WEBVTT

NOTE duration:"01:02:23" NOTE recognizability:0.934

NOTE language:en-us

NOTE Confidence: 0.97044375

 $00:00:00.000 \longrightarrow 00:00:03.798$ Good afternoon, everyone.

NOTE Confidence: 0.97044375

 $00:00:03.800 \longrightarrow 00:00:05.225$ Thank you for coming today

NOTE Confidence: 0.97044375

 $00:00:05.225 \longrightarrow 00:00:06.565$ to our T32 Grand rounds.

NOTE Confidence: 0.97044375

 $00:00:06.565 \longrightarrow 00:00:07.840$ We're on a tight schedule.

NOTE Confidence: 0.97044375

 $00:00:07.840 \longrightarrow 00:00:09.568$ We have three talks,

NOTE Confidence: 0.97044375

 $00:00:09.568 \longrightarrow 00:00:12.160$ so I'll be brief and concise.

NOTE Confidence: 0.97044375

00:00:12.160 --> 00:00:14.890 I direct the T32 Codirect

NOTE Confidence: 0.97044375

 $00:00:14.890 \longrightarrow 00:00:17.074$ T32 with Michael Block.

NOTE Confidence: 0.97044375

 $00:00:17.080 \longrightarrow 00:00:20.920$ We're in, I think our 38th or 39th year.

NOTE Confidence: 0.97044375

 $00:00:20.920 \longrightarrow 00:00:23.307$ It's really one of the joys of

NOTE Confidence: 0.97044375

 $00{:}00{:}23.307 \dashrightarrow 00{:}00{:}25.191$ my professional career to be a

NOTE Confidence: 0.97044375

00:00:25.191 --> 00:00:26.908 part of this following in the

NOTE Confidence: 0.97044375

00:00:26.908 --> 00:00:28.848 big shoes of Doctor Lechman.

00:00:28.850 --> 00:00:31.490 Not physically big, but big.

NOTE Confidence: 0.97044375

00:00:31.490 --> 00:00:31.970 Metaphorically,

NOTE Confidence: 0.87470297125

 $00:00:34.730 \longrightarrow 00:00:36.770$ we are up for a newal next year,

NOTE Confidence: 0.87470297125

 $00:00:36.770 \longrightarrow 00:00:38.658$ so we're going to be doing a mad

NOTE Confidence: 0.87470297125

 $00:00:38.658 \longrightarrow 00:00:40.665$ rush and reaching out to all of

NOTE Confidence: 0.87470297125

00:00:40.665 --> 00:00:42.370 you for materials to support us.

NOTE Confidence: 0.87470297125

 $00:00:42.370 \longrightarrow 00:00:44.333$ And we really couldn't do it and

NOTE Confidence: 0.87470297125

 $00:00:44.333 \longrightarrow 00:00:46.034$ succeed without you all and that the

NOTE Confidence: 0.87470297125

 $00:00:46.034 \longrightarrow 00:00:47.607$ atmosphere that you bring to the center.

NOTE Confidence: 0.904343754545455

00:00:50.610 --> 00:00:51.842 Okay. They told me I need to hit

NOTE Confidence: 0.904343754545455

 $00{:}00{:}51.842 --> 00{:}00{:}53.675$ click first here. There we go.

NOTE Confidence: 0.904343754545455

00:00:53.675 --> 00:00:55.850 So our T32 is growing.

NOTE Confidence: 0.904343754545455

 $00:00:55.850 \longrightarrow 00:00:57.050$ We only have six slots,

NOTE Confidence: 0.904343754545455

 $00:00:57.050 \longrightarrow 00:00:58.247$ Not only but that's what we have,

NOTE Confidence: 0.904343754545455

 $00:00:58.250 \longrightarrow 00:00:59.515$ but we have many others

NOTE Confidence: 0.904343754545455

 $00{:}00{:}59.515 \dashrightarrow 00{:}01{:}00.527$ who participate with us.

 $00{:}01{:}00.530 \dashrightarrow 00{:}01{:}01.698$ And here's a picture.

NOTE Confidence: 0.904343754545455

00:01:01.698 --> 00:01:03.450 I'm not a a Photoshop ace,

NOTE Confidence: 0.904343754545455

 $00{:}01{:}03.450 \dashrightarrow 00{:}01{:}05.763$ so I was able to bring every one in here.

NOTE Confidence: 0.904343754545455

 $00:01:05.770 \longrightarrow 00:01:07.527$ I'm going to ask for some help

NOTE Confidence: 0.904343754545455

 $00:01:07.530 \longrightarrow 00:01:08.610$ down the road from you all.

NOTE Confidence: 0.9335869

 $00:01:11.090 \longrightarrow 00:01:14.485$ And what we're going to hear about

NOTE Confidence: 0.9335869

00:01:14.485 --> 00:01:17.889 today are three talks from trainees

NOTE Confidence: 0.9335869

00:01:17.890 --> 00:01:19.802 Francesca Penner. Dr. Penner.

NOTE Confidence: 0.9335869

00:01:19.802 --> 00:01:22.192 Doctor Gerber and Doctor Kistagna.

NOTE Confidence: 0.9335869

 $00:01:22.200 \longrightarrow 00:01:23.976$ Dr. Penner will be telling us

NOTE Confidence: 0.9335869

 $00{:}01{:}23.976 \dashrightarrow 00{:}01{:}25.846$ about her work on understanding

NOTE Confidence: 0.9335869

 $00:01:25.846 \longrightarrow 00:01:28.318$ emotional regulation and pregnancy.

NOTE Confidence: 0.9335869

 $00{:}01{:}28.320 \dashrightarrow 00{:}01{:}29.910$ Doctor Gerber will be telling

NOTE Confidence: 0.9335869

 $00:01:29.910 \longrightarrow 00:01:31.500$ us about emotion disruption and

NOTE Confidence: 0.9335869

 $00:01:31.557 \longrightarrow 00:01:33.357$ loneliness and autistic and autistic

00:01:33.357 --> 00:01:35.157 youth during the COVID pandemic.

NOTE Confidence: 0.9335869

 $00{:}01{:}35.160 \dashrightarrow 00{:}01{:}36.198$ And lastly, Dr.

NOTE Confidence: 0.9335869

 $00:01:36.198 \longrightarrow 00:01:38.119$ Kistagna will be talking about modeling

NOTE Confidence: 0.9335869

00:01:38.120 --> 00:01:40.720 gaze behavior and starting point bias,

NOTE Confidence: 0.9335869

 $00:01:40.720 \longrightarrow 00:01:42.920$ drift rate and frontal midline

NOTE Confidence: 0.9335869

 $00:01:42.920 \longrightarrow 00:01:44.679$ beta EEG oscillations.

NOTE Confidence: 0.9335869

 $00:01:44.680 \longrightarrow 00:01:46.200$ Before we get on to the three talks,

NOTE Confidence: 0.9335869

 $00:01:46.200 \longrightarrow 00:01:48.216$ I just want to say a few words

NOTE Confidence: 0.9335869

 $00:01:48.216 \longrightarrow 00:01:49.689$ about these three trainees.

NOTE Confidence: 0.9335869

 $00:01:49.690 \longrightarrow 00:01:51.410$ We would love to be able to have

NOTE Confidence: 0.9335869

 $00:01:51.410 \longrightarrow 00:01:52.877$ everyone speak and we did make a

NOTE Confidence: 0.9335869

00:01:52.877 --> 00:01:54.487 call to everyone and then these are

NOTE Confidence: 0.9335869

 $00:01:54.487 \longrightarrow 00:01:55.927$ three individuals who reached out,

NOTE Confidence: 0.9335869

 $00:01:55.930 \longrightarrow 00:01:57.860$ but we'll be catching other

NOTE Confidence: 0.9335869

00:01:57.860 --> 00:02:00.290 people next year to present again.

NOTE Confidence: 0.9335869

 $00{:}02{:}00.290 \dashrightarrow 00{:}02{:}03.218$ Doctor Penner has really done an

 $00:02:03.218 \longrightarrow 00:02:06.026$ exceptional job as a T32 trainee.

NOTE Confidence: 0.9335869

 $00:02:06.026 \longrightarrow 00:02:08.618$ She got her own funding, F32.

NOTE Confidence: 0.9335869

00:02:08.618 --> 00:02:12.202 She published 38 papers up to this point.

