WEBVTT

NOTE duration: "00:56:58.8480000"

NOTE language:en-us

NOTE Confidence: 0.8584302

 $00:00:00.000 \longrightarrow 00:00:02.240$ Can you guys see this?

NOTE Confidence: 0.8584302

 $00:00:02.240 \longrightarrow 00:00:05.879$ Thanks so will start from the beginning.

NOTE Confidence: 0.8584302

 $00{:}00{:}05.880 \to 00{:}00{:}07.326$ OK, you guys got this alright.

NOTE Confidence: 0.8584302

00:00:07.330 --> 00:00:08.955 I'm going to hit somebody

NOTE Confidence: 0.8584302

 $00:00:08.955 \longrightarrow 00:00:10.255$ from the waiting room.

NOTE Confidence: 0.8584302

 $00:00:10.260 \longrightarrow 00:00:13.592$ OK. I so Lauren.

NOTE Confidence: 0.8584302

 $00:00:13.592 \longrightarrow 00:00:16.676$ Thank you so much for the.

NOTE Confidence: 0.8584302

 $00:00:16.680 \longrightarrow 00:00:18.399$ A warm introduction.

NOTE Confidence: 0.8584302

 $00:00:18.399 \longrightarrow 00:00:21.264$ The overstatement about my accomplishments,

NOTE Confidence: 0.8584302

 $00:00:21.270 \longrightarrow 00:00:23.034$ but more importantly,

NOTE Confidence: 0.8584302

 $00{:}00{:}23.034 \dashrightarrow 00{:}00{:}26.562$ for the opportunity to talk to

NOTE Confidence: 0.8584302

00:00:26.562 --> 00:00:29.348 you about racial disparities

NOTE Confidence: 0.8584302

 $00:00:29.348 \longrightarrow 00:00:32.828$ in sleep health during this.

NOTE Confidence: 0.8584302

 $00:00:32.830 \longrightarrow 00:00:36.088$ Really important time in American history.

 $00{:}00{:}36.090 \dashrightarrow 00{:}00{:}39.438$ I have been studying disparities and

NOTE Confidence: 0.8584302

00:00:39.438 --> 00:00:42.599 sleep really for almost 20 years,

NOTE Confidence: 0.8584302

 $00:00:42.600 \longrightarrow 00:00:45.136$ 18 years or so.

NOTE Confidence: 0.8584302

00:00:45.136 --> 00:00:48.940 But it's never been more relevant

NOTE Confidence: 0.8584302

 $00{:}00{:}49.070 \dashrightarrow 00{:}00{:}53.340$ or important than now and I also.

NOTE Confidence: 0.8584302

 $00{:}00{:}53.340 \to 00{:}00{:}56.056$ I'm I'm pushing myself in this talk.

NOTE Confidence: 0.8584302

 $00:00:56.060 \longrightarrow 00:00:59.364$ I've added some new slides because we all

NOTE Confidence: 0.8584302

00:00:59.364 --> 00:01:01.508 have opportunities to learn and grow,

NOTE Confidence: 0.8584302

 $00:01:01.510 \longrightarrow 00:01:03.844$ and when we think about anti

NOTE Confidence: 0.8584302

 $00:01:03.844 \longrightarrow 00:01:05.400$ racism and other things,

NOTE Confidence: 0.8584302

 $00:01:05.400 \longrightarrow 00:01:08.416$ so a lot of what I'll be talking

NOTE Confidence: 0.8584302

 $00:01:08.416 \dashrightarrow 00:01:11.228$ about today is what I typically do.

NOTE Confidence: 0.8584302

00:01:11.230 --> 00:01:12.592 Epidemiology mechanisms, consequences,

NOTE Confidence: 0.8584302

 $00{:}01{:}12.592 \dashrightarrow 00{:}01{:}15.770$ a lot of it maybe seem familiar

NOTE Confidence: 0.8584302

 $00:01:15.838 \longrightarrow 00:01:17.847$ to you or what you're used too.

00:01:17.850 --> 00:01:21.342 And then I gotta go off a little bit,

NOTE Confidence: 0.8584302

 $00:01:21.350 \longrightarrow 00:01:23.390$ but I hope I hope.

NOTE Confidence: 0.8584302

 $00:01:23.390 \longrightarrow 00:01:26.348$ You'll enjoy the ride with me.

NOTE Confidence: 0.8584302

 $00:01:26.350 \longrightarrow 00:01:28.667$ So let's see I move this forward.

NOTE Confidence: 0.8584302

 $00:01:28.670 \longrightarrow 00:01:30.330$ I have people joining the

NOTE Confidence: 0.8584302

 $00:01:30.330 \longrightarrow 00:01:31.658$ waiting room right now.

NOTE Confidence: 0.8584302

00:01:31.660 --> 00:01:33.970 How do I do that?

NOTE Confidence: 0.8584302

 $00:01:33.970 \longrightarrow 00:01:35.990$ In Middle.

NOTE Confidence: 0.8584302

00:01:35.990 --> 00:01:37.290 And just so you know,

NOTE Confidence: 0.8584302

 $00:01:37.290 \longrightarrow 00:01:37.810$ Debbie will

NOTE Confidence: 0.88256556

 $00:01:37.810 \longrightarrow 00:01:39.890$ let everybody in you don't have met people

NOTE Confidence: 0.88256556

00:01:39.890 --> 00:01:42.490 from now on. OK, I'm just going to close it,

NOTE Confidence: 0.88256556

 $00:01:42.490 \longrightarrow 00:01:44.080$ but the problem is it's popping

NOTE Confidence: 0.88256556

00:01:44.080 --> 00:01:46.181 up on my screen so I can't do

NOTE Confidence: 0.88256556

 $00:01:46.181 \longrightarrow 00:01:47.690$ anything else but OK, I'll try.

NOTE Confidence: 0.88256556

 $00{:}01{:}47.690 \dashrightarrow 00{:}01{:}49.250$ I'll try to ignore those messages.

 $00:01:51.320 \longrightarrow 00:01:53.276$ So this is a short talk.

NOTE Confidence: 0.90111876

 $00{:}01{:}53.280 \dashrightarrow 00{:}01{:}56.190$ It's hard for me to get.

NOTE Confidence: 0.90111876

00:01:56.190 --> 00:01:58.370 My highlight in 45 minutes,

NOTE Confidence: 0.90111876

 $00{:}01{:}58.370 \dashrightarrow 00{:}02{:}00.770$ but after my introductions I'll

NOTE Confidence: 0.90111876

 $00{:}02{:}00.770 \dashrightarrow 00{:}02{:}04.422$ spend a little bit about or I would

NOTE Confidence: 0.90111876

 $00{:}02{:}04.422 \dashrightarrow 00{:}02{:}07.124$ say 15 to 20 minutes talking about

NOTE Confidence: 0.90111876

 $00:02:07.213 \longrightarrow 00:02:09.733$ sleep health as a social justice

NOTE Confidence: 0.90111876

 $00:02:09.733 \longrightarrow 00:02:13.211$ issue and why we need to embrace.

NOTE Confidence: 0.90111876

00:02:13.211 --> 00:02:16.196 Social justice in our practice

NOTE Confidence: 0.90111876

 $00:02:16.196 \longrightarrow 00:02:19.179$ and study of sleep health.

NOTE Confidence: 0.90111876

00:02:19.180 --> 00:02:21.412 Then because it's my most active

NOTE Confidence: 0.90111876

00:02:21.412 --> 00:02:22.900 research project right now,

NOTE Confidence: 0.90111876

 $00{:}02{:}22.900 \dashrightarrow 00{:}02{:}25.420$ I'm going to go into talking about

NOTE Confidence: 0.90111876

 $00:02:25.420 \longrightarrow 00:02:27.939$ disparities in sleep in a study that

NOTE Confidence: 0.90111876

 $00:02:27.939 \longrightarrow 00:02:29.985$ I'm doing among teenagers across the

 $00:02:30.053 \longrightarrow 00:02:32.937$ country known as the fragile families study.

NOTE Confidence: 0.90111876

 $00:02:32.940 \longrightarrow 00:02:35.558$ And I'll tell you that we're about

NOTE Confidence: 0.90111876

 $00:02:35.558 \longrightarrow 00:02:38.516$ to go into the field for age 22,

NOTE Confidence: 0.90111876

 $00:02:38.520 \longrightarrow 00:02:40.758$ so that's pretty exciting as well.

NOTE Confidence: 0.90111876

 $00:02:40.760 \longrightarrow 00:02:44.197$ And then I'll conclude with a summary

NOTE Confidence: 0.90111876

 $00{:}02{:}44.197 \dashrightarrow 00{:}02{:}46.948$ in future directions on this topic.

NOTE Confidence: 0.90111876

 $00:02:46.950 \longrightarrow 00:02:49.934$ So as many of you have already heard,

NOTE Confidence: 0.90111876

00:02:49.940 --> 00:02:52.558 I'm located here at Stony Brook across

NOTE Confidence: 0.90111876

 $00{:}02{:}52.558 \dashrightarrow 00{:}02{:}54.800$ the Long Island Sound from you.

NOTE Confidence: 0.90111876

 $00:02:54.800 \longrightarrow 00:02:57.369$ I was just reading about some flesh

NOTE Confidence: 0.90111876

 $00:02:57.369 \longrightarrow 00:03:00.039$ eating bacteria in the Long Island Sound.

NOTE Confidence: 0.90111876

 $00:03:00.040 \longrightarrow 00:03:02.278$ So don't go swimming this week,

NOTE Confidence: 0.90111876

00:03:02.280 --> 00:03:04.150 but I miss Stony Brook.

NOTE Confidence: 0.90111876

 $00:03:04.150 \longrightarrow 00:03:06.020$ I'm also received funding from

NOTE Confidence: 0.90111876

 $00:03:06.020 \longrightarrow 00:03:07.516$ NIH as Lauren mentioned.

NOTE Confidence: 0.90111876

 $00{:}03{:}07.520 \dashrightarrow 00{:}03{:}09.956$ I was involved in the founding and

 $00{:}03{:}09.956 \dashrightarrow 00{:}03{:}12.010$ execution of this great Journal,

NOTE Confidence: 0.90111876

00:03:12.010 --> 00:03:14.248 sleep health and a Mayor Krieger,

NOTE Confidence: 0.90111876

 $00:03:14.250 \longrightarrow 00:03:17.127$ who's in the room with us is.

NOTE Confidence: 0.90111876

00:03:17.130 --> 00:03:19.762 It was the founding art editor and

NOTE Confidence: 0.90111876

 $00{:}03{:}19.762 \dashrightarrow 00{:}03{:}22.345$ remains on on staff is that are

NOTE Confidence: 0.90111876

 $00:03:22.345 \longrightarrow 00:03:25.199$ tender and we love him for that man.

NOTE Confidence: 0.90111876

 $00:03:25.200 \longrightarrow 00:03:27.035$ I'm feeling with the National

NOTE Confidence: 0.90111876

00:03:27.035 --> 00:03:27.769 Sleep Foundation.

NOTE Confidence: 0.90111876

00:03:27.770 --> 00:03:30.339 I also serve in two advisory panels,

NOTE Confidence: 0.90111876

 $00:03:30.340 \longrightarrow 00:03:32.180$ one for the pajama program,

NOTE Confidence: 0.90111876

 $00:03:32.180 \longrightarrow 00:03:34.340$ which provides pajamas and books for

NOTE Confidence: 0.90111876

 $00:03:34.340 \longrightarrow 00:03:36.579$ low income kids across the country.

NOTE Confidence: 0.90111876

 $00:03:36.580 \longrightarrow 00:03:37.525$ So great program,

NOTE Confidence: 0.90111876

 $00{:}03{:}37.525 \dashrightarrow 00{:}03{:}40.235$ and I'm also an advisory panel of a

NOTE Confidence: 0.90111876

 $00:03:40.235 \longrightarrow 00:03:42.445$ organization called children and screens.

 $00:03:42.450 \longrightarrow 00:03:44.658$ If we have time for it,

NOTE Confidence: 0.90111876

 $00:03:44.660 \longrightarrow 00:03:47.537$ I'm going to veer from the topic

NOTE Confidence: 0.90111876

 $00{:}03{:}47.537 \dashrightarrow 00{:}03{:}49.482$ of racial disparities and talk

NOTE Confidence: 0.90111876

 $00:03:49.482 \longrightarrow 00:03:51.366$ about a fun study I did.

NOTE Confidence: 0.90111876

 $00:03:51.370 \longrightarrow 00:03:53.994$ Using Twitter data to see if we could

NOTE Confidence: 0.90111876

 $00{:}03{:}53.994 \dashrightarrow 00{:}03{:}56.798$ predict NBA basketball players performance,

NOTE Confidence: 0.90111876

 $00:03:56.800 \longrightarrow 00:03:58.890$ that's just a good one

NOTE Confidence: 0.90111876

 $00:03:58.890 \longrightarrow 00:04:00.144$ for Thanksgiving dinner.

NOTE Confidence: 0.90111876

 $00:04:00.150 \longrightarrow 00:04:05.326$ If we're able to have Thanksgiving this year.

NOTE Confidence: 0.90111876

 $00:04:05.330 \longrightarrow 00:04:06.110$ Sleep matters,

NOTE Confidence: 0.90111876

 $00{:}04{:}06.110 \dashrightarrow 00{:}04{:}08.060$ that's my take home message.

NOTE Confidence: 0.9011187600:04:08.060 --> 00:04:08.450 OK,

NOTE Confidence: 0.90111876

 $00:04:08.450 \longrightarrow 00:04:09.620$ and as usual,

NOTE Confidence: 0.90111876

 $00:04:09.620 \longrightarrow 00:04:10.790$ the typical disclosure,

NOTE Confidence: 0.90111876

 $00:04:10.790 \longrightarrow 00:04:14.470$ the content reflects my own ideas and not

NOTE Confidence: 0.90111876

 $00:04:14.470 \longrightarrow 00:04:17.349$ necessarily thought that these organizations.

00:04:17.350 --> 00:04:20.798 So one other plug and just kind of

NOTE Confidence: 0.90111876

 $00{:}04{:}20.798 --> 00{:}04{:}23.496$ detail about what I'm up to now,

NOTE Confidence: 0.90111876

 $00:04:23.500 \longrightarrow 00:04:27.798$ because this is a weird weird time.

NOTE Confidence: 0.90111876

 $00:04:27.800 \longrightarrow 00:04:29.830$ I am of course working from home

NOTE Confidence: 0.90111876

 $00:04:29.830 \longrightarrow 00:04:32.470$ and as a public health professor.

NOTE Confidence: 0.90111876

 $00:04:32.470 \longrightarrow 00:04:35.188$ I have teamed up with a.

NOTE Confidence: 0.90111876

 $00:04:35.190 \longrightarrow 00:04:38.016$ Sponge almost a dozen female scientists.

NOTE Confidence: 0.90111876

 $00:04:38.020 \longrightarrow 00:04:41.135$ We run a social media site called

NOTE Confidence: 0.90111876

 $00{:}04{:}41.135 \dashrightarrow 00{:}04{:}43.669$ dear pandemic were on Instagram,

NOTE Confidence: 0.90111876

00:04:43.670 --> 00:04:45.083 Facebook and Twitter.

NOTE Confidence: 0.90111876

00:04:45.083 --> 00:04:47.909 Currently we have over 30,000 followers.

NOTE Confidence: 0.90111876

 $00{:}04{:}47.910 \dashrightarrow 00{:}04{:}50.856$ We post two to three translations

NOTE Confidence: 0.90111876

 $00:04:50.856 \longrightarrow 00:04:53.719$ of the current science on the

NOTE Confidence: 0.90111876

 $00{:}04{:}53.719 \dashrightarrow 00{:}04{:}56.137$ pandemic and how that relates to

NOTE Confidence: 0.90111876

00:04:56.137 --> 00:04:59.037 how to live during the pandemic

 $00:04:59.037 \longrightarrow 00:05:02.037$ and it has been really wonderful

NOTE Confidence: 0.90111876

 $00:05:02.040 \longrightarrow 00:05:05.286$ experience for me in terms of.

NOTE Confidence: 0.90111876

00:05:05.290 --> 00:05:08.328 Coming to terms with what's going on

NOTE Confidence: 0.90111876

00:05:08.328 --> 00:05:11.308 in the pandemic and helping others,

NOTE Confidence: 0.90111876

 $00:05:11.310 \longrightarrow 00:05:12.699$ friends and families,

NOTE Confidence: 0.90111876

 $00:05:12.699 \longrightarrow 00:05:15.477$ and generally the public get reliable.

NOTE Confidence: 0.90111876

 $00:05:15.480 \longrightarrow 00:05:17.920$ Good advice during this info

NOTE Confidence: 0.90111876

 $00:05:17.920 \longrightarrow 00:05:21.511$ demik period that we live in so I

NOTE Confidence: 0.90111876

 $00{:}05{:}21.511 \longrightarrow 00{:}05{:}23.975$ know this is a little off topic

NOTE Confidence: 0.83353585

 $00:05:24.073 \longrightarrow 00:05:27.505$ from this issue of racial disparities,

NOTE Confidence: 0.83353585

 $00:05:27.510 \longrightarrow 00:05:30.924$ but we're we have to acknowledge

NOTE Confidence: 0.83353585

 $00:05:30.924 \longrightarrow 00:05:34.450$ that we're living in a period

NOTE Confidence: 0.83353585

 $00:05:34.450 \longrightarrow 00:05:37.290$ of really twin pandemics of.

NOTE Confidence: 0.83353585

 $00:05:37.290 \longrightarrow 00:05:40.860$ Racial injustice as well as the pandemic

NOTE Confidence: 0.83353585

 $00:05:40.860 \longrightarrow 00:05:44.850$ of kovid, so they are related in that

NOTE Confidence: 0.83353585

 $00:05:44.850 \longrightarrow 00:05:48.686$ way because as we know, minorities have

 $00:05:48.686 \longrightarrow 00:05:51.676$ a dish feel disproportionate burden.

NOTE Confidence: 0.83353585

 $00:05:51.680 \longrightarrow 00:05:55.428$ Of the COVID-19 pandemic.

NOTE Confidence: 0.83353585

 $00:05:55.430 \longrightarrow 00:05:57.350$ So that's it for me in

NOTE Confidence: 0.83353585

 $00:05:57.350 \longrightarrow 00:05:58.310$ terms of introductions.

NOTE Confidence: 0.83353585

 $00:05:58.310 \longrightarrow 00:05:59.910$ Oh, this is my team.

NOTE Confidence: 0.83353585

 $00:05:59.910 \longrightarrow 00:06:01.206$ These are my peeps.

NOTE Confidence: 0.83353585

 $00:06:01.206 \longrightarrow 00:06:03.430$ Talk with him every week or so.

NOTE Confidence: 0.83353585

 $00:06:03.430 \longrightarrow 00:06:05.509$ We getting so many names the words

NOTE Confidence: 0.83353585

 $00:06:05.509 \longrightarrow 00:06:06.950$ are getting squished together.

NOTE Confidence: 0.83353585

 $00:06:06.950 \longrightarrow 00:06:09.374$ Most of the people that I work with

NOTE Confidence: 0.83353585

 $00{:}06{:}09.374 \dashrightarrow 00{:}06{:}11.176$ are Penn State, Wisconsin Princeton,

NOTE Confidence: 0.83353585

 $00:06:11.176 \longrightarrow 00:06:13.294$ but were spreading out and growing

NOTE Confidence: 0.83353585

 $00:06:13.294 \longrightarrow 00:06:15.267$ role almost all over the world now.

NOTE Confidence: 0.83353585

 $00{:}06{:}15.270 \dashrightarrow 00{:}06{:}17.835$ So I want to acknowledge when I get to

NOTE Confidence: 0.83353585

 $00:06:17.835 \longrightarrow 00:06:20.707$ the part on my work and fragile families.

 $00:06:20.710 \longrightarrow 00:06:22.310$ This is a team effort.

NOTE Confidence: 0.83353585

 $00:06:22.310 \longrightarrow 00:06:25.006$ It's not just me and a bunch of.

NOTE Confidence: 0.83353585

00:06:25.010 --> 00:06:25.674 Actigraphy devices,

NOTE Confidence: 0.83353585

00:06:25.674 --> 00:06:27.998 it's it's a huge group of us,

NOTE Confidence: 0.83353585

 $00:06:28.000 \longrightarrow 00:06:31.416$ and I'm lucky to be working with them.

NOTE Confidence: 0.83353585

00:06:31.420 --> 00:06:33.180 And you might hear My 5 year old in the

NOTE Confidence: 0.83353585

 $00:06:33.227 \longrightarrow 00:06:35.075$ background 'cause you just yelled for me.

NOTE Confidence: 0.83353585

 $00:06:35.080 \longrightarrow 00:06:38.060$ So my apologies. OK.

NOTE Confidence: 0.83353585

 $00:06:38.060 \longrightarrow 00:06:40.470$ So why are we here?

NOTE Confidence: 0.83353585

00:06:40.470 --> 00:06:43.356 Let's talk about this issue whi.

NOTE Confidence: 0.83353585

00:06:43.360 --> 00:06:46.734 Is sleep health a social justice issue?

NOTE Confidence: 0.83353585

00:06:46.740 --> 00:06:50.107 Shouldn't sleep health just be for everyone?

NOTE Confidence: 0.83353585

 $00:06:50.110 \longrightarrow 00:06:52.034$ And sure it is.

NOTE Confidence: 0.83353585

 $00:06:52.034 \longrightarrow 00:06:53.477$ That's my answer.

NOTE Confidence: 0.83353585

 $00:06:53.480 \longrightarrow 00:06:55.890$ Sleep health is for everyone,

NOTE Confidence: 0.83353585

 $00:06:55.890 \longrightarrow 00:06:58.782$ but it is especially necessary and

 $00{:}06{:}58.782 \dashrightarrow 00{:}07{:}00.710$ important for disadvantaged populations.

NOTE Confidence: 0.83353585

 $00:07:00.710 \longrightarrow 00:07:04.510$ So I have three reasons why sleep health

NOTE Confidence: 0.83353585

 $00:07:04.510 \longrightarrow 00:07:08.297$ goes beyond just a public health disorder.

