE Confidence: 0.875974060000001

 $00:40:20.422 \rightarrow 00:40:24.160$ if you fall just shy of the tipping point,

NOTE Confidence: 0.87597406000001

 $00:40:24.160 \longrightarrow 00:40:26.620$ you stay in one particular state.

NOTE Confidence: 0.875974060000001

 $00{:}40{:}26.620 \dashrightarrow 00{:}40{:}28.918$ If however you just barely move

NOTE Confidence: 0.875974060000001

 $00:40:28.918 \rightarrow 00:40:32.048$ over the cusp of that tipping point.

NOTE Confidence: 0.875974060000001

00:40:32.050 --> 00:40:34.570 You can shift into a new state,

NOTE Confidence: 0.875974060000001

 $00{:}40{:}34{.}570 \dashrightarrow 00{:}40{:}36{.}832$ and indeed there's now an accumulation

NOTE Confidence: 0.875974060000001

 $00{:}40{:}36.832 \dashrightarrow 00{:}40{:}39.054$ of evidence indicating that this is

NOTE Confidence: 0.875974060000001

 $00:40:39.054 \rightarrow 00:40:40.684$ actually how suicide risk works.

NOTE Confidence: 0.875974060000001

 $00:40:40.690 \rightarrow 00:40:43.930$ So this is a study here, but Tracy Witty.

- $00:40:43.930 \longrightarrow 00:40:44.650$ They've done.
- NOTE Confidence: 0.875974060000001
- 00:40:44.650 --> 00:40:45.037 Taxa,
- NOTE Confidence: 0.875974060000001
- $00:40:45.037 \longrightarrow 00:40:47.359$ metric analysis with large sample of
- NOTE Confidence: 0.875974060000001
- $00{:}40{:}47{.}359 \dashrightarrow 00{:}40{:}49{.}263$ suicidal individuals and found that
- NOTE Confidence: 0.875974060000001
- $00{:}40{:}49{.}263 \dashrightarrow 00{:}40{:}51{.}309$ there was a subgroup of suicidal
- NOTE Confidence: 0.875974060000001
- 00:40:51.309 --> 00:40:51.991 individuals who
- NOTE Confidence: 0.8293058
- 00:40:52.050 --> 00:40:54.370 had very, very high risk for suicide,
- NOTE Confidence: 0.8293058
- $00:40:54.370 \longrightarrow 00:40:55.810$ and they were categorically
- NOTE Confidence: 0.8293058
- $00:40:55.810 \longrightarrow 00:40:57.250$ distinct from everybody else.
- NOTE Confidence: 0.8293058
- $00:40:57.250 \rightarrow 00:40:59.338$ These results were actually replicated by
- NOTE Confidence: 0.8293058
- 00:40:59.338 --> 00:41:01.929 team down at Baylor College of Medicine,
- NOTE Confidence: 0.8293058
- $00:41:01.930 \longrightarrow 00:41:03.043$ with psychiatric inpatients,
- NOTE Confidence: 0.8293058
- $00:41:03.043 \longrightarrow 00:41:04.156$ and found that.
- NOTE Confidence: 0.8293058
- 00:41:04.160 --> 00:41:05.072 Among psychiatric inpatients,
- NOTE Confidence: 0.8293058
- $00:41:05.072 \rightarrow 00:41:07.200$ there's a small group that was really,
- NOTE Confidence: 0.8293058
- $00:41:07.200 \rightarrow 00:41:09.461$ really high risk for suicide and then

- NOTE Confidence: 0.8293058
- 00:41:09.461 --> 00:41:11.760 everybody else was in a lower risk state.
- NOTE Confidence: 0.8293058
- $00:41:11.760 \longrightarrow 00:41:13.280$ We've seen this as well.
- NOTE Confidence: 0.8293058
- 00:41:13.280 --> 00:41:14.483 An epidemiological study.
- NOTE Confidence: 0.8293058
- $00:41:14.483 \rightarrow 00:41:16.704$ This is a. Project done better.
- NOTE Confidence: 0.8293058
- 00:41:16.704 --> 00:41:19.620 Army Stars research team led by Ron Kessler.
- NOTE Confidence: 0.8293058
- $00{:}41{:}19.620 \dashrightarrow 00{:}41{:}22.086$ What they did was they took a large sample
- NOTE Confidence: 0.8293058
- $00:41:22.086 \longrightarrow 00:41:24.635$ of soldiers who had been discharged
- NOTE Confidence: 0.8293058
- 00:41:24.635 --> 00:41:26.399 from psychiatric inpatient care,
- NOTE Confidence: 0.8293058
- $00{:}41{:}26{.}400 \dashrightarrow 00{:}41{:}28{.}185$ used machine learning to split
- NOTE Confidence: 0.8293058
- 00:41:28.185 --> 00:41:29.970 them up into vent tiles.
- NOTE Confidence: 0.8293058
- $00:41:29.970 \longrightarrow 00:41:32.385$ And then they looked at they rank
- NOTE Confidence: 0.8293058
- $00{:}41{:}32{.}385 \dashrightarrow 00{:}41{:}34{.}930$ ordered the vent tiles in terms of
- NOTE Confidence: 0.8293058
- $00{:}41{:}34{.}930 \dashrightarrow 00{:}41{:}37{.}084$ overall risk level and then mapped
- NOTE Confidence: 0.8293058
- $00{:}41{:}37{.}156 \dashrightarrow 00{:}41{:}39{.}620$ onto who and where are the suicide
- NOTE Confidence: 0.8293058
- $00:41:39.620 \longrightarrow 00:41:41.667$ deaths occur and what they found
- NOTE Confidence: 0.8293058

 $00{:}41{:}41.667 \dashrightarrow 00{:}41{:}43.970$ was that over half of the suicide

NOTE Confidence: 0.8293058

 $00{:}41{:}44{.}039 \dashrightarrow 00{:}41{:}46{.}385$ deaths occur in the first subgroup.

NOTE Confidence: 0.8293058

 $00{:}41{:}46{.}390 \dashrightarrow 00{:}41{:}47{.}706$ The 1st event tile.

NOTE Confidence: 0.8293058

 $00{:}41{:}47.706 \dashrightarrow 00{:}41{:}50.071$ This is on the left hand side

NOTE Confidence: 0.8293058

 $00{:}41{:}50{.}071 \dashrightarrow 00{:}41{:}52{.}269$ of the screen and you see the

NOTE Confidence: 0.8293058

 $00:41:52.269 \longrightarrow 00:41:54.317$ rest of the 19 vent tiles.

NOTE Confidence: 0.8293058

 $00{:}41{:}54{.}320 \dashrightarrow 00{:}41{:}56{.}096$ There's not as much difference between

NOTE Confidence: 0.8293058

 $00:41:56.096 \longrightarrow 00:41:58.360$ them is a little bit of variability.

NOTE Confidence: 0.8293058

 $00{:}41{:}58{.}360 \dashrightarrow 00{:}42{:}00{.}453$ Groups two and three or a little

NOTE Confidence: 0.8293058

 $00:42:00.453 \longrightarrow 00:42:02.409$ bit higher risk than the others,

NOTE Confidence: 0.8293058

 $00{:}42{:}02{.}410 \dashrightarrow 00{:}42{:}03{.}674$ but not dramatically so.

NOTE Confidence: 0.8293058

 $00{:}42{:}03.674 \dashrightarrow 00{:}42{:}05.570$ So this also suggests that there's

NOTE Confidence: 0.8293058

 $00:42:05.624 \rightarrow 00:42:07.069$ this sort of tipping point.

NOTE Confidence: 0.8293058

 $00:42:07.070 \rightarrow 00:42:08.948$ There's one small subgroup that accounts

NOTE Confidence: 0.8293058

 $00{:}42{:}08{.}948 \dashrightarrow 00{:}42{:}11{.}108$ for more than half of the suicides,

NOTE Confidence: 0.8293058

 $00:42:11.110 \longrightarrow 00:42:12.700$ and then there's everybody else

- NOTE Confidence: 0.8293058
- $00:42:12.700 \longrightarrow 00:42:15.160$ but the rest of the 95% of the
- NOTE Confidence: 0.8293058
- $00{:}42{:}15.160 \dashrightarrow 00{:}42{:}17.330$ population now on the right hand side.
- NOTE Confidence: 0.8293058
- $00:42:17.330 \longrightarrow 00:42:18.954$ This is not hypothetical.
- NOTE Confidence: 0.8293058
- $00:42:18.954 \rightarrow 00:42:22.319$ Model where if suicide risk was a continuum,
- NOTE Confidence: 0.8293058
- $00:42:22.320 \rightarrow 00:42:24.714$ this sort of unidimensional gradual change
- NOTE Confidence: 0.8293058
- $00{:}42{:}24.714$ --> $00{:}42{:}27.249$ process moving from lower to higher risk.
- NOTE Confidence: 0.8293058
- $00:42:27.250 \longrightarrow 00:42:29.721$ The graph on the right hand side
- NOTE Confidence: 0.8293058
- $00{:}42{:}29{.}721 \dashrightarrow 00{:}42{:}32{.}179$ is what Kessler should have found.
- NOTE Confidence: 0.8293058
- $00{:}42{:}32{.}180 \dashrightarrow 00{:}42{:}34{.}609$ There should have been the sort of
- NOTE Confidence: 0.8293058
- $00:42:34.609 \rightarrow 00:42:36.534$ incremental changes in the probability
- NOTE Confidence: 0.8293058
- $00:42:36.534 \rightarrow 00:42:39.000$ of suicide deaths within each ventile,
- NOTE Confidence: 0.8293058
- $00{:}42{:}39{.}000 \dashrightarrow 00{:}42{:}42{.}960$ but that's of course not what they found.
- NOTE Confidence: 0.8293058
- $00:42:42.960 \rightarrow 00:42:44.492$ We've since mathematically modeled
- NOTE Confidence: 0.8293058
- $00:42:44.492 \longrightarrow 00:42:46.790$ suicidal Ideations on a session by
- NOTE Confidence: 0.8293058
- $00{:}42{:}46.851 \dashrightarrow 00{:}42{:}49.007$ session basis within psychiatric
- NOTE Confidence: 0.8293058
$00:42:49.007 \rightarrow 00:42:50.624$ outpatient psychiatric outpatients,

NOTE Confidence: 0.8293058

 $00{:}42{:}50{.}630 \dashrightarrow 00{:}42{:}53{.}234$ and what we found was that patients NOTE Confidence: 0.8293058

 $00:42:53.234 \rightarrow 00:42:56.521$ who had a history of multiple suicide

NOTE Confidence: 0.8293058

 $00{:}42{:}56{.}521 \dashrightarrow 00{:}42{:}59{.}647$ attempts at the start of treatment,

NOTE Confidence: 0.8293058

 $00{:}42{:}59{.}650 \dashrightarrow 00{:}43{:}02{.}674$ they had a unique change process that NOTE Confidence: 0.8293058

 $00:43:02.674 \rightarrow 00:43:04.976$ was characterized by sudden dramatic

NOTE Confidence: 0.8293058

00:43:04.976 --> 00:43:07.286 Upson Downs in suicidal ideations

NOTE Confidence: 0.8293058

 $00:43:07.286 \longrightarrow 00:43:10.018$ on a session to session basis.

NOTE Confidence: 0.8293058

00:43:10.020 --> 00:43:13.410 It was like a sawtooth pattern.

NOTE Confidence: 0.8293058

 $00:43:13.410 \longrightarrow 00:43:15.080$ In that that sawtooth pattern

NOTE Confidence: 0.8293058

00:43:15.080 --> 00:43:16.750 is consistent with the existence

NOTE Confidence: 0.8293058

00:43:16.808 --> 00:43:18.476 of two discrete states of risk,

NOTE Confidence: 0.8293058

 $00{:}43{:}18{.}480 \dashrightarrow 00{:}43{:}20{.}538$ where in essence the patients are

NOTE Confidence: 0.8293058

 $00{:}43{:}20{.}538$ --> $00{:}43{:}22{.}281$ bouncing back and forth between

NOTE Confidence: 0.8293058

 $00:43:22.281 \longrightarrow 00:43:24.123$ low and high risk that they're

NOTE Confidence: 0.8293058

00:43:24.123 --> 00:43:26.087 not doing it in a gross, gradual,

- NOTE Confidence: 0.8293058
- $00:43:26.087 \rightarrow 00:43:28.306$ slow manner because there's a tipping point,

 $00:43:28.310 \longrightarrow 00:43:29.890$ and so they can be.

NOTE Confidence: 0.8293058

00:43:29.890 --> 00:43:32.088 It's sort of like a binary or

NOTE Confidence: 0.8293058

 $00{:}43{:}32.088 \dashrightarrow 00{:}43{:}33.700$ a one or a zero.

NOTE Confidence: 0.8293058

 $00:43:33.700 \longrightarrow 00:43:35.280$ There is no in between,

NOTE Confidence: 0.8293058

 $00{:}43{:}35{.}280 \dashrightarrow 00{:}43{:}37{.}760$ and there is a distinct subgroup of patients

NOTE Confidence: 0.8293058

 $00:43:37.760 \rightarrow 00:43:40.355$ who seemed to conform to this change process,

NOTE Confidence: 0.8293058

 $00:43:40.360 \longrightarrow 00:43:42.256$ and So what that means is,

NOTE Confidence: 0.8293058

00:43:42.260 --> 00:43:43.052 I think.

NOTE Confidence: 0.8293058

00:43:43.052 --> 00:43:45.032 Our traditional ways of thinking

NOTE Confidence: 0.8293058

 $00:43:45.032 \longrightarrow 00:43:47.505$ about suicide risk in this sort

NOTE Confidence: 0.8293058

00:43:47.505 --> 00:43:49.125 of unit dimensional hierarchy,

NOTE Confidence: 0.8293058

 $00{:}43{:}49{.}130 \dashrightarrow 00{:}43{:}51{.}374$ where at the bottom we have

NOTE Confidence: 0.8293058

00:43:51.374 --> 00:43:52.870 things like I don't

NOTE Confidence: 0.86382526

 $00{:}43{:}52{.}956 \dashrightarrow 00{:}43{:}54{.}628$ want to live anymore.

 $00:43:54.630 \rightarrow 00:43:56.988$ I don't want to be alive,

NOTE Confidence: 0.86382526

 $00:43:56.990 \rightarrow 00:43:58.950$ moving to active suicidal ideations,

NOTE Confidence: 0.86382526

00:43:58.950 --> 00:44:00.126 moving to planning,

NOTE Confidence: 0.86382526

00:44:00.126 --> 00:44:01.694 moving to preparatory behavior,

NOTE Confidence: 0.86382526

 $00:44:01.700 \longrightarrow 00:44:04.058$ and then at the highest level,

NOTE Confidence: 0.86382526

 $00{:}44{:}04{.}060 \dashrightarrow 00{:}44{:}06{.}514$ suicidal behavior where there's at least

NOTE Confidence: 0.86382526

 $00{:}44{:}06{.}514 \dashrightarrow 00{:}44{:}08{.}579$ a significant subgroup of individuals

NOTE Confidence: 0.86382526

 $00:44:08.579 \longrightarrow 00:44:11.127$ who do not conform to this pathway.

NOTE Confidence: 0.86382526

 $00:44:11.130 \longrightarrow 00:44:12.650$ In this hierarchical model,

NOTE Confidence: 0.86382526

 $00:44:12.650 \longrightarrow 00:44:14.930$ some patients do seem to follow

NOTE Confidence: 0.86382526

 $00{:}44{:}14.996 \dashrightarrow 00{:}44{:}16.800$ this gradual change process.

NOTE Confidence: 0.86382526

 $00:44:16.800 \longrightarrow 00:44:18.720$ But there's another substantial minority.

NOTE Confidence: 0.86382526

 $00:44:18.720 \longrightarrow 00:44:20.252$ At the very least,

NOTE Confidence: 0.86382526

00:44:20.252 --> 00:44:21.784 that don't follow this,

NOTE Confidence: 0.86382526

 $00{:}44{:}21.790 \dashrightarrow 00{:}44{:}24.016$ and So what this means is we

NOTE Confidence: 0.86382526

 $00:44:24.016 \rightarrow 00:44:26.491$ probably need to change how we

- NOTE Confidence: 0.86382526
- 00:44:26.491 --> 00:44:27.940 conceptualize suicide risk.
- NOTE Confidence: 0.86382526
- $00:44:27.940 \longrightarrow 00:44:29.860$ And so we've now informed
- NOTE Confidence: 0.86382526
- $00:44:29.860 \longrightarrow 00:44:31.780$ by the notion of emergence,
- NOTE Confidence: 0.86382526
- $00:44:31.780 \longrightarrow 00:44:34.900$ move towards a 3 dimensional model of suicide
- NOTE Confidence: 0.86382526
- $00:44:34.900 \rightarrow 00:44:37.919$ risk and this figure on the screen.
- NOTE Confidence: 0.86382526
- $00{:}44{:}37{.}920 \dashrightarrow 00{:}44{:}40{.}363$ With this sort of curved claim of
- NOTE Confidence: 0.86382526
- 00:44:40.363 00:44:42.318 suicide risk is what's referred
- NOTE Confidence: 0.86382526
- $00:44:42.318 \longrightarrow 00:44:44.826$ to as a cusp catastrophe model.
- NOTE Confidence: 0.86382526
- $00:44:44.830 \longrightarrow 00:44:46.850$ So this provides us with.
- NOTE Confidence: 0.86382526
- $00:44:46.850 \longrightarrow 00:44:49.293$ A way to understand why is it
- NOTE Confidence: 0.86382526
- $00:44:49.293 \longrightarrow 00:44:51.219$ that some individuals seem to
- NOTE Confidence: 0.86382526
- $00{:}44{:}51{.}219 \dashrightarrow 00{:}44{:}53{.}224$ have this gradual change process.
- NOTE Confidence: 0.86382526
- $00:44:53.230 \rightarrow 00:44:55.757$ They sort of slowly move through these
- NOTE Confidence: 0.86382526
- $00{:}44{:}55{.}757 \dashrightarrow 00{:}44{:}57{.}350$ incremental stages towards suicide,
- NOTE Confidence: 0.86382526
- $00{:}44{:}57{.}350 \dashrightarrow 00{:}44{:}59{.}435$ whereas other individuals seem to
- NOTE Confidence: 0.86382526

00:44:59.435 --> 00:45:01.908 very suddenly shift from a low

NOTE Confidence: 0.86382526

00:45:01.908 --> 00:45:04.099 risk state to a high risk state,

NOTE Confidence: 0.86382526

 $00{:}45{:}04{.}100 \dashrightarrow 00{:}45{:}06{.}557$ and so let me demonstrate several of

NOTE Confidence: 0.86382526

 $00{:}45{:}06{.}557 \dashrightarrow 00{:}45{:}09{.}728$ the kind of a key change processes here.

NOTE Confidence: 0.86382526

 $00{:}45{:}09{.}730 \dashrightarrow 00{:}45{:}11.600$ This first pathways pathway a.

NOTE Confidence: 0.86382526

 $00{:}45{:}11.600 \dashrightarrow 00{:}45{:}13.688$ This is sort of the classic

NOTE Confidence: 0.86382526

 $00:45:13.688 \rightarrow 00:45:15.730$ way of thinking about suicide,

NOTE Confidence: 0.86382526

 $00:45:15.730 \longrightarrow 00:45:16.348$ it's unidimensional.

NOTE Confidence: 0.86382526

 $00{:}45{:}16{.}348 \dashrightarrow 00{:}45{:}18{.}820$ As you move up the surface plane that

NOTE Confidence: 0.86382526

 $00:45:18.879 \rightarrow 00:45:20.959$ corresponds to increasing suicide risk,

NOTE Confidence: 0.86382526

 $00{:}45{:}20{.}960 \dashrightarrow 00{:}45{:}23{.}137$ and these individuals then follow back down.

NOTE Confidence: 0.86382526

00:45:23.140 --> 00:45:25.628 They kind of move up and down Hill,

NOTE Confidence: 0.86382526

 $00:45:25.630 \longrightarrow 00:45:27.568$ and the way that this typically

NOTE Confidence: 0.86382526

 $00{:}45{:}27.568 \dashrightarrow 00{:}45{:}29.203$ manifests is those fluctuations in

NOTE Confidence: 0.86382526

 $00:45:29.203 \rightarrow 00:45:30.919$ suicide rates that have inclined in,

NOTE Confidence: 0.86382526

 $00:45:30.920 \longrightarrow 00:45:32.136$ as noted in that,

- NOTE Confidence: 0.86382526
- $00:45:32.136 \longrightarrow 00:45:34.806$ like very first one of the very first
- NOTE Confidence: 0.86382526
- $00{:}45{:}34.806 \dashrightarrow 00{:}45{:}37.134$ slides that I've showed you today.
- NOTE Confidence: 0.86382526
- $00:45:37.140 \longrightarrow 00:45:39.233$ And so we do see that people
- NOTE Confidence: 0.86382526
- $00{:}45{:}39{.}233 \dashrightarrow 00{:}45{:}41{.}841$ have good days and bad days that
- NOTE Confidence: 0.86382526
- $00:45:41.841 \longrightarrow 00:45:43.477$ they have these fluctuations,
- NOTE Confidence: 0.86382526
- $00:45:43.480 \longrightarrow 00:45:45.586$ but they tend to be somewhat
- NOTE Confidence: 0.86382526
- $00:45:45.586 \longrightarrow 00:45:46.639$ smooth and gradual.
- NOTE Confidence: 0.86382526
- $00:45:46.640 \longrightarrow 00:45:48.048$ These individuals often come
- NOTE Confidence: 0.86382526
- $00{:}45{:}48.048 \dashrightarrow 00{:}45{:}49.808$ in to mental health care.
- NOTE Confidence: 0.86382526
- $00:45:49.810 \rightarrow 00:45:51.620$ We typically diagnosed him with
- NOTE Confidence: 0.86382526
- $00:45:51.620 \rightarrow 00:45:53.680$ like mood disorders and this is,
- NOTE Confidence: 0.86382526
- $00{:}45{:}53.680 \dashrightarrow 00{:}45{:}55.927$ I think the sort of preponderance of
- NOTE Confidence: 0.86382526
- $00:45:55.927 \rightarrow 00:45:58.081$ the people that we have traditionally
- NOTE Confidence: 0.86382526
- $00{:}45{:}58.081 \dashrightarrow 00{:}46{:}00.713$ thought about when it comes to suicide.
- NOTE Confidence: 0.86382526
- $00{:}46{:}00{.}720 \dashrightarrow 00{:}46{:}03{.}170$ We didn't have a different group of
- NOTE Confidence: 0.86382526

 $00:46:03.170 \longrightarrow 00:46:05.435$ individuals who are located in a

NOTE Confidence: 0.86382526

 $00:46:05.435 \rightarrow 00:46:07.727$ different place on this behavior surface.

NOTE Confidence: 0.86382526

00:46:07.730 --> 00:46:10.264 They also move up and down Hill,

NOTE Confidence: 0.86382526

 $00:46:10.270 \longrightarrow 00:46:12.468$ but because they are located in a

NOTE Confidence: 0.86382526

 $00{:}46{:}12{.}468 \dashrightarrow 00{:}46{:}15{.}117$ place of the this curved plane that

NOTE Confidence: 0.86382526

 $00{:}46{:}15.117 \dashrightarrow 00{:}46{:}17.162$ corresponds to a steeper slope,

NOTE Confidence: 0.86382526

00:46:17.170 -> 00:46:18.945 they experience much more rapid

NOTE Confidence: 0.86382526

 $00:46:18.945 \rightarrow 00:46:21.520$ increases in rapid decreases in suicide risk.