NOTE Confidence: 0.9335869

 $00:02:12.210 \longrightarrow 00:02:13.450$ Not all in the T32,

NOTE Confidence: 0.9335869

 $00:02:13.450 \longrightarrow 00:02:15.124$ but you know that's what she's

NOTE Confidence: 0.9335869

 $00:02:15.124 \longrightarrow 00:02:16.680$ been doing across her career.

NOTE Confidence: 0.9335869

 $00:02:16.680 \longrightarrow 00:02:18.756$ And she landed a academic position

NOTE Confidence: 0.9335869

00:02:18.756 --> 00:02:20.710 at Baylor University of Department

NOTE Confidence: 0.9335869

00:02:20.710 --> 00:02:22.718 of Psychology and Neuroscience,

NOTE Confidence: 0.9335869

 $00:02:22.720 \longrightarrow 00:02:24.320$ so she'll be heading there.

NOTE Confidence: 0.9335869

 $00:02:24.320 \longrightarrow 00:02:25.862$ Doctor Gerber is in his first

NOTE Confidence: 0.9335869

 $00:02:25.862 \longrightarrow 00:02:28.344$ year in the T32 and he's rocked

NOTE Confidence: 0.9335869

 $00{:}02{:}28.344 \dashrightarrow 00{:}02{:}30.474$ it already with two grants.

NOTE Confidence: 0.9335869

 $00{:}02{:}30.480 \dashrightarrow 00{:}02{:}35.380$ He's got a autism grant and also

NOTE Confidence: 0.9335869

00:02:35.380 --> 00:02:36.930 from the Organization for Autism

 $00:02:36.930 \longrightarrow 00:02:38.858$ Research and also a Child Study

NOTE Confidence: 0.9335869

 $00{:}02{:}38.858 {\: -->\:} 00{:}02{:}40.118$ Center Pilot Research Award.

NOTE Confidence: 0.9335869

 $00{:}02{:}40.120 \dashrightarrow 00{:}02{:}42.200$ So Congrats to Doctor Gerber.

NOTE Confidence: 0.9335869

 $00:02:42.200 \longrightarrow 00:02:43.490$ And lastly Dr.

NOTE Confidence: 0.9335869

 $00:02:43.490 \longrightarrow 00:02:43.920$ Stagna.

NOTE Confidence: 0.94780115

 $00:02:46.480 \longrightarrow 00:02:50.230$ Also was quite prolific with 33

NOTE Confidence: 0.94780115

 $00{:}02{:}50.230 \dashrightarrow 00{:}02{:}53.515$ papers and and F32 also that's an

NOTE Confidence: 0.94780115

 $00:02:53.515 \longrightarrow 00:02:55.550$ independent training grant that he

NOTE Confidence: 0.94780115

 $00{:}02{:}55.628 \mathrel{--}{>} 00{:}02{:}59.422$ received and he's landed a tenure track

NOTE Confidence: 0.94780115

00:02:59.422 --> 00:03:02.440 position at University of Alabama.

NOTE Confidence: 0.94780115

 $00{:}03{:}02.440 \dashrightarrow 00{:}03{:}05.920$ So before I hand over the

NOTE Confidence: 0.94780115

 $00:03:05.920 \longrightarrow 00:03:08.680$ the mic to Doctor Penner,

NOTE Confidence: 0.94780115

 $00:03:08.680 \longrightarrow 00:03:10.836$ I just want to make a plug

NOTE Confidence: 0.94780115

 $00:03:10.836 \longrightarrow 00:03:12.652$ for these these F32 grants.

NOTE Confidence: 0.94780115

 $00:03:12.652 \longrightarrow 00:03:15.964$ We really only have a small number of.

NOTE Confidence: 0.94780115

 $00:03:15.964 \longrightarrow 00:03:18.830$ Spots on the T32 compared to the need.

 $00{:}03{:}18.830 \dashrightarrow 00{:}03{:}21.784$ And so I encourage everyone here to

NOTE Confidence: 0.94780115

 $00:03:21.784 \longrightarrow 00:03:24.470$ try to to pursue these F32 grants.

NOTE Confidence: 0.94780115

 $00:03:24.470 \longrightarrow 00:03:26.086$ We have lots of support for you.

NOTE Confidence: 0.94780115

 $00:03:26.086 \longrightarrow 00:03:26.734$ We read them.

NOTE Confidence: 0.94780115

 $00{:}03{:}26.734 \dashrightarrow 00{:}03{:}28.905$ Michael and I both sat on the study second

NOTE Confidence: 0.94780115

 $00:03:28.905 \longrightarrow 00:03:30.830$ committee for the review of the grants.

NOTE Confidence: 0.94780115

 $00:03:30.830 \longrightarrow 00:03:32.945$ We have examples so we can scaffold you to

NOTE Confidence: 0.94780115

 $00:03:32.945 \longrightarrow 00:03:34.870$ pursue these grants if you're interested.

NOTE Confidence: 0.94780115

00:03:34.870 --> 00:03:36.325 Anyway, thank you.

NOTE Confidence: 0.94780115

 $00:03:36.325 \longrightarrow 00:03:38.750$ Here's a treat for you.

NOTE Confidence: 0.94780115

 $00:03:38.750 \longrightarrow 00:03:39.830$ So Doctor Penner.

NOTE Confidence: 0.9402535

 $00:03:48.470 \longrightarrow 00:03:48.910$ Hi everyone.

NOTE Confidence: 0.9402535

00:03:48.910 --> 00:03:50.446 Thank you so much, Doctor Crowley.

NOTE Confidence: 0.9402535

 $00:03:50.446 \longrightarrow 00:03:52.086$ I'm really thrilled to be

NOTE Confidence: 0.9402535

 $00:03:52.086 \longrightarrow 00:03:53.070$ presenting at Greyhounds.

 $00:03:53.070 \longrightarrow 00:03:54.255$ It's very exciting.

NOTE Confidence: 0.9402535

 $00{:}03{:}54.255 \dashrightarrow 00{:}03{:}56.230$ I like Doctor Crowley said.

NOTE Confidence: 0.9402535

 $00{:}03{:}56.230 \dashrightarrow 00{:}03{:}57.670$ My name is Francesca Penner.

NOTE Confidence: 0.9402535

 $00:03:57.670 \longrightarrow 00:03:59.758$ I'm a postdoc working with Helena

NOTE Confidence: 0.9402535

00:03:59.758 --> 00:04:02.350 Rutherford in the before and after baby lab,

NOTE Confidence: 0.9402535

00:04:02.350 --> 00:04:05.087 and today I'm presenting some work focused

NOTE Confidence: 0.9402535

 $00:04:05.087 \longrightarrow 00:04:07.369$ on emotion regulation during pregnancy.

NOTE Confidence: 0.9402535

 $00:04:07.370 \longrightarrow 00:04:09.332$ I was excited to present this

NOTE Confidence: 0.9402535

 $00{:}04{:}09.332 \dashrightarrow 00{:}04{:}11.009$ work in particular because it's

NOTE Confidence: 0.9402535

00:04:11.009 --> 00:04:12.635 something that I started on right

NOTE Confidence: 0.9402535

00:04:12.635 --> 00:04:13.810 at the beginning of postdoc,

NOTE Confidence: 0.9402535

 $00:04:13.810 \longrightarrow 00:04:15.952$ so I thought it would be interesting

NOTE Confidence: 0.9402535

 $00{:}04{:}15.952 \dashrightarrow 00{:}04{:}17.988$ to kind of share the progression

NOTE Confidence: 0.9402535

 $00:04:17.988 \longrightarrow 00:04:20.445$ of work over the past two years.

NOTE Confidence: 0.9402535

 $00:04:20.450 \longrightarrow 00:04:21.293$ So to start,

NOTE Confidence: 0.9402535

 $00:04:21.293 \longrightarrow 00:04:23.260$ I wanted to begin with talking about

 $00:04:23.323 \longrightarrow 00:04:25.561$ why it's interesting and important to

NOTE Confidence: 0.9402535

 $00{:}04{:}25.561 \rightarrow 00{:}04{:}27.690$ study emotion regulation in pregnancy,

NOTE Confidence: 0.9402535

 $00:04:27.690 \longrightarrow 00:04:29.568$ beginning more broadly with the importance

NOTE Confidence: 0.9402535

00:04:29.568 --> 00:04:31.250 of emotion regulation in general.