NOTE Confidence: 0.83353585

 $00:07:08.300 \longrightarrow 00:07:11.275$ Concern and should be social justice concern.

NOTE Confidence: 0.83353585

00:07:11.280 --> 00:07:14.004 The number one reason is sleep

NOTE Confidence: 0.83353585

 $00:07:14.004 \longrightarrow 00:07:16.670$ deficiency in sleep disorders are common

NOTE Confidence: 0.83353585

 $00:07:16.670 \longrightarrow 00:07:19.372$ for the number that NIH throws out.

NOTE Confidence: 0.83353585

 $00{:}07{:}19.380 \dashrightarrow 00{:}07{:}22.166$ You know 50 to 70 million Americans

NOTE Confidence: 0.83353585

00:07:22.166 --> 00:07:24.552 and I think they're referring

NOTE Confidence: 0.83353585

 $00:07:24.552 \longrightarrow 00:07:27.307$ to a dults suffer from sleep

NOTE Confidence: 0.83353585

 $00:07:27.307 \longrightarrow 00:07:29.810$ deficiency or sleep disorder.

NOTE Confidence: 0.83353585

 $00:07:29.810 \longrightarrow 00:07:31.436$ Pens which groups are talking about.

NOTE Confidence: 0.83353585

 $00:07:31.440 \longrightarrow 00:07:33.060$ Some have more, some of less,

NOTE Confidence: 0.83353585

 $00:07:33.060 \longrightarrow 00:07:34.044$ but that's a lot,

NOTE Confidence: 0.83353585

 $00:07:34.044 \longrightarrow 00:07:35.520$ and so it's a public health

00:07:35.575 --> 00:07:37.020 problem and it's been recognized

NOTE Confidence: 0.83353585

 $00:07:37.020 \longrightarrow 00:07:39.020$ as such for at least 15 years.

NOTE Confidence: 0.83353585

 $00:07:39.020 \longrightarrow 00:07:41.188$ I would say the apj could do more,

NOTE Confidence: 0.83353585

 $00:07:41.190 \longrightarrow 00:07:42.816$ but it's a public health issue.

NOTE Confidence: 0.8707521

00:07:45.010 --> 00:07:47.658 When I want to convey to you if

NOTE Confidence: 0.8707521

00:07:47.658 --> 00:07:50.368 you didn't already know it is that

NOTE Confidence: 0.8707521

00:07:50.368 --> 00:07:52.890 it's also a social justice issue,

NOTE Confidence: 0.8707521

00:07:52.890 --> 00:07:54.294 because it's unequally distributed,

NOTE Confidence: 0.8707521

 $00{:}07{:}54.294 \dashrightarrow 00{:}07{:}56.845$ sleep health is or sleep disorders and

NOTE Confidence: 0.8707521

00:07:56.845 --> 00:07:58.820 sleep deficiency or more prevalent

NOTE Confidence: 0.8707521

 $00{:}07{:}58.820 \dashrightarrow 00{:}08{:}00.005$ among disadvantaged populations.

NOTE Confidence: 0.8707521

00:08:00.010 --> 00:08:03.001 So those two would have been enough, right?

NOTE Confidence: 0.8707521

 $00:08:03.001 \longrightarrow 00:08:05.528$ This is enough to say it's a

NOTE Confidence: 0.8707521

00:08:05.528 --> 00:08:07.137 social justice issue, maybe,

NOTE Confidence: 0.8707521

 $00:08:07.137 \longrightarrow 00:08:09.776$ but the real kicker in the real

NOTE Confidence: 0.8707521

 $00:08:09.776 \longrightarrow 00:08:12.242$ reason why we should care is

 $00{:}08{:}12.242 \dashrightarrow 00{:}08{:}14.690$ because of the decades of research.

NOTE Confidence: 0.8707521

 $00{:}08{:}14.690 \to 00{:}08{:}17.595$ They have shown time and again that

NOTE Confidence: 0.8707521

00:08:17.595 --> 00:08:20.199 the consequences of inadequate sleep,

NOTE Confidence: 0.8707521

00:08:20.200 --> 00:08:22.032 irregular sleep, poorly time,

NOTE Confidence: 0.8707521

 $00{:}08{:}22.032 \dashrightarrow 00{:}08{:}23.759$ sleep, interrupted sleep disorder

NOTE Confidence: 0.8707521

 $00:08:23.759 \longrightarrow 00:08:26.720$ sleep is linked to all of these

NOTE Confidence: 0.8707521

 $00:08:26.801 \longrightarrow 00:08:28.917$ outcomes in multiple domains.

NOTE Confidence: 0.8707521

00:08:28.920 --> 00:08:31.210 Physical health, psychological well being,

NOTE Confidence: 0.8707521

00:08:31.210 --> 00:08:32.594 cognitive functioning,

NOTE Confidence: 0.8707521

 $00:08:32.594 \longrightarrow 00:08:34.670$ public safety so.

NOTE Confidence: 0.8707521

00:08:34.670 --> 00:08:36.470 You know?

NOTE Confidence: 0.8707521

 $00{:}08{:}36.470 \dashrightarrow 00{:}08{:}38.624$ These three combined make it just

NOTE Confidence: 0.8707521

 $00:08:38.624 \longrightarrow 00:08:41.490$ clear as day that we need to be

NOTE Confidence: 0.8707521

00:08:41.490 --> 00:08:43.518 thinking about sleep health as not

NOTE Confidence: 0.8707521

 $00:08:43.594 \longrightarrow 00:08:46.058$ only a public health issue but is

 $00:08:46.058 \longrightarrow 00:08:48.476$ a social justice issue and to me,

NOTE Confidence: 0.8707521

 $00:08:48.476 \longrightarrow 00:08:51.030$ and I've been saying this for years.

NOTE Confidence: 0.8707521

 $00:08:51.030 \longrightarrow 00:08:54.216$ Based on the data that I've been looking at,

NOTE Confidence: 0.8707521

 $00:08:54.220 \longrightarrow 00:08:56.670$ there are three big dimensions

NOTE Confidence: 0.8707521

 $00:08:56.670 \longrightarrow 00:08:59.120$ that we care about most.

NOTE Confidence: 0.8707521

00:08:59.120 --> 00:09:00.888 Lots of little dimensions,

NOTE Confidence: 0.8707521

 $00{:}09{:}00.888 \dashrightarrow 00{:}09{:}03.950$ but the three biggest ones I see.

NOTE Confidence: 0.8707521

 $00{:}09{:}03.950 \dashrightarrow 00{:}09{:}05.866$ Our education associate conomique

NOTE Confidence: 0.8707521

 $00{:}09{:}05.866 \dashrightarrow 00{:}09{:}08.261$ status time and again population

NOTE Confidence: 0.8707521

 $00:09:08.261 \longrightarrow 00:09:10.434$ based studies show individuals with

NOTE Confidence: 0.8707521

 $00:09:10.434 \dashrightarrow 00:09:13.346$ lower levels of education or at the

NOTE Confidence: 0.8707521

00:09:13.346 --> 00:09:15.800 highest risk of especially short sleep,

NOTE Confidence: 0.8707521

 $00:09:15.800 \longrightarrow 00:09:18.104$ but also sleeping too much and

NOTE Confidence: 0.8707521

 $00{:}09{:}18.104 \dashrightarrow 00{:}09{:}21.070$ also a range of sleep disorders.

NOTE Confidence: 0.8707521

 $00:09:21.070 \longrightarrow 00:09:23.698$ The next dimension is neighborhood context.

NOTE Confidence: 0.8707521

 $00:09:23.700 \longrightarrow 00:09:27.220$ Alot of what we see in looking at.

00:09:29.890 --> 00:09:32.908 Social and physical environment is that.

NOTE Confidence: 0.8855895

 $00:09:32.910 \longrightarrow 00:09:35.718$ Living in urban area, too noisy,

NOTE Confidence: 0.8855895

 $00:09:35.720 \longrightarrow 00:09:38.060$ too bright, culturali too awake.

NOTE Confidence: 0.8855895

00:09:38.060 --> 00:09:40.400 Those types of neighborhoods are

NOTE Confidence: 0.8855895

00:09:40.400 --> 00:09:42.740 associated with worse sleep behaviors,

NOTE Confidence: 0.8855895

00:09:42.740 --> 00:09:45.956 and there's a huge Epidemiology literature

NOTE Confidence: 0.8855895

 $00:09:45.956 \longrightarrow 00:09:50.050$ on the link between health and place in

NOTE Confidence: 0.8855895

 $00:09:50.050 \longrightarrow 00:09:53.200$ these studies show people who live in.

NOTE Confidence: 0.8855895

 $00:09:53.200 \longrightarrow 00:09:55.825$ Urban and low income neighborhoods

NOTE Confidence: 0.8855895

 $00{:}09{:}55.825 \dashrightarrow 00{:}09{:}57.925$ have worse health outcomes.

NOTE Confidence: 0.8855895

 $00:09:57.930 \longrightarrow 00:10:00.022$ My work in Texas.

NOTE Confidence: 0.8855895

00:10:00.022 --> 00:10:03.295 In Wisconsin, show that about 20% of

NOTE Confidence: 0.8855895

 $00{:}10{:}03.295 \dashrightarrow 00{:}10{:}06.249$ the reason or the mechanism between

NOTE Confidence: 0.8855895

 $00:10:06.249 \longrightarrow 00:10:09.439$ poor health and poor neighborhoods.

NOTE Confidence: 0.8855895

 $00:10:09.440 \longrightarrow 00:10:10.704$ Is mediated through the

 $00:10:10.704 \longrightarrow 00:10:11.968$ pathway of poor sleep.

NOTE Confidence: 0.8855895

 $00:10:11.970 \longrightarrow 00:10:14.544$ Poor sleep can be part of that and what's

NOTE Confidence: 0.8855895

00:10:14.544 --> 00:10:17.022 nice about sleep compared to, you know,

NOTE Confidence: 0.8855895

 $00:10:17.022 \longrightarrow 00:10:19.234$ move out of the neighborhood is sleeping.

NOTE Confidence: 0.8855895

 $00:10:19.240 \longrightarrow 00:10:21.445$ You can modify sleep in some ways.

NOTE Confidence: 0.8855895

 $00:10:21.450 \longrightarrow 00:10:21.765$ Not.

NOTE Confidence: 0.8855895

 $00:10:21.765 \longrightarrow 00:10:22.395$ Not always.

NOTE Confidence: 0.8855895

00:10:22.395 --> 00:10:24.285 Not everything about sleep is modifiable,

NOTE Confidence: 0.8855895

 $00{:}10{:}24.290 \dashrightarrow 00{:}10{:}26.852$ but there are steps you can take

NOTE Confidence: 0.8855895

 $00:10:26.852 \longrightarrow 00:10:29.020$ to help improve sleep health.

NOTE Confidence: 0.8855895

 $00{:}10{:}29.020 \dashrightarrow 00{:}10{:}32.541$ And we've also shown this with my

NOTE Confidence: 0.8855895

 $00:10:32.541 \longrightarrow 00:10:36.310$ work with Wendy Troxel in Pitts burg.

NOTE Confidence: 0.8855895

 $00{:}10{:}36.310 --> 00{:}10{:}38.915$ We've looked at data acta

NOTE Confidence: 0.8855895

00:10:38.915 --> 00:10:40.999 graphic data of sleep,

NOTE Confidence: 0.8855895

 $00:10:41.000 \longrightarrow 00:10:43.605$ and objective measures of neighborhood

NOTE Confidence: 0.8855895

00:10:43.605 --> 00:10:47.080 context, including household.

00:10:47.080 --> 00:10:49.336 Factors like broken windows and pests,

NOTE Confidence: 0.8855895

 $00:10:49.340 \longrightarrow 00:10:51.596$ those types of things are also

NOTE Confidence: 0.8855895

00:10:51.596 --> 00:10:53.100 predictive of poor sleep,

NOTE Confidence: 0.8855895

00:10:53.100 --> 00:10:54.129 but you know,

NOTE Confidence: 0.8855895

 $00{:}10{:}54.129 \dashrightarrow 00{:}10{:}56.530$ like 50 poor sleep and shorter like

NOTE Confidence: 0.8855895

 $00{:}10{:}56.603 \dashrightarrow 00{:}10{:}59.571$ 15 to 20 minutes less per night sleep

NOTE Confidence: 0.8855895

00:10:59.571 --> 00:11:02.381 actigraph Exley when you live in a

NOTE Confidence: 0.8855895

 $00{:}11{:}02.381 \dashrightarrow 00{:}11{:}04.376$ household where you report maintenance

NOTE Confidence: 0.8855895

 $00:11:04.380 \longrightarrow 00:11:07.050$ problems in litter and graffiti.

NOTE Confidence: 0.8855895

 $00:11:07.050 \longrightarrow 00:11:10.291$ So those things matter why I think

NOTE Confidence: 0.8855895

00:11:10.291 --> 00:11:13.451 probably many of you were here today

NOTE Confidence: 0.8855895

 $00:11:13.451 \longrightarrow 00:11:16.690$ is to talk about this much bigger.

NOTE Confidence: 0.8855895

00:11:16.690 --> 00:11:19.000 An pressing and very relevant

NOTE Confidence: 0.8855895

 $00{:}11{:}19.000 \dashrightarrow 00{:}11{:}22.289$ challenge of what do we know about

NOTE Confidence: 0.8855895

 $00:11:22.289 \longrightarrow 00:11:25.404$ race and sleep or bigger than that?

 $00:11:25.410 \longrightarrow 00:11:26.694$ Racism in sleep and.

NOTE Confidence: 0.8855895

00:11:26.694 --> 00:11:30.387 I could go on for a long time about this,

NOTE Confidence: 0.8855895

 $00:11:30.390 \longrightarrow 00:11:33.630$ but I'm trying to cover a lot at one time.

NOTE Confidence: 0.8855895

 $00:11:33.630 \longrightarrow 00:11:36.158$ And I'm going to go back to one

NOTE Confidence: 0.8855895

 $00:11:36.158 \longrightarrow 00:11:38.803$ of the very first actor graphics

NOTE Confidence: 0.8855895

 $00:11:38.803 \longrightarrow 00:11:41.208$ studies on race and sleep,

NOTE Confidence: 0.8855895

 $00:11:41.210 \longrightarrow 00:11:44.003$ and this was a study done by

NOTE Confidence: 0.8855895

 $00:11:44.003 \longrightarrow 00:11:45.200$ a Diane Lauderdale.

NOTE Confidence: 0.8855895

00:11:45.200 --> 00:11:48.384 The Cardia study in Chicago of young adults,

NOTE Confidence: 0.8855895

 $00:11:48.390 \longrightarrow 00:11:50.790$ and they show early on that.

NOTE Confidence: 0.8855895

 $00{:}11{:}50.790 --> 00{:}11{:}52.370$ As I already mentioned,

NOTE Confidence: 0.8855895

00:11:52.370 --> 00:11:54.345 income or socioeconomic status is

NOTE Confidence: 0.8855895

 $00:11:54.345 \longrightarrow 00:11:56.369$ associated with longer sleep duration.

NOTE Confidence: 0.8855895

00:11:56.370 --> 00:11:58.370 At the time I said,

NOTE Confidence: 0.8855895

 $00:11:58.370 \longrightarrow 00:12:01.639$ what about sleeping too long or highly

NOTE Confidence: 0.8855895

 $00:12:01.639 \longrightarrow 00:12:03.790$ educated people sleeping too long?

00:12:03.790 --> 00:12:05.186 Or or vice versa,

NOTE Confidence: 0.8855895

00:12:05.186 --> 00:12:07.796 and she said we don't have anybody

NOTE Confidence: 0.8855895

 $00:12:07.796 \longrightarrow 00:12:10.848$ sleeping over 9 hours at that point.

NOTE Confidence: 0.8855895

 $00:12:10.850 \longrightarrow 00:12:12.810$ So and that wasn't really

NOTE Confidence: 0.8855895

 $00:12:12.810 \longrightarrow 00:12:14.770$ a problem in this sample.

NOTE Confidence: 0.8855895

 $00:12:14.770 \longrightarrow 00:12:16.334$ But even after adjusting

NOTE Confidence: 0.8855895

 $00:12:16.334 \longrightarrow 00:12:17.507$ for socioeconomic status,

NOTE Confidence: 0.8855895

00:12:17.510 --> 00:12:19.470 what this important study showed

NOTE Confidence: 0.8855895

 $00:12:19.470 \longrightarrow 00:12:21.430$ is that compared to whites,

NOTE Confidence: 0.8855895

00:12:21.430 --> 00:12:23.390 Blacks had shorter sleep duration,

NOTE Confidence: 0.8855895

 $00:12:23.390 \longrightarrow 00:12:25.910$ lower sleep efficiency took longer to

NOTE Confidence: 0.8855895

 $00:12:25.910 \longrightarrow 00:12:28.880$ fall asleep and spent less time in bed.

NOTE Confidence: 0.8855895

 $00{:}12{:}28.880 \dashrightarrow 00{:}12{:}31.379$ So on all of those dimensions you

NOTE Confidence: 0.8855895

 $00{:}12{:}31.379 \dashrightarrow 00{:}12{:}33.969$ know now we think about sleep.

NOTE Confidence: 0.8855895

 $00:12:33.970 \longrightarrow 00:12:36.400$ Health is a multidimensional concept.

 $00:12:36.400 \longrightarrow 00:12:38.040$ All of those dimensions we're

NOTE Confidence: 0.8855895

 $00{:}12{:}38.040 {\:{\circ}{\circ}{\circ}}>00{:}12{:}39.680$ seeing kind of worse outcomes

NOTE Confidence: 0.8855895

 $00{:}12{:}39.740 \dashrightarrow 00{:}12{:}41.410$ for Blacks compared to whites.

NOTE Confidence: 0.8855895

 $00:12:41.410 \longrightarrow 00:12:44.586$ And here's the figure to show it in

NOTE Confidence: 0.8855895

 $00:12:44.586 \longrightarrow 00:12:47.908$ case you like to see actual numbers.

NOTE Confidence: 0.8855895

00:12:47.910 --> 00:12:50.598 Between white women and African American men,

NOTE Confidence: 0.8855895

00:12:50.600 --> 00:12:51.749 which I know,

NOTE Confidence: 0.8855895

00:12:51.749 --> 00:12:54.047 it's kind of a weird comparison,

NOTE Confidence: 0.8855895

 $00{:}12{:}54.050 \dashrightarrow 00{:}12{:}56.738$ but we see on a nightly basis.

NOTE Confidence: 0.8855895

00:12:56.740 --> 00:12:59.804 1.4 fewer hours per night to huge difference.

NOTE Confidence: 0.86630005

00:12:59.810 --> 00:13:02.120 Let me. It's like you know,

NOTE Confidence: 0.86630005

00:13:02.120 --> 00:13:04.738 over 10 hours less sleep per week

NOTE Confidence: 0.86630005

 $00{:}13{:}04.738 \dashrightarrow 00{:}13{:}07.109$ between black men and white women.

NOTE Confidence: 0.86630005

00:13:07.110 --> 00:13:08.990 And then if sleep efficiency

NOTE Confidence: 0.86630005

 $00:13:08.990 \longrightarrow 00:13:11.330$ we see a similar big drop.

NOTE Confidence: 0.86630005

 $00{:}13{:}11.330 \dashrightarrow 00{:}13{:}14.018$ Almost 9 percentage point drop in sleep

00:13:14.018 --> 00:13:17.570 efficiency or difference, not a drop.

NOTE Confidence: 0.86630005

 $00:13:17.570 \longrightarrow 00:13:20.540$ Between white women in African American

NOTE Confidence: 0.86630005

00:13:20.540 --> 00:13:24.109 men and in my work using NHIS,

NOTE Confidence: 0.86630005

00:13:24.110 --> 00:13:26.002 another nationally representative studies,

NOTE Confidence: 0.86630005

00:13:26.002 --> 00:13:29.640 we found time and again that minorities,

NOTE Confidence: 0.86630005

 $00:13:29.640 \longrightarrow 00:13:32.115$ especially Blacks compared to whites

NOTE Confidence: 0.86630005

 $00:13:32.115 \longrightarrow 00:13:35.180$ see shorter sleep duration than whites.

NOTE Confidence: 0.86630005

 $00:13:35.180 \longrightarrow 00:13:38.192$ And here's a summary article written

NOTE Confidence: 0.86630005

 $00:13:38.192 \longrightarrow 00:13:40.968$ by my colleagues, Dana Johnson,

NOTE Confidence: 0.86630005

00:13:40.968 --> 00:13:42.236 Shandra Jackson.

NOTE Confidence: 0.86630005

 $00{:}13{:}42.236 \to 00{:}13{:}46.040$ This was in the journal Nature

NOTE Confidence: 0.86630005

 $00:13:46.147 \longrightarrow 00:13:48.327$ and science of sleep.

NOTE Confidence: 0.86630005

 $00:13:48.330 \longrightarrow 00:13:50.010$ It's hard to summarize the

NOTE Confidence: 0.86630005

 $00:13:50.010 \longrightarrow 00:13:52.260$ entire field in a few slides,

NOTE Confidence: 0.86630005

00:13:52.260 --> 00:13:55.464 but I wanted to just go across this row.

00:13:55.470 --> 00:13:58.269 Don't know if you can see my cursor if

NOTE Confidence: 0.86630005

 $00{:}13{:}58.269 \dashrightarrow 00{:}14{:}01.179$ you look at Blacks compared to whites,

NOTE Confidence: 0.86630005

 $00:14:01.180 \longrightarrow 00:14:02.970$ they have lower sleep duration.

NOTE Confidence: 0.86630005

 $00:14:02.970 \longrightarrow 00:14:05.106$ These numbers are just the references,

NOTE Confidence: 0.86630005

 $00:14:05.110 \longrightarrow 00:14:07.609$ so they're not going to be able

NOTE Confidence: 0.86630005

 $00:14:07.609 \longrightarrow 00:14:08.680$ to interpret them.

NOTE Confidence: 0.86630005

00:14:08.680 --> 00:14:10.520 Lower shorter sleep duration,

NOTE Confidence: 0.86630005

 $00:14:10.520 \longrightarrow 00:14:14.160$ lower sleep quality more and more sleepiness.

