## WEBVTT

NOTE duration:"00:56:58.8480000"
NOTE language:en-us
NOTE Confidence: 0.8584302
00:00:00.000 --> 00:00:02.240 Can you guys see this?
NOTE Confidence: 0.8584302
00:00:02.240 --> 00:00:05.879 Thanks so will start from the beginning.
NOTE Confidence: 0.8584302
00:00:05.880 --> 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 --> 00:00:10.255 from the waiting room.
NOTE Confidence: 0.8584302
00:00:10.260 --> 00:00:13.592 OK. I so Lauren.
NOTE Confidence: 0.8584302
00:00:13.592 --> 00:00:16.676 Thank you so much for the.
NOTE Confidence: 0.8584302
00:00:16.680 --> 00:00:18.399 A warm introduction.
NOTE Confidence: 0.8584302
00:00:18.399 --> 00:00:21.264 The overstatement about my accomplishments, NOTE Confidence: 0.8584302

00:00:21.270 --> 00:00:23.034 but more importantly,
NOTE Confidence: 0.8584302
00:00:23.034 --> 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 --> 00:00:32.828 in sleep health during this.
NOTE Confidence: 0.8584302
00:00:32.830 --> 00:00:36.088 Really important time in American history.

NOTE Confidence: 0.8584302
00:00:36.090 --> 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 --> 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 --> 00:00:53.340 or important than now and I also.
NOTE Confidence: 0.8584302
00:00:53.340 --> 00:00:56.056 I'm I'm pushing myself in this talk.
NOTE Confidence: 0.8584302
00:00:56.060 --> 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 --> 00:01:03.844 and when we think about anti
NOTE Confidence: 0.8584302
00:01:03.844 --> 00:01:05.400 racism and other things,
NOTE Confidence: 0.8584302
00:01:05.400 --> 00:01:08.416 so a lot of what I'll be talking
NOTE Confidence: 0.8584302
00:01:08.416 --> 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 --> 00:01:15.770 a lot of it maybe seem familiar
NOTE Confidence: 0.8584302
00:01:15.838 --> 00:01:17.847 to you or what you're used too.
NOTE Confidence: 0.8584302

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 --> 00:01:23.390 but I hope I hope.
NOTE Confidence: 0.8584302
00:01:23.390 --> 00:01:26.348 You'll enjoy the ride with me.
NOTE Confidence: 0.8584302
00:01:26.350 --> 00:01:28.667 So let's see I move this forward.
NOTE Confidence: 0.8584302
00:01:28.670 --> 00:01:30.330 I have people joining the
NOTE Confidence: 0.8584302
00:01:30.330 --> 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 --> 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 --> 00:01:37.810 Debbie will
NOTE Confidence: 0.88256556
00:01:37.810 --> 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 --> 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 --> 00:01:47.690 anything else but OK, I'll try.
NOTE Confidence: 0.88256556
00:01:47.690 --> 00:01:49.250 I'll try to ignore those messages.

NOTE Confidence: 0.90111876
00:01:51.320 --> 00:01:53.276 So this is a short talk.
NOTE Confidence: 0.90111876
00:01:53.280 --> 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 --> 00:02:00.770 but after my introductions I'll
NOTE Confidence: 0.90111876
00:02:00.770 --> 00:02:04.422 spend a little bit about or I would
NOTE Confidence: 0.90111876
00:02:04.422 --> 00:02:07.124 say 15 to 20 minutes talking about
NOTE Confidence: 0.90111876
00:02:07.213 --> 00:02:09.733 sleep health as a social justice
NOTE Confidence: 0.90111876
00:02:09.733 --> 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 --> 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 --> 00:02:25.420 I'm going to go into talking about
NOTE Confidence: 0.90111876
00:02:25.420 --> 00:02:27.939 disparities in sleep in a study that NOTE Confidence: 0.90111876
00:02:27.939 --> 00:02:29.985 I'm doing among teenagers across the
NOTE Confidence: 0.90111876

00:02:30.053 --> 00:02:32.937 country known as the fragile families study.
NOTE Confidence: 0.90111876
00:02:32.940 --> 00:02:35.558 And I'll tell you that we're about
NOTE Confidence: 0.90111876
00:02:35.558 --> 00:02:38.516 to go into the field for age 22 ,
NOTE Confidence: 0.90111876
00:02:38.520 --> 00:02:40.758 so that's pretty exciting as well.
NOTE Confidence: 0.90111876
00:02:40.760 --> 00:02:44.197 And then I'll conclude with a summary
NOTE Confidence: 0.90111876
00:02:44.197 --> 00:02:46.948 in future directions on this topic.
NOTE Confidence: 0.90111876
00:02:46.950 --> 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 --> 00:02:54.800 the Long Island Sound from you.
NOTE Confidence: 0.90111876
00:02:54.800 --> 00:02:57.369 I was just reading about some flesh
NOTE Confidence: 0.90111876
00:02:57.369 --> 00:03:00.039 eating bacteria in the Long Island Sound.
NOTE Confidence: 0.90111876
00:03:00.040 --> 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 --> 00:03:06.020 I'm also received funding from
NOTE Confidence: 0.90111876
00:03:06.020 --> 00:03:07.516 NIH as Lauren mentioned.
NOTE Confidence: 0.90111876
00:03:07.520 --> 00:03:09.956 I was involved in the founding and

NOTE Confidence: 0.90111876
00:03:09.956 --> 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 --> 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 --> 00:03:22.345 remains on on staff is that are
NOTE Confidence: 0.90111876
00:03:22.345 --> 00:03:25.199 tender and we love him for that man.
NOTE Confidence: 0.90111876
00:03:25.200 --> 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 --> 00:03:32.180 one for the pajama program,
NOTE Confidence: 0.90111876
00:03:32.180 --> 00:03:34.340 which provides pajamas and books for
NOTE Confidence: 0.90111876
00:03:34.340 --> 00:03:36.579 low income kids across the country.
NOTE Confidence: 0.90111876
00:03:36.580 --> 00:03:37.525 So great program,
NOTE Confidence: 0.90111876
00:03:37.525 --> 00:03:40.235 and I'm also an advisory panel of a
NOTE Confidence: 0.90111876
00:03:40.235 --> 00:03:42.445 organization called children and screens.
NOTE Confidence: 0.90111876

00:03:42.450 --> 00:03:44.658 If we have time for it,
NOTE Confidence: 0.90111876
00:03:44.660 --> 00:03:47.537 I'm going to veer from the topic
NOTE Confidence: 0.90111876
00:03:47.537 --> 00:03:49.482 of racial disparities and talk
NOTE Confidence: 0.90111876
00:03:49.482 --> 00:03:51.366 about a fun study I did.
NOTE Confidence: 0.90111876
00:03:51.370 --> 00:03:53.994 Using Twitter data to see if we could
NOTE Confidence: 0.90111876
00:03:53.994 --> 00:03:56.798 predict NBA basketball players performance,
NOTE Confidence: 0.90111876
00:03:56.800 --> 00:03:58.890 that's just a good one
NOTE Confidence: 0.90111876
00:03:58.890 --> 00:04:00.144 for Thanksgiving dinner.
NOTE Confidence: 0.90111876
00:04:00.150 --> 00:04:05.326 If we're able to have Thanksgiving this year.
NOTE Confidence: 0.90111876
00:04:05.330 --> 00:04:06.110 Sleep matters,
NOTE Confidence: 0.90111876
00:04:06.110 --> 00:04:08.060 that's my take home message.
NOTE Confidence: 0.90111876
00:04:08.060 --> 00:04:08.450 OK,
NOTE Confidence: 0.90111876
00:04:08.450 --> 00:04:09.620 and as usual,
NOTE Confidence: 0.90111876
00:04:09.620 --> 00:04:10.790 the typical disclosure,
NOTE Confidence: 0.90111876
00:04:10.790 --> 00:04:14.470 the content reflects my own ideas and not NOTE Confidence: 0.90111876
00:04:14.470 --> 00:04:17.349 necessarily thought that these organizations.

NOTE Confidence: 0.90111876
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 --> 00:04:27.798 because this is a weird weird time.
NOTE Confidence: 0.90111876
00:04:27.800 --> 00:04:29.830 I am of course working from home
NOTE Confidence: 0.90111876
00:04:29.830 --> 00:04:32.470 and as a public health professor.
NOTE Confidence: 0.90111876
00:04:32.470 --> 00:04:35.188 I have teamed up with a.
NOTE Confidence: 0.90111876
00:04:35.190 --> 00:04:38.016 Sponge almost a dozen female scientists.
NOTE Confidence: 0.90111876
00:04:38.020 --> 00:04:41.135 We run a social media site called
NOTE Confidence: 0.90111876
00:04:41.135 --> 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 --> 00:04:50.856 We post two to three translations
NOTE Confidence: 0.90111876
00:04:50.856 --> 00:04:53.719 of the current science on the
NOTE Confidence: 0.90111876
00:04:53.719 --> 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
NOTE Confidence: 0.90111876

00:04:59.037 --> 00:05:02.037 and it has been really wonderful
NOTE Confidence: 0.90111876
00:05:02.040 --> 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 --> 00:05:12.699 friends and families,
NOTE Confidence: 0.90111876
00:05:12.699 --> 00:05:15.477 and generally the public get reliable.
NOTE Confidence: 0.90111876
00:05:15.480 --> 00:05:17.920 Good advice during this info NOTE Confidence: 0.90111876

00:05:17.920 --> 00:05:21.511 demik period that we live in so I
NOTE Confidence: 0.90111876
00:05:21.511 --> 00:05:23.975 know this is a little off topic
NOTE Confidence: 0.83353585
00:05:24.073 --> 00:05:27.505 from this issue of racial disparities,
NOTE Confidence: 0.83353585
00:05:27.510 --> 00:05:30.924 but we're we have to acknowledge
NOTE Confidence: 0.83353585
00:05:30.924 --> 00:05:34.450 that we're living in a period
NOTE Confidence: 0.83353585
00:05:34.450 --> 00:05:37.290 of really twin pandemics of.
NOTE Confidence: 0.83353585
00:05:37.290 --> 00:05:40.860 Racial injustice as well as the pandemic
NOTE Confidence: 0.83353585
00:05:40.860 --> 00:05:44.850 of kovid, so they are related in that NOTE Confidence: 0.83353585

00:05:44.850 --> 00:05:48.686 way because as we know, minorities have

NOTE Confidence: 0.83353585
00:05:48.686 --> 00:05:51.676 a dish feel disproportionate burden.
NOTE Confidence: 0.83353585
00:05:51.680 --> 00:05:55.428 Of the COVID-19 pandemic.
NOTE Confidence: 0.83353585
00:05:55.430 --> 00:05:57.350 So that's it for me in
NOTE Confidence: 0.83353585
00:05:57.350 --> 00:05:58.310 terms of introductions.
NOTE Confidence: 0.83353585
00:05:58.310 --> 00:05:59.910 Oh, this is my team.
NOTE Confidence: 0.83353585
00:05:59.910 --> 00:06:01.206 These are my peeps.
NOTE Confidence: 0.83353585
00:06:01.206 --> 00:06:03.430 Talk with him every week or so.
NOTE Confidence: 0.83353585
00:06:03.430 --> 00:06:05.509 We getting so many names the words
NOTE Confidence: 0.83353585
00:06:05.509 --> 00:06:06.950 are getting squished together.
NOTE Confidence: 0.83353585
00:06:06.950 --> 00:06:09.374 Most of the people that I work with NOTE Confidence: 0.83353585

00:06:09.374 --> 00:06:11.176 are Penn State, Wisconsin Princeton, NOTE Confidence: 0.83353585

00:06:11.176 --> 00:06:13.294 but were spreading out and growing
NOTE Confidence: 0.83353585
00:06:13.294 --> 00:06:15.267 role almost all over the world now.
NOTE Confidence: 0.83353585
00:06:15.270 --> 00:06:17.835 So I want to acknowledge when I get to NOTE Confidence: 0.83353585

00:06:17.835 --> 00:06:20.707 the part on my work and fragile families.
NOTE Confidence: 0.83353585

00:06:20.710 --> 00:06:22.310 This is a team effort.
NOTE Confidence: 0.83353585
00:06:22.310 --> 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 --> 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 --> 00:06:35.075 background 'cause you just yelled for me.
NOTE Confidence: 0.83353585
00:06:35.080 --> 00:06:38.060 So my apologies. OK.
NOTE Confidence: 0.83353585
00:06:38.060 --> 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 --> 00:06:52.034 And sure it is.
NOTE Confidence: 0.83353585
00:06:52.034 --> 00:06:53.477 That's my answer.
NOTE Confidence: 0.83353585
00:06:53.480 --> 00:06:55.890 Sleep health is for everyone,
NOTE Confidence: 0.83353585
00:06:55.890 --> 00:06:58.782 but it is especially necessary and