NOTE Confidence: 0.9402535

 $00{:}04{:}31.250 \dashrightarrow 00{:}04{:}33.836$ So we know emotion regulation is

NOTE Confidence: 0.9402535

 $00:04:33.836 \longrightarrow 00:04:35.560$ a transdiagnostic factor relevant

NOTE Confidence: 0.9402535

00:04:35.628 --> 00:04:37.948 to many mental health disorders

NOTE Confidence: 0.9402535

 $00:04:37.948 \longrightarrow 00:04:39.804$ and symptoms of psychopathology.

NOTE Confidence: 0.9402535

 $00:04:39.810 \longrightarrow 00:04:41.754$ We also know it's a it's targeted in

NOTE Confidence: 0.9402535

 $00:04:41.754 \longrightarrow 00:04:43.009$ multiple evidence based treatment.

NOTE Confidence: 0.9402535

 $00:04:43.010 \longrightarrow 00:04:45.594$ So we have evidence that it can it's

NOTE Confidence: 0.9402535

 $00:04:45.594 \longrightarrow 00:04:47.776$ modifiable that we can improve emotion

NOTE Confidence: 0.9402535

 $00{:}04{:}47.776 \dashrightarrow 00{:}04{:}49.978$ regulation and that by improving it.

NOTE Confidence: 0.9402535

 $00:04:49.980 \longrightarrow 00:04:52.818$ Or by decreasing emotion to circulation,

NOTE Confidence: 0.9402535

 $00:04:52.820 \longrightarrow 00:04:55.245$ we can prevent and reduce

 $00:04:55.245 \longrightarrow 00:04:56.700$ symptoms of psychopathology.

NOTE Confidence: 0.9402535

 $00:04:56.700 \longrightarrow 00:04:58.320$ And we also know that emotion

NOTE Confidence: 0.9402535

 $00:04:58.320 \longrightarrow 00:04:59.980$ regulation is important in caregiving.

NOTE Confidence: 0.9402535

 $00:04:59.980 \longrightarrow 00:05:02.700$ So it helps us be more sensitive caregivers.

NOTE Confidence: 0.9402535

 $00:05:02.700 \longrightarrow 00:05:05.325$ And it's also important in terms of

NOTE Confidence: 0.9402535

 $00:05:05.325 \longrightarrow 00:05:07.689$ modeling for children as they develop

NOTE Confidence: 0.9402535

 $00{:}05{:}07.689 \dashrightarrow 00{:}05{:}10.017$ and learn emotion regulation as well.

NOTE Confidence: 0.9402535

 $00:05:10.020 \longrightarrow 00:05:11.570$ When you think about emotion

NOTE Confidence: 0.9402535

 $00{:}05{:}11.570 \dashrightarrow 00{:}05{:}12.500$ regulation during pregnancy,

NOTE Confidence: 0.9402535

 $00:05:12.500 \longrightarrow 00:05:14.508$ you can think about some of the unique

NOTE Confidence: 0.9402535

 $00{:}05{:}14.508 \dashrightarrow 00{:}05{:}16.006$ factors during this period that

NOTE Confidence: 0.9402535

 $00:05:16.006 \longrightarrow 00:05:17.576$ might affect our emotion regulation.

NOTE Confidence: 0.9402535

 $00:05:17.580 \longrightarrow 00:05:17.890$ So.

NOTE Confidence: 0.9402535

00:05:17.890 --> 00:05:19.750 Certainly there are lots of physical

NOTE Confidence: 0.9402535

 $00:05:19.750 \longrightarrow 00:05:21.516$ changes for the pregnant persons

NOTE Confidence: 0.9402535

 $00:05:21.516 \longrightarrow 00:05:23.456$ and physiological and brain changes

 $00:05:23.456 \longrightarrow 00:05:25.593$ that might affect the physiological

NOTE Confidence: 0.9402535

 $00{:}05{:}25.593 \dashrightarrow 00{:}05{:}27.888$ experience of emotions during pregnancy.

NOTE Confidence: 0.9402535

 $00:05:27.890 \longrightarrow 00:05:29.114$ There are also psychosocial

NOTE Confidence: 0.9402535

 $00:05:29.114 \longrightarrow 00:05:30.644$ stressors that might come up,

NOTE Confidence: 0.9402535

 $00{:}05{:}30.650 \dashrightarrow 00{:}05{:}32.930$ whether it's financial relationship

NOTE Confidence: 0.9402535

 $00:05:32.930 \longrightarrow 00:05:35.780$ or medical stressors that might

NOTE Confidence: 0.9402535

 $00:05:35.780 \longrightarrow 00:05:37.621$ challenge or require emotion

NOTE Confidence: 0.9402535

 $00:05:37.621 \longrightarrow 00:05:39.876$ regulation strategies during this time.

NOTE Confidence: 0.9402535

 $00:05:39.880 \longrightarrow 00:05:41.364$ And then we also know that pregnancy

NOTE Confidence: 0.9402535

 $00:05:41.364 \longrightarrow 00:05:43.144$ is a time of increased vulnerability

NOTE Confidence: 0.9402535

 $00:05:43.144 \longrightarrow 00:05:44.596$ for mental health disorders,

NOTE Confidence: 0.9402535

 $00:05:44.600 \longrightarrow 00:05:47.096$ especially depression and anxiety,

NOTE Confidence: 0.9402535

 $00:05:47.096 \longrightarrow 00:05:49.620$ which also makes emotion regulation

NOTE Confidence: 0.9402535

 $00:05:49.620 \longrightarrow 00:05:51.995$ really relevant during this time.

NOTE Confidence: 0.9402535

 $00:05:52.000 \longrightarrow 00:05:53.146$ And then finally,

 $00:05:53.146 \longrightarrow 00:05:55.625$ when we think about for new parents

NOTE Confidence: 0.9402535

 $00{:}05{:}55.625 \dashrightarrow 00{:}05{:}57.200$ of the transition to parenthood,

NOTE Confidence: 0.9402535

 $00:05:57.200 \longrightarrow 00:05:59.075$ whether there might be changes

NOTE Confidence: 0.9402535

 $00:05:59.075 \longrightarrow 00:06:01.321$ in emotion regulation as sort of

NOTE Confidence: 0.9402535

 $00:06:01.321 \longrightarrow 00:06:03.463$ as new skills come online as we

NOTE Confidence: 0.9402535

 $00:06:03.463 \longrightarrow 00:06:05.330$ become parents for the first time.

NOTE Confidence: 0.9402535

 $00:06:05.330 \longrightarrow 00:06:07.172$ So thinking about all those ways

NOTE Confidence: 0.9402535

 $00:06:07.172 \longrightarrow 00:06:08.400$ that emotion regulation might

NOTE Confidence: 0.9402535

00:06:08.458 --> 00:06:09.649 change during pregnancy,

NOTE Confidence: 0.9402535

 $00{:}06{:}09.650 \dashrightarrow 00{:}06{:}12.874$ but also its relevance for stress and mental

NOTE Confidence: 0.9402535

 $00{:}06{:}12.874 \dashrightarrow 00{:}06{:}15.809$ health and care giving during this time,

NOTE Confidence: 0.9402535

 $00:06:15.810 \longrightarrow 00:06:17.508$ we were interested in kind of

NOTE Confidence: 0.9402535

 $00:06:17.508 \longrightarrow 00:06:19.025$ looking at what's already known

NOTE Confidence: 0.9402535

 $00:06:19.025 \longrightarrow 00:06:20.325$ about emotion regulation during

NOTE Confidence: 0.9402535

00:06:20.325 --> 00:06:22.570 pregnancy in terms of the correlates,

NOTE Confidence: 0.9402535

 $00:06:22.570 \longrightarrow 00:06:24.570$ both during pregnancy and

 $00{:}06{:}24.570 \dashrightarrow 00{:}06{:}26.570$ in the postpartum period.

NOTE Confidence: 0.9402535

 $00:06:26.570 \longrightarrow 00:06:27.822$ So early in 2022,

NOTE Confidence: 0.9402535

 $00:06:27.822 \longrightarrow 00:06:30.215$ Helena and I posted a paper and

NOTE Confidence: 0.9402535

 $00{:}06{:}30.215 \dashrightarrow 00{:}06{:}32.420$ Archives of Women's Mental Health.