NOTE Confidence: 0.86630005

 $00:14:14.160 \longrightarrow 00:14:16.536$ And mixed results on sleep complaints.

NOTE Confidence: 0.86630005

 $00:14:16.540 \longrightarrow 00:14:19.480$ What we see for Hispanics compared

NOTE Confidence: 0.86630005

 $00:14:19.480 \longrightarrow 00:14:22.869$ to whites as shorter sleep duration.

NOTE Confidence: 0.86630005

 $00{:}14{:}22.870 \dashrightarrow 00{:}14{:}25.280$ But Interestingly, fewer sleep complaints.

NOTE Confidence: 0.86630005

 $00:14:25.280 \longrightarrow 00:14:29.256$ And then I just want to highlight what

NOTE Confidence: 0.86630005

 $00:14:29.256 \longrightarrow 00:14:33.468$ we really don't know a lot about at all.

NOTE Confidence: 0.86630005

 $00:14:33.470 \longrightarrow 00:14:35.875$ Insufficient evidence is the Native

NOTE Confidence: 0.86630005

 $00:14:35.875 \longrightarrow 00:14:37.799$ American populations and Native

 $00{:}14{:}37.799 \dashrightarrow 00{:}14{:}39.739$ Hawaiian and Pacific Islanders.

NOTE Confidence: 0.86630005

 $00:14:39.740 \longrightarrow 00:14:42.150$ There's really not a lot

NOTE Confidence: 0.86630005

 $00:14:42.150 \longrightarrow 00:14:44.078$ of information on these,

NOTE Confidence: 0.86630005

00:14:44.080 --> 00:14:47.696 but we have enough kind of consistent and

NOTE Confidence: 0.86630005

 $00:14:47.696 \longrightarrow 00:14:50.227$ replicated data showing that especially

NOTE Confidence: 0.86630005

 $00:14:50.227 \longrightarrow 00:14:53.832$ Blacks and Hispanics are as a population.

NOTE Confidence: 0.86630005

 $00:14:53.840 \longrightarrow 00:14:55.307$ Not every individual,

NOTE Confidence: 0.86630005

00:14:55.307 --> 00:14:57.752 but as a population getting

NOTE Confidence: 0.86630005

 $00:14:57.752 \longrightarrow 00:14:59.529$ insufficient sleep and just

NOTE Confidence: 0.86630005

00:14:59.529 --> 00:15:01.689 come back to my original slide.

NOTE Confidence: 0.86630005

 $00:15:01.690 \longrightarrow 00:15:04.602$ We know that these factors that sleep

NOTE Confidence: 0.86630005

 $00:15:04.602 \longrightarrow 00:15:08.226$ matters for a huge range of life outcomes,

NOTE Confidence: 0.86630005

 $00{:}15{:}08.230 --> 00{:}15{:}08.666 \text{ health},$

NOTE Confidence: 0.86630005

 $00:15:08.666 \longrightarrow 00:15:10.410$ economic outcomes and beyond.

NOTE Confidence: 0.86630005

 $00:15:10.410 \longrightarrow 00:15:12.590$ So I care about these.

 $00:15:14.600 \longrightarrow 00:15:16.079$ The question is.

NOTE Confidence: 0.917439466666667

00:15:16.079 --> 00:15:19.037 And this is a big question.

NOTE Confidence: 0.917439466666667

 $00:15:19.040 \longrightarrow 00:15:20.990$ What are the underlying causes?

NOTE Confidence: 0.917439466666667

 $00:15:20.990 \longrightarrow 00:15:22.940$ Why do we see that?

NOTE Confidence: 0.917439466666667

 $00:15:22.940 \longrightarrow 00:15:25.280$ And I'll say that we know

NOTE Confidence: 0.917439466666667

 $00:15:25.280 \longrightarrow 00:15:26.840$ some of these reasons.

NOTE Confidence: 0.917439466666667

 $00:15:26.840 \dashrightarrow 00:15:29.465$ We know that there are some compositional

NOTE Confidence: 0.917439466666667

 $00:15:29.465 \longrightarrow 00:15:31.056$ differences in populations between

NOTE Confidence: 0.917439466666667

 $00:15:31.056 \longrightarrow 00:15:32.688$ African Americans and whites.

NOTE Confidence: 0.917439466666667

 $00:15:32.690 \longrightarrow 00:15:33.404$ For example,

NOTE Confidence: 0.917439466666667

 $00{:}15{:}33.404 \dashrightarrow 00{:}15{:}35.903$ we know that Blacks are more likely

NOTE Confidence: 0.917439466666667

 $00:15:35.903 \longrightarrow 00:15:38.928$ to work night shifts or irregular hours.

NOTE Confidence: 0.917439466666667

 $00:15:38.930 \longrightarrow 00:15:41.978$ We know that there may be lower levels

NOTE Confidence: 0.917439466666667

 $00{:}15{:}41.978 \dashrightarrow 00{:}15{:}44.387$ of education or more urban living.

NOTE Confidence: 0.917439466666667

00:15:44.390 --> 00:15:45.950 A higher percentage living

NOTE Confidence: 0.917439466666667

00:15:45.950 --> 00:15:47.120 in urban environments,

 $00:15:47.120 \longrightarrow 00:15:49.370$ and so we have some.

NOTE Confidence: 0.917439466666667

 $00{:}15{:}49.370 \dashrightarrow 00{:}15{:}51.442$ Account for that we can say some

NOTE Confidence: 0.917439466666667

 $00:15:51.442 \longrightarrow 00:15:53.025$ of the differences between Blacks

NOTE Confidence: 0.917439466666667

 $00:15:53.025 \longrightarrow 00:15:54.909$ and whites in sleep might be

NOTE Confidence: 0.917439466666667

 $00:15:54.909 \longrightarrow 00:15:57.226$ related to where they live or

NOTE Confidence: 0.917439466666667

 $00:15:57.226 \longrightarrow 00:15:58.447$ their educational differences.

NOTE Confidence: 0.917439466666667

 $00:15:58.450 \longrightarrow 00:16:00.515$ But even when we adjust for that,

NOTE Confidence: 0.917439466666667

 $00:16:00.520 \longrightarrow 00:16:02.290$ we don't fully adjust for it.

NOTE Confidence: 0.917439466666667

 $00:16:02.290 \longrightarrow 00:16:03.760$ The effects don't go away,

NOTE Confidence: 0.917439466666667

 $00:16:03.760 \longrightarrow 00:16:05.825$ and that's a key point we adjust.

NOTE Confidence: 0.917439466666667

00:16:05.830 --> 00:16:07.106 Friend doesn't go away.

NOTE Confidence: 0.917439466666667

 $00{:}16{:}07.106 \dashrightarrow 00{:}16{:}09.020$ And then a good statistician would

NOTE Confidence: 0.917439466666667

 $00{:}16{:}09.078 \dashrightarrow 00{:}16{:}10.835$ rightly come back to me and say,

NOTE Confidence: 0.917439466666667 00:16:10.840 --> 00:16:11.205 Yeah, NOTE Confidence: 0.917439466666667

00:16:11.205 --> 00:16:13.760 but the measures you are using their

 $00:16:13.760 \longrightarrow 00:16:16.258$ crappy measures you know look at education.

NOTE Confidence: 0.917439466666667

 $00{:}16{:}16.260 \dashrightarrow 00{:}16{:}18.348$ Just grab their course measures what

NOTE Confidence: 0.917439466666667

 $00:16:18.348 \longrightarrow 00:16:20.712$ is graduating high school mean for a

NOTE Confidence: 0.917439466666667

00:16:20.712 --> 00:16:22.833 black person versus a white person doesn't?

NOTE Confidence: 0.917439466666667

 $00:16:22.840 \longrightarrow 00:16:24.961$ It doesn't mean the same thing that

NOTE Confidence: 0.917439466666667

00:16:24.961 --> 00:16:27.449 doesn't get into quality or skills learned.

NOTE Confidence: 0.917439466666667

 $00:16:27.450 \longrightarrow 00:16:29.900$ It just tells you whether their credentials

NOTE Confidence: 0.917439466666667

 $00:16:29.900 \longrightarrow 00:16:32.705$ you have the degree and I agree with it.

NOTE Confidence: 0.917439466666667

 $00{:}16{:}32.710 \dashrightarrow 00{:}16{:}34.570$ I agree that some of these

NOTE Confidence: 0.917439466666667

 $00:16:34.570 \longrightarrow 00:16:36.330$ measures are not good enough,

NOTE Confidence: 0.917439466666667

00:16:36.330 --> 00:16:38.304 but I still believe and you

NOTE Confidence: 0.917439466666667

 $00:16:38.304 \longrightarrow 00:16:39.620$ know others support this.

NOTE Confidence: 0.917439466666667

00:16:39.620 --> 00:16:40.984 Other studies support this,

NOTE Confidence: 0.917439466666667

 $00:16:40.984 \longrightarrow 00:16:42.348$ that there's enough evidence

NOTE Confidence: 0.917439466666667

 $00:16:42.348 \longrightarrow 00:16:43.900$ to say that there are.

NOTE Confidence: 0.917439466666667

 $00{:}16{:}43.900 \dashrightarrow 00{:}16{:}46.528$ There's a cloud of other things

 $00:16:46.528 \longrightarrow 00:16:49.359$ that kind of fall under this.

NOTE Confidence: 0.917439466666667

 $00:16:49.360 \longrightarrow 00:16:51.384$ Immeasurable category of discrimination.

NOTE Confidence: 0.917439466666667

00:16:51.384 --> 00:16:52.396 ISM discrimination,

NOTE Confidence: 0.917439466666667 00:16:52.400 --> 00:16:52.902 racism, NOTE Confidence: 0.917439466666667

00:16:52.902 --> 00:16:53.906 chronic vigilance,

NOTE Confidence: 0.917439466666667

 $00{:}16{:}53.906 \dashrightarrow 00{:}16{:}57.420$ that cluster together and you can't measure

NOTE Confidence: 0.917439466666667

 $00:16:57.496 \longrightarrow 00:17:00.508$ that in a nationally representative study.

NOTE Confidence: 0.917439466666667

 $00:17:00.510 \longrightarrow 00:17:02.542$ That's that's too hard.

NOTE Confidence: 0.917439466666667 00:17:02.542 --> 00:17:03.558 It's there's. NOTE Confidence: 0.917439466666667 00:17:03.560 --> 00:17:05.042 You can try,

 $00{:}17{:}05.042 \dashrightarrow 00{:}17{:}08.500$ and I'm encouraged us to try and

NOTE Confidence: 0.917439466666667

NOTE Confidence: 0.917439466666667

 $00{:}17{:}08.612 --> 00{:}17{:}10.148 \ \mathrm{figure \ it \ out},$

NOTE Confidence: 0.917439466666667

 $00:17:10.150 \longrightarrow 00:17:13.186$ but it's not easy to do,

NOTE Confidence: 0.917439466666667

 $00:17:13.190 \longrightarrow 00:17:16.950$ and I would say that.

NOTE Confidence: 0.917439466666667

 $00:17:16.950 \longrightarrow 00:17:20.712$ This is a moment for us as a field

 $00:17:20.712 \longrightarrow 00:17:24.267$ sleep researchers to listen to our.

NOTE Confidence: 0.917439466666667

 $00{:}17{:}24.270 \dashrightarrow 00{:}17{:}26.790$ Our colleagues and friends outside

NOTE Confidence: 0.917439466666667

 $00:17:26.790 \longrightarrow 00:17:29.904$ of sleep health who are talking

NOTE Confidence: 0.917439466666667

00:17:29.904 --> 00:17:32.928 about anti racism and talking about

NOTE Confidence: 0.917439466666667

00:17:32.928 --> 00:17:35.808 being black in America to think

NOTE Confidence: 0.917439466666667

 $00:17:35.808 \longrightarrow 00:17:38.790$ about how we as asleep field can

NOTE Confidence: 0.917439466666667

 $00:17:38.790 \longrightarrow 00:17:41.760$ excuse the expression wake up.

NOTE Confidence: 0.917439466666667

 $00:17:41.760 \longrightarrow 00:17:45.176$ To incorporate these ideas in our research,

NOTE Confidence: 0.917439466666667

 $00{:}17{:}45.180 \dashrightarrow 00{:}17{:}47.448$ because I think.

NOTE Confidence: 0.917439466666667 00:17:47.448 --> 00:17:48.960 They are. NOTE Confidence: 0.917439466666667

00:17:48.960 --> 00:17:52.290 Totally playing a role in

NOTE Confidence: 0.917439466666667

00:17:52.290 --> 00:17:55.620 understanding why sleep is harder,

NOTE Confidence: 0.917439466666667

 $00:17:55.620 \longrightarrow 00:17:58.698$ harder to achieve.

NOTE Confidence: 0.917439466666667

 $00:17:58.700 \longrightarrow 00:17:59.768$ For some people,

NOTE Confidence: 0.917439466666667

 $00:17:59.768 \longrightarrow 00:18:01.904$ some populations than for other populations,

NOTE Confidence: 0.917439466666667

 $00{:}18{:}01.910 \dashrightarrow 00{:}18{:}04.750$ so this is the part of my talk where I

00:18:04.832 --> 00:18:07.704 say I'm going outside of my comfort zone

NOTE Confidence: 0.917439466666667

 $00{:}18{:}07.704 \dashrightarrow 00{:}18{:}11.197$ and I'm going to talk about this expression.

NOTE Confidence: 0.917439466666667

 $00:18:11.200 \longrightarrow 00:18:14.048$ What does it mean to be woke now?

NOTE Confidence: 0.917439466666667 00:18:14.050 --> 00:18:14.407 Granted, NOTE Confidence: 0.917439466666667

 $00:18:14.407 \longrightarrow 00:18:16.549$ this is not what you know.

NOTE Confidence: 0.917439466666667

 $00:18:16.550 \longrightarrow 00:18:18.692$ Usually when I say woke is

NOTE Confidence: 0.917439466666667

 $00:18:18.692 \longrightarrow 00:18:20.569$ the opposite of sleep, but.

NOTE Confidence: 0.917439466666667 00:18:20.569 --> 00:18:21.467 For now, NOTE Confidence: 0.917439466666667

00:18:21.467 --> 00:18:24.610 let's listen to my friends on YouTube

NOTE Confidence: 0.917439466666667

 $00:18:24.703 \longrightarrow 00:18:28.132$ to talk about what it means to be woke,

NOTE Confidence: 0.917439466666667

 $00:18:28.140 \longrightarrow 00:18:29.212$ and I, you know.

NOTE Confidence: 0.917439466666667

00:18:29.212 --> 00:18:31.446 If you guys want to comment on it

NOTE Confidence: 0.917439466666667

 $00{:}18{:}31.446 \dashrightarrow 00{:}18{:}33.406$ later or right in the chat section

NOTE Confidence: 0.917439466666667

 $00:18:33.406 \longrightarrow 00:18:35.278$ about what it means to be woke,

NOTE Confidence: 0.917439466666667

 $00:18:35.280 \longrightarrow 00:18:36.648$ I'd love to hear your thoughts.

 $00:18:36.650 \longrightarrow 00:18:37.800$ Let's see if this works.

NOTE Confidence: 0.7974156

00:19:34.390 --> 00:19:35.990 Hi Lauren, I think it's a little

NOTE Confidence: 0.7974156

 $00:19:35.990 \longrightarrow 00:19:37.653$ hard for us to hear it hears

NOTE Confidence: 0.7974156

 $00:19:37.653 \longrightarrow 00:19:39.256$ any way for you to turn out.

NOTE Confidence: 0.7974156

 $00:19:39.260 \longrightarrow 00:19:41.348$ Darn it, I know you know what this is.

NOTE Confidence: 0.7974156

 $00{:}19{:}41.350 \dashrightarrow 00{:}19{:}45.317$ My hold on. OK, hold on a second I'm gonna.

NOTE Confidence: 0.7974156

 $00:19:45.320 \longrightarrow 00:19:47.154 \text{ I do know how to do this.}$

NOTE Confidence: 0.7974156

00:19:47.160 --> 00:19:48.726 Share computer sound I'm sorry for

NOTE Confidence: 0.7974156

 $00:19:48.726 \longrightarrow 00:19:50.040$ that awkwardness we were here.

NOTE Confidence: 0.7974156

 $00:19:50.040 \longrightarrow 00:19:51.606$ You're hearing it but I think

NOTE Confidence: 0.7974156

 $00{:}19{:}51.610 \dashrightarrow 00{:}19{:}53.182$ we're hearing out of your speakers.

NOTE Confidence: 0.7974156

00:19:53.182 --> 00:19:54.487 So which would be junkie?

NOTE Confidence: 0.7974156

 $00:19:54.490 \longrightarrow 00:19:55.506$ And I'm being quiet.

NOTE Confidence: 0.7974156

 $00{:}19{:}55.506 \dashrightarrow 00{:}19{:}57.380$ So let me just start it back.

NOTE Confidence: 0.7974156

 $00:19:57.380 \longrightarrow 00:19:59.207$ Will just lose a minute hold up

NOTE Confidence: 0.86140288

 $00:19:59.210 \longrightarrow 00:20:00.780$ is not a. Replace that,

 $00:20:00.780 \longrightarrow 00:20:02.190$ everything is not all equal.

NOTE Confidence: 0.86140288

 $00{:}20{:}02.190 \dashrightarrow 00{:}20{:}03.600$ That justice has not happened

NOTE Confidence: 0.86140288

 $00:20:03.600 \longrightarrow 00:20:05.248$ yet for everyone, and that there

NOTE Confidence: 0.86140288

 $00:20:05.248 \longrightarrow 00:20:07.550$ is a lot of work to be done.

NOTE Confidence: 0.8576817

00:20:11.030 --> 00:20:12.580 Your eyes are wide opening.

NOTE Confidence: 0.8576817

 $00{:}20{:}12.580 \dashrightarrow 00{:}20{:}14.235$ You're paying attention and you're

NOTE Confidence: 0.8576817

00:20:14.235 --> 00:20:16.225 reaching out and speaking to people

NOTE Confidence: 0.8576817

 $00{:}20{:}16.225 \to 00{:}20{:}18.157$ along the way and bringing them on.

NOTE Confidence: 0.8576817

 $00:20:18.160 \longrightarrow 00:20:20:386$ And to increase the amount of Wokeness

NOTE Confidence: 0.8576817

 $00:20:20:386 \longrightarrow 00:20:22:582$ in your community being woke is like

NOTE Confidence: 0.8576817

 $00{:}20{:}22.582 \dashrightarrow 00{:}20{:}24.352$ as wide open everything is clear.

NOTE Confidence: 0.8576817

 $00{:}20{:}24.360 \dashrightarrow 00{:}20{:}26.628$ You can always see things that other

NOTE Confidence: 0.8576817

 $00{:}20{:}26.628 \operatorname{--}{>} 00{:}20{:}28.788$ people can just ignore or they just

NOTE Confidence: 0.8576817

00:20:28.788 --> 00:20:31.163 don't know well for me is just being

NOTE Confidence: 0.8576817

 $00:20:31.163 \longrightarrow 00:20:33.347$ outraged all the time and being able

 $00:20:33.347 \longrightarrow 00:20:35.550$ to stay human and feel outraged about

NOTE Confidence: 0.8576817

 $00{:}20{:}35.550 \dashrightarrow 00{:}20{:}37.380$ injustice that is happening around me.

NOTE Confidence: 0.8576817

 $00{:}20{:}37.380 \dashrightarrow 00{:}20{:}39.330$ It's being uncomfortable all the time.

NOTE Confidence: 0.8576817

 $00{:}20{:}39.330 \dashrightarrow 00{:}20{:}41.306$ And making sure that I'm speaking on behalf

NOTE Confidence: 0.8576817

 $00:20:41.306 \longrightarrow 00:20:43.509$ of those that can't speak up for themselves.

NOTE Confidence: 0.8576817

00:20:43.510 --> 00:20:45.070 Some people know what's happening around

NOTE Confidence: 0.8576817

00:20:45.070 --> 00:20:46.896 them, but they're not doing anything there,

NOTE Confidence: 0.8576817

 $00:20:46.900 \longrightarrow 00:20:48.988$ just like, well, it is what it is.

NOTE Confidence: 0.8576817

 $00{:}20{:}48.990 \dashrightarrow 00{:}20{:}51.174$ Yeah, that's not what woke means that you

NOTE Confidence: 0.8576817

 $00:20:51.174 \longrightarrow 00:20:53.156$ actually take it upon yourself to be like.

NOTE Confidence: 0.8576817

00:20:53.160 --> 00:20:54.726 This is something I need to

NOTE Confidence: 0.8576817

 $00:20:54.726 \longrightarrow 00:20:56.294$ fix any part of the solution.

NOTE Confidence: 0.8576817

 $00:20:56.294 \longrightarrow 00:20:58.380$ I mean, The thing is to do that,

NOTE Confidence: 0.8576817

 $00:20:58.380 \longrightarrow 00:20:59.874$ knowing that you can fix it

NOTE Confidence: 0.8576817

00:20:59.874 --> 00:21:01.520 whatever your level or platform is,

NOTE Confidence: 0.8576817

 $00:21:01.520 \longrightarrow 00:21:02.785$ because there's always an opportunity

00:21:02.785 --> 00:21:04.632 for you to do just a little

NOTE Confidence: 0.8576817

 $00:21:04.632 \longrightarrow 00:21:05.688$ something to support them.

NOTE Confidence: 0.8576817

 $00:21:05.690 \longrightarrow 00:21:07.524$ I also think about what words actually

NOTE Confidence: 0.8576817

00:21:07.524 --> 00:21:09.347 mean and how we give them power,

NOTE Confidence: 0.8576817

 $00:21:09.350 \longrightarrow 00:21:09.617$ right?

NOTE Confidence: 0.8576817

 $00:21:09.617 \longrightarrow 00:21:11.753$ Are you just going to wear it across

NOTE Confidence: 0.8576817

00:21:11.753 --> 00:21:14.026 your chest but actually not live it out?