NOTE Confidence: 0.83353585
00:06:58.782 --> 00:07:00.710 important for disadvantaged populations.
NOTE Confidence: 0.83353585
00:07:00.710 --> 00:07:04.510 So I have three reasons why sleep health NOTE Confidence: 0.83353585

00:07:04.510 --> 00:07:08.297 goes beyond just a public health disorder.
NOTE Confidence: 0.83353585
00:07:08.300 --> 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 --> 00:07:16.670 deficiency in sleep disorders are common
NOTE Confidence: 0.83353585
00:07:16.670 --> 00:07:19.372 for the number that NIH throws out.
NOTE Confidence: 0.83353585
00:07:19.380 --> 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 --> 00:07:27.307 to adults suffer from sleep
NOTE Confidence: 0.83353585
00:07:27.307 --> 00:07:29.810 deficiency or sleep disorder.
NOTE Confidence: 0.83353585
00:07:29.810 --> 00:07:31.436 Pens which groups are talking about.
NOTE Confidence: 0.83353585
00:07:31.440 --> 00:07:33.060 Some have more, some of less,
NOTE Confidence: 0.83353585
00:07:33.060 --> 00:07:34.044 but that's a lot,
NOTE Confidence: 0.83353585
00:07:34.044 --> 00:07:35.520 and so it's a public health
NOTE Confidence: 0.83353585

00:07:35.575 --> 00:07:37.020 problem and it's been recognized
NOTE Confidence: 0.83353585
00:07:37.020 --> 00:07:39.020 as such for at least 15 years.
NOTE Confidence: 0.83353585
00:07:39.020 --> 00:07:41.188 I would say the apj could do more, NOTE Confidence: 0.83353585

00:07:41.190 --> 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 --> 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 --> 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 --> 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 --> 00:08:09.776 but the real kicker in the real NOTE Confidence: 0.8707521

00:08:09.776 --> 00:08:12.242 reason why we should care is

NOTE Confidence: 0.8707521
00:08:12.242 --> 00:08:14.690 because of the decades of research.
NOTE Confidence: 0.8707521
00:08:14.690 --> 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 --> 00:08:23.759 sleep, interrupted sleep disorder
NOTE Confidence: 0.8707521
00:08:23.759 --> 00:08:26.720 sleep is linked to all of these
NOTE Confidence: 0.8707521
00:08:26.801 --> 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 --> 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 --> 00:08:38.624 These three combined make it just
NOTE Confidence: 0.8707521
00:08:38.624 --> 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 --> 00:08:46.058 only a public health issue but is
NOTE Confidence: 0.8707521

00:08:46.058 --> 00:08:48.476 a social justice issue and to me,
NOTE Confidence: 0.8707521
00:08:48.476 --> 00:08:51.030 and I've been saying this for years.
NOTE Confidence: 0.8707521
00:08:51.030 --> 00:08:54.216 Based on the data that I've been looking at, NOTE Confidence: 0.8707521

00:08:54.220 --> 00:08:56.670 there are three big dimensions
NOTE Confidence: 0.8707521
00:08:56.670 --> 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 --> 00:09:03.950 but the three biggest ones I see.
NOTE Confidence: 0.8707521
00:09:03.950 --> 00:09:05.866 Our education associate conomique
NOTE Confidence: 0.8707521
00:09:05.866 --> 00:09:08.261 status time and again population
NOTE Confidence: 0.8707521
00:09:08.261 --> 00:09:10.434 based studies show individuals with
NOTE Confidence: 0.8707521
00:09:10.434 --> 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 --> 00:09:18.104 but also sleeping too much and
NOTE Confidence: 0.8707521
00:09:18.104 --> 00:09:21.070 also a range of sleep disorders.
NOTE Confidence: 0.8707521
00:09:21.070 --> 00:09:23.698 The next dimension is neighborhood context.
NOTE Confidence: 0.8707521
00:09:23.700 --> 00:09:27.220 Alot of what we see in looking at.

NOTE Confidence: 0.8855895
00:09:29.890 --> 00:09:32.908 Social and physical environment is that.
NOTE Confidence: 0.8855895
00:09:32.910 --> 00:09:35.718 Living in urban area, too noisy,
NOTE Confidence: 0.8855895
00:09:35.720 --> 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 --> 00:09:50.050 on the link between health and place in NOTE Confidence: 0.8855895

00:09:50.050 --> 00:09:53.200 these studies show people who live in.
NOTE Confidence: 0.8855895
00:09:53.200 --> 00:09:55.825 Urban and low income neighborhoods
NOTE Confidence: 0.8855895
00:09:55.825 --> 00:09:57.925 have worse health outcomes.
NOTE Confidence: 0.8855895
00:09:57.930 --> 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 --> 00:10:06.249 the reason or the mechanism between
NOTE Confidence: 0.8855895
00:10:06.249 --> 00:10:09.439 poor health and poor neighborhoods.
NOTE Confidence: 0.8855895
00:10:09.440 --> 00:10:10.704 Is mediated through the
NOTE Confidence: 0.8855895

00:10:10.704 --> 00:10:11.968 pathway of poor sleep.
NOTE Confidence: 0.8855895
00:10:11.970 --> 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 --> 00:10:19.234 move out of the neighborhood is sleeping.
NOTE Confidence: 0.8855895
00:10:19.240 --> 00:10:21.445 You can modify sleep in some ways.
NOTE Confidence: 0.8855895
00:10:21.450 --> 00:10:21.765 Not.
NOTE Confidence: 0.8855895
00:10:21.765 --> 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 --> 00:10:26.852 but there are steps you can take
NOTE Confidence: 0.8855895
00:10:26.852 --> 00:10:29.020 to help improve sleep health.
NOTE Confidence: 0.8855895
00:10:29.020 --> 00:10:32.541 And we've also shown this with my NOTE Confidence: 0.8855895

00:10:32.541 --> 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 --> 00:10:43.605 and objective measures of neighborhood NOTE Confidence: 0.8855895

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

NOTE Confidence: 0.8855895
00:10:47.080 --> 00:10:49.336 Factors like broken windows and pests,
NOTE Confidence: 0.8855895
00:10:49.340 --> 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 --> 00:10:56.530 like 50 poor sleep and shorter like
NOTE Confidence: 0.8855895
00:10:56.603 --> 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 --> 00:11:04.376 household where you report maintenance
NOTE Confidence: 0.8855895
00:11:04.380 --> 00:11:07.050 problems in litter and graffiti.
NOTE Confidence: 0.8855895
00:11:07.050 --> 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 --> 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 --> 00:11:22.289 challenge of what do we know about NOTE Confidence: 0.8855895

00:11:22.289 --> 00:11:25.404 race and sleep or bigger than that?
NOTE Confidence: 0.8855895

00:11:25.410 --> 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 --> 00:11:33.630 but I'm trying to cover a lot at one time.
NOTE Confidence: 0.8855895
00:11:33.630 --> 00:11:36.158 And I'm going to go back to one
NOTE Confidence: 0.8855895
00:11:36.158 --> 00:11:38.803 of the very first actor graphics
NOTE Confidence: 0.8855895
00:11:38.803 --> 00:11:41.208 studies on race and sleep,
NOTE Confidence: 0.8855895
00:11:41.210 --> 00:11:44.003 and this was a study done by
NOTE Confidence: 0.8855895
00:11:44.003 --> 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 --> 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 --> 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 --> 00:12:01.639 what about sleeping too long or highly
NOTE Confidence: 0.8855895
00:12:01.639 --> 00:12:03.790 educated people sleeping too long?

NOTE Confidence: 0.8855895
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 --> 00:12:10.848 sleeping over 9 hours at that point.
NOTE Confidence: 0.8855895
00:12:10.850 --> 00:12:12.810 So and that wasn't really
NOTE Confidence: 0.8855895
00:12:12.810 --> 00:12:14.770 a problem in this sample.
NOTE Confidence: 0.8855895
00:12:14.770 --> 00:12:16.334 But even after adjusting
NOTE Confidence: 0.8855895
00:12:16.334 --> 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 --> 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 --> 00:12:25.910 lower sleep efficiency took longer to NOTE Confidence: 0.8855895

00:12:25.910 --> 00:12:28.880 fall asleep and spent less time in bed.
NOTE Confidence: 0.8855895
00:12:28.880 --> 00:12:31.379 So on all of those dimensions you
NOTE Confidence: 0.8855895
00:12:31.379 --> 00:12:33.969 know now we think about sleep.
NOTE Confidence: 0.8855895
00:12:33.970 --> 00:12:36.400 Health is a multidimensional concept.
NOTE Confidence: 0.8855895

00:12:36.400 --> 00:12:38.040 All of those dimensions we're
NOTE Confidence: 0.8855895
00:12:38.040 --> 00:12:39.680 seeing kind of worse outcomes
NOTE Confidence: 0.8855895
00:12:39.740 --> 00:12:41.410 for Blacks compared to whites.
NOTE Confidence: 0.8855895
00:12:41.410 --> 00:12:44.586 And here's the figure to show it in
NOTE Confidence: 0.8855895
00:12:44.586 --> 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 --> 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 --> 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 --> 00:13:11.330 we see a similar big drop.
NOTE Confidence: 0.86630005
00:13:11.330 --> 00:13:14.018 Almost 9 percentage point drop in sleep

NOTE Confidence: 0.86630005
00:13:14.018 --> 00:13:17.570 efficiency or difference, not a drop.
NOTE Confidence: 0.86630005
00:13:17.570 --> 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 --> 00:13:32.115 especially Blacks compared to whites
NOTE Confidence: 0.86630005
00:13:32.115 --> 00:13:35.180 see shorter sleep duration than whites.
NOTE Confidence: 0.86630005
00:13:35.180 --> 00:13:38.192 And here's a summary article written
NOTE Confidence: 0.86630005
00:13:38.192 --> 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 --> 00:13:46.040 This was in the journal Nature
NOTE Confidence: 0.86630005
00:13:46.147 --> 00:13:48.327 and science of sleep.
NOTE Confidence: 0.86630005
00:13:48.330 --> 00:13:50.010 It's hard to summarize the
NOTE Confidence: 0.86630005
00:13:50.010 --> 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.
NOTE Confidence: 0.86630005

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 --> 00:14:01.179 you look at Blacks compared to whites,
NOTE Confidence: 0.86630005
00:14:01.180 --> 00:14:02.970 they have lower sleep duration.
NOTE Confidence: 0.86630005
00:14:02.970 --> 00:14:05.106 These numbers are just the references,
NOTE Confidence: 0.86630005
00:14:05.110 --> 00:14:07.609 so they're not going to be able
NOTE Confidence: 0.86630005
00:14:07.609 --> 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 --> 00:14:14.160 lower sleep quality more and more sleepiness.
NOTE Confidence: 0.86630005
00:14:14.160 --> 00:14:16.536 And mixed results on sleep complaints.
NOTE Confidence: 0.86630005
00:14:16.540 --> 00:14:19.480 What we see for Hispanics compared
NOTE Confidence: 0.86630005
00:14:19.480 --> 00:14:22.869 to whites as shorter sleep duration.
NOTE Confidence: 0.86630005
00:14:22.870 --> 00:14:25.280 But Interestingly, fewer sleep complaints.
NOTE Confidence: 0.86630005
00:14:25.280 --> 00:14:29.256 And then I just want to highlight what
NOTE Confidence: 0.86630005
00:14:29.256 --> 00:14:33.468 we really don't know a lot about at all.
NOTE Confidence: 0.86630005
00:14:33.470 --> 00:14:35.875 Insufficient evidence is the Native
NOTE Confidence: 0.86630005
00:14:35.875 --> 00:14:37.799 American populations and Native

NOTE Confidence: 0.86630005
00:14:37.799 --> 00:14:39.739 Hawaiian and Pacific Islanders.
NOTE Confidence: 0.86630005
00:14:39.740 --> 00:14:42.150 There's really not a lot
NOTE Confidence: 0.86630005
00:14:42.150 --> 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 --> 00:14:50.227 replicated data showing that especially
NOTE Confidence: 0.86630005
00:14:50.227 --> 00:14:53.832 Blacks and Hispanics are as a population.
NOTE Confidence: 0.86630005
00:14:53.840 --> 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 --> 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 --> 00:15:04.602 We know that these factors that sleep
NOTE Confidence: 0.86630005
00:15:04.602 --> 00:15:08.226 matters for a huge range of life outcomes,
NOTE Confidence: 0.86630005
00:15:08.230 --> 00:15:08.666 health,
NOTE Confidence: 0.86630005
00:15:08.666 --> 00:15:10.410 economic outcomes and beyond.
NOTE Confidence: 0.86630005
00:15:10.410 --> 00:15:12.590 So I care about these.
NOTE Confidence: 0.917439466666667