NOTE Confidence: 0.86382526

 $00{:}46{:}21.520 \dashrightarrow 00{:}46{:}24.019$ It's no different than if we were

NOTE Confidence: 0.86382526

 $00:46:24.019 \longrightarrow 00:46:26.918$ to kind of like roll a ball up

NOTE Confidence: 0.86382526

 $00:46:26.918 \longrightarrow 00:46:29.150$ and down a really steep Hill.

NOTE Confidence: 0.86382526

00:46:29.150 --> 00:46:32.408 The ball would start to roll up very quickly,

NOTE Confidence: 0.86382526

 $00:46:32.410 \longrightarrow 00:46:35.314$ stop, and then come back down very rapidly.

NOTE Confidence: 0.86382526

 $00:46:35.320 \longrightarrow 00:46:37.130$ In the steeper the slope,

NOTE Confidence: 0.86382526

 $00{:}46{:}37.130 \dashrightarrow 00{:}46{:}40.259$ the faster that return process would be.

NOTE Confidence: 0.86382526

 $00:46:40.260 \longrightarrow 00:46:42.892$ Now this this sort of sub group of

00:46:42.892 --> 00:46:44.578 individuals seems to characterize

NOTE Confidence: 0.86382526

 $00:46:44.578 \longrightarrow 00:46:46.983$ those who are diagnosed with

NOTE Confidence: 0.86382526

00:46:46.983 --> 00:46:48.927 borderline personality disorder and

NOTE Confidence: 0.86382526

 $00{:}46{:}48{.}927 \dashrightarrow 00{:}46{:}51{.}107$ have other related conditions that

NOTE Confidence: 0.86382526

 $00{:}46{:}51{.}107 \dashrightarrow 00{:}46{:}53{.}325$ are characterized by deficient self

NOTE Confidence: 0.86382526

 $00:46:53.325 \rightarrow 00:46:55.185$ regulatory processes where we're

NOTE Confidence: 0.86382526

 $00{:}46{:}55{.}185 \dashrightarrow 00{:}46{:}58{.}413$ more likely to see a sawtooth pattern

NOTE Confidence: 0.86382526

 $00{:}46{:}58{.}413 \dashrightarrow 00{:}47{:}01{.}685$ and then one of the key aspects of

NOTE Confidence: 0.8653134

 $00{:}47{:}01.768 \dashrightarrow 00{:}47{:}04.720$ this is that that up and down that

NOTE Confidence: 0.8653134

 $00{:}47{:}04{.}720$ --> $00{:}47{:}07{.}444$ dramatic up and down actually increases

NOTE Confidence: 0.8653134

00:47:07.444 --> 00:47:09.428 their vulnerability for suddenly

NOTE Confidence: 0.8653134

 $00{:}47{:}09{.}428$ --> $00{:}47{:}11{.}630$ shifting from a low risk state.

NOTE Confidence: 0.8653134

00:47:11.630 --> 00:47:14.303 To a very high risk state from the bottom

NOTE Confidence: 0.8653134

 $00{:}47{:}14.303 \dashrightarrow 00{:}47{:}17.245$ of the surface to the top of the surface,

NOTE Confidence: 0.8653134

 $00{:}47{:}17.250 \dashrightarrow 00{:}47{:}19.427$ and that was actually what David wrote,

 $00{:}47{:}19{.}430 \dashrightarrow 00{:}47{:}21{.}670$ and I found in some of our initial

NOTE Confidence: 0.8653134

 $00{:}47{:}21.670 \dashrightarrow 00{:}47{:}22.881$ research with multiple attempters

NOTE Confidence: 0.8653134

 $00{:}47{:}22.881 \dashrightarrow 00{:}47{:}25.631$ and we now have a new study we just NOTE Confidence: 0.8653134

 $00{:}47{:}25.631 \dashrightarrow 00{:}47{:}27.386$ published in behaviour research and

NOTE Confidence: 0.8653134

 $00{:}47{:}27{.}386 \dashrightarrow 00{:}47{:}29{.}735$ the rapy in the past year where we

NOTE Confidence: 0.8653134

 $00{:}47{:}29.735$ --> $00{:}47{:}31.310$ took patient psychiatric out patients NOTE Confidence: 0.8653134

 $00{:}47{:}31{.}310 \dashrightarrow 00{:}47{:}33{.}475$ who had attempted 1 one time in their

NOTE Confidence: 0.8653134

 $00:47:33.475 \longrightarrow 00:47:35.602$ life and then we mapped out their

NOTE Confidence: 0.8653134

 $00{:}47{:}35{.}602 \dashrightarrow 00{:}47{:}37{.}417$ fluctuations in suicidal ideations over

NOTE Confidence: 0.8653134

 $00{:}47{:}37{.}417$ --> $00{:}47{:}39{.}878$ therapy and what we found was that the NOTE Confidence: 0.8653134

 $00:47:39.878 \rightarrow 00:47:41.450$ patients who had larger fluctuations

NOTE Confidence: 0.8653134

 $00:47:41.450 \longrightarrow 00:47:43.574$ on a session by session basis.

NOTE Confidence: 0.8653134

 $00:47:43.580 \longrightarrow 00:47:46.180$ Or significantly more likely to

NOTE Confidence: 0.8653134

 $00:47:46.180 \longrightarrow 00:47:48.260$ attempt suicide during treatment

NOTE Confidence: 0.8653134

 $00{:}47{:}48.260 \dashrightarrow 00{:}47{:}50.489$ or soon after treatment.

NOTE Confidence: 0.8653134

 $00:47:50.490 \longrightarrow 00:47:52.380$ And so these individuals also,

- NOTE Confidence: 0.8653134
- 00:47:52.380 --> 00:47:53.028 I think,
- NOTE Confidence: 0.8653134
- $00:47:53.028 \longrightarrow 00:47:55.296$ are more likely to come in for
- NOTE Confidence: 0.8653134
- $00{:}47{:}55{.}296 \dashrightarrow 00{:}47{:}56{.}899$ mental health treatment.
- NOTE Confidence: 0.8653134
- $00{:}47{:}56{.}900 \dashrightarrow 00{:}47{:}59{.}105$ And so this is where a lot of our
- NOTE Confidence: 0.8653134
- $00{:}47{:}59{.}105 \dashrightarrow 00{:}48{:}01{.}718$ work that Seth mentioned in his
- NOTE Confidence: 0.8653134
- 00:48:01.718 --> 00:48:03.554 introduction on cognitive behavioral
- NOTE Confidence: 0.8653134
- $00:48:03.554 \rightarrow 00:48:05.570$ therapy for suicide prevention,
- NOTE Confidence: 0.8653134
- $00{:}48{:}05{.}570 \dashrightarrow 00{:}48{:}07{.}826$ I think has been really impactful.
- NOTE Confidence: 0.8653134
- $00{:}48{:}07{.}830 \dashrightarrow 00{:}48{:}09{.}804$ I think other treatments in addition
- NOTE Confidence: 0.8653134
- $00{:}48{:}09{.}804 \dashrightarrow 00{:}48{:}12{.}039$ to BTI but also dialectical behavior
- NOTE Confidence: 0.8653134
- $00{:}48{:}12.039 \dashrightarrow 00{:}48{:}15.000$ the rapy has a lot of implications here.
- NOTE Confidence: 0.8653134
- $00{:}48{:}15{.}000 \dashrightarrow 00{:}48{:}17{.}436$ What we were finding is that these
- NOTE Confidence: 0.8653134
- 00:48:17.436 --> 00:48:20.415 treatments seem to sort of calm the storm
- NOTE Confidence: 0.8653134
- $00{:}48{:}20{.}415 \dashrightarrow 00{:}48{:}23{.}010$ where the fluctuations in suicidal ideations.
- NOTE Confidence: 0.8653134
- $00{:}48{:}23.010 \dashrightarrow 00{:}48{:}24.930$ Over the course of treatment tend
- NOTE Confidence: 0.8653134

 $00:48:24.930 \longrightarrow 00:48:27.687$ to settle down so that there is a

NOTE Confidence: 0.8653134

 $00{:}48{:}27.687 \dashrightarrow 00{:}48{:}29.447$ decreased probability that a person

NOTE Confidence: 0.8653134

 $00:48:29.447 \longrightarrow 00:48:32.081$ will suddenly shift to a high risk

NOTE Confidence: 0.8653134

 $00:48:32.081 \rightarrow 00:48:33.561$ state where suicidal behavior

NOTE Confidence: 0.8653134

 $00:48:33.570 \longrightarrow 00:48:35.330$ is more likely to occur.

NOTE Confidence: 0.8653134

 $00{:}48{:}35{.}330 \dashrightarrow 00{:}48{:}37{.}612$ The key aspect about some of our

NOTE Confidence: 0.8653134

 $00{:}48{:}37{.}612 \dashrightarrow 00{:}48{:}40{.}163$ findings with BTI is that we see

NOTE Confidence: 0.8653134

00:48:40.163 --> 00:48:41.663 treatment effects very quickly,

NOTE Confidence: 0.8653134

 $00{:}48{:}41.670 \dashrightarrow 00{:}48{:}43.074$ typically within three months

NOTE Confidence: 0.8653134

 $00:48:43.074 \longrightarrow 00:48:44.127$ of starting treatment,

NOTE Confidence: 0.8653134

 $00{:}48{:}44{.}130 \dashrightarrow 00{:}48{:}47{.}073$ and so not only is it a long lasting

NOTE Confidence: 0.8653134

00:48:47.073 --> 00:48:49.758 effect up to two years post baseline,

NOTE Confidence: 0.8653134

 $00:48:49.760 \longrightarrow 00:48:52.994$ but we tend to see pretty early

NOTE Confidence: 0.8653134

 $00{:}48{:}52{.}994 \dashrightarrow 00{:}48{:}55{.}000$ separation between treatment groups.

NOTE Confidence: 0.8653134

 $00{:}48{:}55{.}000 \dashrightarrow 00{:}48{:}56{.}077$ Another related intervention

NOTE Confidence: 0.8653134

 $00:48:56.077 \longrightarrow 00:48:58.590$ that that we've worked on a lot

- NOTE Confidence: 0.8653134
- $00:48:58.653 \rightarrow 00:49:00.329$ as crisis response planning,

 $00{:}49{:}00{.}330 \dashrightarrow 00{:}49{:}02{.}818$ which serves as sort of like the kind

NOTE Confidence: 0.8653134

00:49:02.818 --> 00:49:05.667 of a precursor to safety planning,

NOTE Confidence: 0.8653134

 $00:49:05.670 \rightarrow 00:49:08.718$ which a lot of people are familiar with.

NOTE Confidence: 0.8653134

00:49:08.720 --> 00:49:10.240 Crisis response planning was,

NOTE Confidence: 0.8653134

00:49:10.240 --> 00:49:11.380 apart of BTE,

NOTE Confidence: 0.8653134

 $00:49:11.380 \longrightarrow 00:49:13.205$ and then we subsequently extracted

NOTE Confidence: 0.8653134

 $00{:}49{:}13.205 \dashrightarrow 00{:}49{:}15.855$ this procedure and tested it as a

NOTE Confidence: 0.8653134

 $00{:}49{:}15.855 \dashrightarrow 00{:}49{:}17.383$ standalone intervention and emergency

NOTE Confidence: 0.8653134

 $00{:}49{:}17{.}383 \dashrightarrow 00{:}49{:}20{.}129$ department's as well as walk in clinics

NOTE Confidence: 0.8653134

 $00{:}49{:}20{.}129 \dashrightarrow 00{:}49{:}22{.}049$ for UNE scheduled crisis evaluations.

NOTE Confidence: 0.8653134

 $00{:}49{:}22.050 \dashrightarrow 00{:}49{:}24.640$ Whereas what we do is we hand

NOTE Confidence: 0.8653134

 $00:49:24.640 \longrightarrow 00:49:27.290$ write on an index card what?

NOTE Confidence: 0.8653134

00:49:27.290 --> 00:49:27.645 Ultimately,

NOTE Confidence: 0.8653134

 $00{:}49{:}27.645 \dashrightarrow 00{:}49{:}30.485$ amounts to sort of a self regulation plan.

 $00:49:30.490 \rightarrow 00:49:32.968$ How to know when you're getting upset,

NOTE Confidence: 0.8653134

00:49:32.970 - > 00:49:35.455 how to know when you're heading uphill.

NOTE Confidence: 0.8653134

 $00{:}49{:}35{.}460 \dashrightarrow 00{:}49{:}36{.}080$ And then.

NOTE Confidence: 0.8653134

 $00{:}49{:}36{.}080 \dashrightarrow 00{:}49{:}38{.}560$ Here's a list of things that you can

NOTE Confidence: 0.8653134

 $00{:}49{:}38.628 \dashrightarrow 00{:}49{:}40.890$ do to stop yourself from progressing

NOTE Confidence: 0.8653134

 $00{:}49{:}40{.}890 \dashrightarrow 00{:}49{:}43{.}562$ towards a high risk state into self

NOTE Confidence: 0.8653134

 $00:49:43.562 \longrightarrow 00:49:46.481$ regulate to kind of calm yourself back down.

NOTE Confidence: 0.8653134

 $00{:}49{:}46{.}481 \dashrightarrow 00{:}49{:}48{.}336$ We completed a randomized controlled

NOTE Confidence: 0.8653134

 $00{:}49{:}48{.}336 \dashrightarrow 00{:}49{:}50{.}600$ trial that we published in 2017

NOTE Confidence: 0.8653134

 $00:49:50.600 \rightarrow 00:49:52.040$ comparing crisis response planning

NOTE Confidence: 0.8653134

 $00{:}49{:}52.040 \dashrightarrow 00{:}49{:}54.270$ to treatment as usual and found 76%

NOTE Confidence: 0.8653134

 $00{:}49{:}54{.}270 \dashrightarrow 00{:}49{:}55{.}985$ reduction in suicide attempts over

NOTE Confidence: 0.8653134

 $00:49:55.985 \longrightarrow 00:49:58.180$ the six month follow up period.

NOTE Confidence: 0.8653134

 $00:49:58.180 \longrightarrow 00:49:59.506$ And so this.

NOTE Confidence: 0.8653134

 $00{:}49{:}59{.}506 \dashrightarrow 00{:}50{:}00{.}390$ Very simple.

NOTE Confidence: 0.8653134

 $00:50:00.390 \rightarrow 00:50:03.638$ Ateji that definitely takes 30 or 60 minutes.

- NOTE Confidence: 0.8653134
- $00:50:03.640 \longrightarrow 00:50:06.430$ We found this actually quite potent

 $00:50:06.430 \dashrightarrow 00:50:08.290$ for a verting suicidal behaviors.

NOTE Confidence: 0.88343674

 $00:50:08.290 \rightarrow 00:50:10.930$ But then there's one last group that my

NOTE Confidence: 0.88343674

 $00:50:10.930 \rightarrow 00:50:13.039$ research programs increasingly focused on.

NOTE Confidence: 0.88343674

 $00:50:13.040 \longrightarrow 00:50:14.496$ This is this pathway.

NOTE Confidence: 0.88343674

 $00:50:14.496 \longrightarrow 00:50:15.955$ See, this is the.

NOTE Confidence: 0.88343674

 $00:50:15.955 \rightarrow 00:50:17.780$ This is the performance escape,

NOTE Confidence: 0.88343674

 $00:50:17.780 \rightarrow 00:50:19.436$ the catastrophic change group,

NOTE Confidence: 0.88343674

 $00:50:19.436 \longrightarrow 00:50:21.092$ for whom suicidal behaviors

NOTE Confidence: 0.88343674

 $00:50:21.092 \dashrightarrow 00:50:23.256$ seemed to come out of the blue.

NOTE Confidence: 0.88343674

 $00:50:23.260 \longrightarrow 00:50:25.420$ And you can see their position

NOTE Confidence: 0.88343674

 $00{:}50{:}25{.}420 \dashrightarrow 00{:}50{:}27{.}270$ on the behavior surface here.

NOTE Confidence: 0.88343674

 $00:50:27.270 \rightarrow 00:50:30.046$ What happens with this group is when they

NOTE Confidence: 0.88343674

 $00{:}50{:}30{.}046 \dashrightarrow 00{:}50{:}32{.}379$ experience an increase in suicide risk.

NOTE Confidence: 0.88343674

 $00:50:32.380 \longrightarrow 00:50:33.475$ It's very gradual.

00:50:33.475 --> 00:50:34.935 It's not very pronounced,

NOTE Confidence: 0.88343674

 $00:50:34.940 \longrightarrow 00:50:37.901$ so maybe they only get to a point where

NOTE Confidence: 0.88343674

 $00:50:37.901 \rightarrow 00:50:40.130$ they're wishing that they weren't.

NOTE Confidence: 0.88343674

 $00:50:40.130 \longrightarrow 00:50:41.626$ Around anymore they would.

NOTE Confidence: 0.88343674

00:50:41.626 --> 00:50:44.260 They think they'd be better off dead,

NOTE Confidence: 0.88343674

 $00:50:44.260 \longrightarrow 00:50:46.300$ but in some cases they're not

NOTE Confidence: 0.88343674

 $00:50:46.300 \rightarrow 00:50:48.158$ manifesting active forms of suicidal

NOTE Confidence: 0.88343674

00:50:48.158 --> 00:50:49.878 ideations or even planning.

NOTE Confidence: 0.88343674

 $00:50:49.880 \rightarrow 00:50:52.330$ But then what happens is they hit NOTE Confidence: 0.88343674

 $00{:}50{:}52{.}330 \dashrightarrow 00{:}50{:}54{.}662$ this curve in the behavior surface

NOTE Confidence: 0.88343674

 $00{:}50{:}54{.}662 \dashrightarrow 00{:}50{:}57{.}476$ and they sort of like teleport up

NOTE Confidence: 0.88343674

 $00{:}50{:}57{.}554 \dashrightarrow 00{:}51{:}00{.}410$ to the top where they see this very NOTE Confidence: 0.88343674

00:51:00.410 - 00:51:02.360 sudden shift in the probability

NOTE Confidence: 0.88343674

 $00:51:02.360 \longrightarrow 00:51:04.410$ for suicidal behavior in these

NOTE Confidence: 0.88343674

 $00:51:04.410 \longrightarrow 00:51:06.281$ individuals are much less likely

NOTE Confidence: 0.88343674

 $00:51:06.281 \rightarrow 00:51:08.255$ to come to mental health care,

- NOTE Confidence: 0.88343674
- $00:51:08.260 \rightarrow 00:51:11.067$ and it's because for the most part
- NOTE Confidence: 0.88343674
- $00:51:11.067 \rightarrow 00:51:13.607$ they're existing in a low risk state.
- NOTE Confidence: 0.88343674
- $00:51:13.610 \rightarrow 00:51:15.885$ And so when we say get help,
- NOTE Confidence: 0.88343674
- $00:51:15.890 \rightarrow 00:51:17.684$ watch out for these warning signs
- NOTE Confidence: 0.88343674
- 00:51:17.684 --> 00:51:19.308 of suicide that largely focus
- NOTE Confidence: 0.88343674
- $00:51:19.308 \longrightarrow 00:51:20.780$ on active suicidal ideations.
- NOTE Confidence: 0.88343674
- $00:51:20.780 \rightarrow 00:51:22.736$ It doesn't apply to these individuals.
- NOTE Confidence: 0.88343674
- $00:51:22.740 \longrightarrow 00:51:24.696$ This isn't the nature of their
- NOTE Confidence: 0.88343674
- 00:51:24.696 --> 00:51:26.320 subjective experience of suicide risk,
- NOTE Confidence: 0.88343674
- $00{:}51{:}26{.}320 \dashrightarrow 00{:}51{:}28{.}928$ and so we end up missing this group,
- NOTE Confidence: 0.88343674
- $00:51:28.930 \longrightarrow 00:51:30.262$ and we keep encouraging.
- NOTE Confidence: 0.88343674
- 00:51:30.262 --> 00:51:33.170 Go get help to get help,
- NOTE Confidence: 0.88343674
- 00:51:33.170 --> 00:51:35.573 but this is a group for whom that is NOTE Confidence: 0.88343674
- $00{:}51{:}35{.}573 \dashrightarrow 00{:}51{:}38{.}156$ a message that just isn't hitting the NOTE Confidence: 0.88343674
- $00:51:38.156 \rightarrow 00:51:40.990$ target in the way that we needed to.
- NOTE Confidence: 0.88343674

 $00:51:40.990 \longrightarrow 00:51:44.334$ So we know that about 40 to 50% of those

NOTE Confidence: 0.88343674

 $00:51:44.334 \rightarrow 00:51:46.536$ who attempt suicide sort of skipped.

NOTE Confidence: 0.88343674

 $00:51:46.540 \longrightarrow 00:51:48.832$ The planning stage and we have

NOTE Confidence: 0.88343674

 $00:51:48.832 \rightarrow 00:51:50.730$ some newer data coming out.

NOTE Confidence: 0.88343674

 $00{:}51{:}50{.}730 \dashrightarrow 00{:}51{:}53{.}065$ Showing that manifestations of suicide

NOTE Confidence: 0.88343674

 $00{:}51{:}53.065 \dashrightarrow 00{:}51{:}55.827$ risk do not necessarily involve active NOTE Confidence: 0.88343674

00:51:55.827 --> 00:51:57.987 thinking about suicide where we are

NOTE Confidence: 0.88343674

 $00{:}51{:}57{.}987 \dashrightarrow 00{:}52{:}00{.}825$ now able to capture using a scale

NOTE Confidence: 0.88343674

 $00{:}52{:}00{.}825 \dashrightarrow 00{:}52{:}02{.}935$ called the Suicide cognition scale.

NOTE Confidence: 0.88343674

 $00:52:02.940 \dashrightarrow 00:52:05.887$ Things like I can't take this anymore.

NOTE Confidence: 0.88343674

 $00{:}52{:}05{.}890 \dashrightarrow 00{:}52{:}07{.}430$ I deserve to die.

NOTE Confidence: 0.88343674

 $00{:}52{:}07{.}430 \dashrightarrow 00{:}52{:}10{.}940$ No one can help me solve my problems.

NOTE Confidence: 0.88343674

 $00:52:10.940 \longrightarrow 00:52:13.080$ These are perhaps thought processes

NOTE Confidence: 0.88343674

00:52:13.080 --> 00:52:15.687 that signal this is someone who's

NOTE Confidence: 0.88343674

 $00{:}52{:}15.687 \dashrightarrow 00{:}52{:}17.667$ at elevated risk for suicide,

NOTE Confidence: 0.88343674

 $00:52:17.670 \rightarrow 00:52:19.920$ but they aren't necessarily experiencing

- NOTE Confidence: 0.88343674
- $00:52:19.920 \rightarrow 00:52:23.255$ suicidal thoughts in the way that we

 $00:52:23.255 \rightarrow 00:52:25.295$ have traditionally conceptualized them.

NOTE Confidence: 0.88343674

 $00:52:25.300 \rightarrow 00:52:27.492$ Traditionally asked about that,

NOTE Confidence: 0.88343674

 $00:52:27.492 \rightarrow 00:52:30.232$ and so we're effectively missing

NOTE Confidence: 0.88343674

00:52:30.232 --> 00:52:32.687 a large group of people.

NOTE Confidence: 0.88343674

 $00{:}52{:}32{.}690 \dashrightarrow 00{:}52{:}35{.}390$ And so this brings me into the kind of

NOTE Confidence: 0.88343674

 $00:52:35.390 \rightarrow 00:52:38.265$ the last idea of what we're working on,

NOTE Confidence: 0.88343674

 $00:52:38.270 \rightarrow 00:52:40.559$ which is the importance of means restriction,

NOTE Confidence: 0.88343674

 $00{:}52{:}40{.}560 \dashrightarrow 00{:}52{:}41{.}884$ especially with firearm owners.