NOTE Confidence: 0.8576817

 $00:21:14.030 \longrightarrow 00:21:16.240$ Or are you going to give this word a meaning

NOTE Confidence: 0.8576817

00:21:16.290 --> 00:21:18.544 with your actions with your daily commitment?

NOTE Confidence: 0.8576817

 $00:21:18.550 \longrightarrow 00:21:20.146$ And I think in order for

NOTE Confidence: 0.8576817

 $00:21:20.146 \longrightarrow 00:21:21.210$ us to really progress,

NOTE Confidence: 0.8576817

 $00:21:21.210 \longrightarrow 00:21:22.834$ we're going to need people to really

NOTE Confidence: 0.8576817

 $00{:}21{:}22.834 \dashrightarrow 00{:}21{:}24.932$ step out of their comfort zones and

NOTE Confidence: 0.8576817

 $00:21:24.932 \longrightarrow 00:21:26.284$ have those uncomfortable conversations

NOTE Confidence: 0.8576817

 $00:21:26.284 \longrightarrow 00:21:28.533$ and not just live in a space where they

00:21:28.533 --> 00:21:30.495 get to preach to the people who already

NOTE Confidence: 0.8576817

 $00{:}21{:}30.495 \dashrightarrow 00{:}21{:}32.380$ understands what it means can agree more.

NOTE Confidence: 0.8576817

 $00:21:32.380 \longrightarrow 00:21:34.860$ I think to be woke means that you are aware

NOTE Confidence: 0.8576817

 $00:21:34.919 \longrightarrow 00:21:37.167$ of the issues and the world around you.

NOTE Confidence: 0.8576817

 $00:21:37.170 \longrightarrow 00:21:38.952$ I believe it means that you

NOTE Confidence: 0.8576817

 $00:21:38.952 \longrightarrow 00:21:40.530$ are engaged in the work.

NOTE Confidence: 0.8576817

 $00:21:40.530 \longrightarrow 00:21:43.302$ Just as this is a time where we just,

NOTE Confidence: 0.8576817

 $00:21:43.310 \longrightarrow 00:21:45.170$ we can't afford to be asleep,

NOTE Confidence: 0.8576817

 $00{:}21{:}45.170 \longrightarrow 00{:}21{:}47.852$ we have to be all the way alert without

NOTE Confidence: 0.8576817

 $00:21:47.852 \longrightarrow 00:21:50.414$ action on the knowledge that we have now.

NOTE Confidence: 0.8576817

 $00{:}21{:}50.420 \dashrightarrow 00{:}21{:}52.238$ Our world will never change and

NOTE Confidence: 0.8576817

 $00:21:52.238 \longrightarrow 00:21:54.130$ we need that more than ever.

NOTE Confidence: 0.89910436

00:21:58.150 --> 00:22:00.094 OK, thank you for bearing with me and

NOTE Confidence: 0.89910436

 $00:22:00.094 \longrightarrow 00:22:02.249$ I'm sorry for the technical difficulties.

NOTE Confidence: 0.89910436

 $00:22:02.250 \longrightarrow 00:22:05.090$ Can you hear me now?

NOTE Confidence: 0.89910436

00:22:05.090 --> 00:22:07.270 Yes, that's perfect. Thank you.

00:22:07.270 --> 00:22:10.294 OK great, so that was really my first

NOTE Confidence: 0.89910436

 $00:22:10.294 \longrightarrow 00:22:13.966$ time in bedding at YouTube in a video

NOTE Confidence: 0.89910436

00:22:13.966 --> 00:22:16.859 and especially video about being woke,

NOTE Confidence: 0.89910436

 $00:22:16.860 \longrightarrow 00:22:18.705$ but I think.

NOTE Confidence: 0.89910436

 $00{:}22{:}18.705 \dashrightarrow 00{:}22{:}21.780$ It's relevant and especially interesting.

NOTE Confidence: 0.89910436

 $00:22:21.780 \longrightarrow 00:22:24.280$ You know this expression.

NOTE Confidence: 0.89910436

 $00:22:24.280 \longrightarrow 00:22:27.405$ Is asleep term being away?

NOTE Confidence: 0.89910436

 $00{:}22{:}27.410 \longrightarrow 00{:}22{:}32.300$ I mean, it's it's not the term we might use,

NOTE Confidence: 0.89910436

00:22:32.300 --> 00:22:35.556 but being awake means it kind of or

NOTE Confidence: 0.89910436

 $00:22:35.556 \longrightarrow 00:22:38.514$ being well recognizes that everyday

NOTE Confidence: 0.89910436

 $00:22:38.514 \longrightarrow 00:22:41.246$ racism and structural racism.

NOTE Confidence: 0.89910436

00:22:41.250 --> 00:22:42.411 Affects sleep health,

NOTE Confidence: 0.89910436

 $00{:}22{:}42.411 \dashrightarrow 00{:}22{:}45.120$ they're saying in order to be present.

NOTE Confidence: 0.89910436

 $00:22:45.120 \longrightarrow 00:22:48.216$ An engaged in the injustice of the world.

NOTE Confidence: 0.89910436

 $00:22:48.220 \longrightarrow 00:22:49.836$ You cannot be asleep.

00:22:49.836 --> 00:22:53.249 You can afford to be asleep and I mean,

NOTE Confidence: 0.89910436

 $00{:}22{:}53.250 \to 00{:}22{:}55.566$ I think that's that's really powerful.

NOTE Confidence: 0.89910436

 $00:22:55.570 \longrightarrow 00:22:57.181$ I've until recently.

NOTE Confidence: 0.89910436

00:22:57.181 --> 00:23:00.403 I've never really thought about how.

NOTE Confidence: 0.89910436

 $00{:}23{:}00.410 \dashrightarrow 00{:}23{:}03.550$ Sleep disparities was like embed

NOTE Confidence: 0.89910436

 $00:23:03.550 \longrightarrow 00:23:06.690$ or implicated in that expression,

NOTE Confidence: 0.89910436

 $00:23:06.690 \longrightarrow 00:23:09.830$ and I think there's more

NOTE Confidence: 0.89910436

 $00:23:09.830 \longrightarrow 00:23:12.970$ more to think about there.

NOTE Confidence: 0.89203244

 $00{:}23{:}15.650 {\:{\mbox{--}}\!>}\ 00{:}23{:}18.791$ As we try to tease apart how to make

NOTE Confidence: 0.89203244

00:23:18.791 --> 00:23:22.106 the world a better place so we don't.

NOTE Confidence: 0.89203244

 $00:23:22.110 \longrightarrow 00:23:25.960$ So it's not that we.

NOTE Confidence: 0.89203244

 $00:23:25.960 \longrightarrow 00:23:29.340$ So we don't have to wake up to disparities or

NOTE Confidence: 0.89203244

 $00:23:29.415 \longrightarrow 00:23:32.565$ be be chronically vigilant to disparities.

NOTE Confidence: 0.89203244

 $00:23:32.570 \longrightarrow 00:23:34.210$ We can or discrimination.

NOTE Confidence: 0.89203244

00:23:34.210 --> 00:23:37.940 We can all sleep better in a better world,

NOTE Confidence: 0.89203244

 $00:23:37.940 \longrightarrow 00:23:42.399$ and that would ultimately be my goal.

00:23:42.400 --> 00:23:45.870 I know I'm a bit of an Optimist, But.

NOTE Confidence: 0.89203244

 $00:23:45.870 \longrightarrow 00:23:47.676$ But there I am. Did anybody?

NOTE Confidence: 0.89203244

00:23:47.680 --> 00:23:49.780 It's a It's about halfway through it.

NOTE Confidence: 0.89203244

00:23:49.780 --> 00:23:52.188 Does anybody have any thoughts or any type?

NOTE Confidence: 0.89203244

 $00:23:52.190 \longrightarrow 00:23:53.700$ I can't see the chat,

NOTE Confidence: 0.89203244

 $00:23:53.700 \longrightarrow 00:23:57.468$ but if anybody wants to say something about.

NOTE Confidence: 0.89203244

00:23:57.470 --> 00:23:59.976 That expression I'd love to hear more.

NOTE Confidence: 0.89203244

 $00:23:59.980 \longrightarrow 00:24:01.136$ Maybe in the end,

NOTE Confidence: 0.89203244

 $00:24:01.136 \longrightarrow 00:24:04.242$ because to me it's kind of a new direction

NOTE Confidence: 0.89203244

 $00:24:04.242 \longrightarrow 00:24:06.417$ for thinking about sleep disparities.

NOTE Confidence: 0.89403415

00:24:09.370 --> 00:24:13.074 So my last comment on kind of mechanisms

NOTE Confidence: 0.89403415

 $00:24:13.074 \longrightarrow 00:24:16.232$ and pathways through which we see

NOTE Confidence: 0.89403415

 $00{:}24{:}16.232 \dashrightarrow 00{:}24{:}19.639$ differences in sleep among adults, is.

NOTE Confidence: 0.89403415

00:24:19.639 --> 00:24:24.013 Through the these key kind of

NOTE Confidence: 0.89403415

00:24:24.013 --> 00:24:26.200 socially social demographic.

 $00:24:26.200 \longrightarrow 00:24:28.280$ Categories that really end behaviors.

NOTE Confidence: 0.89403415

 $00:24:28.280 \longrightarrow 00:24:30.355$ The first is social and

NOTE Confidence: 0.89403415

 $00:24:30.355 \longrightarrow 00:24:31.185$ marital relationships.

NOTE Confidence: 0.89403415

00:24:31.190 --> 00:24:34.518 Many of you may know Wendy Troxel's work,

NOTE Confidence: 0.89403415

 $00:24:34.520 \longrightarrow 00:24:36.595$ showing that being married is

NOTE Confidence: 0.89403415

 $00{:}24{:}36.595 \dashrightarrow 00{:}24{:}38.255$ associated with better sleep.

NOTE Confidence: 0.89403415

 $00:24:38.260 \longrightarrow 00:24:40.756$ There comes a lot of economic

NOTE Confidence: 0.89403415

00:24:40.756 --> 00:24:42.420 security and emotional security,

NOTE Confidence: 0.89403415

 $00:24:42.420 \longrightarrow 00:24:45.339$ but it's gotta be a good relationship.

NOTE Confidence: 0.89403415

 $00:24:45.340 \longrightarrow 00:24:46.723$ Employment matters again.

NOTE Confidence: 0.89403415

 $00:24:46.723 \longrightarrow 00:24:48.567$ Economic securities very helpful

NOTE Confidence: 0.89403415

00:24:48.567 --> 00:24:51.157 for being able to sleep at night.

NOTE Confidence: 0.89403415

 $00:24:51.160 \longrightarrow 00:24:53.240$ But 15% of people have

NOTE Confidence: 0.89403415

00:24:53.240 --> 00:24:55.320 irregular hours or night shifts,

NOTE Confidence: 0.89403415

 $00:24:55.320 \longrightarrow 00:24:57.688$ and those are obviously.

NOTE Confidence: 0.89403415

 $00{:}24{:}57.688 \dashrightarrow 00{:}24{:}59.464$ Stressful and disruptive.

00:24:59.470 --> 00:25:01.835 The work on American lifestyle

NOTE Confidence: 0.89403415

 $00{:}25{:}01.835 \dashrightarrow 00{:}25{:}03.727$ and sleep is fascinating.

NOTE Confidence: 0.89403415

 $00:25:03.730 \longrightarrow 00:25:07.348$ It fits right in line with the work of

NOTE Confidence: 0.89403415

 $00:25:07.348 \longrightarrow 00:25:09.879$ sociologists on negative acculturation,

NOTE Confidence: 0.89403415

 $00:25:09.880 \longrightarrow 00:25:12.245$ immigrants to the US tend

NOTE Confidence: 0.89403415

 $00:25:12.245 \longrightarrow 00:25:14.610$ to have the best sleep,

NOTE Confidence: 0.89403415

 $00:25:14.610 \longrightarrow 00:25:17.662$ and then they and their offspring as

NOTE Confidence: 0.89403415

 $00{:}25{:}17.662 \dashrightarrow 00{:}25{:}20.432$ they as similate to take an American

NOTE Confidence: 0.89403415

 $00:25:20.432 \longrightarrow 00:25:23.192$ behaviors tend to deteriorate in terms

NOTE Confidence: 0.89403415

 $00:25:23.192 \longrightarrow 00:25:26.428$ of Bedtimes and other sleep outcomes.

NOTE Confidence: 0.89403415

 $00:25:26.430 \longrightarrow 00:25:29.804$ And then of course the close links.

NOTE Confidence: 0.89403415

 $00:25:29.810 \longrightarrow 00:25:32.250$ Between sleep and mental health,

NOTE Confidence: 0.89403415

 $00{:}25{:}32.250 \dashrightarrow 00{:}25{:}35.178$ which many of you know about.

NOTE Confidence: 0.89403415

00:25:35.180 --> 00:25:38.102 And of course how we're spending

NOTE Confidence: 0.89403415

00:25:38.102 --> 00:25:40.890 our time screen, social media,

 $00:25:40.890 \longrightarrow 00:25:42.210$ sedentary behavior,

NOTE Confidence: 0.89403415

 $00:25:42.210 \longrightarrow 00:25:45.510$ all interrelated with sleep outcomes.

NOTE Confidence: 0.89403415

00:25:45.510 --> 00:25:48.222 So I'm going to move on because of

NOTE Confidence: 0.89403415

 $00:25:48.222 \longrightarrow 00:25:51.151$ course I only have 15 or so minutes

NOTE Confidence: 0.89403415

00:25:51.151 --> 00:25:53.630 left to describe my life's work.

NOTE Confidence: 0.89403415

00:25:53.630 --> 00:25:55.784 Not really to describe this project

NOTE Confidence: 0.89403415

 $00:25:55.784 \longrightarrow 00:25:58.674$ that I am so engaged with the

NOTE Confidence: 0.89403415

 $00:25:58.674 \longrightarrow 00:26:00.964$ fragile families study and it's.

NOTE Confidence: 0.89403415

 $00:26:00.970 \longrightarrow 00:26:02.940$ Consistent with the theme of

NOTE Confidence: 0.89403415

00:26:02.940 --> 00:26:04.516 thinking about racial disparities,

NOTE Confidence: 0.89403415

 $00{:}26{:}04.520 \dashrightarrow 00{:}26{:}06.890$ because what we've identified our

NOTE Confidence: 0.89403415

 $00:26:06.890 \longrightarrow 00:26:09.260$ pediatric disparities in sleep starting

NOTE Confidence: 0.89403415

 $00:26:09.333 \longrightarrow 00:26:11.605$ at an early age and then of course,

NOTE Confidence: 0.89403415

 $00{:}26{:}11.610 \dashrightarrow 00{:}26{:}13.182$ moving into active graphic

NOTE Confidence: 0.89403415

 $00:26:13.182 \longrightarrow 00:26:15.147$ disparities in sleep among teenagers.

NOTE Confidence: 0.89403415

 $00{:}26{:}15.150 \dashrightarrow 00{:}26{:}18.687$ And then I go into some other stuff on

00:26:18.687 --> 00:26:21.844 sleep in teens that are kind of key.

NOTE Confidence: 0.89403415

 $00:26:21.850 \longrightarrow 00:26:25.338$ Findings of our study.

NOTE Confidence: 0.89403415

 $00:26:25.340 \longrightarrow 00:26:26.664$ So as I mentioned,

NOTE Confidence: 0.89403415

 $00:26:26.664 \longrightarrow 00:26:28.319$ the beginning of my research

NOTE Confidence: 0.89403415

 $00:26:28.319 \longrightarrow 00:26:29.919$ on sleep disparities,

NOTE Confidence: 0.89403415

 $00{:}26{:}29.920 \dashrightarrow 00{:}26{:}31.465$ I was primarily looking at

NOTE Confidence: 0.89403415

 $00:26:31.465 \longrightarrow 00:26:34.067$ adults and I I was asking the

NOTE Confidence: 0.89403415

00:26:34.067 --> 00:26:36.035 question whether the mechanisms?

NOTE Confidence: 0.89403415

 $00:26:36.040 \longrightarrow 00:26:37.950$ How do we get there,

NOTE Confidence: 0.89403415

00:26:37.950 --> 00:26:40.841 why or black men sleeping an hour

NOTE Confidence: 0.89403415

 $00:26:40.841 \longrightarrow 00:26:43.638$ point for less than white women?

NOTE Confidence: 0.89403415

00:26:43.640 --> 00:26:44.756 What's going on?

NOTE Confidence: 0.89403415

 $00{:}26{:}44.756 \dashrightarrow 00{:}26{:}45.856$ He said, well,

NOTE Confidence: 0.89403415

 $00:26:45.856 \longrightarrow 00:26:47.992$ we have to figure out what

NOTE Confidence: 0.89403415

 $00:26:47.992 \longrightarrow 00:26:49.970$ happens across the life course.

 $00:26:49.970 \longrightarrow 00:26:51.454$ What's the trajectory of

NOTE Confidence: 0.89403415

00:26:51.454 --> 00:26:52.567 these sleep disparities?

NOTE Confidence: 0.89403415

 $00:26:52.570 \longrightarrow 00:26:54.034$ When do they begin?

NOTE Confidence: 0.89403415

 $00:26:54.034 \longrightarrow 00:26:55.864$ And that's when I got

NOTE Confidence: 0.89403415

 $00:26:55.864 \longrightarrow 00:26:57.408$ involved with the study,

NOTE Confidence: 0.89403415

 $00:26:57.410 \longrightarrow 00:26:58.894$ called the fragile families

NOTE Confidence: 0.89403415

 $00:26:58.894 \longrightarrow 00:27:00.749$ and child well being study.

NOTE Confidence: 0.89403415

00:27:00.750 --> 00:27:03.319 It's an excellent resource for many social

NOTE Confidence: 0.89403415

 $00{:}27{:}03.319 \dashrightarrow 00{:}27{:}05.588$ scientists and in more recent years,

NOTE Confidence: 0.89403415

 $00:27:05.590 \longrightarrow 00:27:08.389$ sleep researchers too.

NOTE Confidence: 0.89403415

 $00{:}27{:}08.390 \to 00{:}27{:}10.175$ Longitudinal birth cohort where they've

NOTE Confidence: 0.89403415

00:27:10.175 --> 00:27:11.603 been following individuals who,

NOTE Confidence: 0.89403415

 $00:27:11.610 \longrightarrow 00:27:13.038$ since they were they,

NOTE Confidence: 0.89403415

 $00:27:13.038 \longrightarrow 00:27:14.823$ were enrolled in the hospital.

NOTE Confidence: 0.89403415

 $00:27:14.830 \longrightarrow 00:27:16.262$ Their mothers were enrolled

NOTE Confidence: 0.89403415

 $00:27:16.262 \longrightarrow 00:27:17.694$ when they were born.

00:27:17.700 --> 00:27:19.132 The kids were born,

NOTE Confidence: 0.89403415

 $00:27:19.132 \longrightarrow 00:27:21.280$ and they've been followed at ages.

NOTE Confidence: 0.89403415

00:27:21.280 --> 00:27:21.924 Of course,

NOTE Confidence: 0.89403415

 $00:27:21.924 \longrightarrow 00:27:22.568$ at birth,

NOTE Confidence: 0.89403415

 $00:27:22.568 \longrightarrow 00:27:24.892$ 1359 and 15 were about to next

NOTE Confidence: 0.89403415

 $00:27:24.892 \longrightarrow 00:27:27.146$ month about to go back into the

NOTE Confidence: 0.89403415

 $00:27:27.146 \longrightarrow 00:27:28.740$ field and collect information

NOTE Confidence: 0.89403415

 $00:27:28.740 \longrightarrow 00:27:30.940$ on them as young adults.

NOTE Confidence: 0.89403415

 $00:27:30.940 \longrightarrow 00:27:33.355$ The young adult age 22 study and

NOTE Confidence: 0.89403415

 $00{:}27{:}33.355 \dashrightarrow 00{:}27{:}35.788$ the study was designed to have

NOTE Confidence: 0.89403415

 $00{:}27{:}35.788 \dashrightarrow 00{:}27{:}38.434$ enough power to look at disparities.

NOTE Confidence: 0.89403415

 $00:27:38.440 \longrightarrow 00:27:40.522$ By income and race and parents

NOTE Confidence: 0.89403415

 $00:27:40.522 \longrightarrow 00:27:42.690$ with low levels of Education.

NOTE Confidence: 0.89403415

00:27:42.690 --> 00:27:44.825 So it's really well suited

NOTE Confidence: 0.89403415

 $00:27:44.825 \longrightarrow 00:27:46.960$ to address some of the

 $00:27:47.056 \longrightarrow 00:27:48.888$ concerns that I have.

NOTE Confidence: 0.8827661

 $00:27:48.890 \longrightarrow 00:27:50.720$ I won't spend time here,

NOTE Confidence: 0.8827661

00:27:50.720 --> 00:27:54.023 but these are some of our aims to look

NOTE Confidence: 0.8827661

 $00:27:54.023 \longrightarrow 00:27:57.357$ at trajectory's multiple levels of.

NOTE Confidence: 0.8827661

 $00:27:57.360 \longrightarrow 00:27:59.025$ Predictors and determinants of sleep

NOTE Confidence: 0.8827661

 $00:27:59.025 \longrightarrow 00:28:01.542$ and then of course the outcomes of

NOTE Confidence: 0.8827661

 $00:28:01.542 \longrightarrow 00:28:04.470$ obesity and depression, which I'll just.

NOTE Confidence: 0.8827661

00:28:04.470 --> 00:28:06.790 Touch on slightly today.

NOTE Confidence: 0.8827661

 $00:28:06.790 \longrightarrow 00:28:09.542$ So we had about 3500 teens in the

NOTE Confidence: 0.8827661

00:28:09.542 --> 00:28:11.688 full survey in the full study,

NOTE Confidence: 0.8827661

00:28:11.690 --> 00:28:14.084 but in terms of who we actually

NOTE Confidence: 0.8827661

 $00:28:14.084 \longrightarrow 00:28:15.890$ got into the homes of,

NOTE Confidence: 0.8827661

 $00:28:15.890 \longrightarrow 00:28:17.640$ there was a random subset

NOTE Confidence: 0.8827661

 $00:28:17.640 \longrightarrow 00:28:19.040$ of about 1000 teens,

NOTE Confidence: 0.8827661

00:28:19.040 --> 00:28:22.190 800 of whom we were able to get actigraphy,

NOTE Confidence: 0.8827661

 $00:28:22.190 \longrightarrow 00:28:24.640$ and anybody who we got actigraphy on.