00:15:14.600 --> 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 --> 00:15:20.990 What are the underlying causes?
NOTE Confidence: 0.917439466666667
00:15:20.990 --> 00:15:22.940 Why do we see that?
NOTE Confidence: 0.917439466666667
00:15:22.940 --> 00:15:25.280 And I'll say that we know
NOTE Confidence: 0.917439466666667
00:15:25.280 --> 00:15:26.840 some of these reasons.
NOTE Confidence: 0.917439466666667
00:15:26.840 --> 00:15:29.465 We know that there are some compositional NOTE Confidence: 0.917439466666667

00:15:29.465 --> 00:15:31.056 differences in populations between
NOTE Confidence: 0.917439466666667
00:15:31.056 --> 00:15:32.688 African Americans and whites.
NOTE Confidence: 0.917439466666667
00:15:32.690 --> 00:15:33.404 For example,
NOTE Confidence: 0.917439466666667
00:15:33.404 --> 00:15:35.903 we know that Blacks are more likely
NOTE Confidence: 0.917439466666667
00:15:35.903 --> 00:15:38.928 to work night shifts or irregular hours.
NOTE Confidence: 0.917439466666667
00:15:38.930 --> 00:15:41.978 We know that there may be lower levels
NOTE Confidence: 0.917439466666667
00:15:41.978 --> 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,

NOTE Confidence: 0.917439466666667
00:15:47.120 --> 00:15:49.370 and so we have some.
NOTE Confidence: 0.917439466666667
00:15:49.370 --> 00:15:51.442 Account for that we can say some NOTE Confidence: 0.917439466666667

00:15:51.442 --> 00:15:53.025 of the differences between Blacks NOTE Confidence: 0.917439466666667

00:15:53.025 --> 00:15:54.909 and whites in sleep might be
NOTE Confidence: 0.917439466666667
00:15:54.909 --> 00:15:57.226 related to where they live or
NOTE Confidence: 0.917439466666667
00:15:57.226 --> 00:15:58.447 their educational differences.
NOTE Confidence: 0.917439466666667
00:15:58.450 --> 00:16:00.515 But even when we adjust for that, NOTE Confidence: 0.917439466666667

00:16:00.520 --> 00:16:02.290 we don't fully adjust for it.
NOTE Confidence: 0.917439466666667
00:16:02.290 --> 00:16:03.760 The effects don't go away,
NOTE Confidence: 0.917439466666667
00:16:03.760 --> 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 --> 00:16:09.020 And then a good statistician would
NOTE Confidence: 0.917439466666667
00:16:09.078 --> 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 NOTE Confidence: 0.917439466666667

00:16:13.760 --> 00:16:16.258 crappy measures you know look at education.
NOTE Confidence: 0.917439466666667
00:16:16.260 --> 00:16:18.348 Just grab their course measures what
NOTE Confidence: 0.917439466666667
00:16:18.348 --> 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 --> 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 --> 00:16:29.900 It just tells you whether their credentials NOTE Confidence: 0.917439466666667

00:16:29.900 --> 00:16:32.705 you have the degree and I agree with it.
NOTE Confidence: 0.917439466666667
00:16:32.710 --> 00:16:34.570 I agree that some of these
NOTE Confidence: 0.91743946666667
00:16:34.570 --> 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 --> 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 --> 00:16:42.348 that there's enough evidence
NOTE Confidence: 0.917439466666667
00:16:42.348 --> 00:16:43.900 to say that there are.
NOTE Confidence: 0.917439466666667
00:16:43.900 --> 00:16:46.528 There's a cloud of other things

NOTE Confidence: 0.917439466666667
00:16:46.528 --> 00:16:49.359 that kind of fall under this.
NOTE Confidence: 0.917439466666667
00:16:49.360 --> 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 --> 00:16:57.420 that cluster together and you can't measure
NOTE Confidence: 0.917439466666667
00:16:57.496 --> 00:17:00.508 that in a nationally representative study.
NOTE Confidence: 0.917439466666667
00:17:00.510 --> 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,
NOTE Confidence: 0.917439466666667
00:17:05.042 --> 00:17:08.500 and I'm encouraged us to try and
NOTE Confidence: 0.917439466666667
00:17:08.612 --> 00:17:10.148 figure it out,
NOTE Confidence: 0.917439466666667
00:17:10.150 --> 00:17:13.186 but it's not easy to do,
NOTE Confidence: 0.917439466666667
00:17:13.190 --> 00:17:16.950 and I would say that.
NOTE Confidence: 0.917439466666667
00:17:16.950 --> 00:17:20.712 This is a moment for us as a field
NOTE Confidence: 0.917439466666667

00:17:20.712 --> 00:17:24.267 sleep researchers to listen to our.
NOTE Confidence: 0.917439466666667
00:17:24.270 --> 00:17:26.790 Our colleagues and friends outside
NOTE Confidence: 0.917439466666667
00:17:26.790 --> 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 --> 00:17:38.790 about how we as asleep field can
NOTE Confidence: 0.917439466666667
00:17:38.790 --> 00:17:41.760 excuse the expression wake up.
NOTE Confidence: 0.917439466666667
00:17:41.760 --> 00:17:45.176 To incorporate these ideas in our research,
NOTE Confidence: 0.917439466666667
00:17:45.180 --> 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 --> 00:17:58.698 harder to achieve.
NOTE Confidence: 0.917439466666667
00:17:58.700 --> 00:17:59.768 For some people,
NOTE Confidence: 0.917439466666667
00:17:59.768 --> 00:18:01.904 some populations than for other populations, NOTE Confidence: 0.917439466666667

00:18:01.910 --> 00:18:04.750 so this is the part of my talk where I

NOTE Confidence: 0.917439466666667
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 --> 00:18:11.197 and I'm going to talk about this expression.
NOTE Confidence: 0.917439466666667
00:18:11.200 --> 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 --> 00:18:16.549 this is not what you know.
NOTE Confidence: 0.917439466666667
00:18:16.550 --> 00:18:18.692 Usually when I say woke is
NOTE Confidence: 0.917439466666667
00:18:18.692 --> 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 --> 00:18:28.132 to talk about what it means to be woke,
NOTE Confidence: 0.917439466666667
00:18:28.140 --> 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 --> 00:18:33.406 later or right in the chat section
NOTE Confidence: 0.917439466666667
00:18:33.406 --> 00:18:35.278 about what it means to be woke, NOTE Confidence: 0.917439466666667

00:18:35.280 --> 00:18:36.648 I'd love to hear your thoughts.
NOTE Confidence: 0.8692965

00:18:36.650 --> 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 --> 00:19:37.653 hard for us to hear it hears
NOTE Confidence: 0.7974156
00:19:37.653 --> 00:19:39.256 any way for you to turn out.
NOTE Confidence: 0.7974156
00:19:39.260 --> 00:19:41.348 Darn it, I know you know what this is.
NOTE Confidence: 0.7974156
00:19:41.350 --> 00:19:45.317 My hold on. OK, hold on a second I'm gonna.
NOTE Confidence: 0.7974156
00:19:45.320 --> 00:19:47.154 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 --> 00:19:50.040 that awkwardness we were here.
NOTE Confidence: 0.7974156
00:19:50.040 --> 00:19:51.606 You're hearing it but I think
NOTE Confidence: 0.7974156
00:19:51.610 --> 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 --> 00:19:55.506 And I'm being quiet.
NOTE Confidence: 0.7974156
00:19:55.506 --> 00:19:57.380 So let me just start it back.
NOTE Confidence: 0.7974156
00:19:57.380 --> 00:19:59.207 Will just lose a minute hold up NOTE Confidence: 0.86140288

00:19:59.210 --> 00:20:00.780 is not a. Replace that,

NOTE Confidence: 0.86140288
00:20:00.780 --> 00:20:02.190 everything is not all equal.
NOTE Confidence: 0.86140288
00:20:02.190 --> 00:20:03.600 That justice has not happened
NOTE Confidence: 0.86140288
00:20:03.600 --> 00:20:05.248 yet for everyone, and that there
NOTE Confidence: 0.86140288
00:20:05.248 --> 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 --> 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 --> 00:20:18.157 along the way and bringing them on.
NOTE Confidence: 0.8576817
00:20:18.160 --> 00:20:20.386 And to increase the amount of Wokeness
NOTE Confidence: 0.8576817
00:20:20.386 --> 00:20:22.582 in your community being woke is like NOTE Confidence: 0.8576817

00:20:22.582 --> 00:20:24.352 as wide open everything is clear.
NOTE Confidence: 0.8576817
00:20:24.360 --> 00:20:26.628 You can always see things that other
NOTE Confidence: 0.8576817
00:20:26.628 --> 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 --> 00:20:33.347 outraged all the time and being able NOTE Confidence: 0.8576817

00:20:33.347 --> 00:20:35.550 to stay human and feel outraged about
NOTE Confidence: 0.8576817
00:20:35.550 --> 00:20:37.380 injustice that is happening around me.
NOTE Confidence: 0.8576817
00:20:37.380 --> 00:20:39.330 It's being uncomfortable all the time.
NOTE Confidence: 0.8576817
00:20:39.330 --> 00:20:41.306 And making sure that I'm speaking on behalf
NOTE Confidence: 0.8576817
00:20:41.306 --> 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 --> 00:20:48.988 just like, well, it is what it is.
NOTE Confidence: 0.8576817
00:20:48.990 --> 00:20:51.174 Yeah, that's not what woke means that you
NOTE Confidence: 0.8576817
00:20:51.174 --> 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 --> 00:20:56.294 fix any part of the solution.
NOTE Confidence: 0.8576817
00:20:56.294 --> 00:20:58.380 I mean, The thing is to do that,
NOTE Confidence: 0.8576817
00:20:58.380 --> 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 --> 00:21:02.785 because there's always an opportunity

NOTE Confidence: 0.8576817
00:21:02.785 --> 00:21:04.632 for you to do just a little
NOTE Confidence: 0.8576817
00:21:04.632 --> 00:21:05.688 something to support them.
NOTE Confidence: 0.8576817
00:21:05.690 --> 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 --> 00:21:09.617 right?
NOTE Confidence: 0.8576817
00:21:09.617 --> 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 --> 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 --> 00:21:20.146 And I think in order for
NOTE Confidence: 0.8576817
00:21:20.146 --> 00:21:21.210 us to really progress,
NOTE Confidence: 0.8576817
00:21:21.210 --> 00:21:22.834 we're going to need people to really
NOTE Confidence: 0.8576817
00:21:22.834 --> 00:21:24.932 step out of their comfort zones and
NOTE Confidence: 0.8576817
00:21:24.932 --> 00:21:26.284 have those uncomfortable conversations
NOTE Confidence: 0.8576817
00:21:26.284 --> 00:21:28.533 and not just live in a space where they NOTE Confidence: 0.8576817

00:21:28.533 --> 00:21:30.495 get to preach to the people who already
NOTE Confidence: 0.8576817
00:21:30.495 --> 00:21:32.380 understands what it means can agree more.
NOTE Confidence: 0.8576817
00:21:32.380 --> 00:21:34.860 I think to be woke means that you are aware NOTE Confidence: 0.8576817
00:21:34.919 --> 00:21:37.167 of the issues and the world around you.
NOTE Confidence: 0.8576817
00:21:37.170 --> 00:21:38.952 I believe it means that you
NOTE Confidence: 0.8576817
00:21:38.952 --> 00:21:40.530 are engaged in the work.
NOTE Confidence: 0.8576817
00:21:40.530 --> 00:21:43.302 Just as this is a time where we just,
NOTE Confidence: 0.8576817
00:21:43.310 --> 00:21:45.170 we can't afford to be asleep,
NOTE Confidence: 0.8576817
00:21:45.170 --> 00:21:47.852 we have to be all the way alert without
NOTE Confidence: 0.8576817
00:21:47.852 --> 00:21:50.414 action on the knowledge that we have now.
NOTE Confidence: 0.8576817
00:21:50.420 --> 00:21:52.238 Our world will never change and
NOTE Confidence: 0.8576817
00:21:52.238 --> 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 --> 00:22:02.249 I'm sorry for the technical difficulties.
NOTE Confidence: 0.89910436
00:22:02.250 --> 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.