NOTE Confidence: 0.9402535

 $00{:}06{:}32.420 \dashrightarrow 00{:}06{:}34.170$ That summarizes this research area

NOTE Confidence: 0.9402535

 $00:06:34.170 \longrightarrow 00:06:36.283$ and it's a pretty small research

NOTE Confidence: 0.9402535

 $00:06:36.283 \longrightarrow 00:06:38.390$ area so far in terms of studies

NOTE Confidence: 0.9402535

 $00:06:38.390 \longrightarrow 00:06:40.659$ that have actually measured emotion

NOTE Confidence: 0.9402535

 $00:06:40.659 \longrightarrow 00:06:42.772$ regulation during pregnancy and

NOTE Confidence: 0.9402535

 $00{:}06{:}42.772 \dashrightarrow 00{:}06{:}44.820$ association with other variables

NOTE Confidence: 0.9402535

 $00{:}06{:}44.820 \dashrightarrow 00{:}06{:}47.380$ either in pregnancy or postpartum.

NOTE Confidence: 0.9402535

 $00:06:47.380 \longrightarrow 00:06:49.864$ So this figure from our paper

NOTE Confidence: 0.9402535

 $00:06:49.864 \longrightarrow 00:06:51.520$ kind of summarizes this

NOTE Confidence: 0.9402536

 $00:06:51.602 \longrightarrow 00:06:53.202$ area so far. It's definitely

NOTE Confidence: 0.9402536

 $00:06:53.202 \longrightarrow 00:06:54.857$ a growing area of research.

 $00:06:54.860 \longrightarrow 00:06:56.332$ So I expect that things have may have

NOTE Confidence: 0.9402536

 $00:06:56.332 \longrightarrow 00:06:57.695$ changed in the last year and a half,

NOTE Confidence: 0.9402536

 $00:06:57.700 \longrightarrow 00:07:00.610$ but in terms of what this

NOTE Confidence: 0.9402536

 $00:07:00.610 \longrightarrow 00:07:03.180$ figure represents, so the.

NOTE Confidence: 0.9402536

 $00:07:03.180 \longrightarrow 00:07:06.239$ Boxes in solid lines with solid arrows

NOTE Confidence: 0.9402536

 $00:07:06.239 \longrightarrow 00:07:08.759$ are correlates that we have evidence

NOTE Confidence: 0.9402536

 $00{:}07{:}08.759 \dashrightarrow 00{:}07{:}11.700$ for from at least one study where the

NOTE Confidence: 0.9402536

00:07:11.700 --> 00:07:14.073 boxes that are grayed out with dashed

NOTE Confidence: 0.9402536

 $00{:}07{:}14.073 \dashrightarrow 00{:}07{:}16.093$ lines are hypothesized correlates of

NOTE Confidence: 0.9402536

 $00:07:16.093 \longrightarrow 00:07:17.977$ emotion regulation during pregnancy.

NOTE Confidence: 0.9402536

 $00{:}07{:}17.980 \dashrightarrow 00{:}07{:}20.031$ So some of the things you have

NOTE Confidence: 0.9402536

 $00:07:20.031 \longrightarrow 00:07:22.742$ evidence for so far are that emotion

NOTE Confidence: 0.9402536

 $00:07:22.742 \longrightarrow 00:07:24.502$ regulation measured during pregnancy

NOTE Confidence: 0.9402536

 $00{:}07{:}24.502 \dashrightarrow 00{:}07{:}26.513$ are related to physical and mental

NOTE Confidence: 0.9402536

00:07:26.513 --> 00:07:28.068 health of the pregnant person

NOTE Confidence: 0.9402536

 $00:07:28.068 \longrightarrow 00:07:30.118$ both in pregnancy and postpartum.

 $00:07:30.120 \longrightarrow 00:07:32.510$ It's shown association with caregiving

NOTE Confidence: 0.9402536

 $00:07:32.510 \longrightarrow 00:07:35.280$ behavior measured during pregnancy as well.

NOTE Confidence: 0.9402536

 $00:07:35.280 \longrightarrow 00:07:38.542$ And then it's Even so shown some

NOTE Confidence: 0.9402536

 $00:07:38.542 \longrightarrow 00:07:40.400$ associations between motion regulation

NOTE Confidence: 0.9402536

 $00:07:40.400 \longrightarrow 00:07:42.700$ during pregnancy in the pregnant

NOTE Confidence: 0.9402536

 $00:07:42.700 \longrightarrow 00:07:45.658$ person and then with some infant

NOTE Confidence: 0.9402536

 $00:07:45.658 \longrightarrow 00:07:47.666$ outcomes like feeding interactions

NOTE Confidence: 0.9402536

 $00:07:47.666 \longrightarrow 00:07:50.079$ and infant attention and arousal.

NOTE Confidence: 0.9402536

 $00:07:50.080 \longrightarrow 00:07:53.790$ So we have some emerging evidence for.

NOTE Confidence: 0.9402536

 $00:07:53.790 \longrightarrow 00:07:56.070$ These significant links showing that

NOTE Confidence: 0.9402536

 $00:07:56.070 \longrightarrow 00:07:58.350$ emotion regulation in pregnancy might

NOTE Confidence: 0.9402536

 $00:07:58.418 \longrightarrow 00:08:00.707$ have implications for not only a mental

NOTE Confidence: 0.9402536

 $00:08:00.707 \longrightarrow 00:08:03.570$ health in the pregnant person but also

NOTE Confidence: 0.9402536

 $00:08:03.570 \longrightarrow 00:08:05.390$ caregiving and infant development.

NOTE Confidence: 0.9402536

 $00:08:05.390 \longrightarrow 00:08:07.466$ Which suggests that this is an

 $00:08:07.466 \longrightarrow 00:08:09.765$ important factor to study and also

NOTE Confidence: 0.9402536

 $00:08:09.765 \longrightarrow 00:08:11.469$ the potentially important factor

NOTE Confidence: 0.9402536

 $00:08:11.469 \longrightarrow 00:08:13.621$ for intervention because it could

NOTE Confidence: 0.9402536

 $00:08:13.621 \longrightarrow 00:08:15.536$ have these multi prompt impacts

NOTE Confidence: 0.9402536

 $00:08:15.536 \longrightarrow 00:08:17.630$ even into the postpartum period.

NOTE Confidence: 0.940902764117647

 $00:08:20.290 \longrightarrow 00:08:22.306$ So wanting to kind of build on this

NOTE Confidence: 0.940902764117647

 $00:08:22.306 \longrightarrow 00:08:23.989$ evidence base and study emotion

NOTE Confidence: 0.940902764117647

00:08:23.989 --> 00:08:25.489 regulation during pregnancy more,

NOTE Confidence: 0.940902764117647

 $00:08:25.490 \longrightarrow 00:08:28.108$ we conducted 2 studies with archival data

NOTE Confidence: 0.940902764117647

 $00:08:28.108 \longrightarrow 00:08:30.705$ focused on emotion regulation and perceived

NOTE Confidence: 0.940902764117647

 $00{:}08{:}30.705 \dashrightarrow 00{:}08{:}33.045$ stress during the perinatal period.

NOTE Confidence: 0.940902764117647

 $00:08:33.050 \longrightarrow 00:08:34.970$ And in both of these studies,

NOTE Confidence: 0.940902764117647

 $00:08:34.970 \longrightarrow 00:08:37.065$ we were conceptualizing perceived stress

NOTE Confidence: 0.940902764117647

 $00{:}08{:}37.065 \dashrightarrow 00{:}08{:}39.989$ in terms of appraisals of one's life

NOTE Confidence: 0.940902764117647

 $00:08:39.989 \longrightarrow 00:08:41.894$ as stressful versus objective measures

NOTE Confidence: 0.940902764117647

 $00:08:41.894 \longrightarrow 00:08:44.500$ of life of stressful life events.

 $00:08:44.500 \longrightarrow 00:08:46.383$ And we were thinking about emotion regulation

NOTE Confidence: 0.940902764117647

 $00:08:46.383 \longrightarrow 00:08:48.418$ in terms of James Gross's definition.

NOTE Confidence: 0.940902764117647

 $00{:}08{:}48.420 \dashrightarrow 00{:}08{:}50.580$ So attempts to influence one's

NOTE Confidence: 0.940902764117647

 $00:08:50.580 \longrightarrow 00:08:52.740$ emotions and how they're expressed.