 $00:28:24.640 \longrightarrow 00:28:27.056$ We also collected a daily diary where they

NOTE Confidence: 0.8827661

 $00:28:27.056 \longrightarrow 00:28:29.537$ were asked questions about their behaviors,

NOTE Confidence: 0.8827661

 $00:28:29.540 \longrightarrow 00:28:30.590$ their screen use,

NOTE Confidence: 0.8827661

 $00:28:30.590 \longrightarrow 00:28:32.340$ their diet, etc that day,

NOTE Confidence: 0.8827661

 $00:28:32.340 \longrightarrow 00:28:34.440$ so this was the timing already.

NOTE Confidence: 0.8827661

 $00:28:34.440 \longrightarrow 00:28:36.990$ It's been almost five years since.

NOTE Confidence: 0.8827661

 $00:28:36.990 \longrightarrow 00:28:38.302$ Or more than that,

NOTE Confidence: 0.8827661

 $00:28:38.302 \longrightarrow 00:28:40.270$ for the early waves you know.

NOTE Confidence: 0.8827661

 $00:28:40.270 \longrightarrow 00:28:42.238$ Soon these data will be outdated,

NOTE Confidence: 0.8827661

 $00:28:42.240 \longrightarrow 00:28:44.244$ but we're having the ability to

NOTE Confidence: 0.8827661

 $00:28:44.244 \longrightarrow 00:28:46.302$ track them overtime where their

NOTE Confidence: 0.8827661

00:28:46.302 --> 00:28:48.270 sleep patterns at age 15 predictive

NOTE Confidence: 0.8827661

 $00:28:48.270 \longrightarrow 00:28:50.110$ of their outcomes at age 22.

NOTE Confidence: 0.8827661

00:28:50.110 --> 00:28:53.946 I'll ask me in a few years.

NOTE Confidence: 0.8827661

 $00:28:53.950 \longrightarrow 00:28:55.210$ Here's the distribution of

00:28:55.210 --> 00:28:57.100 for whom we got actigraphy on.

NOTE Confidence: 0.8827661

00:28:57.100 --> 00:28:58.990 I would say they were pretty

NOTE Confidence: 0.8827661

 $00:28:58.990 \longrightarrow 00:29:00.250$ good at following directions.

NOTE Confidence: 0.8827661

 $00{:}29{:}00.250 \dashrightarrow 00{:}29{:}03.085$ We said may lack the devices in seven days.

NOTE Confidence: 0.8827661

 $00:29:03.090 \longrightarrow 00:29:05.610$ Almost all of them did it in six,

NOTE Confidence: 0.8827661

 $00:29:05.610 \longrightarrow 00:29:10.540$ 7 or 8 besides the group who decided not to.

NOTE Confidence: 0.8827661

 $00:29:10.540 \longrightarrow 00:29:15.363$ And they were scored at or fail

NOTE Confidence: 0.8827661

00:29:15.363 --> 00:29:19.350 Buxtons Actigraphy lab in Penn State.

NOTE Confidence: 0.8827661

 $00{:}29{:}19.350 \dashrightarrow 00{:}29{:}21.737$ So the key variables we look at,

NOTE Confidence: 0.8827661

00:29:21.740 --> 00:29:23.440 our sleep duration, sleep quality,

NOTE Confidence: 0.8827661

 $00:29:23.440 \longrightarrow 00:29:24.367$ and sleep timing.

NOTE Confidence: 0.8827661

 $00:29:24.367 \longrightarrow 00:29:26.530$ There are other things we might be

NOTE Confidence: 0.8827661

00:29:26.595 --> 00:29:28.560 looking at regularity and beyond,

NOTE Confidence: 0.8827661

 $00:29:28.560 \longrightarrow 00:29:30.940$ but it's it goes on and on.

NOTE Confidence: 0.8827661

 $00:29:30.940 \longrightarrow 00:29:33.668$ We are enjoying the richness of these data.

NOTE Confidence: 0.8827661

 $00:29:33.670 \longrightarrow 00:29:36.022$ This is a cartoon of what the

 $00{:}29{:}36.022 \dashrightarrow 00{:}29{:}37.420$ actigraph output looks like.

NOTE Confidence: 0.8827661

 $00:29:37.420 \longrightarrow 00:29:38.815$ We used builds respironics watch

NOTE Confidence: 0.8827661

00:29:38.815 --> 00:29:41.021 is and we use the actigraph device

NOTE Confidence: 0.8827661

 $00:29:41.021 \longrightarrow 00:29:43.265$ on the hip to also simultaneously

NOTE Confidence: 0.8827661

00:29:43.265 --> 00:29:44.580 measure physical activity.

NOTE Confidence: 0.8827661

 $00:29:44.580 \longrightarrow 00:29:47.132$ Not going to go into all of the

NOTE Confidence: 0.8827661

 $00:29:47.132 \longrightarrow 00:29:49.160$ rest of the study, but.

NOTE Confidence: 0.8827661

 $00:29:49.160 \longrightarrow 00:29:52.040$ For the topic we are discussing,

NOTE Confidence: 0.8827661

 $00:29:52.040 \longrightarrow 00:29:54.924$ or so when did this study show

NOTE Confidence: 0.8827661

00:29:54.924 --> 00:29:56.910 about racial differences in sleep?

NOTE Confidence: 0.8827661

00:29:56.910 --> 00:30:00.246 First thing they showed in the age 9?

NOTE Confidence: 0.8827661

 $00:30:00.250 \dashrightarrow 00:30:02.826$ Data when it was parent reported data

NOTE Confidence: 0.8827661

 $00:30:02.826 \dashrightarrow 00:30:06.249$ is that there were disparities early in life.

NOTE Confidence: 0.8827661

 $00:30:06.250 \dashrightarrow 00:30:09.778$ At age 9 or measure as leep was where

NOTE Confidence: 0.8827661

 $00:30:09.778 \longrightarrow 00:30:13.090$ they getting sufficient sleep at age 9.

 $00:30:13.090 \longrightarrow 00:30:15.365$ Recommended at least nine hours

NOTE Confidence: 0.8827661

 $00{:}30{:}15.365 \dashrightarrow 00{:}30{:}18.084$ and there's about 60% fewer odds

NOTE Confidence: 0.8827661

 $00:30:18.084 \longrightarrow 00:30:21.213$ of black kids getting nine or more

NOTE Confidence: 0.8827661

00:30:21.213 --> 00:30:24.030 hours per night than white kids.

NOTE Confidence: 0.8827661

 $00{:}30{:}24.030 \dashrightarrow 00{:}30{:}26.766$ An also reduced odds of Hispanic

NOTE Confidence: 0.8827661

00:30:26.766 --> 00:30:28.590 children getting sufficient sleep,

NOTE Confidence: 0.8827661

 $00:30:28.590 \longrightarrow 00:30:31.789$ so this is to me quite telling.

NOTE Confidence: 0.8827661

 $00{:}30{:}31.790 \dashrightarrow 00{:}30{:}36.002$ I have some ideas in the next slide on.

NOTE Confidence: 0.8827661

00:30:36.010 --> 00:30:36.958 On what's happening,

NOTE Confidence: 0.8827661

 $00:30:36.958 \longrightarrow 00:30:39.736$ but at age 9 even we see differences

NOTE Confidence: 0.8827661

00:30:39.736 --> 00:30:40.720 in sleep.

NOTE Confidence: 0.8827661

 $00:30:40.720 \longrightarrow 00:30:42.525$ These were self reported that

NOTE Confidence: 0.8827661

 $00{:}30{:}42.525 \dashrightarrow 00{:}30{:}43.969$ self reported parent reported.

NOTE Confidence: 0.8827661

 $00:30:43.970 \longrightarrow 00:30:47.538$ When we get to the age 15 data.

NOTE Confidence: 0.8827661

 $00:30:47.540 \longrightarrow 00:30:50.078$ We see much bigger differences and

NOTE Confidence: 0.8827661

00:30:50.078 --> 00:30:52.580 we have it reported in minutes

00:30:52.580 --> 00:30:55.107 from Acta graphic sleep we see a

NOTE Confidence: 0.8827661

 $00:30:55.107 \longrightarrow 00:30:57.587$ 32 minute difference between black

NOTE Confidence: 0.8827661

00:30:57.587 --> 00:31:00.647 and white sleep between black and

NOTE Confidence: 0.8827661

 $00:31:00.650 \longrightarrow 00:31:02.762$ white teens on weeknights,

NOTE Confidence: 0.8827661

 $00:31:02.762 \longrightarrow 00:31:05.402$ and 41 minutes on weekends.

NOTE Confidence: 0.8827661

00:31:05.410 --> 00:31:06.194 Now, uh,

NOTE Confidence: 0.8827661

 $00:31:06.194 \longrightarrow 00:31:07.370$ two other studies,

NOTE Confidence: 0.8433218

00:31:07.370 --> 00:31:09.512 one in Pitts Burg by Karen

NOTE Confidence: 0.8433218

 $00:31:09.512 \longrightarrow 00:31:11.872$ Matthews and the other one in

NOTE Confidence: 0.8433218

 $00:31:11.872 \longrightarrow 00:31:14.007$ Cleveland that use actix graphics.

NOTE Confidence: 0.8433218

 $00:31:14.010 \longrightarrow 00:31:16.356$ Lee also show black white differences

NOTE Confidence: 0.8433218

 $00:31:16.356 \longrightarrow 00:31:17.920$ in sleep among teenagers.

NOTE Confidence: 0.8433218

 $00:31:17.920 \longrightarrow 00:31:19.880$ Ours is a national study.

NOTE Confidence: 0.8433218

 $00:31:19.880 \longrightarrow 00:31:23.008$ We had 20 cities involved in our study,

NOTE Confidence: 0.8433218

 $00:31:23.010 \longrightarrow 00:31:25.370$ but those other two community

00:31:25.370 --> 00:31:28.273 studies also showed about 20 minutes

NOTE Confidence: 0.8433218

 $00{:}31{:}28.273 \dashrightarrow 00{:}31{:}31.479$ different per per night for the kids.

NOTE Confidence: 0.8433218

 $00:31:31.480 \longrightarrow 00:31:33.262$ What I think is really interesting

NOTE Confidence: 0.8433218

 $00:31:33.262 \longrightarrow 00:31:35.710$ is we were able to code for napping.

NOTE Confidence: 0.8433218

 $00:31:35.710 \longrightarrow 00:31:38.446$ And what we found is that.

NOTE Confidence: 0.8433218

00:31:38.450 --> 00:31:41.690 There was competition E napping between

NOTE Confidence: 0.8433218

 $00:31:41.690 \longrightarrow 00:31:44.620$ black and white children in that.

NOTE Confidence: 0.8433218

00:31:44.620 --> 00:31:48.044 Night time sleep was shorter for black teens,

NOTE Confidence: 0.8433218

 $00{:}31{:}48.050 \dashrightarrow 00{:}31{:}50.600$ but they often made up for

NOTE Confidence: 0.8433218

 $00:31:50.600 \longrightarrow 00:31:52.770$ it during a daytime nap.

NOTE Confidence: 0.8433218

 $00:31:52.770 \longrightarrow 00:31:56.194$ So if you look at 24 hours sleep,

NOTE Confidence: 0.8433218

 $00:31:56.200 \longrightarrow 00:31:58.378$ you don't get the same racial

NOTE Confidence: 0.8433218

 $00:31:58.378 \longrightarrow 00:32:00.411$ differences in sleep and what's

NOTE Confidence: 0.8433218

 $00{:}32{:}00.411 \dashrightarrow 00{:}32{:}02.431$ particularly interesting is there's

NOTE Confidence: 0.8433218

 $00:32:02.431 \longrightarrow 00:32:04.451$ work in preschoolers showing

NOTE Confidence: 0.8433218

 $00:32:04.451 \longrightarrow 00:32:07.047$ the same thing that night time

 $00:32:07.047 \longrightarrow 00:32:09.067$ sleep among black preschoolers is

NOTE Confidence: 0.8433218

 $00:32:09.070 \longrightarrow 00:32:10.790$ shorter than white preschoolers,

NOTE Confidence: 0.8433218

00:32:10.790 --> 00:32:12.510 but there's Compens Atory,

NOTE Confidence: 0.8433218

 $00:32:12.510 \longrightarrow 00:32:15.330$ and happening, so this may not.

NOTE Confidence: 0.8433218

 $00:32:15.330 \dashrightarrow 00:32:17.696$ Translate to the same outcomes that we

NOTE Confidence: 0.8433218

 $00:32:17.696 \longrightarrow 00:32:20.277$ see in adults where there may not be.

NOTE Confidence: 0.8433218

00:32:20.280 --> 00:32:21.930 This can pensa Tori napping,

NOTE Confidence: 0.8433218

 $00:32:21.930 \longrightarrow 00:32:23.904$ but it is interesting that these

NOTE Confidence: 0.8433218

 $00:32:23.904 \longrightarrow 00:32:25.560$ disparities exist early in life.

NOTE Confidence: 0.8433218

 $00:32:25.560 \longrightarrow 00:32:28.600$ At ages 9 and 15.

NOTE Confidence: 0.8433218

 $00:32:28.600 \dashrightarrow 00:32:33.048$ Here's some more results from the age 9,

NOTE Confidence: 0.8433218

 $00:32:33.050 \longrightarrow 00:32:35.678$ just highlighting that caregiver

NOTE Confidence: 0.8433218

 $00:32:35.678 \longrightarrow 00:32:38.963$ routines are extremely important for.

NOTE Confidence: 0.8433218

 $00:32:38.970 \longrightarrow 00:32:40.534$ Predicting sufficient sleep duration

NOTE Confidence: 0.8433218

 $00:32:40.534 \longrightarrow 00:32:42.489$ almost these are odds ratios.

00:32:42.490 --> 00:32:44.800 You almost never see odds ratios

NOTE Confidence: 0.8433218

 $00{:}32{:}44.800 \dashrightarrow 00{:}32{:}47.197$ it seven fold 7 times higher odds

NOTE Confidence: 0.8433218

00:32:47.197 --> 00:32:48.749 8 times higher odds.

NOTE Confidence: 0.8433218

 $00:32:48.750 \longrightarrow 00:32:51.096$ If you have an early bedtime

NOTE Confidence: 0.8433218

00:32:51.096 --> 00:32:52.660 9:00 PM or earlier,

NOTE Confidence: 0.8433218

00:32:52.660 --> 00:32:54.994 an regularly enforced for a night

NOTE Confidence: 0.8433218

00:32:54.994 --> 00:32:57.551 for more nights per week compared

NOTE Confidence: 0.8433218

 $00:32:57.551 \longrightarrow 00:32:59.861$ to know better huge difference

NOTE Confidence: 0.8433218

 $00{:}32{:}59.861 \dashrightarrow 00{:}33{:}02.332$ is huge importance of having

NOTE Confidence: 0.8433218

 $00:33:02.332 \longrightarrow 00:33:04.340$ and enforcing bedtime routines.

NOTE Confidence: 0.8433218

 $00:33:04.340 \longrightarrow 00:33:07.826$ And in the same data same population.

NOTE Confidence: 0.8433218

 $00:33:07.830 \longrightarrow 00:33:10.914$ We showed that bedtime routines are

NOTE Confidence: 0.8433218

 $00:33:10.914 \longrightarrow 00:33:12.970$ disproportionately not enforced among

NOTE Confidence: 0.8433218

00:33:13.045 --> 00:33:15.300 my children of minority mothers,

NOTE Confidence: 0.8433218

 $00:33:15.300 \longrightarrow 00:33:18.786$ and we also show that the benefit

NOTE Confidence: 0.8433218

 $00:33:18.786 \longrightarrow 00:33:20.280$ of bedtime routines,

 $00:33:20.280 \longrightarrow 00:33:24.270$ especially language based bedtime routines.

NOTE Confidence: 0.8433218

 $00:33:24.270 \longrightarrow 00:33:26.448$ Pay off in terms of better

NOTE Confidence: 0.8433218

 $00:33:26.448 \longrightarrow 00:33:27.174$ cognitive outcomes.

NOTE Confidence: 0.8433218

00:33:27.180 --> 00:33:29.292 This specifically that Pvt test of

NOTE Confidence: 0.8433218

 $00:33:29.292 \longrightarrow 00:33:31.876$ verbal skills goes up so there there

NOTE Confidence: 0.8433218

 $00:33:31.876 \longrightarrow 00:33:34.096$ may be structural reasons behind that.

NOTE Confidence: 0.8433218

00:33:34.100 --> 00:33:37.232 If if mom or dad is working in multiple

NOTE Confidence: 0.8433218

 $00:33:37.232 \longrightarrow 00:33:39.559$ second job and working at night,

NOTE Confidence: 0.8433218

 $00:33:39.560 \longrightarrow 00:33:41.375$ it's harder to enforce routines

NOTE Confidence: 0.8433218

 $00:33:41.375 \longrightarrow 00:33:42.464$ and have that,

NOTE Confidence: 0.8433218

 $00:33:42.470 \longrightarrow 00:33:44.974$ but that may be part of what's explaining

NOTE Confidence: 0.8433218

 $00:33:44.974 \longrightarrow 00:33:47.199$ some of these early disparities.

NOTE Confidence: 0.8433218

 $00{:}33{:}47.200 \dashrightarrow 00{:}33{:}49.804$ We also found that respect to the

NOTE Confidence: 0.8433218

 $00{:}33{:}49.804 \dashrightarrow 00{:}33{:}52.637$ age 15 and I should have clarified

NOTE Confidence: 0.8433218

 $00:33:52.637 \longrightarrow 00:33:55.073$ that in the age 15 data.

 $00:33:55.080 \longrightarrow 00:33:55.487$ Remember,

NOTE Confidence: 0.8433218

 $00{:}33{:}55.487 \dashrightarrow 00{:}33{:}57.522$ the field investigators went into

NOTE Confidence: 0.8433218

00:33:57.522 --> 00:34:00.258 these peoples homes to give them the

NOTE Confidence: 0.8433218

 $00:34:00.258 \longrightarrow 00:34:02.680$ devices and they took notes they recorded.

NOTE Confidence: 0.8433218

 $00:34:02.680 \longrightarrow 00:34:05.046$ If they if when they were doing

NOTE Confidence: 0.8433218

 $00:34:05.046 \longrightarrow 00:34:07.239$ their one hour long interview.

NOTE Confidence: 0.8433218

 $00:34:07.240 \longrightarrow 00:34:09.140$ If they were interrupted and

NOTE Confidence: 0.8433218

 $00{:}34{:}09.140 \dashrightarrow 00{:}34{:}10.660$ interruption could be allowed.

NOTE Confidence: 0.8433218

 $00:34:10.660 \longrightarrow 00:34:11.800$ Television was on,

NOTE Confidence: 0.8433218

 $00:34:11.800 \longrightarrow 00:34:12.940$ dog was barking,

NOTE Confidence: 0.8433218

 $00:34:12.940 \longrightarrow 00:34:15.803$ the phone kept ringing and if they

NOTE Confidence: 0.8433218

 $00:34:15.803 \longrightarrow 00:34:18.462$ if they reported that they were

NOTE Confidence: 0.8433218

 $00{:}34{:}18.462 \dashrightarrow 00{:}34{:}21.156$ interrupted at least three times that

NOTE Confidence: 0.8433218

 $00:34:21.156 \longrightarrow 00:34:24.020$ was associated with an increased.

NOTE Confidence: 0.8433218

 $00:34:24.020 \longrightarrow 00:34:26.048$ Decrement decrement asleep by

NOTE Confidence: 0.8433218

 $00:34:26.048 \longrightarrow 00:34:27.569$ about 21 minutes.

 $00:34:27.570 \longrightarrow 00:34:29.590$ We didn't see that household

NOTE Confidence: 0.8433218

 $00:34:29.590 \longrightarrow 00:34:31.206$ chaos was more common,

NOTE Confidence: 0.8433218

 $00:34:31.210 \longrightarrow 00:34:33.230$ or this interviewer interruption was

NOTE Confidence: 0.8433218

00:34:33.230 --> 00:34:35.250 more common among minority families,

NOTE Confidence: 0.8433218

 $00:34:35.250 \longrightarrow 00:34:36.930$ so it probably doesn't,

NOTE Confidence: 0.8433218

 $00:34:36.930 \longrightarrow 00:34:39.450$ or it doesn't attenuate racial disparities

NOTE Confidence: 0.8470325

 $00:34:39.517 \longrightarrow 00:34:41.845$ in sleep, but it is another dimension

NOTE Confidence: 0.8470325

 $00:34:41.845 \longrightarrow 00:34:45.020$ of what could be going on in some

NOTE Confidence: 0.8470325

00:34:45.020 --> 00:34:46.816 households to affect negatively

NOTE Confidence: 0.8470325

 $00:34:46.816 \dashrightarrow 00:34:49.208$ affect sleep quality. Interesting Lee.

NOTE Confidence: 0.8470325

 $00{:}34{:}49.208 \dashrightarrow 00{:}34{:}52.322$ So no Association between bedroom sharing

NOTE Confidence: 0.8470325

 $00:34:52.322 \longrightarrow 00:34:56.249$ or a self reported in measure of chaos.

NOTE Confidence: 0.8470325

00:34:56.250 --> 00:34:58.638 So what else is going on

NOTE Confidence: 0.8470325

 $00:34:58.638 \longrightarrow 00:35:00.236$ with teenagers, of course.

NOTE Confidence: 0.8470325

 $00:35:00.236 \longrightarrow 00:35:03.022$ Here's this beautiful graphic of an school.

 $00{:}35{:}03.030 \dashrightarrow 00{:}35{:}05.364$ Start times. This is using data

NOTE Confidence: 0.8470325

 $00:35:05.364 \longrightarrow 00:35:07.819$ from 20 cities worth of schools.

NOTE Confidence: 0.8470325

 $00:35:07.820 \dashrightarrow 00:35:09.820$ Active graphic measures of sleep.