NOTE Confidence: 0.88343674

00:52:41.884 --> 00:52:44.744 So now a big portion of my research

NOTE Confidence: 0.88343674

 $00{:}52{:}44.744 \dashrightarrow 00{:}52{:}46.764$ is really focused on understanding.

NOTE Confidence: 0.88343674

00:52:46.770 --> 00:52:48.935 Suicide risk amongst firearm owners

NOTE Confidence: 0.88343674

 $00:52:48.935 \rightarrow 00:52:51.962$ and what we're finding is that there

NOTE Confidence: 0.88343674

 $00{:}52{:}51{.}962 \dashrightarrow 00{:}52{:}54{.}308$ are really high risk subgroups of

NOTE Confidence: 0.88343674

 $00:52:54.308 \rightarrow 00:52:56.800$ gun owners who they typically own.

 $00:52:56.800 \rightarrow 00:52:58.890$ Guns for self protection purposes,

NOTE Confidence: 0.88343674

 $00{:}52{:}58{.}890 \dashrightarrow 00{:}53{:}00{.}234$ but they are much,

NOTE Confidence: 0.88343674

 $00{:}53{:}00{.}234 \dashrightarrow 00{:}53{:}02{.}743$ much more likely to engage in suicidal NOTE Confidence: 0.88343674

 $00{:}53{:}02.743 \dashrightarrow 00{:}53{:}04.843$ behaviors because we're starting to

NOTE Confidence: 0.88343674

00:53:04.843 --> 00:53:09.046 see now is that they have a number of

NOTE Confidence: 0.88343674

00:53:09.046 --> 00:53:11.006 biobehavioral vulnerabilities to suicide.

NOTE Confidence: 0.88343674

 $00:53:11.010 \longrightarrow 00:53:11.846$ They view.

NOTE Confidence: 0.88343674

 $00:53:11.846 \rightarrow 00:53:14.354$ The world is a dangerous place.

NOTE Confidence: 0.88343674

 $00{:}53{:}14.360 \dashrightarrow 00{:}53{:}16.550$ They perceive hostility and others

NOTE Confidence: 0.88343674

 $00:53:16.550 \dashrightarrow 00:53:18.740$ actions even with no hostility.

NOTE Confidence: 0.88343674

 $00{:}53{:}18.740 \dashrightarrow 00{:}53{:}20.768$ Exists in this seems to degrade

NOTE Confidence: 0.88343674

00:53:20.768 --> 00:53:21.782 cognitive control processes,

NOTE Confidence: 0.8589673

 $00{:}53{:}21.790 \dashrightarrow 00{:}53{:}23.799$ which increases the propensity for them to

NOTE Confidence: 0.8589673

 $00{:}53{:}23.799 \dashrightarrow 00{:}53{:}25.860$ engage in these dys regulated behaviors,

NOTE Confidence: 0.8589673

 $00{:}53{:}25{.}860 \dashrightarrow 00{:}53{:}28{.}276$ and if they have a loaded weapon during

NOTE Confidence: 0.8589673

 $00:53:28.276 \rightarrow 00:53:30.784$ moments of acute distress when they suddenly

 $00:53:30.784 \rightarrow 00:53:33.659$ shift to a high probability high risk state,

NOTE Confidence: 0.8589673

 $00{:}53{:}33{.}660 \dashrightarrow 00{:}53{:}35{.}645$ it we aponizes their emotional States

NOTE Confidence: 0.8589673

00:53:35.645 --> 00:53:38.508 and they die very quickly and we do

NOTE Confidence: 0.8589673

 $00:53:38.508 \rightarrow 00:53:40.780$ not have a way to intervene with them,

NOTE Confidence: 0.8589673

 $00:53:40.780 \rightarrow 00:53:43.822$ and so we do have now a new study.

NOTE Confidence: 0.8589673

 $00{:}53{:}43.830 \dashrightarrow 00{:}53{:}45.520$ It's impressed with the American

NOTE Confidence: 0.8589673

00:53:45.520 --> 00:53:46.872 Journal of Public Health,

NOTE Confidence: 0.8589673

 $00:53:46.880 \rightarrow 00:53:48.812$ that's hopefully will be coming out

NOTE Confidence: 0.8589673

 $00{:}53{:}48.812 \dashrightarrow 00{:}53{:}51.494$ in the next few months, showing that.

NOTE Confidence: 0.8589673

 $00{:}53{:}51{.}494 \dashrightarrow 00{:}53{:}55{.}030$ And we brought gun owners into our lab

NOTE Confidence: 0.8589673

 $00{:}53{:}55{.}123 \dashrightarrow 00{:}53{:}58{.}570$ and we sat down with them and we talked

NOTE Confidence: 0.8589673

 $00{:}53{:}58{.}570 \dashrightarrow 00{:}54{:}02{.}190$ about safe gun storage and using gun safes,

NOTE Confidence: 0.8589673

00:54:02.190 --> 00:54:02.836 trigger locks,

NOTE Confidence: 0.8589673

 $00{:}54{:}02{.}836 \dashrightarrow 00{:}54{:}05{.}097$ things like that and what we found

NOTE Confidence: 0.8589673

 $00:54:05.097 \rightarrow 00:54:07.703$ was that very simple conversations

00:54:09.923 --> 00:54:11.497 principles significantly increased
NOTE Confidence: 0.8589673
00:54:11.497 --> 00:54:13.909 the likelihood of gun owners actually
NOTE Confidence: 0.8589673
00:54:13.909 --> 00:54:16.347 using safe storage methods which we
NOTE Confidence: 0.8589673
00:54:16.347 --> 00:54:18.392 know from epidemiological data are
NOTE Confidence: 0.8589673
00:54:18.392 --> 00:54:20.277 correlated with dramatic reductions
NOTE Confidence: 0.8589673
00:54:20.277 --> 00:54:21.780 in suicide mortality.
NOTE Confidence: 0.8589673
00:54:20.77 --> 00:54:24.068 We now have an R61 that we're about

 $00:54:07.703 \rightarrow 00:54:09.923$ guided by motivational interviewing

NOTE Confidence: 0.8589673

NOTE Confidence: 0.8589673

 $00{:}54{:}24.068 \dashrightarrow 00{:}54{:}26.297$ to start enrollment on to further

NOTE Confidence: 0.8589673

 $00{:}54{:}26.297 \dashrightarrow 00{:}54{:}28.679$ understand a lot of these processes,

NOTE Confidence: 0.8589673

00:54:28.680 --> 00:54:31.440 but I think this is in many ways,

NOTE Confidence: 0.8589673

 $00:54:31.440 \longrightarrow 00:54:33.939$ one of the most important directions in NOTE Confidence: 0.8589673

 $00:54:33.939 \rightarrow 00:54:36.077$ suicide prevention is to move outside

NOTE Confidence: 0.8589673

 $00{:}54{:}36{.}077 \dashrightarrow 00{:}54{:}38{.}081$ of the healthcare system because there

NOTE Confidence: 0.8589673

 $00:54:38.081 \dashrightarrow 00:54:40.407$ is a subgroup who don't have access,

NOTE Confidence: 0.8589673

 $00:54:40.410 \longrightarrow 00:54:42.825$ are not going to seek out mental

- NOTE Confidence: 0.8589673
- $00:54:42.825 \longrightarrow 00:54:43.515$ health treatment,
- NOTE Confidence: 0.8589673
- $00{:}54{:}43{.}520 \dashrightarrow 00{:}54{:}45{.}452$ and during those moments of a
- NOTE Confidence: 0.8589673
- $00:54:45.452 \rightarrow 00:54:47.310$ sudden onset of acute despair,
- NOTE Confidence: 0.8589673
- $00:54:47.310 \longrightarrow 00:54:49.403$ we just don't have time to find
- NOTE Confidence: 0.8589673
- $00{:}54{:}49{.}403 \dashrightarrow 00{:}54{:}51{.}800$ them in to intervene with them.
- NOTE Confidence: 0.8589673
- $00{:}54{:}51{.}800 \dashrightarrow 00{:}54{:}54{.}768$ So we need to change the environment.
- NOTE Confidence: 0.8589673
- $00{:}54{:}54{.}770 \dashrightarrow 00{:}54{:}58{.}234$ So that we suicide proof their lives in,
- NOTE Confidence: 0.8589673
- $00:54:58.240 \rightarrow 00:55:02.965$ decrease the probability of a fatal outcome.
- NOTE Confidence: 0.8589673
- 00:55:02.970 --> 00:55:03.670 It's all,
- NOTE Confidence: 0.8589673
- $00:55:03.670 \rightarrow 00:55:06.470$ so that's that's kind of where we're at.
- NOTE Confidence: 0.8589673
- $00:55:06.470 \longrightarrow 00:55:08.570$ With the research a lot more
- NOTE Confidence: 0.8589673
- $00{:}55{:}08{.}570 \dashrightarrow 00{:}55{:}09{.}970$ to be done understandably,
- NOTE Confidence: 0.8589673
- $00:55:09.970 \dashrightarrow 00:55:12.714$ but I'm happy to take any questions that
- NOTE Confidence: 0.8589673
- $00:55:12.714 \rightarrow 00:55:15.220$ anyone might have in the remaining time,
- NOTE Confidence: 0.8589673
- $00:55:15.220 \rightarrow 00:55:15.920$ and likewise,
- NOTE Confidence: 0.8589673

 $00:55:15.920 \rightarrow 00:55:18.020$ if you have to drop off,

NOTE Confidence: 0.8589673

 $00:55:18.020 \dashrightarrow 00:55:19.790$ totally understandable and by all

NOTE Confidence: 0.8589673

 $00{:}55{:}19.790 \dashrightarrow 00{:}55{:}22.620$ means feel free to shoot me an email

NOTE Confidence: 0.8589673

 $00:55:22.620 \rightarrow 00:55:24.270$ afterwards with any questions or

NOTE Confidence: 0.8589673

 $00:55:24.270 \rightarrow 00:55:26.766$ follow up thoughts that you might have.

NOTE Confidence: 0.8589673

 $00{:}55{:}26.770 \dashrightarrow 00{:}55{:}27.820$ So thank you.

NOTE Confidence: 0.8496347

 $00:55:29.890 \rightarrow 00:55:32.518$ Thanks Greg, if there any questions

NOTE Confidence: 0.8496347

 $00{:}55{:}32{.}518$ --> $00{:}55{:}35{.}500$ folks wanna put them into the chat

NOTE Confidence: 0.8496347

 $00{:}55{:}35{.}500 \dashrightarrow 00{:}55{:}37{.}792$ chat room that would be great.

NOTE Confidence: 0.8496347

 $00:55:37.800 \rightarrow 00:55:39.200$ Two things I'd never say.

NOTE Confidence: 0.8496347

 $00{:}55{:}39{.}200 \dashrightarrow 00{:}55{:}40{.}682$ Seeing you give this talk before

NOTE Confidence: 0.8496347

00:55:40.682 --> 00:55:42.683 Craig so you know two things I

NOTE Confidence: 0.8496347

 $00:55:42.683 \rightarrow 00:55:43.955$ thought were really interesting.

NOTE Confidence: 0.8496347

 $00{:}55{:}43.960 \dashrightarrow 00{:}55{:}46.236$ One was on tipping points. You know,

NOTE Confidence: 0.8496347

 $00{:}55{:}46.236 \dashrightarrow 00{:}55{:}49.740$ when you think about the medical model of.

NOTE Confidence: 0.8496347

 $00:55:49.740 \rightarrow 00:55:52.204$ Of of that, you presented around suicidality.

- NOTE Confidence: 0.8496347
- 00:55:52.210 --> 00:55:53.980 This is true, I think,

 $00:55:53.980 \rightarrow 00:55:55.740$ across many different medical diseases.

NOTE Confidence: 0.8496347

00:55:55.740 --> 00:55:56.802 So kidney function,

NOTE Confidence: 0.8496347

 $00:55:56.802 \longrightarrow 00:55:57.810$ for instance, right?

NOTE Confidence: 0.8496347

 $00{:}55{:}57{.}810 \dashrightarrow 00{:}55{:}59{.}610$ We learn in medical school that

NOTE Confidence: 0.8496347

00:55:59.610 --> 00:56:01.009 your kidney function declines

NOTE Confidence: 0.8496347

 $00:56:01.009 \rightarrow 00:56:02.797$ gradually throughout your lifetime,

NOTE Confidence: 0.8496347

 $00:56:02.800 \rightarrow 00:56:03.844$ and then boom,

NOTE Confidence: 0.8496347

 $00:56:03.844 \longrightarrow 00:56:05.932$ all of a sudden something happens

NOTE Confidence: 0.8496347

00:56:05.932 --> 00:56:08.096 and you cross a tipping point,

NOTE Confidence: 0.8496347

 $00{:}56{:}08{.}100 \dashrightarrow 00{:}56{:}10{.}620$ and then all of a sudden you're

NOTE Confidence: 0.8496347

 $00{:}56{:}10.620 \dashrightarrow 00{:}56{:}11.980$ creating starts going up.

NOTE Confidence: 0.8496347

00:56:11.980 --> 00:56:13.746 You know you're you're essentially

NOTE Confidence: 0.8496347

00:56:13.746 --> 00:56:15.156 entering kidney failure even

NOTE Confidence: 0.8496347

 $00{:}56{:}15{.}156 \dashrightarrow 00{:}56{:}16{.}916$ though you've been in decline.

 $00:56:16.920 \rightarrow 00:56:19.038$ There's been these issues all along.

NOTE Confidence: 0.8496347

 $00{:}56{:}19{.}040 \dashrightarrow 00{:}56{:}20{.}408$ There's a tipping point.

NOTE Confidence: 0.8496347

 $00{:}56{:}20{.}408 \dashrightarrow 00{:}56{:}22{.}460$ And same with coronary artery disease NOTE Confidence: 0.8496347

 $00{:}56{:}22{.}517 \dashrightarrow 00{:}56{:}24{.}805$ where your things are going on in the

NOTE Confidence: 0.8496347

 $00{:}56{:}24.805 \dashrightarrow 00{:}56{:}26.488$ background for an extended period,

NOTE Confidence: 0.8496347

 $00{:}56{:}26{.}490 \dashrightarrow 00{:}56{:}27{.}990$ sometimes something can happen early.

NOTE Confidence: 0.8496347

00:56:27.990 --> 00:56:29.790 Maybe you're taking a drug abuse.

NOTE Confidence: 0.8496347

 $00:56:29.790 \longrightarrow 00:56:30.990$ Maybe there's another disease

NOTE Confidence: 0.8496347

 $00{:}56{:}30{.}990 \dashrightarrow 00{:}56{:}31{.}890$ process going on,

NOTE Confidence: 0.8496347

 $00:56:31.890 \longrightarrow 00:56:32.700$ but then boom,

NOTE Confidence: 0.8496347

 $00{:}56{:}32.700 \dashrightarrow 00{:}56{:}34.590$ all of a sudden there's a myocardial

NOTE Confidence: 0.8496347

 $00:56:34.643 \rightarrow 00:56:35.657$ infarction because something

NOTE Confidence: 0.8496347

 $00:56:35.657 \dashrightarrow 00:56:37.685$ is occurring in the vessel that

NOTE Confidence: 0.8496347

 $00:56:37.685 \longrightarrow 00:56:39.484$ was either an it's similar to

NOTE Confidence: 0.8496347

 $00{:}56{:}39{.}484 \dashrightarrow 00{:}56{:}40{.}884$ the 3D model you presented,

NOTE Confidence: 0.8496347

 $00:56:40.890 \longrightarrow 00:56:42.780$ where it can be gradual or all

- NOTE Confidence: 0.8496347
- $00{:}56{:}42.780 \dashrightarrow 00{:}56{:}44.641$ of a sudden something can happen

 $00{:}56{:}44{.}641 \dashrightarrow 00{:}56{:}46{.}890$ and you just jump up the curve.

NOTE Confidence: 0.8496347

 $00:56:46.890 \longrightarrow 00:56:48.390$ So I really like that,

NOTE Confidence: 0.8496347

00:56:48.390 --> 00:56:49.720 right?

NOTE Confidence: 0.87261045

00:56:49.720 --> 00:56:52.408 Yeah, it's the notion of tipping

NOTE Confidence: 0.87261045

 $00:56:52.408 \rightarrow 00:56:55.104$ points is yeah, it's widely used.

NOTE Confidence: 0.87261045

 $00:56:55.104 \rightarrow 00:56:57.792$ In other words not widely used,

NOTE Confidence: 0.87261045

 $00:56:57.800 \longrightarrow 00:57:00.040$ but it's sort of applicable

NOTE Confidence: 0.87261045

 $00{:}57{:}00{.}040 \dashrightarrow 00{:}57{:}01{.}384$ and well understood,

NOTE Confidence: 0.87261045

 $00{:}57{:}01{.}390 \dashrightarrow 00{:}57{:}03{.}970$ and other branches of medicine but

NOTE Confidence: 0.87261045

 $00{:}57{:}03.970 \dashrightarrow 00{:}57{:}06.330$ also other Sciences within biology,

NOTE Confidence: 0.87261045

 $00{:}57{:}06{.}330 \dashrightarrow 00{:}57{:}07{.}214$ chemistry, physics.

NOTE Confidence: 0.87261045

 $00{:}57{:}07{.}214 \dashrightarrow 00{:}57{:}09{.}866$ All of these processes are quite

NOTE Confidence: 0.87261045

00:57:09.866 --> 00:57:13.069 widely used in even the notion of

NOTE Confidence: 0.87261045

 $00:57:13.069 \rightarrow 00:57:14.416$ catastrophic change processes.

 $00{:}57{:}14{.}420 \dashrightarrow 00{:}57{:}18{.}047$ And so I think there's a lot of potential

NOTE Confidence: 0.87261045

 $00{:}57{:}18.047 \dashrightarrow 00{:}57{:}20.767$ value and thinking about change.

NOTE Confidence: 0.87261045

 $00{:}57{:}20.770$ --> $00{:}57{:}22.426$ In these more complicated ways and NOTE Confidence: 0.87261045

 $00:57:22.426 \rightarrow 00:57:24.668$ the good news is that we do have a NOTE Confidence: 0.87261045

NOTE Confidence: 0.87201045

 $00{:}57{:}24.668 \dashrightarrow 00{:}57{:}26.971$ lot of precedent and a lot of examples

NOTE Confidence: 0.87261045

 $00{:}57{:}26{.}971 \dashrightarrow 00{:}57{:}28{.}519$ from other scientific disciplines,

NOTE Confidence: 0.87261045

 $00{:}57{:}28{.}520 \dashrightarrow 00{:}57{:}30{.}504$ and so it's really now just sort of

NOTE Confidence: 0.87261045

 $00{:}57{:}30{.}504 \dashrightarrow 00{:}57{:}32{.}413$ a matter of applying the methods

NOTE Confidence: 0.87261045

 $00{:}57{:}32{.}413 \dashrightarrow 00{:}57{:}33{.}765$ in the computational concepts

NOTE Confidence: 0.87261045

 $00{:}57{:}33.765 \dashrightarrow 00{:}57{:}35.410$ to the work that we do.

NOTE Confidence: 0.83552086

 $00{:}57{:}36{.}690 \dashrightarrow 00{:}57{:}40{.}830$ Then there's a question from Tammy.

NOTE Confidence: 0.83552086

00:57:40.830 --> 00:57:43.134 Say I'll skip over the very nice words

NOTE Confidence: 0.83552086

 $00{:}57{:}43.134 \dashrightarrow 00{:}57{:}45.439$ at the beginning of the question,

NOTE Confidence: 0.83552086

 $00{:}57{:}45{.}440 \dashrightarrow 00{:}57{:}47{.}080$ although every one can read it,

NOTE Confidence: 0.83552086

 $00{:}57{:}47.080 \dashrightarrow 00{:}57{:}49.068$ any data you're aware of Crag that's

NOTE Confidence: 0.83552086

 $00:57:49.068 \longrightarrow 00:57:50.696$ been collected with micro longitudinal

- NOTE Confidence: 0.83552086
- 00:57:50.696 00:57:52.496 methods like EMA or experience

 $00{:}57{:}52{.}496 \dashrightarrow 00{:}57{:}53{.}990$ sampling with firearm owners.

NOTE Confidence: 0.85010266

 $00:57:55.580 \longrightarrow 00:57:57.785$ So not yet, but that's actually so.

NOTE Confidence: 0.85010266

 $00:57:57.790 \longrightarrow 00:57:59.988$ There are 61 that I just received.

NOTE Confidence: 0.85010266

 $00:57:59.990 \longrightarrow 00:58:02.510$ We are going to do that this year,

NOTE Confidence: 0.85010266

 $00{:}58{:}02{.}510 \dashrightarrow 00{:}58{:}04{.}085$ so January is when we're

NOTE Confidence: 0.85010266

 $00:58:04.085 \rightarrow 00:58:05.345$ hoping to start enrollment.

NOTE Confidence: 0.85010266

 $00{:}58{:}05{.}350 \dashrightarrow 00{:}58{:}08{.}240$ What we'll do is the design of our study will

NOTE Confidence: 0.85010266

 $00{:}58{:}08{.}314 \dashrightarrow 00{:}58{:}11{.}018$ be bringing gun owners and non gun owners.

NOTE Confidence: 0.85010266

 $00:58:11.020 \longrightarrow 00:58:12.832$ And then we're looking at two

NOTE Confidence: 0.85010266

00:58:12.832 --> 00:58:14.480 different subgroups of gun owners,

NOTE Confidence: 0.85010266

 $00{:}58{:}14{.}480 \dashrightarrow 00{:}58{:}16{.}720$ those who carry a firearm on a

NOTE Confidence: 0.85010266

 $00:58:16.720 \dashrightarrow 00:58:18.890$ regular basis and those who do not.

NOTE Confidence: 0.85010266

00:58:18.890 $\operatorname{-->}$ 00:58:21.410 Maybe they have a gun in their house,

NOTE Confidence: 0.85010266

 $00:58:21.410 \rightarrow 00:58:23.225$ but they don't necessarily carry

 $00:58:23.225 \longrightarrow 00:58:26.129$ it with them on a regular basis.

NOTE Confidence: 0.85010266

 $00{:}58{:}26{.}130 \dashrightarrow 00{:}58{:}28{.}664$ And yeah, we'll be hanging them six

NOTE Confidence: 0.85010266

 $00:58:28.664 \rightarrow 00:58:31.528$ times a day for four weeks to see.

NOTE Confidence: 0.85010266

 $00:58:31.530 \rightarrow 00:58:33.330$ Like what are they doing?

NOTE Confidence: 0.85010266

 $00:58:33.330 \longrightarrow 00:58:36.210$ Who are they with will be asked about.

NOTE Confidence: 0.85010266

 $00{:}58{:}36{.}210 \dashrightarrow 00{:}58{:}38{.}010$ Mood will also be think

NOTE Confidence: 0.85010266

 $00:58:38.010 \longrightarrow 00:58:39.090$ about suicidal ideations.

NOTE Confidence: 0.85010266

 $00:58:39.090 \rightarrow 00:58:41.242$ So Needless to say we have a pretty

NOTE Confidence: 0.85010266

00:58:41.242 --> 00:58:43.222 robust risk management protocol in

NOTE Confidence: 0.85010266

 $00:58:43.222 \rightarrow 00:58:45.058$ place because consultation with

NOTE Confidence: 0.85010266

 $00:58:45.058 \rightarrow 00:58:47.009$ other suicide researchers using MA.

NOTE Confidence: 0.85010266

 $00:58:47.010 \rightarrow 00:58:49.530$ Some of the comments I've heard is,

NOTE Confidence: 0.85010266

00:58:49.530 --> 00:58:50.574 like you know,

NOTE Confidence: 0.85010266

 $00{:}58{:}50{.}574 \dashrightarrow 00{:}58{:}53{.}010$ we all know intuitively that probably some

NOTE Confidence: 0.85010266

 $00:58:53.080 \rightarrow 00:58:55.649$ of our participants are carrying a weapon,

NOTE Confidence: 0.85010266

 $00:58:55.650 \rightarrow 00:58:55.967$ but.