NOTE Confidence: 0.89910436
00:22:07.270 --> 00:22:10.294 OK great, so that was really my first NOTE Confidence: 0.89910436

00:22:10.294 --> 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 --> 00:22:18.705 but I think.
NOTE Confidence: 0.89910436
00:22:18.705 --> 00:22:21.780 It's relevant and especially interesting.
NOTE Confidence: 0.89910436
00:22:21.780 --> 00:22:24.280 You know this expression.
NOTE Confidence: 0.89910436
00:22:24.280 --> 00:22:27.405 Is asleep term being away?
NOTE Confidence: 0.89910436
00:22:27.410 --> 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 --> 00:22:38.514 being well recognizes that everyday
NOTE Confidence: 0.89910436
00:22:38.514 --> 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 --> 00:22:45.120 they're saying in order to be present.
NOTE Confidence: 0.89910436
00:22:45.120 --> 00:22:48.216 An engaged in the injustice of the world.
NOTE Confidence: 0.89910436
00:22:48.220 --> 00:22:49.836 You cannot be asleep.
NOTE Confidence: 0.89910436

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 --> 00:22:55.566 I think that's that's really powerful.
NOTE Confidence: 0.89910436
00:22:55.570 --> 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 --> 00:23:03.550 Sleep disparities was like embed
NOTE Confidence: 0.89910436
00:23:03.550 --> 00:23:06.690 or implicated in that expression,
NOTE Confidence: 0.89910436
00:23:06.690 --> 00:23:09.830 and I think there's more
NOTE Confidence: 0.89910436
00:23:09.830 --> 00:23:12.970 more to think about there.
NOTE Confidence: 0.89203244
00:23:15.650 --> 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 --> 00:23:25.960 So it's not that we.
NOTE Confidence: 0.89203244
00:23:25.960 --> 00:23:29.340 So we don't have to wake up to disparities or
NOTE Confidence: 0.89203244
00:23:29.415 --> 00:23:32.565 be be chronically vigilant to disparities.
NOTE Confidence: 0.89203244
00:23:32.570 --> 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 --> 00:23:42.399 and that would ultimately be my goal.

NOTE Confidence: 0.89203244
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 --> 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 --> 00:23:53.700 I can't see the chat,
NOTE Confidence: 0.89203244
00:23:53.700 --> 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 --> 00:24:01.136 Maybe in the end,
NOTE Confidence: 0.89203244
00:24:01.136 --> 00:24:04.242 because to me it's kind of a new direction
NOTE Confidence: 0.89203244
00:24:04.242 --> 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 --> 00:24:16.232 and pathways through which we see
NOTE Confidence: 0.89403415
00:24:16.232 --> 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.
NOTE Confidence: 0.89403415

00:24:26.200 --> 00:24:28.280 Categories that really end behaviors.
NOTE Confidence: 0.89403415
00:24:28.280 --> 00:24:30.355 The first is social and
NOTE Confidence: 0.89403415
00:24:30.355 --> 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 --> 00:24:36.595 showing that being married is
NOTE Confidence: 0.89403415
00:24:36.595 --> 00:24:38.255 associated with better sleep.
NOTE Confidence: 0.89403415
00:24:38.260 --> 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 --> 00:24:45.339 but it's gotta be a good relationship.
NOTE Confidence: 0.89403415
00:24:45.340 --> 00:24:46.723 Employment matters again.
NOTE Confidence: 0.89403415
00:24:46.723 --> 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 --> 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 --> 00:24:57.688 and those are obviously.
NOTE Confidence: 0.89403415
00:24:57.688 --> 00:24:59.464 Stressful and disruptive.

NOTE Confidence: 0.89403415
00:24:59.470 --> 00:25:01.835 The work on American lifestyle NOTE Confidence: 0.89403415

00:25:01.835 --> 00:25:03.727 and sleep is fascinating.
NOTE Confidence: 0.89403415
00:25:03.730 --> 00:25:07.348 It fits right in line with the work of NOTE Confidence: 0.89403415

00:25:07.348 --> 00:25:09.879 sociologists on negative acculturation,
NOTE Confidence: 0.89403415
00:25:09.880 --> 00:25:12.245 immigrants to the US tend
NOTE Confidence: 0.89403415
00:25:12.245 --> 00:25:14.610 to have the best sleep,
NOTE Confidence: 0.89403415
00:25:14.610 --> 00:25:17.662 and then they and their offspring as NOTE Confidence: 0.89403415

00:25:17.662 --> 00:25:20.432 they assimilate to take an American
NOTE Confidence: 0.89403415
00:25:20.432 --> 00:25:23.192 behaviors tend to deteriorate in terms
NOTE Confidence: 0.89403415
00:25:23.192 --> 00:25:26.428 of Bedtimes and other sleep outcomes.
NOTE Confidence: 0.89403415
00:25:26.430 --> 00:25:29.804 And then of course the close links.
NOTE Confidence: 0.89403415
00:25:29.810 --> 00:25:32.250 Between sleep and mental health,
NOTE Confidence: 0.89403415
00:25:32.250 --> 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,
NOTE Confidence: 0.89403415

00:25:40.890 --> 00:25:42.210 sedentary behavior,
NOTE Confidence: 0.89403415
00:25:42.210 --> 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 --> 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 --> 00:25:58.674 that I am so engaged with the NOTE Confidence: 0.89403415

00:25:58.674 --> 00:26:00.964 fragile families study and it's.
NOTE Confidence: 0.89403415
00:26:00.970 --> 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 --> 00:26:06.890 because what we've identified our NOTE Confidence: 0.89403415

00:26:06.890 --> 00:26:09.260 pediatric disparities in sleep starting NOTE Confidence: 0.89403415

00:26:09.333 --> 00:26:11.605 at an early age and then of course, NOTE Confidence: 0.89403415

00:26:11.610 --> 00:26:13.182 moving into active graphic
NOTE Confidence: 0.89403415
00:26:13.182 --> 00:26:15.147 disparities in sleep among teenagers.
NOTE Confidence: 0.89403415
00:26:15.150 --> 00:26:18.687 And then I go into some other stuff on

NOTE Confidence: 0.89403415
00:26:18.687 --> 00:26:21.844 sleep in teens that are kind of key.
NOTE Confidence: 0.89403415
00:26:21.850 --> 00:26:25.338 Findings of our study.
NOTE Confidence: 0.89403415
00:26:25.340 --> 00:26:26.664 So as I mentioned,
NOTE Confidence: 0.89403415
00:26:26.664 --> 00:26:28.319 the beginning of my research
NOTE Confidence: 0.89403415
00:26:28.319 --> 00:26:29.919 on sleep disparities,
NOTE Confidence: 0.89403415
00:26:29.920 --> 00:26:31.465 I was primarily looking at NOTE Confidence: 0.89403415

00:26:31.465 --> 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 --> 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 --> 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 --> 00:26:45.856 He said, well,
NOTE Confidence: 0.89403415
00:26:45.856 --> 00:26:47.992 we have to figure out what
NOTE Confidence: 0.89403415
00:26:47.992 --> 00:26:49.970 happens across the life course.
NOTE Confidence: 0.89403415

00:26:49.970 --> 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 --> 00:26:54.034 When do they begin?
NOTE Confidence: 0.89403415
00:26:54.034 --> 00:26:55.864 And that's when I got
NOTE Confidence: 0.89403415
00:26:55.864 --> 00:26:57.408 involved with the study,
NOTE Confidence: 0.89403415
00:26:57.410 --> 00:26:58.894 called the fragile families
NOTE Confidence: 0.89403415
00:26:58.894 --> 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 --> 00:27:05.588 scientists and in more recent years,
NOTE Confidence: 0.89403415
00:27:05.590 --> 00:27:08.389 sleep researchers too.
NOTE Confidence: 0.89403415
00:27:08.390 --> 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 --> 00:27:13.038 since they were they,
NOTE Confidence: 0.89403415
00:27:13.038 --> 00:27:14.823 were enrolled in the hospital.
NOTE Confidence: 0.89403415
00:27:14.830 --> 00:27:16.262 Their mothers were enrolled NOTE Confidence: 0.89403415

00:27:16.262 --> 00:27:17.694 when they were born.

NOTE Confidence: 0.89403415
00:27:17.700 --> 00:27:19.132 The kids were born,
NOTE Confidence: 0.89403415
00:27:19.132 --> 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 --> 00:27:22.568 at birth,
NOTE Confidence: 0.89403415
00:27:22.568 --> 00:27:24.892 1359 and 15 were about to next
NOTE Confidence: 0.89403415
00:27:24.892 --> 00:27:27.146 month about to go back into the
NOTE Confidence: 0.89403415
00:27:27.146 --> 00:27:28.740 field and collect information
NOTE Confidence: 0.89403415
00:27:28.740 --> 00:27:30.940 on them as young adults.
NOTE Confidence: 0.89403415
00:27:30.940 --> 00:27:33.355 The young adult age 22 study and
NOTE Confidence: 0.89403415
00:27:33.355 --> 00:27:35.788 the study was designed to have
NOTE Confidence: 0.89403415
00:27:35.788 --> 00:27:38.434 enough power to look at disparities.
NOTE Confidence: 0.89403415
00:27:38.440 --> 00:27:40.522 By income and race and parents
NOTE Confidence: 0.89403415
00:27:40.522 --> 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 --> 00:27:46.960 to address some of the
NOTE Confidence: 0.8827661

00:27:47.056 --> 00:27:48.888 concerns that I have.
NOTE Confidence: 0.8827661
00:27:48.890 --> 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 --> 00:27:57.357 at trajectory's multiple levels of.
NOTE Confidence: 0.8827661
00:27:57.360 --> 00:27:59.025 Predictors and determinants of sleep
NOTE Confidence: 0.8827661
00:27:59.025 --> 00:28:01.542 and then of course the outcomes of
NOTE Confidence: 0.8827661
00:28:01.542 --> 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 --> 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 --> 00:28:15.890 got into the homes of,
NOTE Confidence: 0.8827661
00:28:15.890 --> 00:28:17.640 there was a random subset
NOTE Confidence: 0.8827661
00:28:17.640 --> 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 --> 00:28:24.640 and anybody who we got actigraphy on.

NOTE Confidence: 0.8827661
00:28:24.640 --> 00:28:27.056 We also collected a daily diary where they NOTE Confidence: 0.8827661

00:28:27.056 --> 00:28:29.537 were asked questions about their behaviors, NOTE Confidence: 0.8827661

00:28:29.540 --> 00:28:30.590 their screen use,
NOTE Confidence: 0.8827661
00:28:30.590 --> 00:28:32.340 their diet, etc that day,
NOTE Confidence: 0.8827661
00:28:32.340 --> 00:28:34.440 so this was the timing already.
NOTE Confidence: 0.8827661
00:28:34.440 --> 00:28:36.990 It's been almost five years since.
NOTE Confidence: 0.8827661
00:28:36.990 --> 00:28:38.302 Or more than that,
NOTE Confidence: 0.8827661
00:28:38.302 --> 00:28:40.270 for the early waves you know.
NOTE Confidence: 0.8827661
00:28:40.270 --> 00:28:42.238 Soon these data will be outdated,
NOTE Confidence: 0.8827661
00:28:42.240 --> 00:28:44.244 but we're having the ability to
NOTE Confidence: 0.8827661
00:28:44.244 --> 00:28:46.302 track them overtime where 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 --> 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 --> 00:28:55.210 Here's the distribution of
NOTE Confidence: 0.8827661

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 --> 00:29:00.250 good at following directions.
NOTE Confidence: 0.8827661
00:29:00.250 --> 00:29:03.085 We said may lack the devices in seven days.
NOTE Confidence: 0.8827661
00:29:03.090 --> 00:29:05.610 Almost all of them did it in six,
NOTE Confidence: 0.8827661
00:29:05.610 --> 00:29:10.540 7 or 8 besides the group who decided not to.
NOTE Confidence: 0.8827661
00:29:10.540 --> 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 --> 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 --> 00:29:24.367 and sleep timing.
NOTE Confidence: 0.8827661
00:29:24.367 --> 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 --> 00:29:30.940 but it's it goes on and on.
NOTE Confidence: 0.8827661
00:29:30.940 --> 00:29:33.668 We are enjoying the richness of these data.
NOTE Confidence: 0.8827661
00:29:33.670 --> 00:29:36.022 This is a cartoon of what the