NOTE Confidence: 0.8470325

 $00:35:09.820 \longrightarrow 00:35:13.015$ The only kids who were in bed enough time

NOTE Confidence: 0.8470325

 $00:35:13.015 \longrightarrow 00:35:16.196$ to get the minimum 8 hours overnight.

NOTE Confidence: 0.8470325

 $00:35:16.200 \longrightarrow 00:35:18.588$ 'cause these are 15 year olds.

NOTE Confidence: 0.8470325

 $00:35:18.590 \longrightarrow 00:35:20.174$ The minimum recommended amount

NOTE Confidence: 0.8470325

 $00:35:20.174 \longrightarrow 00:35:23.016$ of time in bed were those whose

NOTE Confidence: 0.8470325

00:35:23.016 --> 00:35:25.380 high schools start after 8:30 AM.

NOTE Confidence: 0.8470325

 $00:35:25.380 \longrightarrow 00:35:28.005$ And there's just this beautiful

NOTE Confidence: 0.8470325

00:35:28.005 --> 00:35:29.055 dose response.

NOTE Confidence: 0.8470325

00:35:29.060 --> 00:35:29.866 Of course,

NOTE Confidence: 0.8470325

 $00:35:29.866 \longrightarrow 00:35:32.284$ actor graphics sleep in the square

NOTE Confidence: 0.8470325

 $00:35:32.284 \longrightarrow 00:35:34.390$ is shorter than time in bed.

NOTE Confidence: 0.8470325

 $00:35:34.390 \longrightarrow 00:35:36.058$ That makes perfect sense,

NOTE Confidence: 0.8470325

 $00:35:36.058 \longrightarrow 00:35:39.314$ but if your school starts later you get

 $00:35:39.314 \longrightarrow 00:35:42.010$ more time in bed and more time asleep,

NOTE Confidence: 0.8470325

 $00:35:42.010 \longrightarrow 00:35:43.920$ so that's the structural factor.

NOTE Confidence: 0.8470325

00:35:43.920 --> 00:35:44.638 Of course,

NOTE Confidence: 0.8470325

00:35:44.638 --> 00:35:46.792 we all know about the physiological

NOTE Confidence: 0.8470325

 $00{:}35{:}46.792 \dashrightarrow 00{:}35{:}49.249$ phase delay that occurs during puberty.

NOTE Confidence: 0.8470325

 $00{:}35{:}49.250 \dashrightarrow 00{:}35{:}51.420$ Pushing kids to stay up later and

NOTE Confidence: 0.8470325

 $00:35:51.420 \longrightarrow 00:35:54.265$ then there are all these other factors

NOTE Confidence: 0.8470325

00:35:54.265 --> 00:35:56.109 that happened during adolescence,

NOTE Confidence: 0.8470325

 $00{:}35{:}56.110 \dashrightarrow 00{:}35{:}57.286$ specially screen time caffeine

NOTE Confidence: 0.8470325

 $00:35:57.286 \longrightarrow 00:36:00.030$ consumption and a whole range of other.

NOTE Confidence: 0.8470325

 $00:36:00.030 \longrightarrow 00:36:01.059$ High school pressures.

NOTE Confidence: 0.8445937

 $00:36:03.360 \longrightarrow 00:36:06.720$ I'm going to show here some results from

NOTE Confidence: 0.8445937

 $00:36:06.720 \longrightarrow 00:36:10.080$ our study on neighborhood disadvantage,

NOTE Confidence: 0.8445937

 $00:36:10.080 \longrightarrow 00:36:12.550$ showing that more disadvantaged neighborhoods

NOTE Confidence: 0.8445937

 $00:36:12.550 \longrightarrow 00:36:16.290$ have more waso and lower sleep efficiency.

00:36:16.290 --> 00:36:20.098 Not huge effects, but there's something and

NOTE Confidence: 0.8445937

 $00{:}36{:}20.098 \operatorname{{\mathsf{-->}}} 00{:}36{:}24.993$ also we have data showing that kids who

NOTE Confidence: 0.8445937

 $00:36:24.993 \longrightarrow 00:36:28.678$ had consistent enforced routines early in

NOTE Confidence: 0.8445937

 $00:36:28.678 \longrightarrow 00:36:32.521$ life ages 5 and nine were more likely to.

NOTE Confidence: 0.8445937

 $00:36:32.530 \longrightarrow 00:36:35.300$ Have lower body mass index.

NOTE Confidence: 0.8445937

00:36:35.300 --> 00:36:37.376 That's Group One group.

NOTE Confidence: 0.8445937

 $00:36:37.376 \longrightarrow 00:36:42.092$ The green group is Group 4 is the reference

NOTE Confidence: 0.8445937

 $00:36:42.092 \longrightarrow 00:36:46.310$ group and the people who had no bedtime

NOTE Confidence: 0.8445937

 $00:36:46.310 \longrightarrow 00:36:50.048$ routine had shorter sleep duration by

NOTE Confidence: 0.8445937

00:36:50.048 --> 00:36:56.030 about .3 hours and higher body mass index.

NOTE Confidence: 0.8445937

00:36:56.030 --> 00:36:59.630 I don't really have a huge amount of time,

NOTE Confidence: 0.8445937

 $00:36:59.630 \longrightarrow 00:37:03.198$ but I I do want to touch on a few of

NOTE Confidence: 0.8445937

 $00:37:03.198 \longrightarrow 00:37:06.132$ my data points about screens because

NOTE Confidence: 0.8445937

 $00{:}37{:}06.132 \dashrightarrow 00{:}37{:}09.230$ I think that's such a key issue,

NOTE Confidence: 0.8445937

 $00:37:09.230 \longrightarrow 00:37:11.130$ especially during the pandemic when

NOTE Confidence: 0.8445937

 $00:37:11.130 \longrightarrow 00:37:13.786$ we are relying on screens to basically

 $00:37:13.786 \longrightarrow 00:37:15.844$ get all of our social interactions

NOTE Confidence: 0.8445937

 $00:37:15.844 \longrightarrow 00:37:18.029$ and our schooling interactions.

NOTE Confidence: 0.8445937

 $00:37:18.030 \longrightarrow 00:37:21.225$ Here's a figure of this is from Jenn Twinkies

NOTE Confidence: 0.8445937

 $00:37:21.225 \longrightarrow 00:37:24.429$ work looking at short sleep among teenagers.

NOTE Confidence: 0.8445937

 $00:37:24.430 \longrightarrow 00:37:26.010$ How it's gone up.

NOTE Confidence: 0.8445937

 $00:37:26.010 \longrightarrow 00:37:28.380$ Since to that between 2009 and

NOTE Confidence: 0.8445937

 $00:37:28.464 \longrightarrow 00:37:31.180$ 2015 you may say that's old news,

NOTE Confidence: 0.8445937

 $00:37:31.180 \longrightarrow 00:37:34.029$ why are you telling me that the

NOTE Confidence: 0.8445937

 $00:37:34.029 \longrightarrow 00:37:36.666$ reason is because there is a kink

NOTE Confidence: 0.8445937

 $00:37:36.666 \longrightarrow 00:37:39.330$ up in 2012 and 20's work nicely?

NOTE Confidence: 0.8445937

 $00:37:39.330 \dashrightarrow 00:37:42.046$ Medicine shows the only thing that changed.

NOTE Confidence: 0.8445937

 $00:37:42.050 \longrightarrow 00:37:44.840$ Basically between 2000 eleven 2013 is

NOTE Confidence: 0.8445937

 $00{:}37{:}44.840 \dashrightarrow 00{:}37{:}47.040$ the pervasiveness of smartphone use.

NOTE Confidence: 0.8445937

 $00:37:47.040 \longrightarrow 00:37:49.220$ So more and more teens,

NOTE Confidence: 0.8445937

 $00:37:49.220 \longrightarrow 00:37:51.245$ especially as we're bringing our

00:37:51.245 --> 00:37:54.000 devices not just to our bedrooms,

NOTE Confidence: 0.8445937

 $00:37:54.000 \longrightarrow 00:37:56.610$ but into our beds with us,

NOTE Confidence: 0.8445937

 $00{:}37{:}56.610 \dashrightarrow 00{:}37{:}59.262$ using them as a larm clocks and

NOTE Confidence: 0.8445937

 $00:37:59.262 \longrightarrow 00:38:01.948$ goodnight pillows and all of that

NOTE Confidence: 0.8445937

 $00:38:01.948 \longrightarrow 00:38:04.438$ is affecting our ability to sleep.

NOTE Confidence: 0.8445937

00:38:04.440 --> 00:38:07.920 I won't go into great detail on this,

NOTE Confidence: 0.8445937

 $00{:}38{:}07.920 \dashrightarrow 00{:}38{:}10.464$ but I'm fascinated by the literature

NOTE Confidence: 0.8445937

 $00:38:10.464 \longrightarrow 00:38:13.555$ and work showing that our reliance on

NOTE Confidence: 0.8445937

 $00{:}38{:}13.555 \dashrightarrow 00{:}38{:}16.189$ screens is interfering with our sleep,

NOTE Confidence: 0.8445937

 $00:38:16.190 \longrightarrow 00:38:17.396$ especially among teenagers.

NOTE Confidence: 0.8445937

 $00:38:17.396 \longrightarrow 00:38:19.934$ Over 90% of studies that look at screens

NOTE Confidence: 0.8445937

 $00:38:19.934 \longrightarrow 00:38:21.906$ and sleep show this adverse Association

NOTE Confidence: 0.8445937

 $00:38:21.906 \longrightarrow 00:38:24.377$ and the remaining 8% shown a neutral.

NOTE Confidence: 0.8445937

 $00:38:24.377 \longrightarrow 00:38:25.653$ Nobody's saying screens are

NOTE Confidence: 0.8445937

 $00:38:25.653 \longrightarrow 00:38:27.000$ good for your sleep.

NOTE Confidence: 0.8445937

00:38:27.000 --> 00:38:29.289 Maybe if you're doing a meditation app,

 $00:38:29.290 \longrightarrow 00:38:30.915$ but that's not really why

NOTE Confidence: 0.8445937

 $00:38:30.915 \longrightarrow 00:38:32.215$ people are using them.

NOTE Confidence: 0.8445937

 $00:38:32.220 \longrightarrow 00:38:33.520$ And as I said,

NOTE Confidence: 0.8445937

 $00:38:33.520 \longrightarrow 00:38:35.145$ people are using these devices.

NOTE Confidence: 0.8445937

 $00:38:35.150 \longrightarrow 00:38:36.780$ Not only is alarm clocks,

NOTE Confidence: 0.8445937

 $00:38:36.780 \longrightarrow 00:38:39.090$ but they check them in

NOTE Confidence: 0.8445937

 $00:38:39.090 \longrightarrow 00:38:41.400$ the middle of the night.

NOTE Confidence: 0.8445937

 $00{:}38{:}41.400 \dashrightarrow 00{:}38{:}44.208$ Is pervasive and our data from the age

NOTE Confidence: 0.8445937

 $00:38:44.208 \longrightarrow 00:38:47.472$ 15 show that screen use is associated

NOTE Confidence: 0.8445937

00:38:47.472 --> 00:38:49.952 with worse problems falling asleep,

NOTE Confidence: 0.8445937

 $00:38:49.960 \longrightarrow 00:38:54.046$ staying asleep in shorter sleep duration?

NOTE Confidence: 0.8445937

 $00{:}38{:}54.050 \dashrightarrow 00{:}38{:}55.270$ Above and beyond depressed

NOTE Confidence: 0.8445937

 $00{:}38{:}55.270 \dashrightarrow 00{:}38{:}55.880$ depressive symptoms.

NOTE Confidence: 0.8445937

 $00:38:55.880 \dashrightarrow 00:38:58.064$ So I know I'm going off the topic

NOTE Confidence: 0.8445937

 $00:38:58.064 \longrightarrow 00:39:00.680$ of fragile families, but this is.

 $00:39:00.680 \longrightarrow 00:39:04.040$ This is the fun one for your.

NOTE Confidence: 0.8445937

00:39:04.040 --> 00:39:04.796 Your Thanks giving,

NOTE Confidence: 0.8445937

 $00:39:04.796 \longrightarrow 00:39:07.820$ whatever form it may be in this year.

NOTE Confidence: 0.8445937

 $00:39:07.820 \longrightarrow 00:39:09.970$ If somebody says to you, you know.

NOTE Confidence: 0.8445937

 $00:39:09.970 \longrightarrow 00:39:12.490$ Why should I care about sleep?

NOTE Confidence: 0.8445937

00:39:12.490 --> 00:39:15.290 Why should I get off of my screens,

NOTE Confidence: 0.8445937

 $00:39:15.290 \longrightarrow 00:39:17.396$ especially on thinking of your nephew?

NOTE Confidence: 0.8445937

 $00:39:17.400 \longrightarrow 00:39:20.559$ What your high school age and after he says,

NOTE Confidence: 0.8445937

 $00{:}39{:}20.560 \dashrightarrow 00{:}39{:}20.928 \ \mathrm{say},$

NOTE Confidence: 0.8445937

 $00:39:20.928 \longrightarrow 00:39:22.768$ do you know that professional

NOTE Confidence: 0.8445937

 $00{:}39{:}22.768 \dashrightarrow 00{:}39{:}24.981$ athletes do better when they put

NOTE Confidence: 0.8445937

00:39:24.981 --> 00:39:26.997 their phones away and they're off

NOTE Confidence: 0.8445937

 $00:39:26.997 \longrightarrow 00:39:29.326$ Twitter at night and this is proven.

NOTE Confidence: 0.8445937

 $00:39:29.330 \longrightarrow 00:39:31.436$ This is published in sleep health.

NOTE Confidence: 0.8445937

00:39:31.440 --> 00:39:33.195 We looked my colleague Jason

NOTE Confidence: 0.8445937

00:39:33.195 --> 00:39:34.950 Jones who is a sociologist.

00:39:34.950 --> 00:39:37.407 Stony Brook looked at two public datasets.

NOTE Confidence: 0.8335232

 $00:39{:}37.410 \dashrightarrow 00{:}39{:}39.390$ We merged the Twitter records

NOTE Confidence: 0.8335232

 $00:39:39.390 \longrightarrow 00:39:41.370$ of 112 verified NBA players.

NOTE Confidence: 0.8335232

 $00:39:41.370 \longrightarrow 00:39:44.310$ And we merged 30,000 tweets with

NOTE Confidence: 0.8335232

 $00:39:44.310 \longrightarrow 00:39:46.721$ their performance on next days

NOTE Confidence: 0.8335232

 $00:39:46.721 \longrightarrow 00:39:49.649$ games an what we are able to show.

NOTE Confidence: 0.8335232

 $00:39:49.650 \longrightarrow 00:39:53.520$ It's kind of amazing is that if they were

NOTE Confidence: 0.8335232

 $00:39:53.520 \longrightarrow 00:39:57.769$ up late at night tweeting after 11:00 PM.

NOTE Confidence: 0.8335232

 $00:39:57.770 \longrightarrow 00:40:00.356$ They performed worse the next day.

NOTE Confidence: 0.8335232

 $00:40:00.360 \longrightarrow 00:40:02.747$ By about one point and they don't.

NOTE Confidence: 0.8335232

 $00:40:02.750 \longrightarrow 00:40:05.648$ If you add up all the players

NOTE Confidence: 0.8335232

 $00:40:05.648 \longrightarrow 00:40:08.210$ on team for everybody's.

NOTE Confidence: 0.8335232

 $00:40:08.210 \longrightarrow 00:40:10.004$ Staying up late,

NOTE Confidence: 0.8335232

00:40:10.004 --> 00:40:12.396 they're going to have.

NOTE Confidence: 0.8335232

 $00{:}40{:}12.400 \dashrightarrow 00{:}40{:}14.235$ Fewer points scored an also

 $00:40:14.235 \longrightarrow 00:40:16.070$ fewer minutes on the court,

NOTE Confidence: 0.8335232

 $00{:}40{:}16.070 \dashrightarrow 00{:}40{:}19.310$ so and I would say the most powerful effect

NOTE Confidence: 0.8335232

 $00:40:19.310 \longrightarrow 00:40:22.679$ that we saw was a drop in shooting accuracy.

NOTE Confidence: 0.8335232

 $00:40:22.680 \longrightarrow 00:40:25.249$ The amount of shots that they got.

NOTE Confidence: 0.8335232

 $00:40:25.250 \longrightarrow 00:40:27.665$ Here's I think Mrs points per game

NOTE Confidence: 0.8335232

00:40:27.665 --> 00:40:30.318 from about $10\ 1/2$ points per game down

NOTE Confidence: 0.8335232

 $00:40:30.318 \longrightarrow 00:40:33.253$ to nine and a half with some slight

NOTE Confidence: 0.8335232

 $00:40:33.253 \longrightarrow 00:40:35.887$ variation between home and away games.

NOTE Confidence: 0.8335232

 $00{:}40{:}35.890 \dashrightarrow 00{:}40{:}38.370$ Actually there are similar.

NOTE Confidence: 0.8335232

 $00:40:38.370 \longrightarrow 00:40:42.276$ But here's the one for shooting accuracy.

NOTE Confidence: 0.8335232

 $00{:}40{:}42.280 \to 00{:}40{:}45.325$ If you were a late night Twitter,

NOTE Confidence: 0.8335232

 $00:40:45.330 \longrightarrow 00:40:47.946$ which means tweeting after 11:00 PM,

NOTE Confidence: 0.8335232

00:40:47.950 --> 00:40:49.690 your shooting accuracy dropped

NOTE Confidence: 0.8335232

 $00:40:49.690 \longrightarrow 00:40:52.744$ from about 45% down to 43 1/2%.

NOTE Confidence: 0.8335232

 $00:40:52.744 \longrightarrow 00:40:55.360$ So that's a pretty significant drop.

NOTE Confidence: 0.8335232

 $00:40:55.360 \longrightarrow 00:40:57.540$ And if you are infrequent,

00:40:57.540 --> 00:40:59.284 late night Twitter tweeting

NOTE Confidence: 0.8335232

 $00:40:59.284 \longrightarrow 00:41:01.900$ headed even bigger effect on you.

NOTE Confidence: 0.8335232

 $00:41:01.900 \longrightarrow 00:41:05.815$ And it also had a big effect on you.

NOTE Confidence: 0.8335232

 $00:41:05.820 \longrightarrow 00:41:08.436$ If it was an away game.

NOTE Confidence: 0.8335232

 $00{:}41{:}08.440 \longrightarrow 00{:}41{:}13.184$ So this is the message that I say.

NOTE Confidence: 0.8335232

00:41:13.190 --> 00:41:14.710 Speak to your audience.

NOTE Confidence: 0.8335232

00:41:14.710 --> 00:41:17.960 Figure out how how you can meet them

NOTE Confidence: 0.8335232

 $00:41:17.960 \longrightarrow 00:41:20.185$ with something they care about.

NOTE Confidence: 0.8335232

00:41:20.190 --> 00:41:22.250 Teenage boys don't care about

NOTE Confidence: 0.8335232

 $00:41:22.250 \longrightarrow 00:41:23.898$ the effects on metabolism,

NOTE Confidence: 0.8335232

 $00:41:23.900 \longrightarrow 00:41:26.828$ but they might care about if they're going

NOTE Confidence: 0.8335232

 $00:41:26.828 \longrightarrow 00:41:30.079$ to do better in their basketball game.

NOTE Confidence: 0.8335232

 $00{:}41{:}30.080 \dashrightarrow 00{:}41{:}33.321$ And so that's that's my message on

NOTE Confidence: 0.8335232

00:41:33.321 --> 00:41:36.346 using big data to help understand

NOTE Confidence: 0.8335232

 $00:41:36.346 \longrightarrow 00:41:38.398$ the power of sleep.

 $00:41:38.400 \longrightarrow 00:41:40.698$ I have one other follow up.

NOTE Confidence: 0.8335232

 $00{:}41{:}40.700 \dashrightarrow 00{:}41{:}42.615$ We're still in the process

NOTE Confidence: 0.8335232

 $00:41:42.615 \longrightarrow 00:41:44.147$ of collecting some data.

NOTE Confidence: 0.8335232

 $00:41:44.150 \longrightarrow 00:41:45.678$ What's happened to sleep

NOTE Confidence: 0.8335232

00:41:45.678 --> 00:41:47.206 among teenagers since covid?

NOTE Confidence: 0.8335232

 $00:41:47.210 \longrightarrow 00:41:49.779$ I'm involved in the study down and

NOTE Confidence: 0.8335232

00:41:49.779 --> 00:41:51.736 Elana suburbs schools that actually

NOTE Confidence: 0.8335232

 $00:41:51.736 \longrightarrow 00:41:54.094$ opened and closed within one week.

NOTE Confidence: 0.8335232

 $00{:}41{:}54.100 \dashrightarrow 00{:}41{:}56.858$ But we collected data from them before

NOTE Confidence: 0.8335232

 $00:41:56.858 \longrightarrow 00:41:59.985$ the lock down and then in the month

NOTE Confidence: 0.8335232

 $00{:}41{:}59.985 \dashrightarrow 00{:}42{:}02.530$ after the lockdown so March and May,

NOTE Confidence: 0.8335232

 $00:42:02.530 \longrightarrow 00:42:05.239$ and in both of these counties are

NOTE Confidence: 0.8335232

 $00:42:05.239 \longrightarrow 00:42:07.778$ two SIM County to high schools.

NOTE Confidence: 0.8335232

00:42:07.780 --> 00:42:10.244 We saw an increase in sleep duration,

NOTE Confidence: 0.8335232

 $00:42:10.250 \longrightarrow 00:42:11.634$ which is pretty cool.

NOTE Confidence: 0.8335232

00:42:11.634 --> 00:42:14.489 They were going to going to bed later,

 $00:42:14.490 \longrightarrow 00:42:16.470$ but also waking up later so

NOTE Confidence: 0.8335232

 $00:42:16.470 \longrightarrow 00:42:18.370$ there's a shift in timing,

NOTE Confidence: 0.8335232

 $00:42:18.370 \longrightarrow 00:42:19.778$ which is consistent with

NOTE Confidence: 0.8335232

 $00:42:19.778 \longrightarrow 00:42:21.186$ what we would expect.