 $00:58:55.967 \rightarrow 00:58:58.503$ This is the first time that you actually

NOTE Confidence: 0.85010266

 $00{:}58{:}58{.}503 \dashrightarrow 00{:}59{:}01{.}131$ know they'll be carrying a weapon when

NOTE Confidence: 0.85010266

00:59:01.131 -> 00:59:03.408 they're suicidal and that sort of

NOTE Confidence: 0.85010266

 $00:59:03.408 \longrightarrow 00:59:05.550$ changes the scariness of the project,

NOTE Confidence: 0.85010266

 $00:59:05.550 \rightarrow 00:59:08.462$ so we have a pretty robust risk management

NOTE Confidence: 0.85010266

 $00:59:08.462 \dashrightarrow 00:59:11.489$ protocol in one of the hypothesis we have it.

NOTE Confidence: 0.85010266

 $00{:}59{:}11{.}490 \dashrightarrow 00{:}59{:}14{.}186$ We will be asking the mini may are

NOTE Confidence: 0.85010266

00:59:14.186 --> 00:59:16.367 you carrying a firearm right now,

NOTE Confidence: 0.85010266

 $00:59:16.370 \longrightarrow 00:59:19.118$ or is there a firearm within?

NOTE Confidence: 0.85010266

 $00:59:19.120 \dashrightarrow 00:59:20.840$ I can't remember the wording.

NOTE Confidence: 0.85010266

 $00:59:20.840 \longrightarrow 00:59:21.340$ Basically,

NOTE Confidence: 0.85010266

 $00{:}59{:}21{.}340 \dashrightarrow 00{:}59{:}23{.}340$ is there something firearm

NOTE Confidence: 0.85010266

 $00{:}59{:}23{.}340 \dashrightarrow 00{:}59{:}25{.}840$ within reach something like that?

NOTE Confidence: 0.85010266

 $00{:}59{:}25{.}840 \dashrightarrow 00{:}59{:}27{.}958$ And one of our hypothesis is

NOTE Confidence: 0.85010266

 $00{:}59{:}27{.}958 \dashrightarrow 00{:}59{:}30{.}316$ that when someone is in physical

 $00:59:30.316 \longrightarrow 00:59:32.048$ possession of a firearm,

NOTE Confidence: 0.85010266

 $00{:}59{:}32{.}050 \dashrightarrow 00{:}59{:}34{.}510$ that might increase their

NOTE Confidence: 0.85010266

 $00:59:34.510 \longrightarrow 00:59:35.740$ emotional liability.

NOTE Confidence: 0.85010266

 $00:59:35.740 \rightarrow 00:59:37.360$ Their reactivity to stressful events,

NOTE Confidence: 0.85010266

00:59:37.360 - 00:59:39.544 so my hope is that maybe maybe

NOTE Confidence: 0.85010266

 $00:59:39.544 \rightarrow 00:59:41.519$ in a couple of years, yeah,

NOTE Confidence: 0.85010266

 $00{:}59{:}41{.}519 \dashrightarrow 00{:}59{:}43{.}542$ we'll be able to have some of

NOTE Confidence: 0.85010266

 $00:59:43.542 \longrightarrow 00:59:45.110$ those those data available.

NOTE Confidence: 0.85789895

 $00{:}59{:}46{.}460 \dashrightarrow 00{:}59{:}48{.}056$ You know on the group this

NOTE Confidence: 0.85789895

 $00{:}59{:}48.056 \dashrightarrow 00{:}59{:}49.599$ is just a question for me.

NOTE Confidence: 0.85789895

 $00:59:49.600 \longrightarrow 00:59:51.178$ It's not in the chat box.

NOTE Confidence: 0.85789895

 $00:59:51.180 \rightarrow 00:59:52.746$ And please if anyone has questions,

NOTE Confidence: 0.85789895

 $00:59:52.750 \longrightarrow 00:59:55.108$ feel free to jot them down in the box.

NOTE Confidence: 0.85789895

00:59:55.110 --> 00:59:56.745 But I'm thinking about that

NOTE Confidence: 0.85789895

 $00:59:56.745 \longrightarrow 00:59:58.840$ third group on your 3D model.

NOTE Confidence: 0.85789895

 $00:59:58.840 \rightarrow 01:00:00.466$ I've done some work with health.

 $01{:}00{:}00{.}470 \dashrightarrow 01{:}00{:}01{.}982$ And where they're looking for signals

NOTE Confidence: 0.85789895

 $01{:}00{:}01{.}982 \dashrightarrow 01{:}00{:}03{.}513$ and in non behavioral health claims

NOTE Confidence: 0.85789895

 $01:00:03.513 \rightarrow 01:00:05.172$ data so people are not feeling well,

NOTE Confidence: 0.85789895

 $01:00:05.180 \longrightarrow 01:00:06.420$ they're going to primary care.

NOTE Confidence: 0.85789895

 $01:00:06.420 \longrightarrow 01:00:08.116$ They are finding flags that seem to be NOTE Confidence: 0.85789895

01:00:08.116 --> 01:00:09.649 predictive of eventual suicide attempts,

NOTE Confidence: 0.85789895

 $01:00:09.650 \rightarrow 01:00:11.072$ even though the people are actually

NOTE Confidence: 0.85789895

 $01:00:11.072 \longrightarrow 01:00:12.834$ not in any sort of mental health

NOTE Confidence: 0.85789895

 $01{:}00{:}12.834 \dashrightarrow 01{:}00{:}14.352$ care based on their claims data.

NOTE Confidence: 0.85789895

 $01{:}00{:}14.360 \dashrightarrow 01{:}00{:}16.192$ Do you have any sense of whether or NOTE Confidence: 0.85789895

01:00:16.192 --> 01:00:18.328 not I mean have you looked at that?

NOTE Confidence: 0.85789895

 $01{:}00{:}18.330 \dashrightarrow 01{:}00{:}19.800$ Is that something that's come up NOTE Confidence: 0.85789895

 $01:00:19.800 \rightarrow 01:00:21.816$ as to are there going to be signals NOTE Confidence: 0.85789895

 $01{:}00{:}21.816 \dashrightarrow 01{:}00{:}25.350$ that we can acquire to reach out?

NOTE Confidence: 0.8573834

 $01:00:25.350 \dashrightarrow 01:00:28.230$ The so the the one project we did NOTE Confidence: 0.8573834

 $01:00:28.230 \longrightarrow 01:00:31.320$ that was not tide to like medical

NOTE Confidence: 0.8573834

 $01{:}00{:}31{.}320 \dashrightarrow 01{:}00{:}34{.}243$ record data was social media project

NOTE Confidence: 0.8573834

 $01:00:34.243 \longrightarrow 01:00:37.033$ is actually funded by Department

NOTE Confidence: 0.8573834

 $01{:}00{:}37{.}033 \dashrightarrow 01{:}00{:}40{.}662$ of Defense several years ago and we

NOTE Confidence: 0.8573834

 $01{:}00{:}40.662 \dashrightarrow 01{:}00{:}43.910$ basically content coded a years worth of.

NOTE Confidence: 0.8573834

 $01:00:43.910 \dashrightarrow 01:00:46.910$ It was mostly Facebook posts.

NOTE Confidence: 0.8573834

01:00:46.910 --> 01:00:49.082 Amongst users personnel who died by

NOTE Confidence: 0.8573834

 $01:00:49.082 \rightarrow 01:00:51.539$ suicide and then a control group,

NOTE Confidence: 0.8573834

01:00:51.540 --> 01:00:54.235 they died of other non suicide causes

NOTE Confidence: 0.8573834

01:00:54.235 --> 01:00:57.246 and we looked at we kind of compared NOTE Confidence: 0.8573834

 $01{:}00{:}57{.}246 \dashrightarrow 01{:}00{:}59{.}505$ what was on their social media

NOTE Confidence: 0.8573834

 $01{:}00{:}59{.}505 \dashrightarrow 01{:}01{:}02{.}347$ accounts and one of the findings was,

NOTE Confidence: 0.8573834

 $01:01:02.350 \longrightarrow 01:01:05.136$ you know we did find a statistically

NOTE Confidence: 0.8573834

01:01:05.136 --> 01:01:06.600 significant higher rate of,

NOTE Confidence: 0.8573834

01:01:06.600 --> 01:01:08.916 you know post that were hopeless

NOTE Confidence: 0.8573834

 $01{:}01{:}08{.}916 \dashrightarrow 01{:}01{:}10{.}460$ and despondent and depressed.

- NOTE Confidence: 0.8573834
- $01:01:10.460 \longrightarrow 01:01:12.770$ And had those types of themes.
- NOTE Confidence: 0.8573834
- 01:01:12.770 --> 01:01:14.666 They were particularly huge
- NOTE Confidence: 0.8573834
- 01:01:14.666 --> 01:01:17.036 effect sizes once we applied.
- NOTE Confidence: 0.8573834
- $01:01:17.040 \rightarrow 01:01:18.895$ These sort of dynamical systems
- NOTE Confidence: 0.8573834
- $01{:}01{:}18.895 \dashrightarrow 01{:}01{:}21.490$ models what we found was that yeah,
- NOTE Confidence: 0.8573834
- 01:01:21.490 --> 01:01:24.235 that was like a game changer in one of
- NOTE Confidence: 0.8573834
- 01:01:24.235 --> 01:01:27.159 the key findings was that we that was
- NOTE Confidence: 0.8573834
- $01{:}01{:}27.159 \dashrightarrow 01{:}01{:}30.044$ where we started to see the increase
- NOTE Confidence: 0.8573834
- 01:01:30.044 --> 01:01:32.189 in instability in certain variables
- NOTE Confidence: 0.8573834
- $01:01:32.189 \rightarrow 01:01:34.480$ was a very very clear indicator.
- NOTE Confidence: 0.8573834
- $01{:}01{:}34.480 \dashrightarrow 01{:}01{:}37.432$ And what was interesting is as we got
- NOTE Confidence: 0.8573834
- $01{:}01{:}37{.}432 \dashrightarrow 01{:}01{:}40{.}408$ closer and closer to the date of death,
- NOTE Confidence: 0.8573834
- $01{:}01{:}40.410 \dashrightarrow 01{:}01{:}41.894$ those change processes got
- NOTE Confidence: 0.8573834
- $01{:}01{:}41{.}894 \dashrightarrow 01{:}01{:}43{.}378$ more and more pronounced.
- NOTE Confidence: 0.8573834
- $01{:}01{:}43.380 \dashrightarrow 01{:}01{:}45.725$ The second key finding was that we
- NOTE Confidence: 0.8573834

- $01:01:45.725 \rightarrow 01:01:48.339$ found that it was certain sequences.
- NOTE Confidence: 0.8573834
- $01{:}01{:}48{.}340 \dashrightarrow 01{:}01{:}50{.}638$ Of variables, so if you had,
- NOTE Confidence: 0.8573834
- $01:01:50.640 \longrightarrow 01:01:52.160$ say variable in variable,
- NOTE Confidence: 0.8573834
- $01{:}01{:}52{.}160 \dashrightarrow 01{:}01{:}54{.}060$ feed if variable a consistently
- NOTE Confidence: 0.8573834
- $01{:}01{:}54.060 \dashrightarrow 01{:}01{:}55.634$ happened right before variable
- NOTE Confidence: 0.8573834
- 01:01:55.634 --> 01:01:57.146 B that signaled suicide.
- NOTE Confidence: 0.8573834
- 01:01:57.150 --> 01:01:59.065 But if variable B came
- NOTE Confidence: 0.8573834
- $01:01:59.065 \longrightarrow 01:02:00.597$ right before variable A,
- NOTE Confidence: 0.8573834
- $01{:}02{:}00.600 \dashrightarrow 01{:}02{:}02{.}510$ it did not signal suicide.
- NOTE Confidence: 0.8573834
- 01:02:02.510 --> 01:02:04.688 So that sort of notion of
- NOTE Confidence: 0.8573834
- 01:02:04.688 --> 01:02:06.720 sequencing ended up being really,
- NOTE Confidence: 0.8573834
- $01:02:06.720 \rightarrow 01:02:08.640$ really key and then an independent
- NOTE Confidence: 0.8573834
- 01:02:08.640 --> 01:02:10.841 team led by Glenn Coppersmith and
- NOTE Confidence: 0.8573834
- 01:02:10.841 $\operatorname{-->}$ 01:02:12.991 they actually used the technique
- NOTE Confidence: 0.8573834
- $01{:}02{:}12{.}991 \dashrightarrow 01{:}02{:}15{.}150$ faceoffs presented at a conference.
- NOTE Confidence: 0.8573834
- 01:02:15.150 --> 01:02:18.597 They went back to use it on Twitter data,

- NOTE Confidence: 0.8573834
- 01:02:18.600 --> 01:02:20.898 and they called it Micro patterns,

 $01:02:20.900 \longrightarrow 01:02:22.332$ and they found that.

NOTE Confidence: 0.8573834

 $01{:}02{:}22.332 \dashrightarrow 01{:}02{:}24.480$ These micro patterns of sequencing in

NOTE Confidence: 0.8573834

 $01{:}02{:}24.547 \dashrightarrow 01{:}02{:}27.175$ certain orders doubled the amount of

NOTE Confidence: 0.8573834

01:02:27.175 --> 01:02:28.927 information and predictive ability

NOTE Confidence: 0.8573834

01:02:28.997 --> 01:02:31.343 to identify not only suicide but

NOTE Confidence: 0.8573834

01:02:31.343 --> 01:02:32.916 also like schizophrenia, anxiety,

NOTE Confidence: 0.8573834

 $01:02:32.916 \longrightarrow 01:02:33.312$ depression.

NOTE Confidence: 0.8573834

 $01{:}02{:}33{.}312 \dashrightarrow 01{:}02{:}34{.}500$ So we have

NOTE Confidence: 0.85422665

01:02:34.500 --> 01:02:35.691 two questions. Actually,

NOTE Confidence: 0.85422665

01:02:35.691 --> 01:02:38.470 I think related to your EPI scenario,

NOTE Confidence: 0.85422665

 $01{:}02{:}38{.}470 \dashrightarrow 01{:}02{:}42{.}467$ so I'll jump to those real quick.

NOTE Confidence: 0.85422665

 $01{:}02{:}42.470 \dashrightarrow 01{:}02{:}44.724$ Alec was asking about the dependent variable.

NOTE Confidence: 0.85422665

01:02:44.730 --> 01:02:47.054 Do any of the conclusions you have

NOTE Confidence: 0.85422665

 $01:02:47.054 \rightarrow 01:02:48.429$ presented applied differently according
$01:02:48.429 \rightarrow 01:02:50.361$ to whether we're looking at attempts

NOTE Confidence: 0.85422665

 $01:02:50.361 \longrightarrow 01:02:52.158$ that could have ended in death?

NOTE Confidence: 0.86789995

 $01:02:53.950 \longrightarrow 01:02:56.164$ Yeah, so we've not gotten to

NOTE Confidence: 0.86789995

 $01:02:56.164 \rightarrow 01:02:58.155$ that point yet because our

NOTE Confidence: 0.86789995

01:02:58.155 --> 01:03:00.330 samples haven't been big enough.

NOTE Confidence: 0.86789995

01:03:00.330 --> 01:03:02.325 We do have some studies

NOTE Confidence: 0.86789995

 $01{:}03{:}02{.}325 \dashrightarrow 01{:}03{:}04{.}320$ where death was the outcome.

NOTE Confidence: 0.86789995

 $01{:}03{:}04{.}320 \dashrightarrow 01{:}03{:}06{.}738$ We have studies where attempts were

NOTE Confidence: 0.86789995

01:03:06.738 --> 01:03:09.199 the outcomes and so the general

NOTE Confidence: 0.86789995

 $01{:}03{:}09{.}199 \dashrightarrow 01{:}03{:}11{.}509$ concept seemed to be the same,

NOTE Confidence: 0.86789995

 $01{:}03{:}11{.}510 \dashrightarrow 01{:}03{:}13{.}736$ but I think the question is well

NOTE Confidence: 0.86789995

01:03:13.736 --> 01:03:16.295 placed in it is something that I've

NOTE Confidence: 0.86789995

 $01{:}03{:}16.295 \dashrightarrow 01{:}03{:}18.587$ wondered about is are are there

NOTE Confidence: 0.86789995

 $01:03:18.661 \rightarrow 01:03:21.276$ differences between highly lethal and

NOTE Confidence: 0.86789995

 $01:03:21.276 \rightarrow 01:03:23.891$ less lethal suicidal behaviors that?

NOTE Confidence: 0.86789995

 $01:03:23.900 \rightarrow 01:03:25.668$ Yeah, sort of those.

- NOTE Confidence: 0.86789995
- 01:03:25.668 --> 01:03:28.320 Those sudden shifts to high risk
- NOTE Confidence: 0.86789995
- $01:03:28.409 \rightarrow 01:03:31.209$ states we see at least are thinking
- NOTE Confidence: 0.86789995
- $01:03:31.209 \rightarrow 01:03:34.078$ right now is perhaps more relevant
- NOTE Confidence: 0.86789995
- 01:03:34.078 --> 01:03:36.708 for things like firearm suicide
- NOTE Confidence: 0.86789995
- $01:03:36.708 \rightarrow 01:03:39.143$ and other highly lethal methods.
- NOTE Confidence: 0.86789995
- $01:03:39.143 \rightarrow 01:03:40.526$ Whereas pathways A&B,
- NOTE Confidence: 0.86789995
- $01{:}03{:}40{.}530 \dashrightarrow 01{:}03{:}43{.}512$ those are individuals who tend to select
- NOTE Confidence: 0.86789995
- $01:03:43.512 \rightarrow 01:03:46.080$ less lethal methods like medications,
- NOTE Confidence: 0.86789995
- $01:03:46.080 \longrightarrow 01:03:48.684$ and so there may actually be
- NOTE Confidence: 0.86789995
- $01:03:48.684 \rightarrow 01:03:50.995$ different change processes that signal
- NOTE Confidence: 0.86789995
- $01{:}03{:}50.995 \dashrightarrow 01{:}03{:}53.470$ lethal versus non lethal outcomes.
- NOTE Confidence: 0.86789995
- $01{:}03{:}53{.}470 \dashrightarrow 01{:}03{:}55{.}010$ I would love to.
- NOTE Confidence: 0.86789995
- 01:03:55.010 --> 01:03:56.935 Hopefully get a data set
- NOTE Confidence: 0.86789995
- 01:03:56.935 --> 01:03:58.970 large enough where we can
- NOTE Confidence: 0.84199125
- $01:03:58.970 \longrightarrow 01:04:00.346$ test that out more.
- NOTE Confidence: 0.84199125

 $01:04:00.346 \longrightarrow 01:04:02.937$ Yeah, one of the things I loved about

NOTE Confidence: 0.84199125

01:04:02.937 --> 01:04:05.508 your work is to focus on attempts,

NOTE Confidence: 0.84199125

 $01:04:05.510 \longrightarrow 01:04:07.573$ which is like heart attacks, right?

NOTE Confidence: 0.84199125

01:04:07.573 --> 01:04:08.602 It potentially lethal,

NOTE Confidence: 0.84199125

 $01:04:08.602 \longrightarrow 01:04:10.317$ and it relates to Alex,

NOTE Confidence: 0.84199125

 $01{:}04{:}10{.}320 \dashrightarrow 01{:}04{:}11{.}433$ question around that.

NOTE Confidence: 0.84199125

 $01{:}04{:}11{.}433 \dashrightarrow 01{:}04{:}13.659$ And then Sally asked about alcohol

NOTE Confidence: 0.84199125

 $01{:}04{:}13.659 \dashrightarrow 01{:}04{:}15.643$ consumption and whether or not that

NOTE Confidence: 0.84199125

 $01{:}04{:}15.643 \dashrightarrow 01{:}04{:}17.198$ teleports someone to severe risk.

NOTE Confidence: 0.86101437

 $01{:}04{:}19{.}200 \dashrightarrow 01{:}04{:}22{.}427$ Yeah, yeah, that's that's a great question,

NOTE Confidence: 0.86101437

 $01:04:22.430 \longrightarrow 01:04:24.274$ and that's that's something

NOTE Confidence: 0.86101437

 $01{:}04{:}24{.}274 \dashrightarrow 01{:}04{:}27{.}040$ that we wondered about as well.

NOTE Confidence: 0.86101437

 $01{:}04{:}27.040 \dashrightarrow 01{:}04{:}30.549$ We don't know for sure, but you know,

NOTE Confidence: 0.86101437

 $01{:}04{:}30{.}549 \dashrightarrow 01{:}04{:}32{.}967$ so there's some evidence outside of

NOTE Confidence: 0.86101437

 $01:04:32.967 \longrightarrow 01:04:36.541$ the suicide field that acute alcohol

NOTE Confidence: 0.86101437

 $01:04:36.541 \rightarrow 01:04:38.395$ intoxication perhaps attenuates.

- NOTE Confidence: 0.86101437
- $01{:}04{:}38{.}400 \dashrightarrow 01{:}04{:}40{.}086$ Fluctuations in suicide risk owns a

 $01{:}04{:}40.086 \dashrightarrow 01{:}04{:}42.029$ person down and often times a sort of

NOTE Confidence: 0.86101437

 $01:04:42.029 \rightarrow 01:04:43.304$ the motive for alcohol consumption.

NOTE Confidence: 0.86101437

01:04:43.310 --> 01:04:44.680 As I'm up and down,

NOTE Confidence: 0.86101437

01:04:44.680 --> 01:04:47.886 I kind of feel out of control.

NOTE Confidence: 0.86101437

 $01{:}04{:}47.890 \dashrightarrow 01{:}04{:}49.885$ So I drink alcohol and it numbs

NOTE Confidence: 0.86101437

 $01{:}04{:}49.885 \dashrightarrow 01{:}04{:}52.027$ and sort of pegs these Upson

NOTE Confidence: 0.86101437

 $01:04:52.027 \rightarrow 01:04:54.057$ downs that they're less extreme.

NOTE Confidence: 0.86101437

 $01{:}04{:}54.060 \dashrightarrow 01{:}04{:}56.226$ But then there are other individuals

NOTE Confidence: 0.86101437

 $01{:}04{:}56.226 \dashrightarrow 01{:}04{:}58.179$ for whom alcohol consumption sort of.

NOTE Confidence: 0.86101437

 $01{:}04{:}58.180 \dashrightarrow 01{:}05{:}00.808$ Yeah, sort of ramps them up and make some

NOTE Confidence: 0.86101437

 $01{:}05{:}00.808 \dashrightarrow 01{:}05{:}03.328$ more vulnerable to these sudden shifts.

NOTE Confidence: 0.86101437

 $01:05:03.330 \longrightarrow 01:05:05.040$ So we will be we.

NOTE Confidence: 0.86101437

 $01{:}05{:}05{.}040 \dashrightarrow 01{:}05{:}07{.}104$ That's one of the other things

NOTE Confidence: 0.86101437

 $01:05:07.104 \longrightarrow 01:05:09.159$ we are going to look at.

 $01{:}05{:}09{.}160 \dashrightarrow 01{:}05{:}11{.}184$ Some of our PMA studies is how does

NOTE Confidence: 0.86101437

 $01:05:11.184 \longrightarrow 01:05:12.709$ acute alcohol consumption intoxication

NOTE Confidence: 0.86101437

 $01:05:12.709 \rightarrow 01:05:14.637$ perhaps alter change processes?