NOTE Confidence: 0.940902764117647

 $00:08:52.740 \longrightarrow 00:08:53.684$ In particular,

NOTE Confidence: 0.940902764117647

 $00:08:53.684 \longrightarrow 00:08:56.044$ thinking about the emotion regulation

NOTE Confidence: 0.940902764117647

 $00:08:56.044 \longrightarrow 00:08:58.491$ strategies of reappraisal and suppression

NOTE Confidence: 0.940902764117647

 $00{:}08{:}58.491 \dashrightarrow 00{:}09{:}01.125$ with reappraisal thoughts to be a more

NOTE Confidence: 0.940902764117647

 $00:09:01.125 \longrightarrow 00:09:02.457$ adaptive emotion regulation strategy

NOTE Confidence: 0.940902764117647

 $00:09:02.457 \longrightarrow 00:09:05.227$ and suppression thoughts to be a more

NOTE Confidence: 0.940902764117647

 $00:09:05.227 \dashrightarrow 00:09:06.815$ maladaptive emotion regulation strategy.

NOTE Confidence: 0.940902764117647

 $00:09:06.820 \longrightarrow 00:09:08.340$ So in the first study,

NOTE Confidence: 0.940902764117647

 $00{:}09{:}08.340 \dashrightarrow 00{:}09{:}10.644$ we were focused on emotion regulation

NOTE Confidence: 0.940902764117647

 $00{:}09{:}10.644 \dashrightarrow 00{:}09{:}12.180$ strategies and perceived stress

NOTE Confidence: 0.940902764117647

 $00:09:12.237 \longrightarrow 00:09:14.127$ and expectant mothers and fathers.

00:09:14.130 --> 00:09:16.530 During the third trimester,

NOTE Confidence: 0.940902764117647

 $00:09:16.530 \longrightarrow 00:09:19.770$ and this was a sample collected here at Yale.

NOTE Confidence: 0.940902764117647

 $00:09:19.770 \longrightarrow 00:09:21.018$ Of 83 expectant parents,

NOTE Confidence: 0.940902764117647

 $00:09:21.018 \longrightarrow 00:09:22.890$ about 50 of them were pregnant

NOTE Confidence: 0.940902764117647

 $00:09:22.946 \longrightarrow 00:09:25.011$ mothers and then about half of the

NOTE Confidence: 0.940902764117647

00:09:25.011 --> 00:09:26.689 sample were first time parents.

NOTE Confidence: 0.940902764117647

 $00:09:26.690 \longrightarrow 00:09:28.556$ They completed the Perceived Stress Scale

NOTE Confidence: 0.940902764117647

 $00:09:28.556 \longrightarrow 00:09:30.490$ and the Emotion Regulation Questionnaire.

NOTE Confidence: 0.940902764117647

 $00{:}09{:}30.490 \dashrightarrow 00{:}09{:}32.810$ During the third trimester

NOTE Confidence: 0.940902764117647

00:09:32.810 --> 00:09:34.478 of pregnancy and 1st,

NOTE Confidence: 0.940902764117647

 $00{:}09{:}34.478 \dashrightarrow 00{:}09{:}36.002$ we looked at associations between each

NOTE Confidence: 0.940902764117647

 $00:09:36.002 \longrightarrow 00:09:37.929$ of those emotion regulation strategies,

NOTE Confidence: 0.940902764117647

 $00{:}09{:}37.930 \dashrightarrow 00{:}09{:}39.868$ reappraisal and suppression

NOTE Confidence: 0.940902764117647

 $00:09:39.868 \longrightarrow 00:09:41.806$ with perceived stress.

NOTE Confidence: 0.940902764117647

00:09:41.810 --> 00:09:43.700 And we saw associations in expected

NOTE Confidence: 0.940902764117647

 $00:09:43.700 \longrightarrow 00:09:45.386$ directions based on prior work

 $00:09:45.386 \longrightarrow 00:09:46.858$ with the emotion regulation

NOTE Confidence: 0.940902764117647

00:09:46.858 --> 00:09:48.330 questionnaire in other samples.

NOTE Confidence: 0.940902764117647

 $00:09:48.330 \longrightarrow 00:09:50.410$ So we saw that as parents reported greater

NOTE Confidence: 0.940902764117647

 $00:09:50.410 \longrightarrow 00:09:52.486$ levels of or greater use of suppression,

NOTE Confidence: 0.940902764117647

 $00{:}09{:}52.490 \dashrightarrow 00{:}09{:}54.850$ they also reported greater stress.

NOTE Confidence: 0.940902764117647

 $00:09:54.850 \longrightarrow 00:09:55.810$ And as they reported

NOTE Confidence: 0.940902764117647

 $00:09:55.810 \longrightarrow 00:09:56.770$ greater use of reappraisal,

NOTE Confidence: 0.940902764117647

 $00:09:56.770 \longrightarrow 00:09:58.570$ they reported lower perceived stress.

NOTE Confidence: 0.940902764117647

 $00:09:58.570 \longrightarrow 00:10:01.090$ So this is really underlining that

NOTE Confidence: 0.940902764117647

 $00:10:01.090 \longrightarrow 00:10:02.608$ in a sample of expected parents,

NOTE Confidence: 0.940902764117647

 $00:10:02.610 \longrightarrow 00:10:05.535$ we're seeing associations in expected

NOTE Confidence: 0.940902764117647

 $00:10:05.535 \longrightarrow 00:10:08.490$ directions with these two emotion

NOTE Confidence: 0.940902764117647

 $00{:}10{:}08.490 \to 00{:}10{:}11.490$ regulation strategies and perceived stress.

NOTE Confidence: 0.940902764117647

 $00:10:11.490 \longrightarrow 00:10:13.386$ We then were interested in whether

NOTE Confidence: 0.940902764117647

 $00{:}10{:}13.386 \dashrightarrow 00{:}10{:}15.435$ the mothers and fathers differed in

 $00:10:15.435 \longrightarrow 00:10:17.260$ their levels of perceived stress

NOTE Confidence: 0.940902764117647

 $00{:}10{:}17.260 \dashrightarrow 00{:}10{:}19.010$ and emotion regulation strategies.

NOTE Confidence: 0.940902764117647

 $00{:}10{:}19.010 \dashrightarrow 00{:}10{:}21.012$ And we saw we were actually surprised

NOTE Confidence: 0.940902764117647

 $00:10:21.012 \longrightarrow 00:10:23.493$ to see this finding was against our

NOTE Confidence: 0.940902764117647

 $00:10:23.493 \longrightarrow 00:10:25.448$ hypothesis that perceived stress in

NOTE Confidence: 0.940902764117647

 $00:10:25.448 \longrightarrow 00:10:27.649$ mothers and fathers was not different.

NOTE Confidence: 0.940902764117647

 $00:10:27.650 \longrightarrow 00:10:28.850$ So during the third trimester,

NOTE Confidence: 0.940902764117647

 $00:10:28.850 \longrightarrow 00:10:31.850$ they're reporting similar levels of

NOTE Confidence: 0.940902764117647

 $00:10:31.850 \longrightarrow 00:10:33.698$ stress and they're also reporting

NOTE Confidence: 0.940902764117647

 $00{:}10{:}33.698 \dashrightarrow 00{:}10{:}35.258$ similar levels of each emotion

NOTE Confidence: 0.940902764117647

 $00{:}10{:}35.258 \dashrightarrow 00{:}10{:}36.130$ regulation strategies.

NOTE Confidence: 0.940902764117647

 $00:10:36.130 \longrightarrow 00:10:37.530$ There were not any differences

NOTE Confidence: 0.940902764117647

 $00{:}10{:}37.530 \dashrightarrow 00{:}10{:}38.650$ between mothers and fathers.

NOTE Confidence: 0.884924438461538

00:10:41.110 --> 00:10:42.846 So this study, one limitation of it

NOTE Confidence: 0.884924438461538

 $00:10:42.846 \longrightarrow 00:10:44.909$ was that it was cross sectional data.

NOTE Confidence: 0.884924438461538

 $00{:}10{:}44.910 \dashrightarrow 00{:}10{:}47.708$ We were interested in also trying to

 $00:10:47.708 \longrightarrow 00:10:49.742$ understand better the direction of effects

NOTE Confidence: 0.884924438461538

 $00:10:49.742 \longrightarrow 00:10:51.597$ between emotion regulation and perceived

NOTE Confidence: 0.884924438461538

 $00{:}10{:}51.597 \dashrightarrow 00{:}10{:}53.467$ stress during the perinatal period.