NOTE Confidence: 0.8335232

 $00{:}42{:}21.190 \dashrightarrow 00{:}42{:}23.472$ But unfortunately we also saw increases in

NOTE Confidence: 0.8335232

 $00{:}42{:}23.472 \dashrightarrow 00{:}42{:}25.430$ in somnia symptoms and napping behaviors,

NOTE Confidence: 0.8335232

 $00:42:25.430 \longrightarrow 00:42:28.960$ which I don't have as much of a problem with.

NOTE Confidence: 0.8335232

 $00:42:28.960 \longrightarrow 00:42:31.048$ But this is actually paralleled

NOTE Confidence: 0.8335232

 $00:42:31.048 \longrightarrow 00:42:33.200$ in some studies in adults too,

NOTE Confidence: 0.8335232

 $00:42:33.200 \longrightarrow 00:42:35.872$ but these are kind of hot off the

NOTE Confidence: 0.8335232

 $00{:}42{:}35.872 \dashrightarrow 00{:}42{:}38.536$ presses from our study in Georgia, so.

NOTE Confidence: 0.8335232

00:42:38.536 --> 00:42:41.308 I know I'm running a little long,

NOTE Confidence: 0.8335232

 $00{:}42{:}41.310 \dashrightarrow 00{:}42{:}43.710$ I'm just going to end on with some

NOTE Confidence: 0.8335232

00:42:43.710 --> 00:42:45.882 summary in future directions to get

NOTE Confidence: 0.8335232

 $00:42:45.882 \longrightarrow 00:42:49.000$ back to this topic about racial disparities.

 $00:42:49.000 \longrightarrow 00:42:51.928$ We know that they begin early in life.

NOTE Confidence: 0.8335232

 $00:42:51.930 \longrightarrow 00:42:53.760$ Do they begin in infancy?

NOTE Confidence: 0.8335232

 $00:42:53.760 \longrightarrow 00:42:54.126$ Maybe,

NOTE Confidence: 0.8335232

 $00:42:54.126 \longrightarrow 00:42:55.956$ but they definitely persist in

NOTE Confidence: 0.8335232

00:42:55.956 --> 00:42:57.420 preschool school age years.

NOTE Confidence: 0.8335232

00:42:57.420 --> 00:42:58.892 An adolescence through adulthood,

NOTE Confidence: 0.8335232

 $00:42:58.892 \longrightarrow 00:43:01.100$ and we know that they are

NOTE Confidence: 0.8731468

 $00:43:01.170 \longrightarrow 00:43:03.086$ linked to sleep, is linked,

NOTE Confidence: 0.8731468

 $00{:}43{:}03.086 {\:{\mbox{--}}}{\:{\mbox{-}}} 00{:}43{:}05.376$ or inadequate sleep is linked

NOTE Confidence: 0.8731468

 $00:43:05.376 \longrightarrow 00:43:07.470$ to depression and obesity.

NOTE Confidence: 0.8731468

 $00{:}43{:}07.470 \dashrightarrow 00{:}43{:}09.990$ Among youth, I think the most important

NOTE Confidence: 0.8731468

00:43:09.990 --> 00:43:12.348 modifiable behavior is focusing on bedtimes,

NOTE Confidence: 0.8731468

 $00:43:12.350 \longrightarrow 00:43:14.968$ bedtime routines, and cutting out screen use.

NOTE Confidence: 0.8731468

 $00:43:14.970 \longrightarrow 00:43:17.273$ I think this place somewhat of a

NOTE Confidence: 0.8731468

00:43:17.273 --> 00:43:19.100 role in explaining disparities.

NOTE Confidence: 0.8731468

 $00:43:19.100 \longrightarrow 00:43:21.890$ Not all of it, and some of it's beyond

 $00:43:21.890 \longrightarrow 00:43:24.348$ the scope of what's addressable.

NOTE Confidence: 0.8731468

 $00:43:24.350 \longrightarrow 00:43:26.968$ If it's a structural reason for heart,

NOTE Confidence: 0.8731468

 $00{:}43{:}26.970 \dashrightarrow 00{:}43{:}28.850$ difficult to enforce bed time routines,

NOTE Confidence: 0.8731468

 $00:43:28.850 \longrightarrow 00:43:31.384$ but it is an important one because

NOTE Confidence: 0.8731468

 $00:43:31.384 \longrightarrow 00:43:34.100$ it's kind of a low hanging fruit.

NOTE Confidence: 0.8731468

 $00:43:34.100 \longrightarrow 00:43:36.404$ And then there are some more

NOTE Confidence: 0.8731468

 $00:43:36.404 \longrightarrow 00:43:37.940$ complicated structural problems with.

NOTE Confidence: 0.8731468

 $00:43:37.940 \longrightarrow 00:43:39.980$ Insufficient sleep among younger people,

NOTE Confidence: 0.8731468

 $00:43:39.980 \longrightarrow 00:43:42.822$ such as household chaos in school start

NOTE Confidence: 0.8731468

 $00:43:42.822 \longrightarrow 00:43:45.666$ times, these are not easy to change.

NOTE Confidence: 0.8731468

 $00:43:45.670 \longrightarrow 00:43:46.368$ They may.

NOTE Confidence: 0.8731468

 $00:43:46.368 \longrightarrow 00:43:48.113$ They probably play less of

NOTE Confidence: 0.8731468

00:43:48.113 --> 00:43:50.150 a role in disparities,

NOTE Confidence: 0.8731468

 $00:43:50.150 \longrightarrow 00:43:52.190$ but they're still very important.

NOTE Confidence: 0.8731468

 $00:43:52.190 \longrightarrow 00:43:55.235$ And then I'll just kind of conclude

 $00:43:55.235 \longrightarrow 00:43:58.741$ with what I think are some really

NOTE Confidence: 0.8731468

00:43:58.741 --> 00:44:01.366 key areas for thinking about.

NOTE Confidence: 0.8731468

 $00:44:01.370 \longrightarrow 00:44:03.104$ Disparities and sleep.

NOTE Confidence: 0.8731468

00:44:03.104 --> 00:44:04.838 As I said,

NOTE Confidence: 0.8731468

 $00:44:04.840 \longrightarrow 00:44:08.102$ We need to embrace this idea of

NOTE Confidence: 0.8731468

00:44:08.102 --> 00:44:09.912 understanding how discrimination affect

NOTE Confidence: 0.8731468

 $00:44:09.912 \longrightarrow 00:44:12.568$ sleep and what we can do about it.

NOTE Confidence: 0.8731468

 $00{:}44{:}12.570 \dashrightarrow 00{:}44{:}15.335$ We need to think about causal and

NOTE Confidence: 0.8731468

00:44:15.335 --> 00:44:16.972 modifiable mechanisms through doing

NOTE Confidence: 0.8731468

00:44:16.972 --> 00:44:18.887 experimental work with in person

NOTE Confidence: 0.8731468

 $00{:}44{:}18.887 \dashrightarrow 00{:}44{:}21.800$ work and then thinking more about the

NOTE Confidence: 0.8731468

 $00:44:21.800 \longrightarrow 00:44:23.556$ consequences of sleep disparities.

NOTE Confidence: 0.8731468

 $00:44:23.560 \longrightarrow 00:44:27.168$ I think we have a pretty good grasp

NOTE Confidence: 0.8731468

 $00:44:27.168 \longrightarrow 00:44:30.758$ of the consequences for health.

NOTE Confidence: 0.8731468

00:44:30.760 --> 00:44:33.080 But less work has focused on kind of

NOTE Confidence: 0.8731468

 $00:44:33.080 \longrightarrow 00:44:34.850$ socioeconomic and performance outcomes,

 $00:44:34.850 \longrightarrow 00:44:37.578$ and I'd love to see more on that.

NOTE Confidence: 0.8731468

00:44:37.580 --> 00:44:38.612 And then finally,

NOTE Confidence: 0.8731468

 $00:44:38.612 \longrightarrow 00:44:40.332$ the big work is translating

NOTE Confidence: 0.8731468

 $00:44:40.332 \longrightarrow 00:44:42.347$ all of this to the public.

NOTE Confidence: 0.8731468

00:44:42.350 --> 00:44:44.414 How can we develop, implement, evaluate,

NOTE Confidence: 0.8731468

00:44:44.414 --> 00:44:45.476 culturally tailored interventions,

NOTE Confidence: 0.8731468

 $00:44:45.476 \longrightarrow 00:44:48.149$ and that's kind of the long term goal.

NOTE Confidence: 0.8731468

 $00:44:48.150 \longrightarrow 00:44:50.196$ I hope for all of us.

NOTE Confidence: 0.8731468

 $00:44:50.200 \longrightarrow 00:44:52.384$ Here's a figure that Dan Buysse

NOTE Confidence: 0.8731468

 $00:44:52.384 \longrightarrow 00:44:54.496$ beautifully put together for a review

NOTE Confidence: 0.8731468

 $00{:}44{:}54.496 \dashrightarrow 00{:}44{:}56.872$ article of here in the layers and levels

NOTE Confidence: 0.8731468

 $00:44:56.936 \longrightarrow 00:44:59.060$ in the sociological model of sleep.

NOTE Confidence: 0.8731468

 $00:44:59.060 \longrightarrow 00:45:00.880$ And each of these levels

NOTE Confidence: 0.8731468

 $00:45:00.880 \longrightarrow 00:45:02.700$ carries with it kind of.

NOTE Confidence: 0.8731468

 $00:45:02.700 \longrightarrow 00:45:06.060$ A set of opportunities for

 $00:45:06.060 \longrightarrow 00:45:08.748$ intervention and we should.

NOTE Confidence: 0.8731468

 $00{:}45{:}08.750 \dashrightarrow 00{:}45{:}10.934$ Be considering and thinking at all

NOTE Confidence: 0.8731468

 $00:45:10.934 \longrightarrow 00:45:13.118$ these levels as much as we can,

NOTE Confidence: 0.8731468

 $00:45:13.120 \longrightarrow 00:45:15.130$ because these are big, complicated problems,

NOTE Confidence: 0.8731468

 $00:45:15.130 \longrightarrow 00:45:16.810$ and that's that's the plan.

NOTE Confidence: 0.8731468

00:45:16.810 --> 00:45:20.170 So thank you all. I'd love to hear from you.

NOTE Confidence: 0.8731468

 $00{:}45{:}20.170 \dashrightarrow 00{:}45{:}22.890$ I one thing I don't like about this

NOTE Confidence: 0.8731468

00:45:22.890 --> 00:45:26.217 format is I don't get to see all your faces,

NOTE Confidence: 0.8731468

 $00{:}45{:}26.220 \dashrightarrow 00{:}45{:}28.852$ but at least mayor kept his on so

NOTE Confidence: 0.8731468

 $00:45:28.852 \longrightarrow 00:45:31.597$ I could see his most of the time.

NOTE Confidence: 0.8731468

 $00{:}45{:}31.600 --> 00{:}45{:}33.280$ So let's open it up.

NOTE Confidence: 0.8731468

00:45:33.280 --> 00:45:35.290 I don't know how this works,

NOTE Confidence: 0.8731468

00:45:35.290 --> 00:45:38.548 but Lauren you can lead us.

NOTE Confidence: 0.8731468

 $00:45:38.550 \longrightarrow 00:45:38.915 \text{ Yes},$

NOTE Confidence: 0.8731468

 $00:45:38.915 \longrightarrow 00:45:41.470$ thank you so much for a really

NOTE Confidence: 0.8731468

 $00:45:41.470 \longrightarrow 00:45:44.344$ fantastic talk or and we can open it

 $00:45:44.344 \longrightarrow 00:45:46.931$ up to questions and anyone is welcome

NOTE Confidence: 0.8731468

 $00{:}45{:}46.931 \dashrightarrow 00{:}45{:}49.594$ to unmute themselves an ask away there.

NOTE Confidence: 0.8731468

 $00:45:49.594 \longrightarrow 00:45:51.922$ I don't think there are any

NOTE Confidence: 0.8731468

 $00:45:51.922 \longrightarrow 00:45:53.918$ questions in the chat just yet,

NOTE Confidence: 0.8731468

 $00:45:53.920 \longrightarrow 00:45:54.695$ OK.

NOTE Confidence: 0.8731468 00:45:54.695 --> 00:45:55.470 So NOTE Confidence: 0.8518336

00:45:55.470 --> 00:45:58.838 I'd like to make a comment warn that

NOTE Confidence: 0.8518336

 $00:45:58.838 \longrightarrow 00:46:02.680$ that I got a communication about a month

NOTE Confidence: 0.8518336

 $00{:}46{:}02.680 \dashrightarrow 00{:}46{:}07.368$ and a half ago from a professor at MIT.

NOTE Confidence: 0.8518336

 $00:46:07.370 \longrightarrow 00:46:10.150$ Covid Anne was using an oximeter,

NOTE Confidence: 0.8518336

 $00:46:10.150 \longrightarrow 00:46:14.630$ and she asked me a very simple question.

NOTE Confidence: 0.8518336

 $00:46:14.630 \longrightarrow 00:46:19.358$ Are oximeters accurate in black people?

NOTE Confidence: 0.8518336

 $00{:}46{:}19.360 \dashrightarrow 00{:}46{:}22.118$ And when you think about an oximeter,

NOTE Confidence: 0.8518336

 $00:46:22.120 \longrightarrow 00:46:24.878$ you know it fits on the finger.

NOTE Confidence: 0.8518336

00:46:24.880 --> 00:46:27.624 It shines a light through the finger,

00:46:27.630 --> 00:46:31.344 and yeah. And so I didn't know I didn't

NOTE Confidence: 0.8518336

 $00{:}46{:}31.344 \dashrightarrow 00{:}46{:}34.206$ know the answer to the question.

NOTE Confidence: 0.8518336

 $00:46:34.210 \longrightarrow 00:46:36.822$ Fascinating, so so I contacted two

NOTE Confidence: 0.8518336

 $00:46:36.822 \longrightarrow 00:46:38.558$ engineers working for companies

NOTE Confidence: 0.8518336

00:46:38.558 --> 00:46:40.769 that actually build these things,

NOTE Confidence: 0.8518336

 $00:46:40.770 \longrightarrow 00:46:43.752$ and I said are they accurate in

NOTE Confidence: 0.8518336

00:46:43.752 --> 00:46:46.447 black people and they said, well,

NOTE Confidence: 0.8518336

 $00:46:46.447 \longrightarrow 00:46:47.321$ the standards.

NOTE Confidence: 0.8518336

 $00:46:47.321 \longrightarrow 00:46:49.506$ These are called ISO standards,

NOTE Confidence: 0.8518336

00:46:49.510 --> 00:46:54.109 you only have to get data on 12 people.

NOTE Confidence: 0.8518336

 $00{:}46{:}54.110 \dashrightarrow 00{:}46{:}58.310$ Four of whom have to be dark skinned.

NOTE Confidence: 0.8518336

 $00:46:58.310 \longrightarrow 00:47:00.417$ So there are millions of people

NOTE Confidence: 0.8518336

 $00:47:00.417 \longrightarrow 00:47:02.720$ out there that are that are using

NOTE Confidence: 0.8518336

 $00:47:02.787 \longrightarrow 00:47:04.911$ oximeters and we don't really know

NOTE Confidence: 0.8518336

 $00:47:04.911 \longrightarrow 00:47:07.726$ how accurate they are in people with

NOTE Confidence: 0.8518336

00:47:07.726 --> 00:47:09.498 different amounts of pigmentation,

00:47:09.500 --> 00:47:13.108 both in you know, both in their finger.

NOTE Confidence: 0.8518336

 $00{:}47{:}13.110 \dashrightarrow 00{:}47{:}15.264$ On their ring finger there some

NOTE Confidence: 0.8518336

 $00:47:15.264 \longrightarrow 00:47:17.550$ now that are on the rings.

NOTE Confidence: 0.8518336

00:47:17.550 --> 00:47:19.770 An Apple just came out with

NOTE Confidence: 0.8518336

 $00:47:19.770 \longrightarrow 00:47:21.620$ one that's on their watch.

NOTE Confidence: 0.8518336

00:47:21.620 --> 00:47:24.996 I read about that and so this is an example

NOTE Confidence: 0.8518336

 $00:47:24.996 \longrightarrow 00:47:27.540$ where the data just isn't available.

NOTE Confidence: 0.8753355

 $00{:}47{:}28.200 \dashrightarrow 00{:}47{:}30.902$ But there must be some indication if

NOTE Confidence: 0.8753355

00:47:30.902 --> 00:47:33.498 if oximeters aren't working in darker

NOTE Confidence: 0.8753355

 $00:47:33.498 \longrightarrow 00:47:36.480$ skinned people, that this is, uh, I.

NOTE Confidence: 0.8753355

00:47:36.480 --> 00:47:38.958 I mean, I've never thought of

NOTE Confidence: 0.8753355

 $00:47:38.958 \longrightarrow 00:47:41.282$ this before, but it seems like,

NOTE Confidence: 0.8753355

 $00{:}47{:}41.282 \dashrightarrow 00{:}47{:}43.147$ wouldn't somebody who's a clinician

NOTE Confidence: 0.8753355

00:47:43.147 --> 00:47:45.169 have noticed something before?

NOTE Confidence: 0.8753355

00:47:45.170 --> 00:47:47.660 If it wasn't working well, I

 $00:47:47.660 \longrightarrow 00:47:51.536$ mean, this is The thing is.

NOTE Confidence: 0.8753355

00:47:51.540 --> 00:47:53.990 We don't know, and since covid you'll

NOTE Confidence: 0.8753355

 $00:47:53.990 \longrightarrow 00:47:56.057$ remember that with kovid there are

NOTE Confidence: 0.8753355

00:47:56.057 --> 00:47:58.283 all these things in the media about

NOTE Confidence: 0.8753355

00:47:58.354 --> 00:47:59.802 oxygen saturation's going into

NOTE Confidence: 0.8753355

 $00:47:59.802 \longrightarrow 00:48:02.316$ the 50s and how terrible it was.

NOTE Confidence: 0.8753355

 $00:48:02.316 \longrightarrow 00:48:04.332$ It turns out that the standards

NOTE Confidence: 0.8753355

 $00:48:04.332 \longrightarrow 00:48:06.472$ are such that nobody has any

NOTE Confidence: 0.8753355

 $00:48:06.472 \longrightarrow 00:48:08.903$ data for these things below 70%.

NOTE Confidence: 0.8753355

 $00:48:08.903 \longrightarrow 00:48:11.184$ Well so anyway so,

NOTE Confidence: 0.8753355

 $00:48:11.184 \longrightarrow 00:48:14.523$ but the fact that they there's

NOTE Confidence: 0.8753355

00:48:14.523 --> 00:48:17.297 almost no data published in darker

NOTE Confidence: 0.8753355

 $00:48:17.297 \longrightarrow 00:48:21.249$ skin people to me is like mindboggling.

NOTE Confidence: 0.88523835

 $00:48:22.500 \longrightarrow 00:48:25.623$ It is an I hope somebody on this call

NOTE Confidence: 0.88523835

00:48:25.623 --> 00:48:28.543 comes up with the study design for it

NOTE Confidence: 0.88523835

 $00:48:28.543 \longrightarrow 00:48:31.328$ to test that out. I mean 12 people.

 $00:48:31.328 \longrightarrow 00:48:34.670$ That mean that is way too small sample size

NOTE Confidence: 0.88523835

00:48:34.670 --> 00:48:37.180 you would think, or 444. That's not.

NOTE Confidence: 0.88523835

00:48:37.180 --> 00:48:40.036 Yeah, thank you for illuminating that for me.

NOTE Confidence: 0.9114585

 $00:48:45.430 \longrightarrow 00:48:47.570$ Any other comments or thoughts?

NOTE Confidence: 0.8541973

 $00:48:51.430 \longrightarrow 00:48:54.236$ I know we're all tired of zoom is tough.

NOTE Confidence: 0.8410781

00:48:56.870 --> 00:48:58.049 Or I'll just

NOTE Confidence: 0.8410781

 $00:48:58.050 \longrightarrow 00:49:00.020$ comment about your question awhile

NOTE Confidence: 0.8410781

 $00:49:00.020 \longrightarrow 00:49:01.989$ ago about the woke comment.

NOTE Confidence: 0.8410781

00:49:01.990 --> 00:49:05.536 You know the bulk idea and I do really,

NOTE Confidence: 0.8410781

 $00:49:05.536 \longrightarrow 00:49:06.718$ really like that.

NOTE Confidence: 0.8410781

 $00:49:06.720 \longrightarrow 00:49:08.690$ My connection and the video,

NOTE Confidence: 0.8410781

 $00:49:08.690 \longrightarrow 00:49:10.660$ but I'm also, you know,

NOTE Confidence: 0.8410781

 $00{:}49{:}10.660 \dashrightarrow 00{:}49{:}11.446$ increasingly fascinating,

NOTE Confidence: 0.8410781

 $00:49:11.446 \longrightarrow 00:49:15.200$ fascinated with like this sort of.

NOTE Confidence: 0.8410781

 $00:49:15.200 \longrightarrow 00:49:18.122$ Community idea and late people at

 $00:49:18.122 \longrightarrow 00:49:20.981$ persons idea sleep duration that we

NOTE Confidence: 0.8410781

 $00:49:20.981 \longrightarrow 00:49:23.886$ you know that we're behind and talking

NOTE Confidence: 0.8410781

 $00:49:23.886 \longrightarrow 00:49:26.620$ about sleep as a multidimensional.

NOTE Confidence: 0.8410781

 $00:49:26.620 \longrightarrow 00:49:27.685$ Aspect in it,

NOTE Confidence: 0.8410781

 $00:49:27.685 \longrightarrow 00:49:31.470$ so so far in in my research with toddlers,

NOTE Confidence: 0.8410781

 $00:49:31.470 \longrightarrow 00:49:33.780$ the variability is where I'm really

NOTE Confidence: 0.8410781

 $00:49:33.780 \longrightarrow 00:49:35.828$ seeing that the race ethnicity

NOTE Confidence: 0.8410781

 $00:49:35.828 \longrightarrow 00:49:37.993$ differences and makes me very

NOTE Confidence: 0.8410781

 $00{:}49{:}37.993 \dashrightarrow 00{:}49{:}40.559$ concerned that you know how much

NOTE Confidence: 0.8410781

 $00:49:40.559 \longrightarrow 00:49:42.449$ variability we're seeing and that

NOTE Confidence: 0.8410781

 $00:49:42.449 \longrightarrow 00:49:44.396$ works like a missed opportunity.