NOTE Confidence: 0.8827661
00:29:36.022 --> 00:29:37.420 actigraph output looks like.
NOTE Confidence: 0.8827661
00:29:37.420 --> 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 --> 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 --> 00:29:47.132 Not going to go into all of the
NOTE Confidence: 0.8827661
00:29:47.132 --> 00:29:49.160 rest of the study, but.
NOTE Confidence: 0.8827661
00:29:49.160 --> 00:29:52.040 For the topic we are discussing,
NOTE Confidence: 0.8827661
00:29:52.040 --> 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 --> 00:30:02.826 Data when it was parent reported data
NOTE Confidence: 0.8827661
00:30:02.826 --> 00:30:06.249 is that there were disparities early in life.
NOTE Confidence: 0.8827661
00:30:06.250 --> 00:30:09.778 At age 9 or measure asleep was where
NOTE Confidence: 0.8827661
00:30:09.778 --> 00:30:13.090 they getting sufficient sleep at age 9 .
NOTE Confidence: 0.8827661

00:30:13.090 --> 00:30:15.365 Recommended at least nine hours
NOTE Confidence: 0.8827661
00:30:15.365 --> 00:30:18.084 and there's about $60 \%$ fewer odds
NOTE Confidence: 0.8827661
00:30:18.084 --> 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 --> 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 --> 00:30:31.789 so this is to me quite telling.
NOTE Confidence: 0.8827661
00:30:31.790 --> 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 --> 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 --> 00:30:42.525 These were self reported that
NOTE Confidence: 0.8827661
00:30:42.525 --> 00:30:43.969 self reported parent reported.
NOTE Confidence: 0.8827661
00:30:43.970 --> 00:30:47.538 When we get to the age 15 data.
NOTE Confidence: 0.8827661
00:30:47.540 --> 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

NOTE Confidence: 0.8827661
00:30:52.580 --> 00:30:55.107 from Acta graphic sleep we see a
NOTE Confidence: 0.8827661
00:30:55.107 --> 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 --> 00:31:02.762 white teens on weeknights,
NOTE Confidence: 0.8827661
00:31:02.762 --> 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 --> 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 --> 00:31:11.872 Matthews and the other one in
NOTE Confidence: 0.8433218
00:31:11.872 --> 00:31:14.007 Cleveland that use actix graphics.
NOTE Confidence: 0.8433218
00:31:14.010 --> 00:31:16.356 Lee also show black white differences
NOTE Confidence: 0.8433218
00:31:16.356 --> 00:31:17.920 in sleep among teenagers.
NOTE Confidence: 0.8433218
00:31:17.920 --> 00:31:19.880 Ours is a national study.
NOTE Confidence: 0.8433218
00:31:19.880 --> 00:31:23.008 We had 20 cities involved in our study, NOTE Confidence: 0.8433218

00:31:23.010 --> 00:31:25.370 but those other two community
NOTE Confidence: 0.8433218

00:31:25.370 --> 00:31:28.273 studies also showed about 20 minutes
NOTE Confidence: 0.8433218
00:31:28.273 --> 00:31:31.479 different per per night for the kids.
NOTE Confidence: 0.8433218
00:31:31.480 --> 00:31:33.262 What I think is really interesting
NOTE Confidence: 0.8433218
00:31:33.262 --> 00:31:35.710 is we were able to code for napping.
NOTE Confidence: 0.8433218
00:31:35.710 --> 00:31:38.446 And what we found is that.
NOTE Confidence: 0.8433218
00:31:38.450 --> 00:31:41.690 There was competitior E napping between
NOTE Confidence: 0.8433218
00:31:41.690 --> 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 --> 00:31:50.600 but they often made up for
NOTE Confidence: 0.8433218
00:31:50.600 --> 00:31:52.770 it during a daytime nap.
NOTE Confidence: 0.8433218
00:31:52.770 --> 00:31:56.194 So if you look at 24 hours sleep,
NOTE Confidence: 0.8433218
00:31:56.200 --> 00:31:58.378 you don't get the same racial
NOTE Confidence: 0.8433218
00:31:58.378 --> 00:32:00.411 differences in sleep and what's
NOTE Confidence: 0.8433218
00:32:00.411 --> 00:32:02.431 particularly interesting is there's
NOTE Confidence: 0.8433218
00:32:02.431 --> 00:32:04.451 work in preschoolers showing NOTE Confidence: 0.8433218
00:32:04.451 --> 00:32:07.047 the same thing that night time

NOTE Confidence: 0.8433218
00:32:07.047 --> 00:32:09.067 sleep among black preschoolers is NOTE Confidence: 0.8433218

00:32:09.070 --> 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 --> 00:32:15.330 and happening, so this may not.
NOTE Confidence: 0.8433218
00:32:15.330 --> 00:32:17.696 Translate to the same outcomes that we
NOTE Confidence: 0.8433218
00:32:17.696 --> 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 --> 00:32:23.904 but it is interesting that these
NOTE Confidence: 0.8433218
00:32:23.904 --> 00:32:25.560 disparities exist early in life.
NOTE Confidence: 0.8433218
00:32:25.560 --> 00:32:28.600 At ages 9 and 15.
NOTE Confidence: 0.8433218
00:32:28.600 --> 00:32:33.048 Here's some more results from the age 9 ,
NOTE Confidence: 0.8433218
00:32:33.050 --> 00:32:35.678 just highlighting that caregiver
NOTE Confidence: 0.8433218
00:32:35.678 --> 00:32:38.963 routines are extremely important for.
NOTE Confidence: 0.8433218
00:32:38.970 --> 00:32:40.534 Predicting sufficient sleep duration
NOTE Confidence: 0.8433218
00:32:40.534 --> 00:32:42.489 almost these are odds ratios.
NOTE Confidence: 0.8433218

00:32:42.490 --> 00:32:44.800 You almost never see odds ratios NOTE Confidence: 0.8433218

00:32:44.800 --> 00:32:47.197 it sevenfold 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 --> 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 --> 00:32:59.861 to know better huge difference
NOTE Confidence: 0.8433218
00:32:59.861 --> 00:33:02.332 is huge importance of having
NOTE Confidence: 0.8433218
00:33:02.332 --> 00:33:04.340 and enforcing bedtime routines.
NOTE Confidence: 0.8433218
00:33:04.340 --> 00:33:07.826 And in the same data same population.
NOTE Confidence: 0.8433218
00:33:07.830 --> 00:33:10.914 We showed that bedtime routines are
NOTE Confidence: 0.8433218
00:33:10.914 --> 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 --> 00:33:18.786 and we also show that the benefit NOTE Confidence: 0.8433218

00:33:18.786 --> 00:33:20.280 of bedtime routines,

NOTE Confidence: 0.8433218
00:33:20.280 --> 00:33:24.270 especially language based bedtime routines.
NOTE Confidence: 0.8433218
00:33:24.270 --> 00:33:26.448 Pay off in terms of better
NOTE Confidence: 0.8433218
00:33:26.448 --> 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 --> 00:33:31.876 verbal skills goes up so there there
NOTE Confidence: 0.8433218
00:33:31.876 --> 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 --> 00:33:39.559 second job and working at night,
NOTE Confidence: 0.8433218
00:33:39.560 --> 00:33:41.375 it's harder to enforce routines
NOTE Confidence: 0.8433218
00:33:41.375 --> 00:33:42.464 and have that,
NOTE Confidence: 0.8433218
00:33:42.470 --> 00:33:44.974 but that may be part of what's explaining NOTE Confidence: 0.8433218

00:33:44.974 --> 00:33:47.199 some of these early disparities.
NOTE Confidence: 0.8433218
00:33:47.200 --> 00:33:49.804 We also found that respect to the
NOTE Confidence: 0.8433218
00:33:49.804 --> 00:33:52.637 age 15 and I should have clarified
NOTE Confidence: 0.8433218
00:33:52.637 --> 00:33:55.073 that in the age 15 data.
NOTE Confidence: 0.8433218

00:33:55.080 --> 00:33:55.487 Remember,
NOTE Confidence: 0.8433218
00:33:55.487 --> 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 --> 00:34:02.680 devices and they took notes they recorded.
NOTE Confidence: 0.8433218
00:34:02.680 --> 00:34:05.046 If they if when they were doing
NOTE Confidence: 0.8433218
00:34:05.046 --> 00:34:07.239 their one hour long interview.
NOTE Confidence: 0.8433218
00:34:07.240 --> 00:34:09.140 If they were interrupted and
NOTE Confidence: 0.8433218
00:34:09.140 --> 00:34:10.660 interruption could be allowed.
NOTE Confidence: 0.8433218
00:34:10.660 --> 00:34:11.800 Television was on,
NOTE Confidence: 0.8433218
00:34:11.800 --> 00:34:12.940 dog was barking,
NOTE Confidence: 0.8433218
00:34:12.940 --> 00:34:15.803 the phone kept ringing and if they NOTE Confidence: 0.8433218

00:34:15.803 --> 00:34:18.462 if they reported that they were
NOTE Confidence: 0.8433218
00:34:18.462 --> 00:34:21.156 interrupted at least three times that
NOTE Confidence: 0.8433218
00:34:21.156 --> 00:34:24.020 was associated with an increased.
NOTE Confidence: 0.8433218
00:34:24.020 --> 00:34:26.048 Decrement decrement asleep by
NOTE Confidence: 0.8433218
00:34:26.048 --> 00:34:27.569 about 21 minutes.

NOTE Confidence: 0.8433218
00:34:27.570 --> 00:34:29.590 We didn't see that household
NOTE Confidence: 0.8433218
00:34:29.590 --> 00:34:31.206 chaos was more common,
NOTE Confidence: 0.8433218
00:34:31.210 --> 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 --> 00:34:36.930 so it probably doesn't,
NOTE Confidence: 0.8433218
00:34:36.930 --> 00:34:39.450 or it doesn't attenuate racial disparities
NOTE Confidence: 0.8470325
00:34:39.517 --> 00:34:41.845 in sleep, but it is another dimension NOTE Confidence: 0.8470325

00:34:41.845 --> 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 --> 00:34:49.208 affect sleep quality. Interesting Lee.
NOTE Confidence: 0.8470325
00:34:49.208 --> 00:34:52.322 So no Association between bedroom sharing NOTE Confidence: 0.8470325

00:34:52.322 --> 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 --> 00:35:00.236 with teenagers, of course.
NOTE Confidence: 0.8470325
00:35:00.236 --> 00:35:03.022 Here's this beautiful graphic of an school.
NOTE Confidence: 0.8470325

00:35:03.030 --> 00:35:05.364 Start times. This is using data
NOTE Confidence: 0.8470325
00:35:05.364 --> 00:35:07.819 from 20 cities worth of schools.
NOTE Confidence: 0.8470325
00:35:07.820 --> 00:35:09.820 Active graphic measures of sleep.
NOTE Confidence: 0.8470325
00:35:09.820 --> 00:35:13.015 The only kids who were in bed enough time
NOTE Confidence: 0.8470325
00:35:13.015 --> 00:35:16.196 to get the minimum 8 hours overnight.
NOTE Confidence: 0.8470325
00:35:16.200 --> 00:35:18.588 'cause these are 15 year olds.
NOTE Confidence: 0.8470325
00:35:18.590 --> 00:35:20.174 The minimum recommended amount
NOTE Confidence: 0.8470325
00:35:20.174 --> 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 --> 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 --> 00:35:32.284 actor graphics sleep in the square
NOTE Confidence: 0.8470325
00:35:32.284 --> 00:35:34.390 is shorter than time in bed.
NOTE Confidence: 0.8470325
00:35:34.390 --> 00:35:36.058 That makes perfect sense,
NOTE Confidence: 0.8470325
00:35:36.058 --> 00:35:39.314 but if your school starts later you get

NOTE Confidence: 0.8470325
00:35:39.314 --> 00:35:42.010 more time in bed and more time asleep, NOTE Confidence: 0.8470325

00:35:42.010 --> 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 --> 00:35:49.249 phase delay that occurs during puberty.
NOTE Confidence: 0.8470325
00:35:49.250 --> 00:35:51.420 Pushing kids to stay up later and
NOTE Confidence: 0.8470325
00:35:51.420 --> 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 --> 00:35:57.286 specially screentime caffeine
NOTE Confidence: 0.8470325
00:35:57.286 --> 00:36:00.030 consumption and a whole range of other.
NOTE Confidence: 0.8470325
00:36:00.030 --> 00:36:01.059 High school pressures.
NOTE Confidence: 0.8445937
00:36:03.360 --> 00:36:06.720 I'm going to show here some results from
NOTE Confidence: 0.8445937
00:36:06.720 --> 00:36:10.080 our study on neighborhood disadvantage,
NOTE Confidence: 0.8445937
00:36:10.080 --> 00:36:12.550 showing that more disadvantaged neighborhoods
NOTE Confidence: 0.8445937
00:36:12.550 --> 00:36:16.290 have more waso and lower sleep efficiency.
NOTE Confidence: 0.8445937