NOTE Confidence: 0.86101437

 $01:05:14.640 \rightarrow 01:05:17.250$ My suspicion what I really think

NOTE Confidence: 0.86101437

 $01:05:17.250 \longrightarrow 01:05:19.387$ we'll probably find is that

NOTE Confidence: 0.86101437

 $01:05:19.387 \longrightarrow 01:05:21.915$ there is going to be sort of a.

NOTE Confidence: 0.86101437

 $01:05:21.920 \longrightarrow 01:05:24.495$ A conditional finding where it

NOTE Confidence: 0.86101437

 $01:05:24.495 \longrightarrow 01:05:27.870$ will be some for some people.

NOTE Confidence: 0.86101437

 $01{:}05{:}27.870 \dashrightarrow 01{:}05{:}30.258$ Alcohol consumption and those sort of

NOTE Confidence: 0.86101437

 $01{:}05{:}30.258 \dashrightarrow 01{:}05{:}33.327$ calm them down and then for others

NOTE Confidence: 0.86101437

 $01{:}05{:}33{.}327 \dashrightarrow 01{:}05{:}35{.}195$ it increases their reactivity,

NOTE Confidence: 0.86101437

 $01{:}05{:}35{.}200 \dashrightarrow 01{:}05{:}37{.}748$ which I think would be really helpful

NOTE Confidence: 0.86101437

 $01{:}05{:}37.748 \dashrightarrow 01{:}05{:}40.603$ because that might help us to more

NOTE Confidence: 0.86101437

01:05:40.603 --> 01:05:42.295 accurately target different subgroups

NOTE Confidence: 0.86101437

 $01{:}05{:}42.295 \dashrightarrow 01{:}05{:}45.204$ of patients and individuals for alcohol

NOTE Confidence: 0.86101437

 $01{:}05{:}45{.}204 \dashrightarrow 01{:}05{:}47{.}699$ consumption within their treatment plans.

- NOTE Confidence: 0.87295824
- $01:05:49.780 \longrightarrow 01:05:51.172$ There's another question that

 $01:05:51.172 \longrightarrow 01:05:52.912$ came in between those two,

NOTE Confidence: 0.87295824

 $01{:}05{:}52{.}920 \dashrightarrow 01{:}05{:}55{.}363$ but it wasn't as related to what

NOTE Confidence: 0.87295824

01:05:55.363 --> 01:05:58.160 you had said, so I hold it back,

NOTE Confidence: 0.87295824

 $01{:}05{:}58{.}160 \dashrightarrow 01{:}05{:}59{.}552$ which is the international

NOTE Confidence: 0.87295824

 $01:05:59.552 \longrightarrow 01:06:00.944$ variability safe to countries.

NOTE Confidence: 0.87295824

 $01:06:00.950 \dashrightarrow 01:06:04.464$ I think she meant the country Australia.

NOTE Confidence: 0.87295824

 $01:06:04.470 \longrightarrow 01:06:06.210$ Where they ban access to firearms

NOTE Confidence: 0.87295824

 $01:06:06.210 \longrightarrow 01:06:07.650$ in a more stringent way?

NOTE Confidence: 0.87295824

 $01:06:07.650 \longrightarrow 01:06:09.090$ Can you comment on that?

NOTE Confidence: 0.8247037

 $01:06:10.420 \longrightarrow 01:06:13.460$ Yeah, so there certainly are.

NOTE Confidence: 0.8247037

 $01{:}06{:}13.460 \dashrightarrow 01{:}06{:}17.078$ You know, lower suicide rates and.

NOTE Confidence: 0.8247037

01:06:17.080 --> 01:06:18.408 In countries with more

NOTE Confidence: 0.8247037

 $01{:}06{:}18.408 \dashrightarrow 01{:}06{:}19.736$ stringent access to firearms,

NOTE Confidence: 0.8247037

 $01{:}06{:}19.740 \dashrightarrow 01{:}06{:}21.756$ what one of the things that related

01:06:21.756 --> 01:06:24.552 to this when we look at just sort of

NOTE Confidence: 0.8247037

 $01{:}06{:}24.552 \dashrightarrow 01{:}06{:}26.628$ means restriction in general is that

NOTE Confidence: 0.8247037

 $01{:}06{:}26{.}628 \dashrightarrow 01{:}06{:}28{.}932$ there are sort of international and NOTE Confidence: 0.8247037

 $01:06:28.932 \rightarrow 01:06:30.368$ cultural variability regarding this,

NOTE Confidence: 0.8247037

 $01{:}06{:}30{.}368$ --> $01{:}06{:}33{.}040$ and so one of the key assumptions about

NOTE Confidence: 0.8247037

 $01:06:33.101 \rightarrow 01:06:35.105$ means restriction in general that we NOTE Confidence: 0.8247037

01:06:35.105 --> 01:06:37.447 talk about is that the method that

NOTE Confidence: 0.8247037

 $01{:}06{:}37{.}447 \dashrightarrow 01{:}06{:}39{.}652$ you're going to restrict needs to be

NOTE Confidence: 0.8247037

01:06:39.660 --> 01:06:41.646 sufficiently lethal to have an effect,

NOTE Confidence: 0.8247037

01:06:41.650 --> 01:06:43.855 so it has it has to kill people with

NOTE Confidence: 0.8247037

01:06:43.855 --> 01:06:46.141 a high enough rate that restricting

NOTE Confidence: 0.8247037

01:06:46.141 --> 01:06:48.890 access will actually make a difference.

NOTE Confidence: 0.8247037

 $01:06:48.890 \longrightarrow 01:06:50.024$ And then Secondly,

NOTE Confidence: 0.8247037

 $01{:}06{:}50{.}024 \dashrightarrow 01{:}06{:}52{.}670$ the method has to be common enough

NOTE Confidence: 0.8247037

 $01{:}06{:}52{.}750 \dashrightarrow 01{:}06{:}55{.}320$ within the population that again

NOTE Confidence: 0.8247037

 $01:06:55.320 \rightarrow 01:06:57.376$ restricting it would potentially

- NOTE Confidence: 0.8247037
- 01:06:57.376 --> 01:06:59.540 reduce an observable notable,

 $01:06:59.540 \rightarrow 01:07:01.850$ meaningful proportion of the population.

NOTE Confidence: 0.8247037

 $01{:}07{:}01{.}850 \dashrightarrow 01{:}07{:}03{.}239$ And so yeah,

NOTE Confidence: 0.8247037

01:07:03.239 --> 01:07:05.091 in many international spaces

NOTE Confidence: 0.8247037

 $01:07:05.091 \longrightarrow 01:07:06.480$ in other nations,

NOTE Confidence: 0.8247037

 $01{:}07{:}06.480 \dashrightarrow 01{:}07{:}09.258$ fire arms isn't really sort of initiative.

NOTE Confidence: 0.8247037

01:07:09.260 --> 01:07:11.495 Are no firearm suicides are

NOTE Confidence: 0.8247037

01:07:11.495 --> 01:07:13.730 very little because of their

NOTE Confidence: 0.8247037

 $01:07:13.813 \longrightarrow 01:07:16.208$ limited access to that method,

NOTE Confidence: 0.8247037

 $01{:}07{:}16{.}210 \dashrightarrow 01{:}07{:}19{.}986$ but in those nations they typically look at.

NOTE Confidence: 0.8247037

 $01{:}07{:}19{.}990 \dashrightarrow 01{:}07{:}22{.}192$ Other methods in from a means

NOTE Confidence: 0.8247037

01:07:22.192 --> 01:07:22.926 restriction perspective.

NOTE Confidence: 0.8247037

 $01:07:22.930 \dashrightarrow 01:07:25.708$ They would target something else so.

NOTE Confidence: 0.8247037

 $01{:}07{:}25.710 \dashrightarrow 01{:}07{:}28.620$ The most classic examples of this

NOTE Confidence: 0.8247037

01:07:28.620 --> 01:07:31.160 historically was in Sri Lanka,

 $01{:}07{:}31{.}160 \dashrightarrow 01{:}07{:}33{.}950$ Indonesia or maybe it was Indonesia

NOTE Confidence: 0.8247037

 $01{:}07{:}33.950 \dashrightarrow 01{:}07{:}37.100$ and some other Pacific island nations.

NOTE Confidence: 0.8247037

 $01{:}07{:}37{.}100 \dashrightarrow 01{:}07{:}39{.}570$ It was poisoning with fertilizer.

NOTE Confidence: 0.8247037

 $01{:}07{:}39{.}570 \dashrightarrow 01{:}07{:}42{.}050$ Someo farmers would drink there.

NOTE Confidence: 0.8247037

 $01{:}07{:}42.050 \dashrightarrow 01{:}07{:}45.020$ Basically fertilizer to kill themselves in.

NOTE Confidence: 0.8247037

 $01{:}07{:}45{.}020 \dashrightarrow 01{:}07{:}47{.}960$ So in these nations they restricted

NOTE Confidence: 0.8247037

 $01{:}07{:}47.960 \dashrightarrow 01{:}07{:}51.058$ basically the sale of pesticides and

NOTE Confidence: 0.8247037

 $01{:}07{:}51{.}058 \dashrightarrow 01{:}07{:}54{.}202$ fertilizers that that removed some of

NOTE Confidence: 0.8247037

 $01{:}07{:}54.202 \dashrightarrow 01{:}07{:}58.267$ the most toxic chemicals and agents and so.

NOTE Confidence: 0.8247037

01:07:58.270 --> 01:08:01.378 In essence, former still had the tools

NOTE Confidence: 0.8247037

 $01:08:01.378 \longrightarrow 01:08:04.227$ that they need to do their jobs,

NOTE Confidence: 0.8247037

 $01{:}08{:}04{.}230 \dashrightarrow 01{:}08{:}06{.}848$ but now they were less dangerous and

NOTE Confidence: 0.8247037

 $01:08:06.848 \dashrightarrow 01:08:10.199$ so if they drink pesticide or what not,

NOTE Confidence: 0.8247037

 $01{:}08{:}10.200 \dashrightarrow 01{:}08{:}14.025$ they were less likely to die as a result.

NOTE Confidence: 0.8247037

01:08:14.030 --> 01:08:16.562 In UK it was carbon monoxide

NOTE Confidence: 0.8247037

 $01:08:16.562 \rightarrow 01:08:19.569$ being sent to homes to fuel ovens,

- NOTE Confidence: 0.8247037
- 01:08:19.570 --> 01:08:20.872 things like that,
- NOTE Confidence: 0.8247037
- $01{:}08{:}20.872 \dashrightarrow 01{:}08{:}23.042$ and some of the Scandinavian
- NOTE Confidence: 0.8247037
- $01:08:23.042 \rightarrow 01:08:25.819$ nations is restricting paracetamol.
- NOTE Confidence: 0.8247037
- $01{:}08{:}25.820 \dashrightarrow 01{:}08{:}26.562$ And so,
- NOTE Confidence: 0.8247037
- 01:08:26.562 --> 01:08:28.417 so in the United States,
- NOTE Confidence: 0.8247037
- $01{:}08{:}28{.}420 \dashrightarrow 01{:}08{:}30{.}972$ it's guns and I don't think will ever
- NOTE Confidence: 0.8247037
- $01:08:30.972 \longrightarrow 01:08:33.835$ been the curve on suicide until we
- NOTE Confidence: 0.8247037
- $01:08:33.835 \longrightarrow 01:08:36.408$ start really thinking about firearms as
- NOTE Confidence: 0.8247037
- $01:08:36.408 \longrightarrow 01:08:38.837$ a key central aspect of a conference.
- NOTE Confidence: 0.8247037
- 01:08:38.840 --> 01:08:40.328 Is suicide prevention plan.
- NOTE Confidence: 0.8032915
- $01:08:42.580 \longrightarrow 01:08:45.422$ Um, we have a very long statement
- NOTE Confidence: 0.8032915
- $01:08:45.422 \longrightarrow 01:08:47.290$ in question from Shelly.
- NOTE Confidence: 0.8032915
- $01:08:47.290 \longrightarrow 01:08:50.244$ I don't know if she wants to
- NOTE Confidence: 0.8032915
- $01{:}08{:}50{.}244 \dashrightarrow 01{:}08{:}53{.}279$ actually go on audio and say it.
- NOTE Confidence: 0.8032915
- $01{:}08{:}53{.}280 \dashrightarrow 01{:}08{:}55{.}480$ I mean, I think.
- NOTE Confidence: 0.8032915

 $01:08:55.480 \longrightarrow 01:08:57.258$ Well, that's thought about just

NOTE Confidence: 0.8032915

01:08:57.258 --> 01:08:59.100 sort of a question comment crag

NOTE Confidence: 0.8032915

01:08:59.158 --> 01:09:01.083 because when I think about some of NOTE Confidence: 0.8032915

01:09:01.083 --> 01:09:02.979 the questions in the talking about

NOTE Confidence: 0.8032915

 $01:09:02.979 \rightarrow 01:09:05.013$ because 'cause this shell is question

NOTE Confidence: 0.8032915

 $01{:}09{:}05{.}013$ --> $01{:}09{:}06{.}645$ comment was really around a bunch NOTE Confidence: 0.8032915

 $01{:}09{:}06.645 \dashrightarrow 01{:}09{:}08.390$ of linear variables and then some

NOTE Confidence: 0.8032915

 $01{:}09{:}08{.}390 \dashrightarrow 01{:}09{:}10{.}026$ unpredictable variable or exponential.

NOTE Confidence: 0.8032915

01:09:10.030 --> 01:09:11.913 I think you know comes in from

NOTE Confidence: 0.8032915

 $01{:}09{:}11{.}913 \dashrightarrow 01{:}09{:}13{.}502$ some direction and then pushes

NOTE Confidence: 0.8032915

 $01{:}09{:}13.502 \dashrightarrow 01{:}09{:}15.307$ everything over the tipping point.

NOTE Confidence: 0.8032915

01:09:15.310 --> 01:09:17.487 But I think on the treatment side

NOTE Confidence: 0.8032915

 $01{:}09{:}17{.}487 \dashrightarrow 01{:}09{:}19{.}394$ or intervention side one of the

NOTE Confidence: 0.8032915

 $01{:}09{:}19{.}394 \dashrightarrow 01{:}09{:}20{.}909$ things that I find interesting.

NOTE Confidence: 0.8032915

 $01{:}09{:}20{.}910 \dashrightarrow 01{:}09{:}24{.}358$ If you take time to really think about.

NOTE Confidence: 0.8032915

 $01{:}09{:}24.360 \dashrightarrow 01{:}09{:}25.734$ Crisis response planning.

- NOTE Confidence: 0.8032915
- 01:09:25.734 --> 01:09:27.566 CBT in your work.
- NOTE Confidence: 0.8032915
- $01:09:27.570 \longrightarrow 01:09:28.953$ In some ways,
- NOTE Confidence: 0.8032915
- $01:09:28.953 \rightarrow 01:09:31.258$ it helps neutralize the unpredictability
- NOTE Confidence: 0.8032915
- $01:09:31.258 \rightarrow 01:09:33.519$ of what those things are.
- NOTE Confidence: 0.8032915
- 01:09:33.520 --> 01:09:35.122 Because you're identifying
- NOTE Confidence: 0.8032915
- $01:09:35.122 \longrightarrow 01:09:37.792$ specific things that will either
- NOTE Confidence: 0.8032915
- $01:09:37.792 \longrightarrow 01:09:40.218$ distract or soothe the storm.
- NOTE Confidence: 0.8032915
- $01:09:40.220 \rightarrow 01:09:42.237$ You know that are not 100% likely,
- NOTE Confidence: 0.8032915
- $01:09:42.237 \rightarrow 01:09:43.959$ but at least are highly likely,
- NOTE Confidence: 0.8032915
- $01{:}09{:}43{.}960 \dashrightarrow 01{:}09{:}46{.}336$ and so some of that is in the crisis
- NOTE Confidence: 0.8032915
- 01:09:46.336 --> 01:09:48.187 response plan some more of it is in
- NOTE Confidence: 0.8032915
- 01:09:48.187 --> 01:09:50.421 the CBT in terms of better identifying
- NOTE Confidence: 0.8032915
- $01{:}09{:}50{.}421 \dashrightarrow 01{:}09{:}52{.}316$ when those storms are brewing.
- NOTE Confidence: 0.8032915
- $01:09:52.320 \longrightarrow 01:09:54.036$ But can you comment on that?
- NOTE Confidence: 0.8032915
- $01:09:54.040 \rightarrow 01:09:55.768$ Like why is it so effective?
- NOTE Confidence: 0.8474755

01:09:57.290 --> 01:10:00.530 Yeah, I think it's you.

NOTE Confidence: 0.8474755

 $01{:}10{:}00.530 \dashrightarrow 01{:}10{:}02.749$ So it doesn't sort of like provides

NOTE Confidence: 0.8474755

01:10:02.749 --> 01:10:05.230 this sort of buffer zone between these

NOTE Confidence: 0.8474755

 $01{:}10{:}05{.}230 \dashrightarrow 01{:}10{:}08{.}010$ two distinct States and so in essence,

NOTE Confidence: 0.8474755

 $01{:}10{:}08{.}010 \dashrightarrow 01{:}10{:}10{.}186$ the first piece of it is how to

NOTE Confidence: 0.8474755

01:10:10.186 --> 01:10:11.888 know when you're heading towards

NOTE Confidence: 0.8474755

 $01:10:11.888 \longrightarrow 01:10:14.436$ a higher state and being able to

NOTE Confidence: 0.8474755

 $01:10:14.511 \rightarrow 01:10:16.596$ recognize your own personal indicators

NOTE Confidence: 0.8474755

 $01:10:16.596 \longrightarrow 01:10:19.045$ or warning signs of that process,

NOTE Confidence: 0.8474755

 $01:10:19.045 \rightarrow 01:10:21.885$ and then so now that you're aware of,

NOTE Confidence: 0.8474755

01:10:21.890 --> 01:10:24.026 like Now you know that you're

NOTE Confidence: 0.8474755

 $01{:}10{:}24.026 \dashrightarrow 01{:}10{:}25.450$ heading towards that space,

NOTE Confidence: 0.8474755

 $01{:}10{:}25{.}450 \dashrightarrow 01{:}10{:}28{.}645$ then the rest of the plan is all about.

NOTE Confidence: 0.8474755

01:10:28.650 --> 01:10:30.480 Here's a whole bunch of

NOTE Confidence: 0.8474755

 $01:10:30.480 \longrightarrow 01:10:32.310$ different things that you could.

NOTE Confidence: 0.8474755

 $01{:}10{:}32{.}310 \dashrightarrow 01{:}10{:}35{.}510$ Do to report back up to reverse the

- NOTE Confidence: 0.8474755
- $01:10:35.510 \rightarrow 01:10:38.399$ process to take an offering up to.

01:10:38.400 --> 01:10:39.170 In essence,

NOTE Confidence: 0.8474755

 $01:10:39.170 \longrightarrow 01:10:42.250$ lots of lots of different ways to avert

NOTE Confidence: 0.8474755

 $01:10:42.330 \rightarrow 01:10:44.898$ getting into that high risk space,

NOTE Confidence: 0.8474755

 $01:10:44.900 \longrightarrow 01:10:46.930$ and so in some cases,

NOTE Confidence: 0.8474755

 $01:10:46.930 \rightarrow 01:10:50.575$ and it really is sort of riding the wave,

NOTE Confidence: 0.8474755

 $01:10:50.580 \longrightarrow 01:10:51.642$ but it does.

NOTE Confidence: 0.8474755

 $01:10:51.642 \rightarrow 01:10:54.120$ It's something that I think really hits

NOTE Confidence: 0.8474755

01:10:54.196 --> 01:10:56.466 that notion of non proportionality

NOTE Confidence: 0.8474755

 $01:10:56.466 \rightarrow 01:10:58.282$ is something very simple,

NOTE Confidence: 0.8474755

01:10:58.290 --> 01:11:01.482 like I was shocked to be perfectly

NOTE Confidence: 0.8474755

01:11:01.482 --> 01:11:04.717 honest when we did that CRP study.

NOTE Confidence: 0.8474755

 $01:11:04.720 \longrightarrow 01:11:06.066$ I was like, you know, this.

NOTE Confidence: 0.8474755

01:11:06.066 --> 01:11:07.662 We're writing a bunch of stuff

NOTE Confidence: 0.8474755

01:11:07.662 --> 01:11:09.139 done on an index card.

 $01:11:09.140 \longrightarrow 01:11:10.344$ In about 30 minutes,

NOTE Confidence: 0.8474755

01:11:10.344 --> 01:11:12.810 you know this is going to help in

NOTE Confidence: 0.8474755

01:11:12.810 --> 01:11:14.866 the next few weeks, but you know,

NOTE Confidence: 0.8474755

01:11:14.866 --> 01:11:16.910 we really need to get someone into

NOTE Confidence: 0.8474755

01:11:16.979 --> 01:11:18.917 like treatment like the CBT or

NOTE Confidence: 0.8474755

01:11:18.917 --> 01:11:21.114 something like that to have a longer

NOTE Confidence: 0.8474755

01:11:21.114
 --> 01:11:23.074 term effect and what we ended up

NOTE Confidence: 0.8474755

 $01{:}11{:}23.080 \dashrightarrow 01{:}11{:}25.159$ finding was that the effects tended to

NOTE Confidence: 0.8474755

 $01{:}11{:}25{.}159 \dashrightarrow 01{:}11{:}27{.}617$ get bigger and bigger as more time passed,

NOTE Confidence: 0.8474755

01:11:27.620 --> 01:11:29.438 and so I was like wow,

NOTE Confidence: 0.8474755

 $01:11:29.440 \longrightarrow 01:11:31.265$ there's something happening here and

NOTE Confidence: 0.8474755

 $01:11:31.265 \longrightarrow 01:11:33.439$ it appears to help individuals to

NOTE Confidence: 0.8474755

 $01{:}11{:}33{.}439 \dashrightarrow 01{:}11{:}35{.}167$ know where their tipping point is.