NOTE Confidence: 0.884924438461538

 $00:10:53.470 \longrightarrow 00:10:55.246$ So we had some archival data

NOTE Confidence: 0.884924438461538

00:10:55.246 --> 00:10:56.779 from a collaborator at Texas

NOTE Confidence: 0.884924438461538

 $00:10:56.779 \longrightarrow 00:10:58.229$ A and M Rebecca Brooker,

NOTE Confidence: 0.884924438461538

 $00:10:58.230 \longrightarrow 00:11:00.470$ and that's what we examined and study too.

NOTE Confidence: 0.884924438461538

00:11:00.470 --> 00:11:02.724 So this study also looks at perceived

NOTE Confidence: 0.884924438461538

00:11:02.724 --> 00:11:04.390 stress and emotion regulation,

NOTE Confidence: 0.884924438461538

 $00:11:04.390 \longrightarrow 00:11:06.580$ those same 2 variables and

NOTE Confidence: 0.884924438461538

00:11:06.580 --> 00:11:08.770 measures across three time points

NOTE Confidence: 0.884924438461538

 $00:11:08.844 \longrightarrow 00:11:12.018$ in in the perinatal period.

NOTE Confidence: 0.884924438461538

 $00:11:12.020 \longrightarrow 00:11:13.658$ So because we had three time points,

NOTE Confidence: 0.884924438461538

00:11:13.660 --> 00:11:14.900 here was the 2nd trimester,

NOTE Confidence: 0.884924438461538

 $00:11:14.900 \longrightarrow 00:11:17.858$ third trimester and four months postpartum.

 $00:11:17.860 \longrightarrow 00:11:20.317$ We were interested in testing a cross

NOTE Confidence: 0.884924438461538

 $00:11:20.317 \longrightarrow 00:11:23.113$ like panel model to be able to look at

NOTE Confidence: 0.884924438461538

 $00:11:23.113 \longrightarrow 00:11:25.295$ both the stability of each of these

NOTE Confidence: 0.884924438461538

 $00:11:25.295 \longrightarrow 00:11:27.612$ constructs but also the cross lag and

NOTE Confidence: 0.884924438461538

 $00:11:27.620 \longrightarrow 00:11:31.220$ cross-sectional relationships between them.

NOTE Confidence: 0.884924438461538

 $00:11:31.220 \longrightarrow 00:11:34.532$ And this was a sample of 92 pregnant women.

NOTE Confidence: 0.884924438461538

 $00:11:34.540 \longrightarrow 00:11:36.475$ This these data were collected

NOTE Confidence: 0.884924438461538

00:11:36.475 --> 00:11:38.023 at Montana State University.

NOTE Confidence: 0.884924438461538

00:11:38.030 --> 00:11:39.118 And as I said,

NOTE Confidence: 0.884924438461538

 $00:11:39.118 \longrightarrow 00:11:40.750$ they completed the same 2 measures,

NOTE Confidence: 0.884924438461538

 $00{:}11{:}40.750 \dashrightarrow 00{:}11{:}42.086$ the Emotion Regulation Questionnaire

NOTE Confidence: 0.884924438461538

 $00:11:42.086 \longrightarrow 00:11:43.756$ and the Perceived Stress Scale

NOTE Confidence: 0.884924438461538

 $00:11:43.756 \longrightarrow 00:11:45.148$ in the second trimester,

NOTE Confidence: 0.884924438461538

 $00:11:45.150 \longrightarrow 00:11:49.068$ third trimester and four months postpartum.

NOTE Confidence: 0.884924438461538

 $00:11:49.070 \longrightarrow 00:11:51.326$ So we looked at associations between

NOTE Confidence: 0.884924438461538

 $00{:}11{:}51.326 \dashrightarrow 00{:}11{:}52.830$ suppression and perceived stress.

 $00:11:52.830 \longrightarrow 00:11:54.468$ We really only saw evidence for

NOTE Confidence: 0.884924438461538

 $00:11:54.468 \longrightarrow 00:11:56.510$ stability of each of these constructs.

NOTE Confidence: 0.884924438461538

 $00:11:56.510 \longrightarrow 00:11:58.110$ So there were no cross,

NOTE Confidence: 0.884924438461538

 $00:11:58.110 \longrightarrow 00:11:59.806$ lagged or cross-sectional associations

NOTE Confidence: 0.884924438461538

 $00:11:59.806 \longrightarrow 00:12:01.502$ between suppression and perceived

NOTE Confidence: 0.884924438461538

 $00:12:01.502 \longrightarrow 00:12:03.029$ stress in this sample.

NOTE Confidence: 0.959262244444445

 $00:12:05.090 \longrightarrow 00:12:06.645$ We looked at associations between

NOTE Confidence: 0.959262244444445

 $00{:}12{:}06.645 \dashrightarrow 00{:}12{:}07.889$ reappraisal and perceived stress.

NOTE Confidence: 0.959262244444445

 $00:12:07.890 \longrightarrow 00:12:09.870$ We again saw evidence for the

NOTE Confidence: 0.959262244444445

 $00:12:09.870 \longrightarrow 00:12:11.643$ stability of each of these

NOTE Confidence: 0.9592622444444445

 $00{:}12{:}11.643 \dashrightarrow 00{:}12{:}13.568$ across the three time points.

NOTE Confidence: 0.959262244444445

 $00:12:13.570 \longrightarrow 00:12:15.480$ And then we saw cross-sectional

NOTE Confidence: 0.959262244444445

 $00:12:15.480 \longrightarrow 00:12:17.008$ associations in the same

NOTE Confidence: 0.959262244444445

 $00:12:17.008 \longrightarrow 00:12:18.810$ direction as study one. So as

NOTE Confidence: 0.94331735

 $00:12:21.050 \longrightarrow 00:12:23.386$ reappraisal increased, perceived stress

 $00:12:23.386 \longrightarrow 00:12:26.890$ decreased in the same time point.

NOTE Confidence: 0.94331735

 $00{:}12{:}26.890 \dashrightarrow 00{:}12{:}29.194$ We also saw evidence for one cross lag

NOTE Confidence: 0.94331735

00:12:29.194 --> 00:12:31.315 effect, so giving us some potential

NOTE Confidence: 0.94331735

00:12:31.315 --> 00:12:33.140 information about the direction of

NOTE Confidence: 0.94331735

 $00:12:33.202 \longrightarrow 00:12:35.602$ effects where greater stress in the

NOTE Confidence: 0.94331735

 $00:12:35.602 \longrightarrow 00:12:37.202$ second trimester predicted lower

NOTE Confidence: 0.94331735

 $00{:}12{:}37.268 \dashrightarrow 00{:}12{:}39.328$ reappraisal in the third trimester.

NOTE Confidence: 0.94331735

 $00:12:39.330 \longrightarrow 00:12:41.390$ So potentially suggesting that

NOTE Confidence: 0.94331735

 $00{:}12{:}41.390 \dashrightarrow 00{:}12{:}43.965$ more stress in pregnancy could

NOTE Confidence: 0.94331735

 $00:12:43.965 \longrightarrow 00:12:47.839$ sort of get in the way of adaptive

NOTE Confidence: 0.94331735

 $00{:}12{:}47.839 \dashrightarrow 00{:}12{:}49.243$ emotion regulation strategies.

NOTE Confidence: 0.94331735

00:12:49.250 --> 00:12:50.930 To summarize these two studies,

NOTE Confidence: 0.94331735

 $00:12:50.930 \longrightarrow 00:12:53.150$ so both studies together showed.

NOTE Confidence: 0.94331735

 $00{:}12{:}53.150 \dashrightarrow 00{:}12{:}55.298$ Significant links between reappraisal

NOTE Confidence: 0.94331735

 $00:12:55.298 \longrightarrow 00:12:59.765$ and perceived stress cross sectionally in

NOTE Confidence: 0.94331735

 $00:12:59.765 \longrightarrow 00:13:02.495$ both mothers and fathers during during

 $00:13:02.495 \longrightarrow 00:13:04.605$ pregnancy Study two gave some evidence

NOTE Confidence: 0.94331735

 $00:13:04.605 \longrightarrow 00:13:06.785$ for the stability of emotion regulation

NOTE Confidence: 0.94331735

 $00:13:06.785 \longrightarrow 00:13:09.105$ strategies over the perinatal period.

NOTE Confidence: 0.94331735

00:13:09.110 --> 00:13:10.874 Although it's really important to know that

NOTE Confidence: 0.94331735

 $00:13:10.874 \longrightarrow 00:13:12.470$ this measurement of emotion regulations,

NOTE Confidence: 0.94331735

00:13:12.470 --> 00:13:13.430 your questionnaire measure,

NOTE Confidence: 0.94331735

 $00:13:13.430 \longrightarrow 00:13:15.350$ is thought to be more traitlike.