NOTE Confidence: 0.8410781

00:49:44.396 --> 00:49:47.217 Having worked in primary care for years,

NOTE Confidence: 0.8410781

 $00:49:47.220 \longrightarrow 00:49:48.640$ you know I don't.

NOTE Confidence: 0.8410781

00:49:48.640 --> 00:49:51.330 I don't think I ever asked before

NOTE Confidence: 0.8410781

 $00:49:51.330 \longrightarrow 00:49:53.685$ I became a sleep researcher.

NOTE Confidence: 0.8410781

 $00:49:53.690 \longrightarrow 00:49:56.945$ You know how regular is the bedtime?

00:49:56.950 --> 00:49:58.350 Alright, and what influences that?

NOTE Confidence: 0.8410781

 $00:49:58.350 \longrightarrow 00:50:00.394$ And so it's a. It's a really.

NOTE Confidence: 0.8410781

 $00:50:00.400 \longrightarrow 00:50:02.300$ In terms of sleep health,

NOTE Confidence: 0.8410781

00:50:02.300 --> 00:50:04.200 especially in young children and

NOTE Confidence: 0.8410781

 $00:50:04.200 \dashrightarrow 00:50:06.726$ setting up habits, and you know.

NOTE Confidence: 0.8410781

 $00:50:06.726 \longrightarrow 00:50:08.574$ Yeah, I guess so.

NOTE Confidence: 0.8410781

 $00:50:08.580 \longrightarrow 00:50:10.844$ I love the idea of Oak and I,

NOTE Confidence: 0.8410781

00:50:10.850 --> 00:50:12.986 but I I challenges all to

NOTE Confidence: 0.8410781

 $00:50:12.986 \longrightarrow 00:50:14.410$ be talking about sleep.

NOTE Confidence: 0.8410781

 $00{:}50{:}14.410 \dashrightarrow 00{:}50{:}16.360$ Health and that would you mentioned.

NOTE Confidence: 0.8410781

00:50:16.360 --> 00:50:17.985 And I mean obviously everybody

NOTE Confidence: 0.8410781

 $00:50:17.985 \longrightarrow 00:50:19.610$ on this call knows that.

NOTE Confidence: 0.8410781

00:50:19.610 --> 00:50:21.994 But I I try not to miss any

NOTE Confidence: 0.8410781

00:50:21.994 --> 00:50:24.193 opportunity I can to tell to say

NOTE Confidence: 0.8410781

00:50:24.193 --> 00:50:26.526 to somebody you know we need to

 $00:50:26.526 \longrightarrow 00:50:28.710$ do more than ask about duration.

NOTE Confidence: 0.8410781

00:50:28.710 --> 00:50:30.985 You know 'cause it said I did

NOTE Confidence: 0.8260552

 $00:50:30.990 \longrightarrow 00:50:32.934$ term woke is like just the

NOTE Confidence: 0.8260552

00:50:32.934 --> 00:50:34.205 simplicity of sleep, right?

NOTE Confidence: 0.8260552

00:50:34.205 --> 00:50:35.680 Absolutely? And I'm sure many

NOTE Confidence: 0.8260552

00:50:35.680 --> 00:50:37.810 of you if you aren't already.

NOTE Confidence: 0.8260552

 $00:50:37.810 \longrightarrow 00:50:40.210$ Check out damn bic
is work on are you

NOTE Confidence: 0.8260552

 $00:50:40.210 \longrightarrow 00:50:42.931$ stated it's and also of new research on

NOTE Confidence: 0.8260552

 $00:50:42.931 \longrightarrow 00:50:45.278$ the sleep regularity index, that regularity.

NOTE Confidence: 0.8260552

 $00:50:45.278 \longrightarrow 00:50:46.730$ Is extremely important,

NOTE Confidence: 0.8260552

 $00:50:46.730 \longrightarrow 00:50:48.820$ and it's harder to measure.

NOTE Confidence: 0.8260552

 $00:50:48.820 \longrightarrow 00:50:50.488$ First of all, it's.

NOTE Confidence: 0.8260552

 $00:50:50.488 \longrightarrow 00:50:53.732$ It's not easy, but I think that may be

NOTE Confidence: 0.8260552

 $00{:}50{:}53.732 \dashrightarrow 00{:}50{:}57.159$ going on in in our racial differences.

NOTE Confidence: 0.8260552

 $00:50:57.160 \longrightarrow 00:50:58.414$ In adolescents data,

NOTE Confidence: 0.8260552

 $00:50:58.414 \longrightarrow 00:51:00.922$ we're seeing that 24 hours sleep

 $00{:}51{:}00.922 \to 00{:}51{:}02.988$ doesn't vary by race ethnicity,

NOTE Confidence: 0.8260552

 $00:51:02.990 \longrightarrow 00:51:05.962$ but night time sleep does, which means.

NOTE Confidence: 0.8260552

00:51:05.962 --> 00:51:09.490 Probably you know I'm not in the room,

NOTE Confidence: 0.8260552

 $00:51:09.490 \longrightarrow 00:51:11.465$ but probably there's a a

NOTE Confidence: 0.8260552

 $00:51:11.465 \longrightarrow 00:51:13.440$ nap at the first chance.

NOTE Confidence: 0.8260552

 $00:51:13.440 \longrightarrow 00:51:15.102$ The team can get it, you know,

NOTE Confidence: 0.8260552

 $00:51:15.102 \longrightarrow 00:51:16.754$ like Oh, I got home from school.

NOTE Confidence: 0.8260552

 $00:51:16.760 \longrightarrow 00:51:18.176$ Now I can take a nap.

NOTE Confidence: 0.8260552

 $00:51:18.180 \longrightarrow 00:51:20.304$ Oh I got home from my after school job.

NOTE Confidence: 0.8260552

 $00:51:20.310 \longrightarrow 00:51:21.738$ Now I can take a nap.

NOTE Confidence: 0.8260552

 $00{:}51{:}21.740 \dashrightarrow 00{:}51{:}23.828$ They're catching up and it might.

NOTE Confidence: 0.8260552

 $00:51:23.830 \longrightarrow 00:51:25.273$ Be extremely irregular,

NOTE Confidence: 0.8260552

 $00:51:25.273 \longrightarrow 00:51:29.251$ or it might be in the middle of

NOTE Confidence: 0.8260552

 $00:51:29.251 \longrightarrow 00:51:31.796$ school that's hard to measure,

NOTE Confidence: 0.8260552

 $00:51:31.800 \longrightarrow 00:51:34.290$ but if it's micro nap.

 $00:51:34.290 \longrightarrow 00:51:35.192$ But yes,

NOTE Confidence: 0.8260552

 $00:51:35.192 \longrightarrow 00:51:38.349$ I think we need to embrace the

NOTE Confidence: 0.8260552

 $00:51:38.349 \longrightarrow 00:51:40.260$ multidimensionality aspect completely.

NOTE Confidence: 0.8158154

 $00:51:42.700 \longrightarrow 00:51:44.740$ And with that pair connection

NOTE Confidence: 0.8158154

 $00:51:44.740 \longrightarrow 00:51:47.508$ that teens would I just in sleep

NOTE Confidence: 0.8158154

 $00:51:47.508 \longrightarrow 00:51:50.092$ clinic what I hear a lot is that.

NOTE Confidence: 0.8158154

00:51:50.100 --> 00:51:51.624 Depending on work schedules

NOTE Confidence: 0.8158154

 $00:51:51.624 \longrightarrow 00:51:53.148$ such as shift work,

NOTE Confidence: 0.8158154

 $00:51:53.150 \longrightarrow 00:51:55.424$ alot of adolescents are self regulating

NOTE Confidence: 0.8158154

 $00:51:55.424 \longrightarrow 00:51:58.129$ themselves at night and so you know

NOTE Confidence: 0.8158154

 $00:51:58.129 \longrightarrow 00:52:00.009$ there's that perhaps more variability.

NOTE Confidence: 0.8158154

 $00:52:00.010 \longrightarrow 00:52:02.290$ My work is not in teams,

NOTE Confidence: 0.8158154

 $00:52:02.290 \longrightarrow 00:52:04.432$ but I would imagine that among

NOTE Confidence: 0.8158154

 $00:52:04.432 \longrightarrow 00:52:07.556$ those who are who are who are self

NOTE Confidence: 0.8158154

00:52:07.556 --> 00:52:11.110 regulating home alone at night.

NOTE Confidence: 0.8158154

00:52:11.110 --> 00:52:12.610 There's going to be more variability.

 $00:52:13.220 \longrightarrow 00:52:15.008$ Absolutely thank you.

NOTE Confidence: 0.8567506875

 $00:52:17.190 \longrightarrow 00:52:19.158$ David. You're on mute.

NOTE Confidence: 0.79615027

 $00:52:25.180 \longrightarrow 00:52:26.888$ You're still here with David.

NOTE Confidence: 0.9367003

00:52:30.550 --> 00:52:33.710 I can't hear you. Can you type it in?

NOTE Confidence: 0.92861915

 $00:52:38.550 \longrightarrow 00:52:39.120$ Let's see.

NOTE Confidence: 0.79082364

 $00:52:46.530 \longrightarrow 00:52:47.736$ While he's doing that,

NOTE Confidence: 0.79082364

 $00:52:47.736 \longrightarrow 00:52:50.380$ I I have an obligatory hat to put on.

NOTE Confidence: 0.79082364

 $00{:}52{:}50.380 \dashrightarrow 00{:}52{:}52.156$ My husband was like you're going

NOTE Confidence: 0.79082364

 $00:52:52.156 \longrightarrow 00:52:54.228$ to speak at Yale, so I got.

NOTE Confidence: 0.79082364

00:52:54.228 --> 00:52:55.708 I got my baseball cap.

NOTE Confidence: 0.79082364

 $00:52:55.710 \longrightarrow 00:52:56.595$ It's really nice.

NOTE Confidence: 0.79082364

 $00:52:56.595 \longrightarrow 00:52:58.070$ Where'd you get that hat?

NOTE Confidence: 0.79082364

 $00{:}52{:}58.070 \dashrightarrow 00{:}52{:}59.846$ He went there is class to night.

NOTE Confidence: 0.8143791

 $00:53:02.880 \longrightarrow 00:53:06.006$ I like I won't do it for the talk,

NOTE Confidence: 0.8143791

 $00:53:06.010 \longrightarrow 00:53:08.796$ but I'll put it on during the question

 $00:53:08.796 \longrightarrow 00:53:10.884$ and answer, so David's question is,

NOTE Confidence: 0.8143791

 $00{:}53{:}10.884 \dashrightarrow 00{:}53{:}13.320$ has there been a move given zoom

NOTE Confidence: 0.8143791

 $00:53:13.320 \longrightarrow 00:53:16.360$ to postpone school start times?

NOTE Confidence: 0.8143791

 $00:53:16.360 \longrightarrow 00:53:20.088$ Out schools in the US or such a

NOTE Confidence: 0.8143791

 $00{:}53{:}20.088 \to 00{:}53{:}22.588$ decentralized process I I cannot speak

NOTE Confidence: 0.8143791

 $00:53:22.588 \longrightarrow 00:53:25.600$ for all of schools or all of zoom,

NOTE Confidence: 0.8143791

 $00:53:25.600 \longrightarrow 00:53:28.270$ but what an opportunity root Gruber

NOTE Confidence: 0.8143791

 $00:53:28.270 \longrightarrow 00:53:30.860$ wrote an article just last week

NOTE Confidence: 0.8143791

 $00{:}53{:}30.860 \dashrightarrow 00{:}53{:}33.628$ or two saying yes, now we should.

NOTE Confidence: 0.8143791

00:53:33.628 --> 00:53:35.808 Now we should have school

NOTE Confidence: 0.8143791

 $00{:}53{:}35.808 \to 00{:}53{:}38.200$ starting at 10:00 AM on zoom.

NOTE Confidence: 0.8143791

 $00{:}53{:}38.200 \dashrightarrow 00{:}53{:}41.910$ Absolutely, I can say an ecdotally.

NOTE Confidence: 0.8143791

 $00:53:41.910 \longrightarrow 00:53:43.340$ I don't think that's happening.

NOTE Confidence: 0.8143791

 $00:53:43.340 \longrightarrow 00:53:45.050$ I think the default position is.

NOTE Confidence: 0.8143791

 $00:53:45.050 \longrightarrow 00:53:47.610$ Have them signed on at.

NOTE Confidence: 0.8143791

 $00:53:47.610 \longrightarrow 00:53:49.325$ At 8:05 or whatever time

00:53:49.325 --> 00:53:50.697 there school typically starts,

NOTE Confidence: 0.8143791

 $00:53:50.700 \longrightarrow 00:53:53.436$ because that's what's known as the work day.

NOTE Confidence: 0.8143791

 $00:53:53.440 \longrightarrow 00:53:54.812$ On the other hand,

NOTE Confidence: 0.8143791

00:53:54.812 --> 00:53:56.527 there's not the morning commute.

NOTE Confidence: 0.8143791

 $00:53:56.530 \longrightarrow 00:53:58.588$ My kids got up and did

NOTE Confidence: 0.8143791

00:53:58.588 --> 00:53:59.960 virtual school this morning,

NOTE Confidence: 0.8143791

 $00:53:59.960 \longrightarrow 00:54:02.333$ and we didn't have to hustle and

NOTE Confidence: 0.8143791

 $00:54:02.333 \longrightarrow 00:54:04.759$ bustle to get them out the door.

NOTE Confidence: 0.8143791

00:54:04.760 --> 00:54:06.028 They were no shoes.

NOTE Confidence: 0.8143791

00:54:06.028 --> 00:54:08.530 My kids are not in high school.

NOTE Confidence: 0.8143791

 $00:54:08.530 \longrightarrow 00:54:11.274$ It's a little bit of a different thing,

NOTE Confidence: 0.8143791

 $00:54:11.280 \longrightarrow 00:54:12.648$ but the elimination route.

NOTE Confidence: 0.8143791

00:54:12.648 --> 00:54:13.335 Sorry, Gruber,

NOTE Confidence: 0.8143791

 $00:54:13.335 \longrightarrow 00:54:13.680$ Gruber.

NOTE Confidence: 0.8705622

00:54:16.060 --> 00:54:18.445 The elimination of commute time

00:54:18.445 --> 00:54:20.830 may also be reducing disparities,

NOTE Confidence: 0.8705622

 $00{:}54{:}20.830 \dashrightarrow 00{:}54{:}22.738$ because in some communities,

NOTE Confidence: 0.8705622

 $00:54:22.738 \longrightarrow 00:54:24.169$ particularly rural communities,

NOTE Confidence: 0.8705622

 $00:54:24.170 \longrightarrow 00:54:27.380$ maybe the poorest students living furthest

NOTE Confidence: 0.8705622

 $00:54:27.380 \longrightarrow 00:54:31.797$ away and having to wake up just even a tiny.

NOTE Confidence: 0.8705622

 $00:54:31.800 \longrightarrow 00:54:36.128$ You know 20 minutes earlier every night could

NOTE Confidence: 0.8705622

 $00{:}54{:}36.128 \dashrightarrow 00{:}54{:}40.020$ could lead to a clinically significant.

NOTE Confidence: 0.8705622

 $00:54:40.020 \longrightarrow 00:54:41.636$ Difference in sleep duration

NOTE Confidence: 0.8705622

 $00:54:41.636 \longrightarrow 00:54:44.060$ so that may be a benefit.

NOTE Confidence: 0.8705622

00:54:44.060 --> 00:54:46.482 I would say a slight benefit of

NOTE Confidence: 0.8705622

 $00{:}54{:}46.482 \dashrightarrow 00{:}54{:}48.500$ the zoom schooling academically.

NOTE Confidence: 0.8705622

 $00:54:48.500 \longrightarrow 00:54:52.500$ I am not a fan, but at least sleep

NOTE Confidence: 0.8705622

 $00:54:52.500 \longrightarrow 00:54:56.250$ wise we may have some some perks.

NOTE Confidence: 0.8705622

 $00:54:56.250 \longrightarrow 00:54:57.658$ Oh, more and yeah,

NOTE Confidence: 0.8705622

00:54:57.658 --> 00:54:59.418 you can read David's comment

NOTE Confidence: 0.7584076

 $00:54:59.420 \longrightarrow 00:55:00.470$ in the chat.

00:55:02.130 --> 00:55:03.690 American Academy of Pediatrics

NOTE Confidence: 0.8927289

 $00:55:03.690 \longrightarrow 00:55:06.030$ recommendations for school reopening or tried

NOTE Confidence: 0.8927289

 $00{:}55{:}06.030 \dashrightarrow 00{:}55{:}08.370$ to insert a recommendation about it,

NOTE Confidence: 0.8927289

 $00:55:08.370 \longrightarrow 00:55:10.710$ but it was not well received.

NOTE Confidence: 0.8927289

 $00{:}55{:}10.710 \dashrightarrow 00{:}55{:}13.050$ It sounds like I'm so disappointed

NOTE Confidence: 0.8927289

 $00:55:13.050 \longrightarrow 00:55:16.304$ to hear that, but how fantastic that

NOTE Confidence: 0.8927289

 $00:55:16.304 \longrightarrow 00:55:19.430$ you were fighting the good fight.

NOTE Confidence: 0.8927289

00:55:19.430 --> 00:55:21.122 That's crazy, AP should

NOTE Confidence: 0.8927289

 $00:55:21.122 \longrightarrow 00:55:23.660$ totally be on board with that.

NOTE Confidence: 0.8927289

 $00:55:23.660 \longrightarrow 00:55:27.036$ They already have a position statement on it,

NOTE Confidence: 0.8927289

 $00{:}55{:}27.040 \dashrightarrow 00{:}55{:}31.064$ so I don't know why they wouldn't so.

NOTE Confidence: 0.8927289

00:55:31.070 --> 00:55:33.968 That stinks, I can say I

NOTE Confidence: 0.8927289

00:55:33.968 --> 00:55:35.900 helped fight for the.

NOTE Confidence: 0.8927289

 $00:55:35.900 \longrightarrow 00:55:38.366$ AP's position statement on screen use

NOTE Confidence: 0.8927289

 $00:55:38.366 \longrightarrow 00:55:40.767$ in children to advocate that don't

00:55:40.767 --> 00:55:43.175 use screens in the hour before bed,

NOTE Confidence: 0.8927289

 $00:55:43.180 \longrightarrow 00:55:46.260$ and they did accept that even though really

NOTE Confidence: 0.8927289

 $00:55:46.260 \longrightarrow 00:55:48.920$ the science and that's a little fuzzy,

NOTE Confidence: 0.8927289

 $00:55:48.920 \longrightarrow 00:55:52.700$ but it's just generally good advice.

NOTE Confidence: 0.8927289

 $00:55:52.700 \longrightarrow 00:55:55.184$ On the weather, it's one hour or two hours,

NOTE Confidence: 0.8927289

 $00:55:55.190 \longrightarrow 00:55:56.858$ or what the right duration is.

NOTE Confidence: 0.8927289

 $00:55:56.860 \longrightarrow 00:55:58.785$ But one hours, so that's a bummer.

NOTE Confidence: 0.8927289

 $00:55:58.790 \longrightarrow 00:56:00.458$ So let me read the ship.

NOTE Confidence: 0.8927289

 $00{:}56{:}00.460 \dashrightarrow 00{:}56{:}03.299$ Probably wrap up 'cause it.

NOTE Confidence: 0.8927289

 $00:56:03.300 \longrightarrow 00:56:04.600$ Hey Mr second question,

NOTE Confidence: 0.8927289

 $00{:}56{:}04.600 \dashrightarrow 00{:}56{:}06.550$ David David tried to text me.

NOTE Confidence: 0.8927289

 $00:56:06.550 \longrightarrow 00:56:09.150$ If you are email me if you want.

NOTE Confidence: 0.8927289

00:56:09.150 --> 00:56:11.425 Thank you so much and thanks to

NOTE Confidence: 0.8927289

00:56:11.425 --> 00:56:13.041 everybody who's been a conference

NOTE Confidence: 0.8927289

00:56:13.041 --> 00:56:15.529 today and I want to just let people

NOTE Confidence: 0.8927289

 $00:56:15.529 \longrightarrow 00:56:17.925$ know about our speaker for next week.

00:56:17.925 --> 00:56:20.256 We're going to be hearing from Fatima,

NOTE Confidence: 0.8927289

 $00:56:20.256 \longrightarrow 00:56:22.663$ Cody Stanford who is at Harvard and

NOTE Confidence: 0.8927289

 $00:56:22.663 \longrightarrow 00:56:24.777$ she's going to be giving a talk

NOTE Confidence: 0.8927289

 $00:56:24.777 \longrightarrow 00:56:26.636$ relevant to many of our patients.

NOTE Confidence: 0.8927289

 $00:56:26.636 \longrightarrow 00:56:28.394$ It's going to be entitled obesity

NOTE Confidence: 0.8927289

 $00:56:28.394 \longrightarrow 00:56:29.630$ and its management.

NOTE Confidence: 0.8927289

 $00:56:29.630 \longrightarrow 00:56:32.118$ What you need to know is a Sleep

NOTE Confidence: 0.8927289

 $00{:}56{:}32.118 \dashrightarrow 00{:}56{:}33.600$ Medicine physician and provider.

NOTE Confidence: 0.8927289

 $00:56:33.600 \longrightarrow 00:56:35.010$ So please join us for that,

NOTE Confidence: 0.8927289

 $00{:}56{:}35.010 \dashrightarrow 00{:}56{:}36.660$ then have a great week take care.

NOTE Confidence: 0.9112298

 $00:56:40.050 \longrightarrow 00:56:43.610$ I wrote to your response to me. I.

NOTE Confidence: 0.5058198

 $00:56:47.130 \longrightarrow 00:56:48.790$ Thanks all bye.