NOTE Confidence: 0.8474755

 $01:11:35.170 \longrightarrow 01:11:36.520$ Into in essence,

NOTE Confidence: 0.8474755

01:11:36.520 --> 01:11:38.770 a stay away from that,

NOTE Confidence: 0.8474755

01:11:38.770 --> 01:11:41.470 and it seems to work very,

- NOTE Confidence: 0.8474755
- $01:11:41.470 \rightarrow 01:11:43.270$ very effectively as result.
- NOTE Confidence: 0.8588811
- 01:11:43.830 --> 01:11:47.110 So I think we're how we have 60 seconds left,
- NOTE Confidence: 0.8588811
- $01:11:47.110 \longrightarrow 01:11:49.078$ so just given all this data,
- NOTE Confidence: 0.8588811
- $01:11:49.080 \rightarrow 01:11:50.720$ what do you think? Why?
- NOTE Confidence: 0.8588811
- $01:11:50.720 \longrightarrow 01:11:52.688$ Why do we still have these
- NOTE Confidence: 0.8588811
- $01:11:52.688 \rightarrow 01:11:54.000$ issues in the military,
- NOTE Confidence: 0.8588811
- $01:11:54.000 \rightarrow 01:11:55.968$ the VA and in our country?
- NOTE Confidence: 0.8588811
- $01:11:55.970 \rightarrow 01:11:57.610$ What's preventing these interventions from?
- NOTE Confidence: 0.84881026
- $01:11:59.130 \longrightarrow 01:12:01.440$ And be part of it is.
- NOTE Confidence: 0.84881026
- $01{:}12{:}01{.}440 \dashrightarrow 01{:}12{:}04{.}149$ I think we still buy and larger than the
- NOTE Confidence: 0.84881026
- $01:12:04.149 \longrightarrow 01:12:05.906$ middle health disciplines conceptualize
- NOTE Confidence: 0.84881026
- $01{:}12{:}05{.}906 \dashrightarrow 01{:}12{:}09{.}140$ suicide as a symptom of mental illness.
- NOTE Confidence: 0.84881026
- $01:12:09.140 \rightarrow 01:12:12.220$ And so by and large treatment, as usual,
- NOTE Confidence: 0.84881026
- $01{:}12{:}12{.}220 \dashrightarrow 01{:}12{:}14.145$ is largely treat the depression.
- NOTE Confidence: 0.84881026
- $01:12:14.150 \longrightarrow 01:12:16.460$ Treat the PTS di treat anxiety,
- NOTE Confidence: 0.84881026

- $01:12:16.460 \rightarrow 01:12:18.000$ whatever the you know,
- NOTE Confidence: 0.84881026
- $01:12:18.000 \longrightarrow 01:12:19.540$ whatever the diagnosis is,
- NOTE Confidence: 0.84881026
- $01:12:19.540 \longrightarrow 01:12:21.076$ and then theoretically suicide
- NOTE Confidence: 0.84881026
- $01{:}12{:}21.076 \dashrightarrow 01{:}12{:}22.996$ risk should resolve after that.
- NOTE Confidence: 0.84881026
- $01{:}12{:}23.000 \dashrightarrow 01{:}12{:}25.562$ But now I think we increasingly recognize
- NOTE Confidence: 0.84881026
- $01{:}12{:}25{.}562 \dashrightarrow 01{:}12{:}27{.}128$ that suicide is transdiagnostic
- NOTE Confidence: 0.84881026
- $01:12:27.128 \longrightarrow 01:12:29.546$ that it's better to look at.
- NOTE Confidence: 0.84881026
- 01:12:29.550 --> 01:12:31.296 Suicide risk is.
- NOTE Confidence: 0.84881026
- 01:12:31.296 --> 01:12:33.624 Independent of psychiatric diagnosis
- NOTE Confidence: 0.84881026
- $01{:}12{:}33{.}624 \dashrightarrow 01{:}12{:}37{.}038$ and so treatments like bteen crisis
- NOTE Confidence: 0.84881026
- 01:12:37.038 --> 01:12:40.206 response planning are going directly at.
- NOTE Confidence: 0.84881026
- $01{:}12{:}40{.}210 \dashrightarrow 01{:}12{:}41{.}718$ Several mechanisms that seem
- NOTE Confidence: 0.84881026
- 01:12:41.718 --> 01:12:43.980 to give rise to suicide risk,
- NOTE Confidence: 0.84881026
- $01{:}12{:}43.980 \dashrightarrow 01{:}12{:}46.381$ and so it's a more direct targeting
- NOTE Confidence: 0.84881026
- $01:12:46.381 \longrightarrow 01:12:49.235$ of the problem as opposed to an
- NOTE Confidence: 0.84881026
- $01:12:49.235 \rightarrow 01:12:50.991$ indirect targeting through these

 $01:12:50.991 \rightarrow 01:12:52.899$ other reported mental health.

NOTE Confidence: 0.84881026

 $01{:}12{:}52{.}900 \dashrightarrow 01{:}12{:}55{.}364$ Channels the last thing that I think

NOTE Confidence: 0.84881026

 $01:12:55.364 \rightarrow 01:12:58.041$ is really key that another aspect of

NOTE Confidence: 0.84881026

01:12:58.041 --> 01:13:00.806 my thinking is really moving out of

NOTE Confidence: 0.84881026

 $01:13:00.806 \rightarrow 01:13:03.742$ this sort of mental health model of suicide,

NOTE Confidence: 0.84881026

 $01:13:03.750 \longrightarrow 01:13:05.964$ and we're now looking more and

NOTE Confidence: 0.84881026

 $01{:}13{:}05{.}964 \dashrightarrow 01{:}13{:}08{.}600$ more at more like environmental.

NOTE Confidence: 0.84881026

01:13:08.600 --> 01:13:09.968 Injury prevention models where

NOTE Confidence: 0.84881026

01:13:09.968 --> 01:13:12.020 you know we don't reduce traffic

NOTE Confidence: 0.84881026

 $01:13:12.080 \rightarrow 01:13:14.198$ fatalities by saying everyone needs to.

NOTE Confidence: 0.84881026

 $01:13:14.200 \longrightarrow 01:13:16.354$ Lookout for the warning signs of

NOTE Confidence: 0.84881026

01:13:16.354 --> 01:13:19.246 a car accident and then if you see

NOTE Confidence: 0.84881026

01:13:19.246 --> 01:13:21.316 those warning signs you should go

NOTE Confidence: 0.84881026

 $01{:}13{:}21{.}391 \dashrightarrow 01{:}13{:}23{.}999$ and get enroll in a drivers Ed class.

NOTE Confidence: 0.84881026

01:13:24.000 --> 01:13:24.714 I mean,

 $01:13:24.714 \rightarrow 01:13:26.499$ that's basically how we approach

NOTE Confidence: 0.84881026

01:13:26.499 --> 01:13:27.850 suicide prevention right now.

NOTE Confidence: 0.84881026

 $01:13:27.850 \longrightarrow 01:13:29.985$ What we do is we build safer

NOTE Confidence: 0.84881026

01:13:29.985 --> 01:13:32.526 roads and we build safer cars and

NOTE Confidence: 0.84881026

 $01{:}13{:}32{.}526 \dashrightarrow 01{:}13{:}34{.}848$ we require people to buckle up.

NOTE Confidence: 0.84881026

 $01{:}13{:}34{.}850 \dashrightarrow 01{:}13{:}36{.}650$ And we criminalize conditions like NOTE Confidence: 0.84881026

 $01:13:36.650 \rightarrow 01:13:38.450$ drinking and driving that increase

NOTE Confidence: 0.84881026

 $01:13:38.512 \rightarrow 01:13:40.287$ the probability of fatal outcomes.

NOTE Confidence: 0.84881026

 $01{:}13{:}40.290 \dashrightarrow 01{:}13{:}41.040$ And so,

NOTE Confidence: 0.84881026

01:13:41.040 --> 01:13:43.665 how do we now take a similar

NOTE Confidence: 0.84881026

 $01:13:43.665 \rightarrow 01:13:45.920$ thought process with suicide,

NOTE Confidence: 0.84881026

 $01:13:45.920 \longrightarrow 01:13:49.154$ where we change the environment in a

NOTE Confidence: 0.84881026

01:13:49.154 $\operatorname{-->}$ 01:13:52.239 way that reduces the likelihood of a

NOTE Confidence: 0.84881026

 $01:13:52.239 \rightarrow 01:13:56.310$ person if they do shift to a high risk state,

NOTE Confidence: 0.84881026

 $01:13:56.310 \longrightarrow 01:13:59.438$ they have a seat belt now and they

NOTE Confidence: 0.84881026

01:13:59.438 --> 01:14:01.280 are significantly more likely

- NOTE Confidence: 0.84881026
- $01{:}14{:}01{.}280 \dashrightarrow 01{:}14{:}03{.}236$ to survive that unforeseen,
- NOTE Confidence: 0.84881026
- $01:14:03.240 \longrightarrow 01:14:04.106$ unpredictable conditions.
- NOTE Confidence: 0.84881026
- 01:14:04.106 --> 01:14:04.539 So
- NOTE Confidence: 0.8744251
- $01:14:04.540 \longrightarrow 01:14:07.438$ can you one quick thing on that
- NOTE Confidence: 0.8744251
- $01:14:07.438 \longrightarrow 01:14:10.249$ that issue of the systemic?
- NOTE Confidence: 0.8744251
- 01:14:10.250 --> 01:14:11.405 Approach and associating
- NOTE Confidence: 0.8744251
- $01:14:11.405 \longrightarrow 01:14:12.945$ it with mental illness.
- NOTE Confidence: 0.8744251
- 01:14:12.950 --> 01:14:14.735 There's varying degrees in different
- NOTE Confidence: 0.8744251
- 01:14:14.735 --> 01:14:16.989 studies about how many people actually
- NOTE Confidence: 0.8744251
- 01:14:16.989 --> 01:14:19.425 even have an independent mental health
- NOTE Confidence: 0.8744251
- 01:14:19.425 --> 01:14:21.015 condition from suicidality, right?
- NOTE Confidence: 0.8744251
- 01:14:21.015 --> 01:14:23.205 Just like heart attacks like some
- NOTE Confidence: 0.8744251
- $01:14:23.205 \rightarrow 01:14:25.169$ people just don't have another
- NOTE Confidence: 0.8744251
- $01{:}14{:}25{.}169 \dashrightarrow 01{:}14{:}27{.}575$ cardiac condition that we're aware of.
- NOTE Confidence: 0.8744251
- 01:14:27.580 --> 01:14:30.284 So what is your best guestimate of the
- NOTE Confidence: 0.8744251

- $01:14:30.284 \rightarrow 01:14:32.967$ people who attempt suicide and actually
- NOTE Confidence: 0.8744251
- 01:14:32.970 --> 01:14:34.889 don't have some other standal
one
- NOTE Confidence: 0.81706005
- $01:14:34.890 \longrightarrow 01:14:35.660$ health condition?
- NOTE Confidence: 0.81706005
- $01{:}14{:}35.660 \dashrightarrow 01{:}14{:}37.585$ Yeah, I would say so.
- NOTE Confidence: 0.81706005
- $01{:}14{:}37{.}590 \dashrightarrow 01{:}14{:}40{.}530$ It's a bigger percentage than we think.
- NOTE Confidence: 0.81706005
- $01{:}14{:}40{.}530 \dashrightarrow 01{:}14{:}42{.}658$ Or at least that we've traditionally assumed.
- NOTE Confidence: 0.81706005
- 01:14:42.660 --> 01:14:44.788 So if you look at CDC data,
- NOTE Confidence: 0.81706005
- 01:14:44.790 --> 01:14:46.743 55% of suicide decedents in the US
- NOTE Confidence: 0.81706005
- $01{:}14{:}46.743 \dashrightarrow 01{:}14{:}49.040$ do not have a known mental illness.
- NOTE Confidence: 0.81706005
- $01:14:49.040 \rightarrow 01:14:51.464$ Now the typical worst retort to that is,
- NOTE Confidence: 0.81706005
- $01:14:51.470 \longrightarrow 01:14:53.374$ well, they didn't go in to meet
- NOTE Confidence: 0.81706005
- $01{:}14{:}53{.}374 \dashrightarrow 01{:}14{:}55{.}120$ with the the rapist or psychiatrist,
- NOTE Confidence: 0.81706005
- $01:14:55.120 \rightarrow 01:14:56.950$ and so they were never diagnosed,
- NOTE Confidence: 0.81706005
- 01:14:56.950 --> 01:14:59.382 so we just didn't know that they had
- NOTE Confidence: 0.81706005
- $01:14:59.382 \longrightarrow 01:15:01.506$ the condition that we assume is there.
- NOTE Confidence: 0.81706005
- $01:15:01.510 \longrightarrow 01:15:03.280$ But if you look at some

- NOTE Confidence: 0.81706005
- 01:15:03.280 --> 01:15:05.150 other lines of data and ones,
- NOTE Confidence: 0.81706005
- 01:15:05.150 --> 01:15:06.980 I think that is really informative.
- NOTE Confidence: 0.81706005
- 01:15:06.980 --> 01:15:08.332 This Joe Franklin's meta
- NOTE Confidence: 0.81706005
- $01{:}15{:}08{.}332 \dashrightarrow 01{:}15{:}10{.}360$ analysis from a few years ago.
- NOTE Confidence: 0.81706005
- 01:15:10.360 --> 01:15:11.950 Looking at 50 years of
- NOTE Confidence: 0.81706005
- $01:15:11.950 \longrightarrow 01:15:13.222$ suicide risk factor research,
- NOTE Confidence: 0.81706005
- $01:15:13.230 \rightarrow 01:15:15.590$ if you kind of do some reverse engineering
- NOTE Confidence: 0.81706005
- $01:15:15.590 \rightarrow 01:15:18.016$ of some of the statistics he reported,
- NOTE Confidence: 0.81706005
- $01:15:18.020 \longrightarrow 01:15:18.786$ in essence,
- NOTE Confidence: 0.81706005
- $01:15:18.786 \rightarrow 01:15:21.467$ what his data would suggest is that.
- NOTE Confidence: 0.81706005
- $01:15:21.470 \longrightarrow 01:15:23.560$ Somewhere around 40% of those
- NOTE Confidence: 0.81706005
- $01:15:23.560 \longrightarrow 01:15:26.196$ who attempt suicide or die by
- NOTE Confidence: 0.81706005
- 01:15:26.196 --> 01:15:28.546 suicide have a mental health
- NOTE Confidence: 0.81706005
- $01{:}15{:}28{.}546 \dashrightarrow 01{:}15{:}30{.}426$ diagnosis or elevated symptoms.
- NOTE Confidence: 0.81706005
- $01:15:30.430 \longrightarrow 01:15:33.649$ Things like that.
- NOTE Confidence: 0.81706005

 $01:15:33.650 \longrightarrow 01:15:35.848$ I think the third line of evidence

NOTE Confidence: 0.81706005

01:15:35.848 --> 01:15:37.840 comes from psych autopsy studies,

NOTE Confidence: 0.81706005

 $01{:}15{:}37.840 \dashrightarrow 01{:}15{:}40.276$ which are often used to support that.

NOTE Confidence: 0.81706005

 $01:15:40.280 \longrightarrow 01:15:42.363$ This is where the 90% status

NOTE Confidence: 0.81706005

01:15:42.363 --> 01:15:44.028 obtained from 90% of suicide

NOTE Confidence: 0.81706005

 $01{:}15{:}44.028 \dashrightarrow 01{:}15{:}45.870$ decisions have a mental illness.

NOTE Confidence: 0.81706005

 $01:15:45.870 \rightarrow 01:15:49.536$ It comes from cycle autopsy studies.

NOTE Confidence: 0.81706005

 $01:15:49.540 \longrightarrow 01:15:51.755$ The second party method is

NOTE Confidence: 0.81706005

01:15:51.755 --> 01:15:53.527 highly vulnerable to bias,

NOTE Confidence: 0.81706005

 $01{:}15{:}53{.}530 \dashrightarrow 01{:}15{:}56{.}386$ and if you look at case controlled

NOTE Confidence: 0.81706005

 $01{:}15{:}56{.}386 \dashrightarrow 01{:}15{:}59{.}554$ cycle top studies where you can see NOTE Confidence: 0.81706005

01:15:59.554 --> 01:16:01.874 is that they generally overestimate

NOTE Confidence: 0.81706005

01:16:01.874 --> 01:16:04.176 rates of psychiatric illness in

NOTE Confidence: 0.81706005

01:16:04.176 --> 01:16:07.266 control cases by double and so you

NOTE Confidence: 0.81706005

 $01{:}16{:}07{.}266 \dashrightarrow 01{:}16{:}09{.}496$ can reasonably infer that may be

NOTE Confidence: 0.81706005

 $01:16:09.496 \rightarrow 01:16:11.817$ psych autopsies are doubling their

- NOTE Confidence: 0.81706005
- $01:16:11.817 \rightarrow 01:16:14.117$ biased towards over diagnosing mental
- NOTE Confidence: 0.81706005
- 01:16:14.117 $\operatorname{-->}$ 01:16:17.008 health conditions by a factor of two,
- NOTE Confidence: 0.81706005
- 01:16:17.010 --> 01:16:19.510 in which case 90% of.
- NOTE Confidence: 0.81706005
- $01{:}16{:}19{.}510 \dashrightarrow 01{:}16{:}22{.}282$ Which is their finding would convert to
- NOTE Confidence: 0.81706005
- $01{:}16{:}22.282 \dashrightarrow 01{:}16{:}25.050$ about a 45% and estimate the correction,
- NOTE Confidence: 0.81706005
- $01{:}16{:}25.050 \dashrightarrow 01{:}16{:}26.235$ so to speak.
- NOTE Confidence: 0.81706005
- $01{:}16{:}26{.}240 \dashrightarrow 01{:}16{:}29{.}304$ So this is sort of like these several
- NOTE Confidence: 0.81706005
- 01:16:29.304 --> 01:16:32.158 lines of evidence that I would say
- NOTE Confidence: 0.81706005
- $01:16:32.158 \longrightarrow 01:16:35.162$ maybe around 40 to 50% of suicide.
- NOTE Confidence: 0.81706005
- 01:16:35.162 --> 01:16:36.665 Decedents Oregon suicide
- NOTE Confidence: 0.81706005
- $01{:}16{:}36{.}665 \dashrightarrow 01{:}16{:}39{.}170$ attempters probably do not have.
- NOTE Confidence: 0.81706005
- 01:16:39.170 --> 01:16:40.514 A diagnosable mental condition.
- NOTE Confidence: 0.81706005
- $01:16:40.514 \rightarrow 01:16:42.530$ They might be really stressed out.
- NOTE Confidence: 0.81706005
- $01:16:42.530 \longrightarrow 01:16:44.205$ It might be really upset
- NOTE Confidence: 0.81706005
- $01:16:44.205 \rightarrow 01:16:45.545$ under pressure for sure,
- NOTE Confidence: 0.81706005

 $01:16:45.550 \longrightarrow 01:16:47.536$ but come on like being upset

NOTE Confidence: 0.81706005

 $01{:}16{:}47{.}536 \dashrightarrow 01{:}16{:}49{.}593$ when your partner tells you that

NOTE Confidence: 0.81706005

 $01:16:49.593 \rightarrow 01:16:51.597$ they're going to leave you there.

NOTE Confidence: 0.81706005

 $01:16:51.600 \rightarrow 01:16:54.288$ Having an affair is not a mental illness.

NOTE Confidence: 0.81706005

 $01{:}16{:}54{.}290 \dashrightarrow 01{:}16{:}55{.}970$ That is a normative emotional

NOTE Confidence: 0.81706005

 $01:16:55.970 \longrightarrow 01:16:57.650$ reaction to a life stressor,

NOTE Confidence: 0.81706005

 $01{:}16{:}57{.}650 \dashrightarrow 01{:}17{:}00{.}116$ and so I think we've blurred

NOTE Confidence: 0.81706005

 $01:17:00.116 \longrightarrow 01:17:01.349$ the lines between.

NOTE Confidence: 0.81706005

 $01:17:01.350 \rightarrow 01:17:03.807$ Between these experiences and as a result,

NOTE Confidence: 0.81706005

 $01:17:03.810 \longrightarrow 01:17:06.400$ we put all of our eggs into

NOTE Confidence: 0.81706005

 $01{:}17{:}06{.}400 \dashrightarrow 01{:}17{:}08{.}220$ the Git mental health.

NOTE Confidence: 0.81706005

 $01{:}17{:}08.220 \dashrightarrow 01{:}17{:}10.470$ Basket mental health treatment basket

NOTE Confidence: 0.81706005

 $01:17:10.470 \longrightarrow 01:17:14.474$ and so we're ignoring a lot of other

NOTE Confidence: 0.81706005

 $01:17:14.474 \rightarrow 01:17:16.714$ potentially useful and impactful

NOTE Confidence: 0.81706005

 $01:17:16.714 \rightarrow 01:17:18.394$ suicide prevention strategies.

NOTE Confidence: 0.86512434

 $01{:}17{:}20.580 \dashrightarrow 01{:}17{:}22.379$ Some very positive feedback in the chat.

- NOTE Confidence: 0.86512434
- $01{:}17{:}22.380 \dashrightarrow 01{:}17{:}24.025$ I'll take some screen shots so
- NOTE Confidence: 0.86512434
- $01:17:24.025 \longrightarrow 01:17:26.674$ that you can show it to your loved
- NOTE Confidence: 0.86512434
- $01:17:26.674 \longrightarrow 01:17:28.844$ ones and family so that they know
- NOTE Confidence: 0.86512434
- $01:17:28.911 \rightarrow 01:17:30.885$ what a great job you did crag.
- NOTE Confidence: 0.86512434
- $01:17:30.890 \rightarrow 01:17:35.314$ Any other questions or comments for Crag?
- NOTE Confidence: 0.86512434
- 01:17:35.320 --> 01:17:36.640 Before we let him get on
- NOTE Confidence: 0.86512434
- $01{:}17{:}36.640 \dashrightarrow 01{:}17{:}37.740$ to his weekend I guess.
- NOTE Confidence: 0.83398587
- 01:17:40.620 --> 01:17:42.636 Hi this is Shelly I guess I I apologize
- NOTE Confidence: 0.83398587
- $01{:}17{:}42.636 \dashrightarrow 01{:}17{:}44.917$ for the length the set up there so I've
- NOTE Confidence: 0.83398587
- 01:17:44.917 --> 01:17:46.780 read Malcolm Gladwell's tipping point.
- NOTE Confidence: 0.83398587
- 01:17:46.780 --> 01:17:48.931 Understand I've done a lot of work in the
- NOTE Confidence: 0.83398587
- $01{:}17{:}48{.}931$ --> $01{:}17{:}50{.}625$ chemistry lab with pH buffering and it's NOTE Confidence: 0.83398587
- 01:17:50.625 --> 01:17:52.283 very very simple to overshoot because
- NOTE Confidence: 0.83398587
- 01:17:52.283 --> 01:17:54.287 you're on an exponential pathway right? NOTE Confidence: 0.83398587
- $01{:}17{:}54{.}290 \dashrightarrow 01{:}17{:}56{.}405$ So what I was thinking is it sounds like NOTE Confidence: 0.83398587

 $01{:}17{:}56{.}405 \dashrightarrow 01{:}17{:}58{.}670$ you have a lot of linear factors and then

NOTE Confidence: 0.83398587

 $01{:}17{:}58.670 \dashrightarrow 01{:}18{:}01.081$ you have an exponential factor that may not

NOTE Confidence: 0.83398587

 $01:18:01.081 \rightarrow 01:18:03.065$ be the same exponential factor every time.

NOTE Confidence: 0.83398587

01:18:03.065 --> 01:18:04.535 So very very quick to overshoot

NOTE Confidence: 0.83398587

 $01:18:04.535 \longrightarrow 01:18:06.078$ at that moment of suicidality.

NOTE Confidence: 0.83398587

01:18:06.080 --> 01:18:08.096 Most of the work I do is

NOTE Confidence: 0.83398587

 $01:18:08.096 \rightarrow 01:18:09.810$ with veterans at this point.

NOTE Confidence: 0.83398587

 $01:18:09.810 \longrightarrow 01:18:11.644$ And most of the veterans are very,

NOTE Confidence: 0.83398587

 $01{:}18{:}11{.}650 \dashrightarrow 01{:}18{:}12{.}762$ very familiar with we apons.

NOTE Confidence: 0.83398587

01:18:12.762 --> 01:18:14.716 The conversations I start out early I

NOTE Confidence: 0.83398587

 $01{:}18{:}14.716 \dashrightarrow 01{:}18{:}16.120$ start out often talking about guns.

NOTE Confidence: 0.83398587

01:18:16.120 --> 01:18:17.435 I talked extensively about it

NOTE Confidence: 0.83398587

 $01:18:17.435 \longrightarrow 01:18:18.224$ in the interview,

NOTE Confidence: 0.83398587

 $01:18:18.230 \longrightarrow 01:18:19.540$ find out how they're stored,

NOTE Confidence: 0.83398587

 $01:18:19.540 \longrightarrow 01:18:21.644$ what they do with somehow they carry it.