NOTE Confidence: 0.94331735

 $00:13:15.350 \longrightarrow 00:13:18.350$ So that's one reason why we're

NOTE Confidence: 0.94331735

 $00:13:18.350 \longrightarrow 00:13:20.850$ we're likely seeing stability here.

NOTE Confidence: 0.94331735

00:13:20.850 --> 00:13:21.783 And study two,

NOTE Confidence: 0.94331735

 $00{:}13{:}21.783 \dashrightarrow 00{:}13{:}23.960$ we saw that higher stress or appraisals

NOTE Confidence: 0.94331735

 $00{:}13{:}24.025 \dashrightarrow 00{:}13{:}25.789$ of stress in the second trimester

NOTE Confidence: 0.94331735

 $00{:}13{:}25.789 \dashrightarrow 00{:}13{:}28.334$ sort of might get in the way of

NOTE Confidence: 0.94331735

 $00:13:28.334 \longrightarrow 00:13:29.969$ adaptive emotion regulation later on.

NOTE Confidence: 0.94331735

00:13:29.970 --> 00:13:31.650 So giving us information about the

 $00:13:31.650 \longrightarrow 00:13:33.336$ direction of effects and then study

NOTE Confidence: 0.94331735

 $00:13:33.336 \longrightarrow 00:13:35.128$ one suggests that there is a potential

NOTE Confidence: 0.94331735

 $00:13:35.128 \longrightarrow 00:13:37.010$ need to include both expected parents,

NOTE Confidence: 0.94331735

00:13:37.010 --> 00:13:39.089 so not just the pregnant parent in

NOTE Confidence: 0.94331735

 $00:13:39.089 \longrightarrow 00:13:40.383$ prenatal mental health screening

NOTE Confidence: 0.94331735

 $00:13:40.383 \longrightarrow 00:13:42.103$ and interventions because we saw

NOTE Confidence: 0.94331735

 $00:13:42.103 \longrightarrow 00:13:43.873$ these similar levels of stress

NOTE Confidence: 0.94331735

 $00:13:43.873 \longrightarrow 00:13:45.209$ reported by both parents.

NOTE Confidence: 0.945889103999999

00:13:47.330 --> 00:13:49.826 So I wanted to briefly go through two

NOTE Confidence: 0.945889103999999

 $00{:}13{:}49.826 \dashrightarrow 00{:}13{:}51.928$ current studies that focus on emotion

NOTE Confidence: 0.945889103999999

00:13:51.928 --> 00:13:53.693 regulation during pregnancy that I

NOTE Confidence: 0.945889103999999

 $00:13:53.693 \longrightarrow 00:13:55.821$ got funding for as a postdoc and

NOTE Confidence: 0.945889103999999

 $00:13:55.821 \longrightarrow 00:13:57.567$ these are collecting data right now.

NOTE Confidence: 0.945889103999999

00:13:57.570 --> 00:14:00.207 So if we go back to our initial model,

NOTE Confidence: 0.945889103999999

 $00:14:00.210 \longrightarrow 00:14:01.992$ what is known and unknown in

NOTE Confidence: 0.945889103999999

 $00:14:01.992 \longrightarrow 00:14:02.883$ terms of correlates?

 $00:14:02.890 \longrightarrow 00:14:06.340$ I was interested in better understanding

NOTE Confidence: 0.945889103999999

 $00:14:06.340 \longrightarrow 00:14:08.140$ emotion regulation in during

NOTE Confidence: 0.945889103999999

00:14:08.140 --> 00:14:09.765 pregnancy at a qualitative level,

NOTE Confidence: 0.945889103999999

00:14:09.770 --> 00:14:11.570 so understanding women's subjective

NOTE Confidence: 0.945889103999999

 $00:14:11.570 \longrightarrow 00:14:13.820$ experience of emotions and emotion

NOTE Confidence: 0.945889103999999

00:14:13.820 --> 00:14:15.270 regulation during pregnancy.

NOTE Confidence: 0.945889103999999

00:14:15.270 --> 00:14:17.419 So I received funding from Yale Women

NOTE Confidence: 0.945889103999999

 $00:14:17.419 \longrightarrow 00:14:19.990$ Faculty Forum to conduct a qualitative study.

NOTE Confidence: 0.945889103999999

 $00:14:19.990 \longrightarrow 00:14:22.110$ This is data collections going on right now,

NOTE Confidence: 0.945889103999999

00:14:22.110 --> 00:14:25.030 so I've done about half of the interviews,

NOTE Confidence: 0.945889103999999

 $00:14:25.030 \longrightarrow 00:14:27.032$ and the goal is to hear directly

NOTE Confidence: 0.945889103999999

00:14:27.032 --> 00:14:28.715 from pregnant women about their

NOTE Confidence: 0.945889103999999

 $00{:}14{:}28.715 \dashrightarrow 00{:}14{:}30.356$ experience of emotions, stressors,

NOTE Confidence: 0.945889103999999

 $00:14:30.356 \longrightarrow 00:14:32.786$ and emotion regulation during pregnancy.

NOTE Confidence: 0.945889103999999

00:14:32.790 --> 00:14:35.586 It's specifically first time pregnant women,

 $00:14:35.590 \longrightarrow 00:14:38.110$ and the plan is to code these

NOTE Confidence: 0.945889103999999

00:14:38.110 --> 00:14:40.269 interviews once they're all complete

NOTE Confidence: 0.945889103999999

 $00:14:40.269 \longrightarrow 00:14:41.778$ using thematic analysis.

NOTE Confidence: 0.945889103999999

00:14:41.780 --> 00:14:43.400 The second study that's ongoing right

NOTE Confidence: 0.945889103999999

 $00:14:43.400 \longrightarrow 00:14:45.290$ now is focused on this association

NOTE Confidence: 0.945889103999999

 $00:14:45.290 \longrightarrow 00:14:46.802$ between emotion regulation measured

NOTE Confidence: 0.945889103999999

00:14:46.802 --> 00:14:49.283 in pregnancy and whether it can tell

NOTE Confidence: 0.945889103999999

00:14:49.283 --> 00:14:50.803 us anything about future caregiving

NOTE Confidence: 0.945889103999999

 $00:14:50.803 \longrightarrow 00:14:53.660$ behavior after the baby is born.

NOTE Confidence: 0.945889103999999

 $00:14:53.660 \longrightarrow 00:14:55.522$ So this study is funded by the

NOTE Confidence: 0.945889103999999

 $00{:}14{:}55.522 \dashrightarrow 00{:}14{:}57.160$ Colleen Dobbins Foundation and the

NOTE Confidence: 0.945889103999999

00:14:57.160 --> 00:14:58.339 American Psychological Foundation,

NOTE Confidence: 0.945889103999999

00:14:58.340 --> 00:15:01.140 and it is recruiting 61st time parents,

NOTE Confidence: 0.945889103999999

 $00:15:01.140 \longrightarrow 00:15:02.928$ both mothers and fathers,

NOTE Confidence: 0.945889103999999

 $00:15:02.928 \longrightarrow 00:15:05.163$ to evaluate whether emotion regulation

NOTE Confidence: 0.945889103999999

 $00{:}15{:}05.163 \dashrightarrow 00{:}15{:}07.327$ measured during the third trimester.

 $00:15:07.330 \longrightarrow 00:15:09.520$ Can predict caregiving 2 to four

NOTE Confidence: 0.945889103999999

 $00:15:09.520 \longrightarrow 00:15:10.250$ months postpartum.

NOTE Confidence: 0.945889103999999

 $00:15:10.250 \longrightarrow 00:15:12.370$ And in terms of caregiving,

NOTE Confidence: 0.945889103999999

 $00:15:12.370 \longrightarrow 00:15:13.645$ we're specifically interested

NOTE Confidence: 0.945889103999999

00:15:13.645 --> 00:15:15.770 in responses to infant crying.