00:36:16.290 --> 00:36:20.098 Not huge effects, but there's something and NOTE Confidence: 0.8445937

00:36:20.098 --> 00:36:24.993 also we have data showing that kids who NOTE Confidence: 0.8445937

00:36:24.993 --> 00:36:28.678 had consistent enforced routines early in NOTE Confidence: 0.8445937

00:36:28.678 --> 00:36:32.521 life ages 5 and nine were more likely to.
NOTE Confidence: 0.8445937
00:36:32.530 --> 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 --> 00:36:42.092 The green group is Group 4 is the reference NOTE Confidence: 0.8445937

00:36:42.092 --> 00:36:46.310 group and the people who had no bedtime
NOTE Confidence: 0.8445937
00:36:46.310 --> 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 --> 00:37:03.198 but I I do want to touch on a few of
NOTE Confidence: 0.8445937
00:37:03.198 --> 00:37:06.132 my data points about screens because
NOTE Confidence: 0.8445937
00:37:06.132 --> 00:37:09.230 I think that's such a key issue,
NOTE Confidence: 0.8445937
00:37:09.230 --> 00:37:11.130 especially during the pandemic when NOTE Confidence: 0.8445937

00:37:11.130 --> 00:37:13.786 we are relying on screens to basically

NOTE Confidence: 0.8445937
00:37:13.786 --> 00:37:15.844 get all of our social interactions
NOTE Confidence: 0.8445937
00:37:15.844 --> 00:37:18.029 and our schooling interactions.
NOTE Confidence: 0.8445937
00:37:18.030 --> 00:37:21.225 Here's a figure of this is from Jenn Twinkies NOTE Confidence: 0.8445937

00:37:21.225 --> 00:37:24.429 work looking at short sleep among teenagers.
NOTE Confidence: 0.8445937
00:37:24.430 --> 00:37:26.010 How it's gone up.
NOTE Confidence: 0.8445937
00:37:26.010 --> 00:37:28.380 Since to that between 2009 and
NOTE Confidence: 0.8445937
00:37:28.464 --> 00:37:31.180 2015 you may say that's old news,
NOTE Confidence: 0.8445937
00:37:31.180 --> 00:37:34.029 why are you telling me that the
NOTE Confidence: 0.8445937
00:37:34.029 --> 00:37:36.666 reason is because there is a kink
NOTE Confidence: 0.8445937
00:37:36.666 --> 00:37:39.330 up in 2012 and 20's work nicely?
NOTE Confidence: 0.8445937
00:37:39.330 --> 00:37:42.046 Medicine shows the only thing that changed.
NOTE Confidence: 0.8445937
00:37:42.050 --> 00:37:44.840 Basically between 2000 eleven 2013 is
NOTE Confidence: 0.8445937
00:37:44.840 --> 00:37:47.040 the pervasiveness of smartphone use.
NOTE Confidence: 0.8445937
00:37:47.040 --> 00:37:49.220 So more and more teens,
NOTE Confidence: 0.8445937
00:37:49.220 --> 00:37:51.245 especially as we're bringing our
NOTE Confidence: 0.8445937

00:37:51.245 --> 00:37:54.000 devices not just to our bedrooms, NOTE Confidence: 0.8445937

00:37:54.000 --> 00:37:56.610 but into our beds with us,
NOTE Confidence: 0.8445937
00:37:56.610 --> 00:37:59.262 using them as alarm clocks and NOTE Confidence: 0.8445937

00:37:59.262 --> 00:38:01.948 goodnight pillows and all of that NOTE Confidence: 0.8445937

00:38:01.948 --> 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 --> 00:38:10.464 but I'm fascinated by the literature NOTE Confidence: 0.8445937

00:38:10.464 --> 00:38:13.555 and work showing that our reliance on
NOTE Confidence: 0.8445937
00:38:13.555 --> 00:38:16.189 screens is interfering with our sleep,
NOTE Confidence: 0.8445937
00:38:16.190 --> 00:38:17.396 especially among teenagers.
NOTE Confidence: 0.8445937
00:38:17.396 --> 00:38:19.934 Over $90 \%$ of studies that look at screens NOTE Confidence: 0.8445937

00:38:19.934 --> 00:38:21.906 and sleep show this adverse Association
NOTE Confidence: 0.8445937
00:38:21.906 --> 00:38:24.377 and the remaining $8 \%$ shown a neutral.
NOTE Confidence: 0.8445937
00:38:24.377 --> 00:38:25.653 Nobody's saying screens are
NOTE Confidence: 0.8445937
00:38:25.653 --> 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,

NOTE Confidence: 0.8445937
00:38:29.290 --> 00:38:30.915 but that's not really why
NOTE Confidence: 0.8445937
00:38:30.915 --> 00:38:32.215 people are using them.
NOTE Confidence: 0.8445937
00:38:32.220 --> 00:38:33.520 And as I said,
NOTE Confidence: 0.8445937
00:38:33.520 --> 00:38:35.145 people are using these devices.
NOTE Confidence: 0.8445937
00:38:35.150 --> 00:38:36.780 Not only is alarm clocks,
NOTE Confidence: 0.8445937
00:38:36.780 --> 00:38:39.090 but they check them in
NOTE Confidence: 0.8445937
00:38:39.090 --> 00:38:41.400 the middle of the night.
NOTE Confidence: 0.8445937
00:38:41.400 --> 00:38:44.208 Is pervasive and our data from the age
NOTE Confidence: 0.8445937
00:38:44.208 --> 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 --> 00:38:54.046 staying asleep in shorter sleep duration?
NOTE Confidence: 0.8445937
00:38:54.050 --> 00:38:55.270 Above and beyond depressed
NOTE Confidence: 0.8445937
00:38:55.270 --> 00:38:55.880 depressive symptoms.
NOTE Confidence: 0.8445937
00:38:55.880 --> 00:38:58.064 So I know I'm going off the topic
NOTE Confidence: 0.8445937
00:38:58.064 --> 00:39:00.680 of fragile families, but this is.
NOTE Confidence: 0.8445937

00:39:00.680 --> 00:39:04.040 This is the fun one for your.
NOTE Confidence: 0.8445937
00:39:04.040 --> 00:39:04.796 Your Thanksgiving,
NOTE Confidence: 0.8445937
00:39:04.796 --> 00:39:07.820 whatever form it may be in this year.
NOTE Confidence: 0.8445937
00:39:07.820 --> 00:39:09.970 If somebody says to you, you know.
NOTE Confidence: 0.8445937
00:39:09.970 --> 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 --> 00:39:17.396 especially on thinking of your nephew?
NOTE Confidence: 0.8445937
00:39:17.400 --> 00:39:20.559 What your high school age and after he says,
NOTE Confidence: 0.8445937
00:39:20.560 --> 00:39:20.928 say,
NOTE Confidence: 0.8445937
00:39:20.928 --> 00:39:22.768 do you know that professional
NOTE Confidence: 0.8445937
00:39:22.768 --> 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 --> 00:39:29.326 Twitter at night and this is proven.
NOTE Confidence: 0.8445937
00:39:29.330 --> 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.

NOTE Confidence: 0.8335232
00:39:34.950 --> 00:39:37.407 Stony Brook looked at two public datasets.
NOTE Confidence: 0.8335232
00:39:37.410 --> 00:39:39.390 We merged the Twitter records
NOTE Confidence: 0.8335232
00:39:39.390 --> 00:39:41.370 of 112 verified NBA players.
NOTE Confidence: 0.8335232
00:39:41.370 --> 00:39:44.310 And we merged 30,000 tweets with
NOTE Confidence: 0.8335232
00:39:44.310 --> 00:39:46.721 their performance on next days
NOTE Confidence: 0.8335232
00:39:46.721 --> 00:39:49.649 games an what we are able to show.
NOTE Confidence: 0.8335232
00:39:49.650 --> 00:39:53.520 It's kind of amazing is that if they were
NOTE Confidence: 0.8335232
00:39:53.520 --> 00:39:57.769 up late at night tweeting after 11:00 PM.
NOTE Confidence: 0.8335232
00:39:57.770 --> 00:40:00.356 They performed worse the next day.
NOTE Confidence: 0.8335232
00:40:00.360 --> 00:40:02.747 By about one point and they don't.
NOTE Confidence: 0.8335232
00:40:02.750 --> 00:40:05.648 If you add up all the players
NOTE Confidence: 0.8335232
00:40:05.648 --> 00:40:08.210 on team for everybody's.
NOTE Confidence: 0.8335232
00:40:08.210 --> 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 --> 00:40:14.235 Fewer points scored an also
NOTE Confidence: 0.8335232

00:40:14.235 --> 00:40:16.070 fewer minutes on the court,
NOTE Confidence: 0.8335232
00:40:16.070 --> 00:40:19.310 so and I would say the most powerful effect
NOTE Confidence: 0.8335232
00:40:19.310 --> 00:40:22.679 that we saw was a drop in shooting accuracy.
NOTE Confidence: 0.8335232
00:40:22.680 --> 00:40:25.249 The amount of shots that they got.
NOTE Confidence: 0.8335232
00:40:25.250 --> 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 $101 / 2$ points per game down
NOTE Confidence: 0.8335232
00:40:30.318 --> 00:40:33.253 to nine and a half with some slight
NOTE Confidence: 0.8335232
00:40:33.253 --> 00:40:35.887 variation between home and away games.
NOTE Confidence: 0.8335232
00:40:35.890 --> 00:40:38.370 Actually there are similar.
NOTE Confidence: 0.8335232
00:40:38.370 --> 00:40:42.276 But here's the one for shooting accuracy.
NOTE Confidence: 0.8335232
00:40:42.280 --> 00:40:45.325 If you were a late night Twitter,
NOTE Confidence: 0.8335232
00:40:45.330 --> 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 --> 00:40:52.744 from about $45 \%$ down to $431 / 2 \%$.
NOTE Confidence: 0.8335232
00:40:52.744 --> 00:40:55.360 So that's a pretty significant drop.
NOTE Confidence: 0.8335232
00:40:55.360 --> 00:40:57.540 And if you are infrequent,

NOTE Confidence: 0.8335232
00:40:57.540 --> 00:40:59.284 late night Twitter tweeting
NOTE Confidence: 0.8335232
00:40:59.284 --> 00:41:01.900 headed even bigger effect on you.
NOTE Confidence: 0.8335232
00:41:01.900 --> 00:41:05.815 And it also had a big effect on you.
NOTE Confidence: 0.8335232
00:41:05.820 --> 00:41:08.436 If it was an away game.
NOTE Confidence: 0.8335232
00:41:08.440 --> 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 --> 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 --> 00:41:23.898 the effects on metabolism,
NOTE Confidence: 0.8335232
00:41:23.900 --> 00:41:26.828 but they might care about if they're going NOTE Confidence: 0.8335232

00:41:26.828 --> 00:41:30.079 to do better in their basketball game.
NOTE Confidence: 0.8335232
00:41:30.080 --> 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 --> 00:41:38.398 the power of sleep.
NOTE Confidence: 0.8335232

00:41:38.400 --> 00:41:40.698 I have one other follow up.
NOTE Confidence: 0.8335232
00:41:40.700 --> 00:41:42.615 We're still in the process
NOTE Confidence: 0.8335232
00:41:42.615 --> 00:41:44.147 of collecting some data.
NOTE Confidence: 0.8335232
00:41:44.150 --> 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 --> 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 --> 00:41:54.094 opened and closed within one week.
NOTE Confidence: 0.8335232
00:41:54.100 --> 00:41:56.858 But we collected data from them before NOTE Confidence: 0.8335232

00:41:56.858 --> 00:41:59.985 the lock down and then in the month NOTE Confidence: 0.8335232

00:41:59.985 --> 00:42:02.530 after the lockdown so March and May, NOTE Confidence: 0.8335232

00:42:02.530 --> 00:42:05.239 and in both of these counties are
NOTE Confidence: 0.8335232
00:42:05.239 --> 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 --> 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,