NOTE Confidence: 0.83398587

01:18:21.650 --> 01:18:22.202 You know,

- NOTE Confidence: 0.83398587
- $01:18:22.202 \rightarrow 01:18:23.582$ there's a fairly lengthy conversation
- NOTE Confidence: 0.83398587
- $01:18:23.582 \rightarrow 01:18:25.475$ and a lot of times sometimes they
- NOTE Confidence: 0.83398587
- $01{:}18{:}25{.}475 \dashrightarrow 01{:}18{:}27{.}429$ back off and sometimes it it goes to.
- NOTE Confidence: 0.83398587
- 01:18:27.430 --> 01:18:29.008 You know, I just say listen,
- NOTE Confidence: 0.83398587
- 01:18:29.010 --> 01:18:30.062 you're probably not anything
- NOTE Confidence: 0.83398587
- $01:18:30.062 \longrightarrow 01:18:31.377$ to worry about right now,
- NOTE Confidence: 0.83398587
- $01:18:31.380 \rightarrow 01:18:33.738$ but if the time ever comes in the future,
- NOTE Confidence: 0.83398587
- 01:18:33.740 --> 01:18:35.060 I want to, you know,
- NOTE Confidence: 0.83398587
- 01:18:35.060 --> 01:18:36.638 I have a comfort level talking
- NOTE Confidence: 0.83398587
- 01:18:36.638 --> 01:18:37.690 with you about this,
- NOTE Confidence: 0.83398587
- $01{:}18{:}37.690 \dashrightarrow 01{:}18{:}40.394$ and we've laid out the groundwork for that.
- NOTE Confidence: 0.83398587
- 01:18:40.400 --> 01:18:42.020 Now I don't have any data.
- NOTE Confidence: 0.83398587
- 01:18:42.020 --> 01:18:43.910 I don't know if it helps us.
- NOTE Confidence: 0.83398587
- 01:18:43.910 --> 01:18:45.260 Don't know if it doesn't,
- NOTE Confidence: 0.83398587
- $01{:}18{:}45{.}260 \dashrightarrow 01{:}18{:}47{.}066$ but one of the frustrations I have
- NOTE Confidence: 0.83398587

 $01:18:47.066 \rightarrow 01:18:49.004$ is with my fellow clinician who

NOTE Confidence: 0.83398587

 $01:18:49.004 \rightarrow 01:18:50.834$ sometimes in all best efforts.

NOTE Confidence: 0.83398587

 $01:18:50.840 \longrightarrow 01:18:52.360$ Seem like that conversation

NOTE Confidence: 0.83398587

 $01:18:52.360 \longrightarrow 01:18:53.500$ is incredibly minimal,

NOTE Confidence: 0.83398587

 $01:18:53.500 \longrightarrow 01:18:55.780$ is sort of the richness that

NOTE Confidence: 0.83398587

 $01:18:55.780 \longrightarrow 01:18:57.300$ it could be done.

NOTE Confidence: 0.83398587

01:18:57.300 --> 01:18:57.647 Yeah,

NOTE Confidence: 0.83398587

 $01{:}18{:}57.647 \dashrightarrow 01{:}19{:}00.076$ so I guess I'm wondering what we

NOTE Confidence: 0.83398587

01:19:00.076 --> 01:19:02.739 can do to train the clinician to

NOTE Confidence: 0.83398587

 $01:19:02.739 \longrightarrow 01:19:05.113$ inquire in a way that's useful

NOTE Confidence: 0.83398587

 $01{:}19{:}05{.}113 \dashrightarrow 01{:}19{:}07{.}555$ to the patient in those times.

NOTE Confidence: 0.83398587

 $01:19:07.560 \longrightarrow 01:19:08.574$ So we yeah,

NOTE Confidence: 0.83398587

 $01{:}19{:}08{.}574 \dashrightarrow 01{:}19{:}10{.}264$ so we trained clinicians pretty

NOTE Confidence: 0.83398587

01:19:10.264 --> 01:19:12.499 often in mean safety counseling,

NOTE Confidence: 0.83398587

 $01:19:12.500 \rightarrow 01:19:15.540$ but now the training workshop that I do,

NOTE Confidence: 0.83398587

01:19:15.540 --> 01:19:17.820 I just call firearm safety counseling.

- NOTE Confidence: 0.83398587
- 01:19:17.820 --> 01:19:18.900 I'm like, yeah,
- NOTE Confidence: 0.83398587
- 01:19:18.900 --> 01:19:21.060 'cause I find clinicians are usually
- NOTE Confidence: 0.83398587
- $01:19:21.060 \rightarrow 01:19:23.250$ reasonably comfortable talking about like.
- NOTE Confidence: 0.83398587
- $01{:}19{:}23.250 \dashrightarrow 01{:}19{:}24.814$ Limiting access to medications
- NOTE Confidence: 0.83398587
- $01{:}19{:}24.814 \dashrightarrow 01{:}19{:}26.378$ and things like that,
- NOTE Confidence: 0.83398587
- $01:19:26.380 \longrightarrow 01:19:30.290$ but it is a firearm issue that often is much,
- NOTE Confidence: 0.83398587
- $01{:}19{:}30{.}290 \dashrightarrow 01{:}19{:}33{.}027$ much more challenging, and so we do.
- NOTE Confidence: 0.83398587
- $01{:}19{:}33{.}030 \dashrightarrow 01{:}19{:}34{.}980$ So we do have data.
- NOTE Confidence: 0.83398587
- 01:19:34.980 --> 01:19:37.717 Their forthcoming that if you do this,
- NOTE Confidence: 0.83398587
- $01:19:37.720 \longrightarrow 01:19:39.880$ if you have these conversations in
- NOTE Confidence: 0.83398587
- 01:19:39.880 --> 01:19:42.799 a very sort of non judgmental way.
- NOTE Confidence: 0.83398587
- $01{:}19{:}42.800 \dashrightarrow 01{:}19{:}45.128$ But again we used the motivational
- NOTE Confidence: 0.83398587
- $01{:}19{:}45{.}128 \dashrightarrow 01{:}19{:}47{.}100$ interviewing based approach we found.
- NOTE Confidence: 0.83398587
- $01{:}19{:}47{.}100 \dashrightarrow 01{:}19{:}48{.}852$ There was incredibly highly
- NOTE Confidence: 0.83398587
- $01:19:48.852 \rightarrow 01:19:51.480$ acceptable in our study with military
- NOTE Confidence: 0.83398587

 $01:19:51.555 \rightarrow 01:19:53.844$ personnel out of 200 year old 130.

NOTE Confidence: 0.83398587

01:19:53.850 --> 01:19:56.356 200% of them said I would recommend

NOTE Confidence: 0.83398587

 $01:19:56.356 \rightarrow 01:19:58.060$ this conversation for a friend,

NOTE Confidence: 0.83398587

 $01:19:58.060 \longrightarrow 01:20:00.636$ which is sort of like OK then.

NOTE Confidence: 0.83398587

 $01{:}20{:}00.640 \dashrightarrow 01{:}20{:}02.400$ That's some St cred there.

NOTE Confidence: 0.83398587

 $01:20:02.400 \rightarrow 01:20:04.160$ This is evidence of acceptability.

NOTE Confidence: 0.8675714

 $01{:}20{:}06{.}340 \dashrightarrow 01{:}20{:}08{.}468$ Reached their likelihood of locking up their

NOTE Confidence: 0.8675714

 $01:20:08.468 \rightarrow 01:20:11.010$ guns and we found that the vast majority,

NOTE Confidence: 0.8675714

 $01{:}20{:}11.010 \dashrightarrow 01{:}20{:}12.560$ even though there was there,

NOTE Confidence: 0.8675714

 $01{:}20{:}12{.}560 \dashrightarrow 01{:}20{:}15{.}359$ was a small number who kind of still had,

NOTE Confidence: 0.8675714

01:20:15.360 --> 01:20:16.896 you know, screw you guys at

NOTE Confidence: 0.8675714

 $01:20:16.896 \longrightarrow 01:20:18.780$ the end of the conversation,

NOTE Confidence: 0.8675714

 $01:20:18.780 \longrightarrow 01:20:20.957$ all of those during the follow up.

NOTE Confidence: 0.8675714

 $01:20:20.960 \longrightarrow 01:20:22.324$ They said, you know,

NOTE Confidence: 0.8675714

 $01{:}20{:}22{.}324 \dashrightarrow 01{:}20{:}24{.}935$ I felt respected and listened to you guys

NOTE Confidence: 0.8675714

01:20:24.935 --> 01:20:27.664 didn't push me and so we had a few who

- NOTE Confidence: 0.8675714
- $01:20:27.664 \rightarrow 01:20:30.288$ at least we're left with a good impression,

 $01{:}20{:}30{.}290 \dashrightarrow 01{:}20{:}32{.}460$ even though perhaps we hadn't yet convinced

NOTE Confidence: 0.8675714

 $01{:}20{:}32.460 \dashrightarrow 01{:}20{:}34.947$ them that it was in their best interest.

NOTE Confidence: 0.8675714

 $01:20:34.950 \longrightarrow 01:20:36.966$ But one of those things that we

NOTE Confidence: 0.8675714

01:20:36.966 --> 01:20:38.829 have found really helpful working.

NOTE Confidence: 0.8675714

 $01:20:38.830 \longrightarrow 01:20:39.954$ Gun owners in general.

NOTE Confidence: 0.8675714

 $01{:}20{:}39{.}954 \dashrightarrow 01{:}20{:}42{.}027$ Is using the metaphor of a designated

NOTE Confidence: 0.8675714

01:20:42.027 --> 01:20:43.662 drivers in wearing seatbelts and

NOTE Confidence: 0.8675714

01:20:43.662 --> 01:20:45.890 we say do you when you drive?

NOTE Confidence: 0.8675714

 $01{:}20{:}45{.}890 \dashrightarrow 01{:}20{:}48{.}510$ Do you only wear seat belt on the day that

NOTE Confidence: 0.8675714

 $01{:}20{:}48.576 \dashrightarrow 01{:}20{:}50.944$ you expect to get into a car accident?

NOTE Confidence: 0.8675714

 $01{:}20{:}50{.}950 \dashrightarrow 01{:}20{:}52{.}350$ And they're like, well, no,

NOTE Confidence: 0.8675714

 $01:20:52.350 \rightarrow 01:20:54.317$ you can't predict it is like right?

NOTE Confidence: 0.8675714

 $01{:}20{:}54{.}320 \dashrightarrow 01{:}20{:}56{.}432$ And we never know when we're going to

NOTE Confidence: 0.8675714

 $01:20:56.432 \rightarrow 01:20:58.229$ have those really, really bad days.

- $01:20:58.229 \longrightarrow 01:21:00.140$ And so that's why we wear a
- NOTE Confidence: 0.8675714
- $01{:}21{:}00{.}203 \dashrightarrow 01{:}21{:}01{.}628$ seat belt just in case.
- NOTE Confidence: 0.8675714
- $01:21:01.630 \longrightarrow 01:21:03.268$ And so what's going to be
- NOTE Confidence: 0.8675714
- $01:21:03.268 \longrightarrow 01:21:05.000$ the seat belt for your gun?
- NOTE Confidence: 0.8675714
- $01{:}21{:}05{.}000 \dashrightarrow 01{:}21{:}07{.}044$ And they find that we were finding
- NOTE Confidence: 0.8675714
- $01{:}21{:}07{.}044 \dashrightarrow 01{:}21{:}08.650$ that often times helps him to think.
- NOTE Confidence: 0.8675714
- 01:21:08.650 --> 01:21:08.966 OK,
- NOTE Confidence: 0.8675714
- 01:21:08.966 --> 01:21:11.178 maybe a gun safe and unlock something
- NOTE Confidence: 0.8675714
- $01{:}21{:}11{.}178 \dashrightarrow 01{:}21{:}13.617$ like that is sort of like a seat belt.
- NOTE Confidence: 0.8675714
- $01{:}21{:}13.620 \dashrightarrow 01{:}21{:}15.414$ And that might be the difference
- NOTE Confidence: 0.8675714
- $01{:}21{:}15{.}414 \dashrightarrow 01{:}21{:}17{.}686$ between life and death in the same way NOTE Confidence: 0.8675714
- $01:21:17.686 \rightarrow 01:21:19.440$ that wearing your seat belt can be.
- NOTE Confidence: 0.8675714
- $01{:}21{:}19{.}440 \dashrightarrow 01{:}21{:}21{.}078$ Those difference between life and death
- NOTE Confidence: 0.8675714
- $01{:}21{:}21{.}078 \dashrightarrow 01{:}21{:}23{.}337$ in a car accident and then the designated
- NOTE Confidence: 0.8675714
- $01:21:23.337 \rightarrow 01:21:25.250$ driver model is really resonated a lot.
- NOTE Confidence: 0.8675714
- $01:21:25.250 \rightarrow 01:21:25.527$ Where,

- NOTE Confidence: 0.8675714
- 01:21:25.527 --> 01:21:26.358 like you know,
- NOTE Confidence: 0.8675714
- 01:21:26.358 --> 01:21:28.020 if you're worried about a friend,
- NOTE Confidence: 0.8675714
- $01{:}21{:}28{.}020 \dashrightarrow 01{:}21{:}30{.}156$ we we target this sort of community rather
- NOTE Confidence: 0.8675714
- $01:21:30.156 \rightarrow 01:21:32.177$ than this like a high risk individual,
- NOTE Confidence: 0.8675714
- 01:21:32.180 --> 01:21:33.686 but will say you know when
- NOTE Confidence: 0.8675714
- 01:21:33.686 --> 01:21:35.230 your friend has been drinking,
- NOTE Confidence: 0.8675714
- $01{:}21{:}35{.}230 \dashrightarrow 01{:}21{:}36{.}958$ you take away their parties because
- NOTE Confidence: 0.8675714
- $01{:}21{:}36{.}958 \dashrightarrow 01{:}21{:}38{.}931$ it's dangerous and it doesn't mean they
- NOTE Confidence: 0.8675714
- $01{:}21{:}38{.}931 \dashrightarrow 01{:}21{:}41{.}040$ never get to drive again in their life.
- NOTE Confidence: 0.8675714
- $01:21:41.040 \longrightarrow 01:21:43.245$ It's just that you have to wait
- NOTE Confidence: 0.8675714
- $01:21:43.245 \rightarrow 01:21:44.825$ until they're sober so it's
- NOTE Confidence: 0.8675714
- $01{:}21{:}44.825 \dashrightarrow 01{:}21{:}46.240$ safer and then they can.
- NOTE Confidence: 0.8675714
- 01:21:46.240 --> 01:21:46.814 You know,
- NOTE Confidence: 0.8675714
- 01:21:46.814 $\operatorname{-->}$ 01:21:49.110 have a car keys back again and so
- NOTE Confidence: 0.8675714
- 01:21:49.185 --> 01:21:51.257 it works the same with the gun,
- NOTE Confidence: 0.8675714

- $01{:}21{:}51{.}260 \dashrightarrow 01{:}21{:}52{.}976$ shouldn't it will ask you should
- NOTE Confidence: 0.8675714
- 01:21:52.976 --> 01:21:54.470 suicidal people have access to

01:21:54.470 --> 01:21:55.980 loaded weapons and everyone's like,

NOTE Confidence: 0.8675714

 $01{:}21{:}55{.}980 \dashrightarrow 01{:}21{:}57{.}450$ no, that's a terrible idea,

NOTE Confidence: 0.8675714

01:21:57.450 --> 01:21:57.998 like right,

NOTE Confidence: 0.8675714

 $01{:}21{:}57{.}998 \dashrightarrow 01{:}22{:}01{.}162$ and so if you're if you know we have a friend

NOTE Confidence: 0.8675714

 $01:22:01.162 \rightarrow 01:22:03.650$ is going through a hard time like that.

NOTE Confidence: 0.8675714

 $01:22:03.650 \longrightarrow 01:22:05.330$ Let's think about this like a

NOTE Confidence: 0.8675714

 $01{:}22{:}05{.}330 \dashrightarrow 01{:}22{:}06{.}816$ designated driver and let's may be

NOTE Confidence: 0.8675714

 $01:22:06.816 \longrightarrow 01:22:08.386$ offer to temporarily hold onto

NOTE Confidence: 0.8675714

 $01:22:08.386 \longrightarrow 01:22:09.968$ their weapons until they're in

NOTE Confidence: 0.8675714

01:22:09.968 --> 01:22:11.318 a different state of mountain.

NOTE Confidence: 0.8675714

 $01:22:11.320 \longrightarrow 01:22:12.976$ And then perhaps it would be

NOTE Confidence: 0.8675714

 $01{:}22{:}12{.}976 \dashrightarrow 01{:}22{:}14{.}860$ safer for them to have access.

NOTE Confidence: 0.8675714

 $01:22:14.860 \longrightarrow 01:22:16.600$ And we're finding those messages

NOTE Confidence: 0.8675714

 $01{:}22{:}16.600 \dashrightarrow 01{:}22{:}17.992$ are very positively received.

- NOTE Confidence: 0.8675714
- $01{:}22{:}18.000 \dashrightarrow 01{:}22{:}20.170$ But the hard part is,

 $01:22:20.170 \longrightarrow 01:22:20.611$ yeah,

NOTE Confidence: 0.8675714

 $01:22:20.611 \longrightarrow 01:22:21.493$ training clinicians.

NOTE Confidence: 0.8675714

 $01:22:21.493 \rightarrow 01:22:24.580$ My sense is that clinicians are often

NOTE Confidence: 0.8675714

 $01:22:24.653 \rightarrow 01:22:26.857$ biased towards complete removal.

NOTE Confidence: 0.8675714

 $01:22:26.860 \longrightarrow 01:22:28.308$ Of the fire room.

NOTE Confidence: 0.8675714

 $01{:}22{:}28{.}308 \dashrightarrow 01{:}22{:}30{.}118$ From the households which makes

NOTE Confidence: 0.8675714

 $01:22:30.118 \longrightarrow 01:22:31.480$ a lot of sense,

NOTE Confidence: 0.8675714

 $01:22:31.480 \longrightarrow 01:22:33.255$ that is definitely a probably

NOTE Confidence: 0.8675714

 $01:22:33.255 \longrightarrow 01:22:34.320$ the safest option,

NOTE Confidence: 0.8675714

01:22:34.320 $\operatorname{-->}$ 01:22:36.777 but we're really taking more of a

NOTE Confidence: 0.8675714

01:22:36.777 --> 01:22:38.579 harm reduction approach and saying,

NOTE Confidence: 0.8675714

 $01:22:38.580 \longrightarrow 01:22:40.220$ all things being equal,

NOTE Confidence: 0.8675714

01:22:40.220 --> 01:22:42.680 if someone has multiple loaded weapons

NOTE Confidence: 0.88456506

 $01{:}22{:}42.747 \dashrightarrow 01{:}22{:}45.057$ that are readily available in the home
$01{:}22{:}45.057 \dashrightarrow 01{:}22{:}47.981$ and we move them to a state where now

NOTE Confidence: 0.88456506

01:22:47.981 --> 01:22:50.582 those we apons are all in a gun safe,

NOTE Confidence: 0.88456506

 $01{:}22{:}50.582 \dashrightarrow 01{:}22{:}53.840$ or they're all locked up with a trigger lock,

NOTE Confidence: 0.88456506

 $01:22:53.840 \rightarrow 01:22:57.739$ even though they're still in the home.

NOTE Confidence: 0.88456506

 $01:22:57.740 \longrightarrow 01:23:00.218$ They are in a safer space,

NOTE Confidence: 0.88456506

01:23:00.220 --> 01:23:01.456 relatively relatively speaking

NOTE Confidence: 0.88456506

 $01:23:01.456 \longrightarrow 01:23:03.104$ than they were before,

NOTE Confidence: 0.88456506

 $01{:}23{:}03{.}110 \dashrightarrow 01{:}23{:}05{.}952$ and I see that as a valuable

NOTE Confidence: 0.88456506

01:23:05.952 --> 01:23:08.069 movement that's worth us talking

NOTE Confidence: 0.83615094

 $01{:}23{:}08{.}070 \dashrightarrow 01{:}23{:}09{.}306$ with this clinicians.

NOTE Confidence: 0.83615094

 $01{:}23{:}09{.}306 \dashrightarrow 01{:}23{:}13{.}020$ While I see Mike and Alec and Howard here,

NOTE Confidence: 0.83615094

 $01:23:13.020 \longrightarrow 01:23:15.090$ you have three, you know,

NOTE Confidence: 0.83615094

 $01:23:15.090 \rightarrow 01:23:16.380$ preeminent for ensic psychiatrists.

NOTE Confidence: 0.83615094

01:23:16.380 $\operatorname{-->}$ 01:23:19.390 And I heard what you said about

NOTE Confidence: 0.83615094

 $01:23:19.456 \rightarrow 01:23:21.276$ absolute removal of the gun,

NOTE Confidence: 0.83615094

 $01:23:21.280 \rightarrow 01:23:25.132$ which my suspicion is done out of fear of

- NOTE Confidence: 0.83615094
- $01:23:25.132 \rightarrow 01:23:28.257$ liability for not insisting on it versus.

 $01{:}23{:}28{.}260 \dashrightarrow 01{:}23{:}29{.}696$ Google clinical evidence 'cause

NOTE Confidence: 0.83615094

 $01:23:29.696 \longrightarrow 01:23:31.491$ your middle ground is so

NOTE Confidence: 0.83615094

 $01{:}23{:}31{.}491 \dashrightarrow 01{:}23{:}33{.}217$ intuitive and makes so much sense.

NOTE Confidence: 0.83615094

01:23:33.220 --> 01:23:34.104 You know my suspicion,

NOTE Confidence: 0.83615094

 $01{:}23{:}34{.}104 \dashrightarrow 01{:}23{:}35{.}793$ and I am always have a little

NOTE Confidence: 0.83615094

01:23:35.793 --> 01:23:37.049 little touch of cynicism,

NOTE Confidence: 0.83615094

01:23:37.050 --> 01:23:38.681 and I guess my perspective on things

NOTE Confidence: 0.83615094

 $01{:}23{:}38{.}681 \dashrightarrow 01{:}23{:}40{.}788$ is that it's because we don't go for

NOTE Confidence: 0.83615094

 $01{:}23{:}40.788 \dashrightarrow 01{:}23{:}42.143$ the absolute removal were a fraid.

NOTE Confidence: 0.83615094

 $01:23:42.150 \longrightarrow 01:23:42.912$ If something happens,

NOTE Confidence: 0.83615094

 $01{:}23{:}42.912 \dashrightarrow 01{:}23{:}43.928$ there's a liability risk.

NOTE Confidence: 0.83615094

01:23:43.930 --> 01:23:45.510 It's black or white.

NOTE Confidence: 0.83615094

 $01{:}23{:}45{.}510 \dashrightarrow 01{:}23{:}47{.}880$ And I remember the first time

NOTE Confidence: 0.83615094

01:23:47.969 --> 01:23:49.787 I I saw you speak live,

 $01:23:49.790 \rightarrow 01:23:53.300$ you put up a little table of like the disk,

NOTE Confidence: 0.83615094

 $01:23:53.300 \longrightarrow 01:23:54.792$ disjoint between the misalignment

NOTE Confidence: 0.83615094

01:23:54.792 --> 01:23:57.030 between what does the clinician want

NOTE Confidence: 0.83615094

 $01:23:57.085 \rightarrow 01:23:59.269$ when they meet with the suicidal patient?

NOTE Confidence: 0.83615094

 $01:23:59.270 \longrightarrow 01:24:01.376$ And what does the patient want?

NOTE Confidence: 0.83615094

 $01:24:01.380 \longrightarrow 01:24:03.130$ Do you remember that slide?

NOTE Confidence: 0.83615094

 $01:24:03.130 \longrightarrow 01:24:04.890$ That was quite awhile ago?

NOTE Confidence: 0.83615094

 $01{:}24{:}04.890 \dashrightarrow 01{:}24{:}07.228$ Comment on that because I thought it

NOTE Confidence: 0.83615094

01:24:07.228 --> 01:24:10.910 was really incredibly elegant, yeah?

NOTE Confidence: 0.85294086

 $01:24:10.910 \longrightarrow 01:24:13.169$ Yeah, it's sort of a key point in a

NOTE Confidence: 0.85294086

01:24:13.169 --> 01:24:15.427 lot of the trainings I do is yeah

NOTE Confidence: 0.85294086

 $01{:}24{:}15{.}427 \dashrightarrow 01{:}24{:}17{.}504$ this that the clinicians goals are

NOTE Confidence: 0.85294086

01:24:17.504 --> 01:24:19.862 to prevent the patient from dying,

NOTE Confidence: 0.85294086

01:24:19.870 --> 01:24:22.026 and then I also tongue in cheek,

NOTE Confidence: 0.85294086

 $01{:}24{:}22.030 \dashrightarrow 01{:}24{:}23.890$ say and to avoid getting sued.

NOTE Confidence: 0.85294086

 $01:24:23.890 \longrightarrow 01:24:26.162$ And then I like to say well in

- NOTE Confidence: 0.85294086
- $01:24:26.162 \rightarrow 01:24:27.908$ most cases let's be honest,

 $01{:}24{:}27{.}910 \dashrightarrow 01{:}24{:}30{.}475$ we don't want to get sued and we know

NOTE Confidence: 0.85294086

01:24:30.475 - 01:24:33.081 the way to not get sued is to not have

NOTE Confidence: 0.85294086

 $01:24:33.081 \rightarrow 01:24:35.629$ a patient die something like that.

NOTE Confidence: 0.85294086

 $01{:}24{:}35{.}630 \dashrightarrow 01{:}24{:}37{.}140$ Whereas the patient's goals are

NOTE Confidence: 0.85294086

 $01{:}24{:}37{.}140 \dashrightarrow 01{:}24{:}38{.}348$ to alleviate their suffering

NOTE Confidence: 0.85294086

 $01:24:38.348 \longrightarrow 01:24:39.649$ and solve their problem,

NOTE Confidence: 0.85294086

 $01:24:39.650 \rightarrow 01:24:42.514$ and So what ends up happening is we.

NOTE Confidence: 0.85294086

 $01{:}24{:}42.520 \dashrightarrow 01{:}24{:}44.980$ Sometimes gets so focused on preventing

NOTE Confidence: 0.85294086

 $01:24:44.980 \longrightarrow 01:24:48.002$ death that we forget that in another

NOTE Confidence: 0.85294086

 $01{:}24{:}48.002 \dashrightarrow 01{:}24{:}50.624$ important part of suicide prevention is

NOTE Confidence: 0.85294086

 $01{:}24{:}50{.}624 \dashrightarrow 01{:}24{:}53{.}050$ creating lives that are worth living,

NOTE Confidence: 0.85294086

 $01{:}24{:}53.050 \dashrightarrow 01{:}24{:}56.060$ and so we may succeed in the short term in NOTE Confidence: 0.85294086

01:24:56.133 --> 01:24:59.358 keeping someone breathing biologically alive.

NOTE Confidence: 0.85294086

 $01:24:59.360 \longrightarrow 01:25:01.886$ But if we don't do something

- $01:25:01.886 \rightarrow 01:25:03.570$ that changes their environment,
- NOTE Confidence: 0.85294086
- $01:25:03.570 \longrightarrow 01:25:04.414$ their psychology,
- NOTE Confidence: 0.85294086
- $01:25:04.414 \rightarrow 01:25:05.680$ things like that,
- NOTE Confidence: 0.85294086
- $01:25:05.680 \rightarrow 01:25:08.206$ and probably they're going to get
- NOTE Confidence: 0.85294086
- 01:25:08.206 --> 01:25:09.890 into the state again,
- NOTE Confidence: 0.85294086
- $01{:}25{:}09{.}890 \dashrightarrow 01{:}25{:}13{.}306$ and so we need to look at quality
- NOTE Confidence: 0.85294086
- $01:25:13.306 \longrightarrow 01:25:17.077$ of life in addition to simply just.
- NOTE Confidence: 0.85294086
- 01:25:17.080 --> 01:25:18.870 Like restraining people from dying,
- NOTE Confidence: 0.85294086
- $01:25:18.870 \rightarrow 01:25:21.374$ and so when it comes to the issues NOTE Confidence: 0.85294086
- $01:25:21.374 \rightarrow 01:25:23.170$ surrounding like means restriction,
- NOTE Confidence: 0.85294086
- $01:25:23.170 \longrightarrow 01:25:25.578$ I think of you know I've written
- NOTE Confidence: 0.85294086
- $01:25:25.578 \longrightarrow 01:25:27.460$ about this a few times.
- NOTE Confidence: 0.85294086
- $01{:}25{:}27{.}460 \dashrightarrow 01{:}25{:}29{.}336$ I think one of the downsides we
- NOTE Confidence: 0.85294086
- $01:25:29.336 \rightarrow 01:25:31.251$ recommended as a suicide prevention
- NOTE Confidence: 0.85294086
- $01{:}25{:}31{.}251 \dashrightarrow 01{:}25{:}32{.}826$ intervention for clinicians.
- NOTE Confidence: 0.85294086
- 01:25:32.830 --> 01:25:34.290 But as was Shelley,

- NOTE Confidence: 0.85294086
- $01:25:34.290 \rightarrow 01:25:36.480$ was alluding to we don't really
- NOTE Confidence: 0.85294086
- $01:25:36.554 \rightarrow 01:25:38.556$ do any training at all on how
- NOTE Confidence: 0.85294086
- $01:25:38.556 \longrightarrow 01:25:40.350$ to do this effectively,
- NOTE Confidence: 0.85294086
- $01:25:40.350 \rightarrow 01:25:43.206$ so we almost set ourselves up for failure,
- NOTE Confidence: 0.85294086
- $01{:}25{:}43{.}210 \dashrightarrow 01{:}25{:}46{.}138$ and we think I think in terms of
- NOTE Confidence: 0.85294086
- $01:25:46.138 \rightarrow 01:25:48.580$ these sort of binary extremes.
- NOTE Confidence: 0.85294086
- $01:25:48.580 \longrightarrow 01:25:49.892$ Where I don't know.
- NOTE Confidence: 0.85294086
- $01:25:49.892 \rightarrow 01:25:51.860$ We'll see how things emerge overtime.
- NOTE Confidence: 0.85294086
- $01{:}25{:}51{.}860 \dashrightarrow 01{:}25{:}53{.}876$ You know I do some consulting on
- NOTE Confidence: 0.85294086
- 01:25:53.876 --> 01:25:55.800 legal cases like negligence cases,
- NOTE Confidence: 0.85294086
- $01{:}25{:}55{.}800 \dashrightarrow 01{:}25{:}58{.}096$ things like this and it's a topic
- NOTE Confidence: 0.85294086
- $01{:}25{:}58.096 \dashrightarrow 01{:}26{:}00.777$ that is very key to a lot of those
- NOTE Confidence: 0.85294086
- $01:26:00.777 \longrightarrow 01:26:03.782$ is at what point do you say that a NOTE Confidence: 0.85294086
- 01:26:03.782 --> 01:26:05.632 clinician have been reasonable and
- NOTE Confidence: 0.85294086
- $01{:}26{:}05{.}640 \dashrightarrow 01{:}26{:}08{.}094$ done enough 'cause we can always NOTE Confidence: 0.85294086

- $01{:}26{:}08.094 \dashrightarrow 01{:}26{:}10.742$ find something more that a person
- NOTE Confidence: 0.85294086
- $01:26:10.742 \longrightarrow 01:26:12.610$ could have theoretically done?
- NOTE Confidence: 0.85294086
- 01:26:12.610 --> 01:26:16.230 And it I found it tough with the gun issue,
- NOTE Confidence: 0.85294086
- $01:26:16.230 \longrightarrow 01:26:18.402$ but they give some cases now.
- NOTE Confidence: 0.85294086
- 01:26:18.402 --> 01:26:19.850 Clinicians that actually did
- NOTE Confidence: 0.85294086
- $01{:}26{:}19.850 \dashrightarrow 01{:}26{:}20.646$ needs restriction.
- NOTE Confidence: 0.85294086
- $01:26:20.646 \longrightarrow 01:26:21.044$ Yeah,
- NOTE Confidence: 0.85294086
- 01:26:21.044 --> 01:26:23.034 they didn't need description and
- NOTE Confidence: 0.85294086
- $01{:}26{:}23.034 \dashrightarrow 01{:}26{:}25.168$ then the patient didn't tell them
- NOTE Confidence: 0.85294086
- $01:26:25.168 \rightarrow 01:26:27.082$ they still had a secret gun.
- NOTE Confidence: 0.85294086
- $01:26:27.090 \longrightarrow 01:26:28.900$ I mean it's good news.
- NOTE Confidence: 0.7872699
- $01:26:28.900 \rightarrow 01:26:31.378$ Craig is that unlike drinking and driving
- NOTE Confidence: 0.7872699
- $01{:}26{:}31{.}378 \dashrightarrow 01{:}26{:}33{.}968$ gun ownership is not not all politicized.
- NOTE Confidence: 0.7872699
- 01:26:33.970 --> 01:26:36.076 So since drinking and driving and
- NOTE Confidence: 0.7872699
- $01:26:36.076 \rightarrow 01:26:37.950$ designated driver that just simple,
- NOTE Confidence: 0.7872699
- $01:26:37.950 \longrightarrow 01:26:39.914$ it's just simple problem.

- NOTE Confidence: 0.7872699
- 01:26:39.914 --> 01:26:42.860 The gun issue I'm sure will

 $01:26:42.954 \longrightarrow 01:26:45.269$ be even easier to tackle.

NOTE Confidence: 0.7872699

01:26:45.270 --> 01:26:47.849 Yeah, well thank you, anything else?

NOTE Confidence: 0.7872699

01:26:47.849 --> 01:26:50.207 I just wonder what you think

NOTE Confidence: 0.7872699

 $01{:}26{:}50{.}207 \dashrightarrow 01{:}26{:}52{.}945$ the APA is considering having

NOTE Confidence: 0.7872699

 $01:26:52.945 \longrightarrow 01:26:54.920$ suicidal behaviors, a diagnosis.

NOTE Confidence: 0.80266505

 $01{:}26{:}56{.}130 \dashrightarrow 01{:}26{:}58{.}706$ And given the fact that yeah don't have,

NOTE Confidence: 0.80266505

 $01:26:58.710 \rightarrow 01:27:01.294$ I just wonder what you think about that.

NOTE Confidence: 0.8976931

 $01{:}27{:}02.780 \dashrightarrow 01{:}27{:}06.364$ Yeah, I'm sort of ambivalent about it.

NOTE Confidence: 0.8976931

 $01:27:06.370 \longrightarrow 01:27:07.958$ On the one hand.

NOTE Confidence: 0.8976931

01:27:07.958 --> 01:27:10.775 I think some of the arguments being

NOTE Confidence: 0.8976931

01:27:10.775 --> 01:27:13.535 made for why we want to do it,

NOTE Confidence: 0.8976931

01:27:13.540 --> 01:27:15.740 I think makes sense.

NOTE Confidence: 0.8976931

01:27:15.740 --> 01:27:19.004 You know to recognize it as being discrete

NOTE Confidence: 0.8976931

01:27:19.004 --> 01:27:22.449 from other psychiatric conditions diagnosis,

 $01:27:22.450 \longrightarrow 01:27:26.930$ I think probably there might be what?

NOTE Confidence: 0.8976931

01:27:26.930 --> 01:27:29.754 Joyner is called the closet with an acute

NOTE Confidence: 0.8976931

01:27:29.754 --> 01:27:31.899 suicidal syndrome or something like that,

NOTE Confidence: 0.8976931

 $01:27:31.900 \longrightarrow 01:27:34.147$ where maybe there is kind of a

NOTE Confidence: 0.8976931

01:27:34.147 --> 01:27:35.571 unique mental state associated

NOTE Confidence: 0.8976931

 $01{:}27{:}35{.}571 \dashrightarrow 01{:}27{:}37{.}935$ with near term risk for suicide.

NOTE Confidence: 0.8976931

 $01{:}27{:}37{.}940 \dashrightarrow 01{:}27{:}40{.}803$ Now the downside kind of my hesitation

NOTE Confidence: 0.8976931

 $01{:}27{:}40.803 \dashrightarrow 01{:}27{:}44.218$ about it as I kind of feel like begin

NOTE Confidence: 0.8976931

01:27:44.218 --> 01:27:46.908 were now now with a diagnosis as

NOTE Confidence: 0.8976931

 $01:27:46.908 \longrightarrow 01:27:49.666$ opposed to a manner of death. And.

NOTE Confidence: 0.8976931

01:27:49.666 $\operatorname{-->}$ 01:27:52.870 You know, I don't know that we have like,

NOTE Confidence: 0.8976931

01:27:52.870 --> 01:27:53.830 yeah, Heart Attack syndrome.

NOTE Confidence: 0.8976931

 $01:27:53.830 \longrightarrow 01:27:54.310$ We don't.

NOTE Confidence: 0.8976931

 $01{:}27{:}54{.}310 \dashrightarrow 01{:}27{:}56{.}110$ You know, it's sort of.

NOTE Confidence: 0.8976931

 $01:27:56.110 \rightarrow 01:27:58.846$ I kind of feel like it's our continuing trend

NOTE Confidence: 0.8976931

 $01{:}27{:}58.846 \dashrightarrow 01{:}28{:}01.629$ to conceptualize and think about suicide.

- NOTE Confidence: 0.8976931
- $01:28:01.630 \longrightarrow 01:28:03.098$ From the nearly exclusive

01:28:03.098 --> 01:28:04.566 lens of psychiatric illness.

NOTE Confidence: 0.8976931

 $01{:}28{:}04{.}570 \dashrightarrow 01{:}28{:}07{.}034$ And so I think that will slow

NOTE Confidence: 0.8976931

 $01:28:07.034 \rightarrow 01:28:09.360$ us down from in my opinion.

NOTE Confidence: 0.8976931

01:28:09.360 --> 01:28:11.664 I think we need to be a little bit

NOTE Confidence: 0.8976931

01:28:11.664 --> 01:28:13.565 more divergent and are thinking

NOTE Confidence: 0.8976931

01:28:13.565 --> 01:28:15.929 about suicide to consider it from

NOTE Confidence: 0.8976931

 $01{:}28{:}15{.}997 \dashrightarrow 01{:}28{:}17{.}757$ these different perspectives and

NOTE Confidence: 0.8976931

01:28:17.757 --> 01:28:20.397 angles as opposed to continuing to

NOTE Confidence: 0.8976931

 $01{:}28{:}20{.}400 \dashrightarrow 01{:}28{:}23{.}046$ kind of narrow us down more and

NOTE Confidence: 0.8976931

 $01{:}28{:}23.046 \dashrightarrow 01{:}28{:}26.119$ more into the DSM and the domain of.

NOTE Confidence: 0.8976931

01:28:26.120 --> 01:28:28.175 You know one particular health

NOTE Confidence: 0.8976931

01:28:28.175 --> 01:28:29.408 care discipline so.

NOTE Confidence: 0.8662479

 $01{:}28{:}31{.}640 \dashrightarrow 01{:}28{:}33{.}248$ And no one is asking me,

NOTE Confidence: 0.8662479

 $01{:}28{:}33{.}250 \dashrightarrow 01{:}28{:}35{.}070$ but I happen to the heart attack

- $01:28:35.070 \longrightarrow 01:28:36.957$ thing to me or an arrhythmia is
- NOTE Confidence: 0.8662479
- $01:28:36.957 \longrightarrow 01:28:38.880$ in fact a parallel in my mind.
- NOTE Confidence: 0.8662479
- 01:28:38.880 --> 01:28:39.855 Anyone can have.
- NOTE Confidence: 0.8662479
- 01:28:39.855 --> 01:28:41.480 I honestly believe anyone can
- NOTE Confidence: 0.8662479
- $01{:}28{:}41{.}480 \dashrightarrow 01{:}28{:}42{.}969$ become suicidal with the right.
- NOTE Confidence: 0.8662479
- 01:28:42.970 --> 01:28:43.656 External variables,
- NOTE Confidence: 0.8662479
- $01:28:43.656 \longrightarrow 01:28:45.371$ and certainly if other conditions
- NOTE Confidence: 0.8662479
- 01:28:45.371 --> 01:28:47.270 occur as they go through life,
- NOTE Confidence: 0.8662479
- $01{:}28{:}47{.}270 \dashrightarrow 01{:}28{:}49{.}256$ just like in a heart attack,
- NOTE Confidence: 0.8662479
- $01:28:49.260 \longrightarrow 01:28:50.584$ anyone can get Melanoma.
- NOTE Confidence: 0.8662479
- $01:28:50.584 \longrightarrow 01:28:51.908$ They are like important,
- NOTE Confidence: 0.8662479
- $01:28:51.910 \longrightarrow 01:28:52.903$ they had outcomes,
- NOTE Confidence: 0.8662479
- 01:28:52.903 --> 01:28:55.220 and I wouldn't worry about it, Craig.
- NOTE Confidence: 0.8662479
- 01:28:55.220 --> 01:28:57.200 Yeah, well and I think yeah,
- NOTE Confidence: 0.8398212
- $01:28:57.200 \longrightarrow 01:28:59.433$ I've thought about this a lot in
- NOTE Confidence: 0.8398212
- $01:28:59.433 \rightarrow 01:29:01.658$ the past year when they were getting

- NOTE Confidence: 0.8398212
- $01:29:01.658 \longrightarrow 01:29:04.150$ close to a year of a pandemic.

 $01{:}29{:}04.150 \dashrightarrow 01{:}29{:}05.895$ And so I'm constantly asked

NOTE Confidence: 0.8398212

 $01:29:05.895 \rightarrow 01:29:07.640$ about how the pandemic influence

NOTE Confidence: 0.8398212

 $01{:}29{:}07{.}708 \dashrightarrow 01{:}29{:}09{.}787$ suicide risk and how do we improve

NOTE Confidence: 0.8398212

 $01:29:09.787 \longrightarrow 01:29:11.440$ access to mental health care.

NOTE Confidence: 0.8398212

 $01{:}29{:}11{.}440 \dashrightarrow 01{:}29{:}13{.}756$ And I think the point that.

NOTE Confidence: 0.8398212

 $01:29:13.760 \longrightarrow 01:29:15.850$ We often overlook is like, yeah,

NOTE Confidence: 0.8398212

 $01:29:15.850 \rightarrow 01:29:17.450$ you know, therapy medications might

NOTE Confidence: 0.8398212

 $01{:}29{:}17.450 \dashrightarrow 01{:}29{:}19.780$ help to reduce a person's distress,

NOTE Confidence: 0.8398212

01:29:19.780 $\operatorname{-->}$ 01:29:22.090 but it doesn't inherently change the

NOTE Confidence: 0.8398212

 $01{:}29{:}22.090 \dashrightarrow 01{:}29{:}24.641$ fact that the environment right now is

NOTE Confidence: 0.8398212

01:29:24.641 --> 01:29:26.853 placing a lot of strain on individual,

NOTE Confidence: 0.8398212

 $01:29:26.860 \rightarrow 01:29:29.684$ so you can't therapy your way out of NOTTE C = C 1 = 0.0200212

NOTE Confidence: 0.8398212

01:29:29.684 --> 01:29:31.850 COVID-19 you know you can't therapy NOTE Confidence: 0.8398212

01:29:31.850 --> 01:29:34.649 your way out of a minimum wage job.

01:29:34.650 --> 01:29:37.827 You can't therapy your way out of an abusive,

NOTE Confidence: 0.8398212

 $01:29:37.830 \longrightarrow 01:29:39.909$ toxic work environment.

NOTE Confidence: 0.8398212

 $01:29:39.910 \longrightarrow 01:29:42.717$ And and so I think this is.

NOTE Confidence: 0.8398212

 $01:29:42.720 \rightarrow 01:29:45.760$ This is one of the main reasons why

NOTE Confidence: 0.8398212

 $01{:}29{:}45.760 \dashrightarrow 01{:}29{:}49.086$ I think we're so bad that suicide

NOTE Confidence: 0.8398212

 $01{:}29{:}49.086 \dashrightarrow 01{:}29{:}52.157$ prevention as there are things in

NOTE Confidence: 0.8398212

 $01{:}29{:}52{.}157 \dashrightarrow 01{:}29{:}55{.}187$ life that contribute to suicide risk.

NOTE Confidence: 0.8398212

 $01:29:55.190 \rightarrow 01:29:57.367$ But we we largely think about suicide

NOTE Confidence: 0.8398212

 $01{:}29{:}57{.}367 \dashrightarrow 01{:}29{:}59{.}249$ as being within the individual.

NOTE Confidence: 0.8398212

 $01:29:59.250 \longrightarrow 01:30:00.482$ The thing that we.

NOTE Confidence: 0.8398212

 $01{:}30{:}00{.}482 \dashrightarrow 01{:}30{:}03{.}862$ Just to sort of root out and get rid of

NOTE Confidence: 0.8398212

 $01:30:03.862 \rightarrow 01:30:06.052$ when in reality there are conditions

NOTE Confidence: 0.8398212

 $01{:}30{:}06{.}128 \dashrightarrow 01{:}30{:}08{.}844$ all around us that contribute to that,

NOTE Confidence: 0.8398212

 $01{:}30{:}08.850 \dashrightarrow 01{:}30{:}11.065$ and we would probably actually

NOTE Confidence: 0.8398212

01:30:11.065 --> 01:30:13.280 see way better results if.

NOTE Confidence: 0.8398212

 $01:30:13.280 \rightarrow 01:30:15.290$ If we increase the minimum wage,

- NOTE Confidence: 0.8398212
- 01:30:15.290 01:30:17.635 if we expanded access to health care,

 $01:30:17.640 \longrightarrow 01:30:19.644$ if we targeted racism and discrimination

NOTE Confidence: 0.8398212

01:30:19.644 --> 01:30:20.646 against vulnerable populations,

NOTE Confidence: 0.8398212

 $01{:}30{:}20.650 \dashrightarrow 01{:}30{:}23.298$ and there's not much that I'm going to

NOTE Confidence: 0.8398212

 $01{:}30{:}23.298 \dashrightarrow 01{:}30{:}26.344$ be able to do as a health care provider.

NOTE Confidence: 0.8398212

01:30:26.350 --> 01:30:26.681 Yeah,

NOTE Confidence: 0.8398212

01:30:26.681 --> 01:30:28.336 to improve the financial stability

NOTE Confidence: 0.8398212

 $01:30:28.336 \rightarrow 01:30:30.383$ of my patients that they're working

NOTE Confidence: 0.8398212

 $01:30:30.383 \longrightarrow 01:30:31.707$ 3 minimum wage jobs.

NOTE Confidence: 0.8398212

 $01{:}30{:}31{.}710 \dashrightarrow 01{:}30{:}34{.}238$ It's it would be way more impactful to

NOTE Confidence: 0.8398212

 $01:30:34.238 \rightarrow 01:30:36.398$ just increase their salary in resolve.

NOTE Confidence: 0.8398212

 $01{:}30{:}36{.}400 \dashrightarrow 01{:}30{:}39{.}406$ A lot of the stress that they're coming in.

NOTE Confidence: 0.8398212

 $01:30:39.410 \longrightarrow 01:30:40.750$ Complaining to me about.

NOTE Confidence: 0.8398212

 $01:30:40.750 \longrightarrow 01:30:41.755$ But of course,

NOTE Confidence: 0.8398212

 $01{:}30{:}41.760 \dashrightarrow 01{:}30{:}44.190$ it's really not coming to complain.

- 01:30:44.190 --> 01:30:47.083 About that because I can't afford it, right?
- NOTE Confidence: 0.8398212
- 01:30:47.083 --> 01:30:47.809 So anyway.
- NOTE Confidence: 0.69182986
- 01:30:50.570 --> 01:30:53.054 Craig, thank you.