NOTE Confidence: 0.8335232
00:42:14.490 --> 00:42:16.470 but also waking up later so
NOTE Confidence: 0.8335232
00:42:16.470 --> 00:42:18.370 there's a shift in timing,
NOTE Confidence: 0.8335232
00:42:18.370 --> 00:42:19.778 which is consistent with
NOTE Confidence: 0.8335232
00:42:19.778 --> 00:42:21.186 what we would expect.
NOTE Confidence: 0.8335232
00:42:21.190 --> 00:42:23.472 But unfortunately we also saw increases in
NOTE Confidence: 0.8335232
00:42:23.472 --> 00:42:25.430 insomnia symptoms and napping behaviors,
NOTE Confidence: 0.8335232
00:42:25.430 --> 00:42:28.960 which I don't have as much of a problem with.
NOTE Confidence: 0.8335232
00:42:28.960 --> 00:42:31.048 But this this is actually paralleled
NOTE Confidence: 0.8335232
00:42:31.048 --> 00:42:33.200 in some studies in adults too,
NOTE Confidence: 0.8335232
00:42:33.200 --> 00:42:35.872 but these are kind of hot off the
NOTE Confidence: 0.8335232
00:42:35.872 --> 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 --> 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 --> 00:42:49.000 back to this topic about racial disparities.
NOTE Confidence: 0.8335232

00:42:49.000 --> 00:42:51.928 We know that they begin early in life.
NOTE Confidence: 0.8335232
00:42:51.930 --> 00:42:53.760 Do they begin in infancy?
NOTE Confidence: 0.8335232
00:42:53.760 --> 00:42:54.126 Maybe,
NOTE Confidence: 0.8335232
00:42:54.126 --> 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 --> 00:43:01.100 and we know that they are
NOTE Confidence: 0.8731468
00:43:01.170 --> 00:43:03.086 linked to sleep, is linked,
NOTE Confidence: 0.8731468
00:43:03.086 --> 00:43:05.376 or inadequate sleep is linked
NOTE Confidence: 0.8731468
00:43:05.376 --> 00:43:07.470 to depression and obesity.
NOTE Confidence: 0.8731468
00:43:07.470 --> 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 --> 00:43:14.968 bedtime routines, and cutting out screen use.
NOTE Confidence: 0.8731468
00:43:14.970 --> 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 --> 00:43:21.890 Not all of it, and some of it's beyond

NOTE Confidence: 0.8731468
00:43:21.890 --> 00:43:24.348 the scope of what's addressable.
NOTE Confidence: 0.8731468
00:43:24.350 --> 00:43:26.968 If it's a structural reason for heart,
NOTE Confidence: 0.8731468
00:43:26.970 --> 00:43:28.850 difficult to enforce bedtime routines, NOTE Confidence: 0.8731468

00:43:28.850 --> 00:43:31.384 but it is an important one because
NOTE Confidence: 0.8731468
00:43:31.384 --> 00:43:34.100 it's kind of a low hanging fruit.
NOTE Confidence: 0.8731468
00:43:34.100 --> 00:43:36.404 And then there are some more
NOTE Confidence: 0.8731468
00:43:36.404 --> 00:43:37.940 complicated structural problems with.
NOTE Confidence: 0.8731468
00:43:37.940 --> 00:43:39.980 Insufficient sleep among younger people,
NOTE Confidence: 0.8731468
00:43:39.980 --> 00:43:42.822 such as household chaos in school start
NOTE Confidence: 0.8731468
00:43:42.822 --> 00:43:45.666 times, these are not easy to change.
NOTE Confidence: 0.8731468
00:43:45.670 --> 00:43:46.368 They may.
NOTE Confidence: 0.8731468
00:43:46.368 --> 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 --> 00:43:52.190 but they're still very important.
NOTE Confidence: 0.8731468
00:43:52.190 --> 00:43:55.235 And then I'll just kind of conclude
NOTE Confidence: 0.8731468

00:43:55.235 --> 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 --> 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 --> 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 --> 00:44:12.568 sleep and what we can do about it.
NOTE Confidence: 0.8731468
00:44:12.570 --> 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 --> 00:44:21.800 work and then thinking more about the NOTE Confidence: 0.8731468

00:44:21.800 --> 00:44:23.556 consequences of sleep disparities.
NOTE Confidence: 0.8731468
00:44:23.560 --> 00:44:27.168 I think we have a pretty good grasp
NOTE Confidence: 0.8731468
00:44:27.168 --> 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 --> 00:44:34.850 socioeconomic and performance outcomes,

NOTE Confidence: 0.8731468
00:44:34.850 --> 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 --> 00:44:40.332 the big work is translating
NOTE Confidence: 0.8731468
00:44:40.332 --> 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 --> 00:44:48.149 and that's kind of the long term goal.
NOTE Confidence: 0.8731468
00:44:48.150 --> 00:44:50.196 I hope for all of us.
NOTE Confidence: 0.8731468
00:44:50.200 --> 00:44:52.384 Here's a figure that Dan Buysse
NOTE Confidence: 0.8731468
00:44:52.384 --> 00:44:54.496 beautifully put together for a review
NOTE Confidence: 0.8731468
00:44:54.496 --> 00:44:56.872 article of here in the layers and levels
NOTE Confidence: 0.8731468
00:44:56.936 --> 00:44:59.060 in the sociological model of sleep.
NOTE Confidence: 0.8731468
00:44:59.060 --> 00:45:00.880 And each of these levels
NOTE Confidence: 0.8731468
00:45:00.880 --> 00:45:02.700 carries with it kind of.
NOTE Confidence: 0.8731468
00:45:02.700 --> 00:45:06.060 A set of opportunities for
NOTE Confidence: 0.8731468

00:45:06.060 --> 00:45:08.748 intervention and we should.
NOTE Confidence: 0.8731468
00:45:08.750 --> 00:45:10.934 Be considering and thinking at all
NOTE Confidence: 0.8731468
00:45:10.934 --> 00:45:13.118 these levels as much as we can,
NOTE Confidence: 0.8731468
00:45:13.120 --> 00:45:15.130 because these are big, complicated problems,
NOTE Confidence: 0.8731468
00:45:15.130 --> 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 --> 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 --> 00:45:28.852 but at least mayor kept his on so
NOTE Confidence: 0.8731468
00:45:28.852 --> 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 --> 00:45:38.915 Yes,
NOTE Confidence: 0.8731468
00:45:38.915 --> 00:45:41.470 thank you so much for a really
NOTE Confidence: 0.8731468
00:45:41.470 --> 00:45:44.344 fantastic talk or and we can open it

NOTE Confidence: 0.8731468
00:45:44.344 --> 00:45:46.931 up to questions and anyone is welcome
NOTE Confidence: 0.8731468
00:45:46.931 --> 00:45:49.594 to unmute themselves an ask away there.
NOTE Confidence: 0.8731468
00:45:49.594 --> 00:45:51.922 I don't think there are any
NOTE Confidence: 0.8731468
00:45:51.922 --> 00:45:53.918 questions in the chat just yet,
NOTE Confidence: 0.8731468
00:45:53.920 --> 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 --> 00:46:02.680 that I got a communication about a month
NOTE Confidence: 0.8518336
00:46:02.680 --> 00:46:07.368 and a half ago from a professor at MIT.
NOTE Confidence: 0.8518336
00:46:07.370 --> 00:46:10.150 Covid Anne was using an oximeter, NOTE Confidence: 0.8518336
00:46:10.150 --> 00:46:14.630 and she asked me a very simple question.
NOTE Confidence: 0.8518336
00:46:14.630 --> 00:46:19.358 Are oximeters accurate in black people?
NOTE Confidence: 0.8518336
00:46:19.360 --> 00:46:22.118 And when you think about an oximeter,
NOTE Confidence: 0.8518336
00:46:22.120 --> 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,
NOTE Confidence: 0.8518336

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 --> 00:46:34.206 know the answer to the question.
NOTE Confidence: 0.8518336
00:46:34.210 --> 00:46:36.822 Fascinating, so so I contacted two
NOTE Confidence: 0.8518336
00:46:36.822 --> 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 --> 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 --> 00:46:47.321 the standards.
NOTE Confidence: 0.8518336
00:46:47.321 --> 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 --> 00:46:58.310 Four of whom have to be dark skinned.
NOTE Confidence: 0.8518336
00:46:58.310 --> 00:47:00.417 So there are millions of people
NOTE Confidence: 0.8518336
00:47:00.417 --> 00:47:02.720 out there that are that are using
NOTE Confidence: 0.8518336
00:47:02.787 --> 00:47:04.911 oximeters and we don't really know
NOTE Confidence: 0.8518336
00:47:04.911 --> 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,

NOTE Confidence: 0.8518336
00:47:09.500 --> 00:47:13.108 both in you know, both in their finger.
NOTE Confidence: 0.8518336
00:47:13.110 --> 00:47:15.264 On their ring finger there some
NOTE Confidence: 0.8518336
00:47:15.264 --> 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 --> 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 --> 00:47:27.540 where the data just isn't available.
NOTE Confidence: 0.8753355
00:47:28.200 --> 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 --> 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 --> 00:47:41.282 this before, but it seems like,
NOTE Confidence: 0.8753355
00:47:41.282 --> 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
NOTE Confidence: 0.8753355

00:47:47.660 --> 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 --> 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 --> 00:48:02.316 the 50s and how terrible it was.
NOTE Confidence: 0.8753355
00:48:02.316 --> 00:48:04.332 It turns out that the standards NOTE Confidence: 0.8753355

00:48:04.332 --> 00:48:06.472 are such that nobody has any
NOTE Confidence: 0.8753355
00:48:06.472 --> 00:48:08.903 data for these things below $70 \%$.
NOTE Confidence: 0.8753355
00:48:08.903 --> 00:48:11.184 Well so anyway so,
NOTE Confidence: 0.8753355
00:48:11.184 --> 00:48:14.523 but the 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 --> 00:48:21.249 skin people to me is like mindboggling.
NOTE Confidence: 0.88523835
00:48:22.500 --> 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 --> 00:48:31.328 to test that out. I mean 12 people.

NOTE Confidence: 0.88523835
00:48:31.328 --> 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 --> 00:48:47.570 Any other comments or thoughts?
NOTE Confidence: 0.8541973
00:48:51.430 --> 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 --> 00:49:00.020 comment about your question awhile
NOTE Confidence: 0.8410781
00:49:00.020 --> 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 --> 00:49:06.718 really like that.
NOTE Confidence: 0.8410781
00:49:06.720 --> 00:49:08.690 My connection and the video,
NOTE Confidence: 0.8410781
00:49:08.690 --> 00:49:10.660 but I'm also, you know,
NOTE Confidence: 0.8410781
00:49:10.660 --> 00:49:11.446 increasingly fascinating,
NOTE Confidence: 0.8410781
00:49:11.446 --> 00:49:15.200 fascinated with like this sort of. NOTE Confidence: 0.8410781

00:49:15.200 --> 00:49:18.122 Community idea and late people at NOTE Confidence: 0.8410781

00:49:18.122 --> 00:49:20.981 persons idea sleep duration that we
NOTE Confidence: 0.8410781
00:49:20.981 --> 00:49:23.886 you know that we're behind and talking
NOTE Confidence: 0.8410781
00:49:23.886 --> 00:49:26.620 about sleep as a multidimensional.
NOTE Confidence: 0.8410781
00:49:26.620 --> 00:49:27.685 Aspect in it,
NOTE Confidence: 0.8410781
00:49:27.685 --> 00:49:31.470 so so far in in my research with toddlers,
NOTE Confidence: 0.8410781
00:49:31.470 --> 00:49:33.780 the variability is where I'm really
NOTE Confidence: 0.8410781
00:49:33.780 --> 00:49:35.828 seeing that the race ethnicity
NOTE Confidence: 0.8410781
00:49:35.828 --> 00:49:37.993 differences and makes me very
NOTE Confidence: 0.8410781
00:49:37.993 --> 00:49:40.559 concerned that you know how much
NOTE Confidence: 0.8410781
00:49:40.559 --> 00:49:42.449 variability we're seeing and that
NOTE Confidence: 0.8410781
00:49:42.449 --> 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 --> 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 --> 00:49:53.685 I became a sleep researcher.
NOTE Confidence: 0.8410781
00:49:53.690 --> 00:49:56.945 You know how regular is the bedtime?

NOTE Confidence: 0.8410781
00:49:56.950 --> 00:49:58.350 Alright, and what influences that?
NOTE Confidence: 0.8410781
00:49:58.350 --> 00:50:00.394 And so it's a. It's a really.
NOTE Confidence: 0.8410781
00:50:00.400 --> 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 --> 00:50:06.726 setting up habits, and you know.
NOTE Confidence: 0.8410781
00:50:06.726 --> 00:50:08.574 Yeah, I guess so.
NOTE Confidence: 0.8410781
00:50:08.580 --> 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 --> 00:50:14.410 be talking about sleep.
NOTE Confidence: 0.8410781
00:50:14.410 --> 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 --> 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
NOTE Confidence: 0.8410781

00:50:26.526 --> 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 --> 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 --> 00:50:40.210 Check out damn bicis work on are you NOTE Confidence: 0.8260552

00:50:40.210 --> 00:50:42.931 stated it's and also of new research on NOTE Confidence: 0.8260552

00:50:42.931 --> 00:50:45.278 the sleep regularity index, that regularity.
NOTE Confidence: 0.8260552
00:50:45.278 --> 00:50:46.730 Is extremely important,
NOTE Confidence: 0.8260552
00:50:46.730 --> 00:50:48.820 and it's harder to measure.
NOTE Confidence: 0.8260552
00:50:48.820 --> 00:50:50.488 First of all, it's.
NOTE Confidence: 0.8260552
00:50:50.488 --> 00:50:53.732 It's not easy, but I think that may be
NOTE Confidence: 0.8260552
00:50:53.732 --> 00:50:57.159 going on in in our racial differences.
NOTE Confidence: 0.8260552
00:50:57.160 --> 00:50:58.414 In adolescents data, NOTE Confidence: 0.8260552

00:50:58.414 --> 00:51:00.922 we're seeing that 24 hours sleep

NOTE Confidence: 0.8260552
00:51:00.922 --> 00:51:02.988 doesn't vary by race ethnicity,
NOTE Confidence: 0.8260552
00:51:02.990 --> 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 --> 00:51:11.465 but probably there's a a
NOTE Confidence: 0.8260552
00:51:11.465 --> 00:51:13.440 nap at the first chance.
NOTE Confidence: 0.8260552
00:51:13.440 --> 00:51:15.102 The team can get it, you know,
NOTE Confidence: 0.8260552
00:51:15.102 --> 00:51:16.754 like Oh, I got home from school.
NOTE Confidence: 0.8260552
00:51:16.760 --> 00:51:18.176 Now I can take a nap.
NOTE Confidence: 0.8260552
00:51:18.180 --> 00:51:20.304 Oh I got home from my after school job.
NOTE Confidence: 0.8260552
00:51:20.310 --> 00:51:21.738 Now I can take a nap.
NOTE Confidence: 0.8260552
00:51:21.740 --> 00:51:23.828 They're catching up and it might.
NOTE Confidence: 0.8260552
00:51:23.830 --> 00:51:25.273 Be extremely irregular,
NOTE Confidence: 0.8260552
00:51:25.273 --> 00:51:29.251 or it might be in the middle of
NOTE Confidence: 0.8260552
00:51:29.251 --> 00:51:31.796 school that's hard to measure,
NOTE Confidence: 0.8260552
00:51:31.800 --> 00:51:34.290 but if it's micro nap.
NOTE Confidence: 0.8260552

00:51:34.290 --> 00:51:35.192 But yes,
NOTE Confidence: 0.8260552
00:51:35.192 --> 00:51:38.349 I think we need to embrace the NOTE Confidence: 0.8260552

00:51:38.349 --> 00:51:40.260 multidimensionality aspect completely.
NOTE Confidence: 0.8158154
00:51:42.700 --> 00:51:44.740 And with that pair connection
NOTE Confidence: 0.8158154
00:51:44.740 --> 00:51:47.508 that teens would I just in sleep
NOTE Confidence: 0.8158154
00:51:47.508 --> 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 --> 00:51:53.148 such as shift work,
NOTE Confidence: 0.8158154
00:51:53.150 --> 00:51:55.424 alot of adolescents are self regulating
NOTE Confidence: 0.8158154
00:51:55.424 --> 00:51:58.129 themselves at night and so you know NOTE Confidence: 0.8158154

00:51:58.129 --> 00:52:00.009 there's that perhaps more variability.
NOTE Confidence: 0.8158154
00:52:00.010 --> 00:52:02.290 My work is not in teams,
NOTE Confidence: 0.8158154
00:52:02.290 --> 00:52:04.432 but I would imagine that among
NOTE Confidence: 0.8158154
00:52:04.432 --> 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.

NOTE Confidence: 0.94186884
00:52:13.220 --> 00:52:15.008 Absolutely thank you.
NOTE Confidence: 0.8567506875
00:52:17.190 --> 00:52:19.158 David. You're on mute.
NOTE Confidence: 0.79615027
00:52:25.180 --> 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 --> 00:52:39.120 Let's see.
NOTE Confidence: 0.79082364
00:52:46.530 --> 00:52:47.736 While he's doing that,
NOTE Confidence: 0.79082364
00:52:47.736 --> 00:52:50.380 I I have an obligatory hat to put on.
NOTE Confidence: 0.79082364
00:52:50.380 --> 00:52:52.156 My husband was like you're going
NOTE Confidence: 0.79082364
00:52:52.156 --> 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 --> 00:52:56.595 It's really nice.
NOTE Confidence: 0.79082364
00:52:56.595 --> 00:52:58.070 Where'd you get that hat?
NOTE Confidence: 0.79082364
00:52:58.070 --> 00:52:59.846 He went there is class tonight.
NOTE Confidence: 0.8143791
00:53:02.880 --> 00:53:06.006 I like I won't do it for the talk,
NOTE Confidence: 0.8143791
00:53:06.010 --> 00:53:08.796 but I'll put it on during the question NOTE Confidence: 0.8143791

00:53:08.796 --> 00:53:10.884 and answer, so David's question is,
NOTE Confidence: 0.8143791
00:53:10.884 --> 00:53:13.320 has there been a move given zoom
NOTE Confidence: 0.8143791
00:53:13.320 --> 00:53:16.360 to postpone school start times?
NOTE Confidence: 0.8143791
00:53:16.360 --> 00:53:20.088 Out schools in the US or such a
NOTE Confidence: 0.8143791
00:53:20.088 --> 00:53:22.588 decentralized process I I cannot speak
NOTE Confidence: 0.8143791
00:53:22.588 --> 00:53:25.600 for all of schools or all of zoom,
NOTE Confidence: 0.8143791
00:53:25.600 --> 00:53:28.270 but what an opportunity root Gruber NOTE Confidence: 0.8143791

00:53:28.270 --> 00:53:30.860 wrote an article just last week
NOTE Confidence: 0.8143791
00:53:30.860 --> 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 --> 00:53:38.200 starting at 10:00 AM on zoom.
NOTE Confidence: 0.8143791
00:53:38.200 --> 00:53:41.910 Absolutely, I can say anecdotally.
NOTE Confidence: 0.8143791
00:53:41.910 --> 00:53:43.340 I don't think that's happening.
NOTE Confidence: 0.8143791
00:53:43.340 --> 00:53:45.050 I think the default position is.
NOTE Confidence: 0.8143791
00:53:45.050 --> 00:53:47.610 Have them signed on at.
NOTE Confidence: 0.8143791
00:53:47.610 --> 00:53:49.325 At 8:05 or whatever time

NOTE Confidence: 0.8143791
00:53:49.325 --> 00:53:50.697 there school typically starts,
NOTE Confidence: 0.8143791
00:53:50.700 --> 00:53:53.436 because that's what's known as the work day.
NOTE Confidence: 0.8143791
00:53:53.440 --> 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 --> 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 --> 00:54:02.333 and we didn't have to hustle and
NOTE Confidence: 0.8143791
00:54:02.333 --> 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 --> 00:54:11.274 It's a little bit of a different thing,
NOTE Confidence: 0.8143791
00:54:11.280 --> 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 --> 00:54:13.680 Gruber.
NOTE Confidence: 0.8705622
00:54:16.060 --> 00:54:18.445 The elimination of commute time
NOTE Confidence: 0.8705622

00:54:18.445 --> 00:54:20.830 may also be reducing disparities,
NOTE Confidence: 0.8705622
00:54:20.830 --> 00:54:22.738 because in some communities,
NOTE Confidence: 0.8705622
00:54:22.738 --> 00:54:24.169 particularly rural communities, NOTE Confidence: 0.8705622

00:54:24.170 --> 00:54:27.380 maybe the poorest students living furthest
NOTE Confidence: 0.8705622
00:54:27.380 --> 00:54:31.797 away and having to wake up just even a tiny.
NOTE Confidence: 0.8705622
00:54:31.800 --> 00:54:36.128 You know 20 minutes earlier every night could
NOTE Confidence: 0.8705622
00:54:36.128 --> 00:54:40.020 could lead to a clinically significant.
NOTE Confidence: 0.8705622
00:54:40.020 --> 00:54:41.636 Difference in sleep duration
NOTE Confidence: 0.8705622
00:54:41.636 --> 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 --> 00:54:48.500 the zoom schooling academically.
NOTE Confidence: 0.8705622
00:54:48.500 --> 00:54:52.500 I am not a fan, but at least sleep
NOTE Confidence: 0.8705622
00:54:52.500 --> 00:54:56.250 wise we may have some some perks.
NOTE Confidence: 0.8705622
00:54:56.250 --> 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 --> 00:55:00.470 in the chat.

NOTE Confidence: 0.8927289
00:55:02.130 --> 00:55:03.690 American Academy of Pediatrics
NOTE Confidence: 0.8927289
00:55:03.690 --> 00:55:06.030 recommendations for school reopening or tried
NOTE Confidence: 0.8927289
00:55:06.030 --> 00:55:08.370 to insert a recommendation about it,
NOTE Confidence: 0.8927289
00:55:08.370 --> 00:55:10.710 but it was not well received.
NOTE Confidence: 0.8927289
00:55:10.710 --> 00:55:13.050 It sounds like I'm so disappointed
NOTE Confidence: 0.8927289
00:55:13.050 --> 00:55:16.304 to hear that, but how fantastic that
NOTE Confidence: 0.8927289
00:55:16.304 --> 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 --> 00:55:23.660 totally be on board with that.
NOTE Confidence: 0.8927289
00:55:23.660 --> 00:55:27.036 They already have a position statement on it,
NOTE Confidence: 0.8927289
00:55:27.040 --> 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 --> 00:55:38.366 AP's position statement on screen use
NOTE Confidence: 0.8927289
00:55:38.366 --> 00:55:40.767 in children to advocate that don't
NOTE Confidence: 0.8927289

00:55:40.767 --> 00:55:43.175 use screens in the hour before bed,
NOTE Confidence: 0.8927289
00:55:43.180 --> 00:55:46.260 and they did accept that even though really
NOTE Confidence: 0.8927289
00:55:46.260 --> 00:55:48.920 the science and that's a little fuzzy, NOTE Confidence: 0.8927289

00:55:48.920 --> 00:55:52.700 but it's just generally good advice.
NOTE Confidence: 0.8927289
00:55:52.700 --> 00:55:55.184 On the weather, it's one hour or two hours,
NOTE Confidence: 0.8927289
00:55:55.190 --> 00:55:56.858 or what the right duration is.
NOTE Confidence: 0.8927289
00:55:56.860 --> 00:55:58.785 But one hours, so that's a bummer.
NOTE Confidence: 0.8927289
00:55:58.790 --> 00:56:00.458 So let me read the ship.
NOTE Confidence: 0.8927289
00:56:00.460 --> 00:56:03.299 Probably wrap up 'cause it.
NOTE Confidence: 0.8927289
00:56:03.300 --> 00:56:04.600 Hey Mr second question,
NOTE Confidence: 0.8927289
00:56:04.600 --> 00:56:06.550 David David tried to text me.
NOTE Confidence: 0.8927289
00:56:06.550 --> 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 --> 00:56:17.925 know about our speaker for next week.

NOTE Confidence: 0.8927289
00:56:17.925 --> 00:56:20.256 We're going to be hearing from Fatima, NOTE Confidence: 0.8927289

00:56:20.256 --> 00:56:22.663 Cody Stanford who is at Harvard and NOTE Confidence: 0.8927289

00:56:22.663 --> 00:56:24.777 she's going to be giving a talk NOTE Confidence: 0.8927289

00:56:24.777 --> 00:56:26.636 relevant to many of our patients.
NOTE Confidence: 0.8927289
00:56:26.636 --> 00:56:28.394 It's going to be entitled obesity
NOTE Confidence: 0.8927289
00:56:28.394 --> 00:56:29.630 and its management.
NOTE Confidence: 0.8927289
00:56:29.630 --> 00:56:32.118 What you need to know is a Sleep
NOTE Confidence: 0.8927289
00:56:32.118 --> 00:56:33.600 Medicine physician and provider.
NOTE Confidence: 0.8927289
00:56:33.600 --> 00:56:35.010 So please join us for that,
NOTE Confidence: 0.8927289
00:56:35.010 --> 00:56:36.660 then have a great week take care.
NOTE Confidence: 0.9112298
00:56:40.050 --> 00:56:43.610 I wrote to your response to me. I.
NOTE Confidence: 0.5058198
00:56:47.130 --> 00:56:48.790 Thanks all bye.