NOTE Confidence: 0.945889103999999

 $00:15:15.770 \longrightarrow 00:15:17.732$ We're measuring that in multiple ways

NOTE Confidence: 0.945889103999999

 $00:15:17.732 \longrightarrow 00:15:19.530$ that so through questionnaire measures,

NOTE Confidence: 0.945889103999999

 $00{:}15{:}19.530 \dashrightarrow 00{:}15{:}21.585$ through behavior during the still

NOTE Confidence: 0.945889103999999

00:15:21.585 --> 00:15:23.102 face paradigm through behavior

NOTE Confidence: 0.945889103999999

00:15:23.102 --> 00:15:25.178 during a baby simulator task that

NOTE Confidence: 0.945889103999999

 $00:15:25.178 \longrightarrow 00:15:27.403$ Helena has used before in her studies

NOTE Confidence: 0.945889103999999

00:15:27.403 --> 00:15:29.483 that is programmed to cry for a

NOTE Confidence: 0.945889103999999

 $00:15:29.483 \longrightarrow 00:15:30.579$ certain amount of time.

NOTE Confidence: 0.945889103999999

 $00{:}15{:}30.580 \to 00{:}15{:}32.980$ And then also through measuring EE,

NOTE Confidence: 0.945889103999999

 $00:15:32.980 \longrightarrow 00:15:35.188$ G and event related potentials during

 $00:15:35.188 \longrightarrow 00:15:37.220$ audio of infant crying as well.

NOTE Confidence: 0.938576366666667

 $00:15:39.540 \longrightarrow 00:15:41.548$ So as I transition to faculty, I'm excited

NOTE Confidence: 0.938576366666667

 $00:15:41.548 \longrightarrow 00:15:43.536$ to continue building this line of research.

NOTE Confidence: 0.938576366666667

 $00:15:43.540 \longrightarrow 00:15:45.876$ So some initial thoughts are to expand the

NOTE Confidence: 0.938576366666667

 $00:15:45.876 \longrightarrow 00:15:48.494$ UP study which is that last study I shared to

NOTE Confidence: 0.938576366666667

00:15:48.494 --> 00:15:51.118 have a group of parents of psychopathology.

NOTE Confidence: 0.938576366666667

 $00:15:51.120 \longrightarrow 00:15:53.328$ I'm also really interested in physiological

NOTE Confidence: 0.938576366666667

00:15:53.328 --> 00:15:55.946 measures of emotion regulation, including EE,

NOTE Confidence: 0.938576366666667

00:15:55.946 --> 00:15:59.957 G&ERP at multiple time points to un-

derstand

NOTE Confidence: 0.938576366666667

 $00{:}15{:}59.960 \dashrightarrow 00{:}16{:}01.600$ other methods with other methods,

NOTE Confidence: 0.938576366666667

 $00{:}16{:}01.600 \dashrightarrow 00{:}16{:}03.538$ whether there's stability or change in

NOTE Confidence: 0.938576366666667

 $00:16:03.538 \longrightarrow 00:16:05.479$ the motion regulation over this period.

NOTE Confidence: 0.938576366666667

00:16:05.480 --> 00:16:07.760 And then I'm very interested in,

NOTE Confidence: 0.938576366666667

 $00:16:07.760 \longrightarrow 00:16:10.875$ in this in the context of intervention,

NOTE Confidence: 0.938576366666667

 $00:16:10.880 \longrightarrow 00:16:12.835$ to really thinking about interventions

00:16:12.835 --> 00:16:14.399 that improve emotion regulation,

NOTE Confidence: 0.938576366666667

 $00:16:14.400 \longrightarrow 00:16:16.596$ whether they can really have this,

NOTE Confidence: 0.938576366666667

 $00:16:16.600 \longrightarrow 00:16:19.996$ these multipronged impacts in terms of.

NOTE Confidence: 0.938576366666667

00:16:20.000 --> 00:16:23.288 Both parental and child health and

NOTE Confidence: 0.938576366666667

 $00:16:23.288 \longrightarrow 00:16:26.360$ caregiving after the child is born.

NOTE Confidence: 0.938576366666667

 $00:16:26.360 \longrightarrow 00:16:28.754$ So I just wanted to end by thanking Helena.

NOTE Confidence: 0.938576366666667

 $00:16:28.760 \longrightarrow 00:16:31.028$ She's been the best postdoctoral mentor

NOTE Confidence: 0.938576366666667

00:16:31.028 --> 00:16:33.574 I could have imagined and as well

NOTE Confidence: 0.938576366666667

00:16:33.574 --> 00:16:35.512 as Doctor Crowley and Doctor Block,

NOTE Confidence: 0.938576366666667

 $00:16:35.520 \longrightarrow 00:16:36.639$ the T32 directors.

NOTE Confidence: 0.938576366666667

 $00:16:36.639 \longrightarrow 00:16:39.751$ It's been really great to be in the

NOTE Confidence: 0.938576366666667

 $00:16:39.751 \longrightarrow 00:16:42.726$ T32 and especially in terms of grant

NOTE Confidence: 0.938576366666667

 $00:16:42.726 \longrightarrow 00:16:45.080$ writing training and also wanted to thank

NOTE Confidence: 0.938576366666667

 $00:16:45.080 \longrightarrow 00:16:47.220$ funders and everyone in the Babel lab,

NOTE Confidence: 0.938576366666667

 $00:16:47.220 \longrightarrow 00:16:48.975$ coauthors and other post docs

NOTE Confidence: 0.938576366666667

 $00:16:48.975 \longrightarrow 00:16:50.379$ in the T32 seminar.

 $00{:}16{:}50.380 {\:\dashrightarrow\:} 00{:}16{:}50.860$ Thank you.

NOTE Confidence: 0.937378342857143

 $00:17:00.590 \longrightarrow 00:17:02.627$ So we do have time for questions.

NOTE Confidence: 0.937378342857143

 $00:17:02.630 \longrightarrow 00:17:05.610$ We have 5 minutes. Make sure

NOTE Confidence: 0.937378342857143

 $00:17:05.610 \longrightarrow 00:17:08.110$ this is done. Any questions?

NOTE Confidence: 0.9402536

 $00:17:12.530 \longrightarrow 00:17:14.530$ That was very impressive and interesting.

NOTE Confidence: 0.94780115

 $00:17:14.530 \longrightarrow 00:17:16.650$ Thank you. Since you're interested

NOTE Confidence: 0.94780115

00:17:16.650 --> 00:17:18.900 in qualitative studies, I was just

NOTE Confidence: 0.94780115

 $00:17:18.900 \longrightarrow 00:17:20.330$ wondering what your thoughts are

NOTE Confidence: 0.91018715

 $00:17:20.330 \longrightarrow 00:17:22.100$ about measures of stress in the

NOTE Confidence: 0.91018715

 $00:17:22.100 \longrightarrow 00:17:24.769$ pregnant moms, if it's self-reports

NOTE Confidence: 0.91018715

 $00{:}17{:}24.770 \dashrightarrow 00{:}17{:}26.846$ are better or some objective measures.

NOTE Confidence: 0.91018715

 $00:17:26.850 \longrightarrow 00:17:28.887$ What's your experience now being in there

NOTE Confidence: 0.9402536

 $00:17:29.290 \longrightarrow 00:17:32.850$ I think really that.

NOTE Confidence: 0.9402536

 $00:17:32.850 \longrightarrow 00:17:33.958$ Neither one is better.

NOTE Confidence: 0.9402536

00:17:33.958 --> 00:17:35.343 Like I really think it's

 $00:17:35.343 \longrightarrow 00:17:36.208$ important to do both.

NOTE Confidence: 0.9402536

 $00:17:36.210 \longrightarrow 00:17:38.110$ I mean these these studies, you know,

NOTE Confidence: 0.9402536

 $00{:}17{:}38.110 \dashrightarrow 00{:}17{:}40.280$ were perceived stress and I do think

NOTE Confidence: 0.9402536

 $00:17:40.280 \longrightarrow 00:17:42.768$ there is a place for that because, you know,

NOTE Confidence: 0.9402536

 $00:17:42.770 \longrightarrow 00:17:44.810$ our perceptions of stress are important.

NOTE Confidence: 0.9402536

00:17:44.810 --> 00:17:46.630 And there's some evidence that it might

NOTE Confidence: 0.9402536

00:17:46.630 --> 00:17:48.328 overlap more with like mental health,

NOTE Confidence: 0.9402536

 $00:17:48.330 \longrightarrow 00:17:49.998$ like depression and anxiety.

NOTE Confidence: 0.9402536

 $00{:}17{:}49.998 \to 00{:}17{:}52.402$ But I do think that it,

NOTE Confidence: 0.9402536

 $00:17:52.402 \longrightarrow 00:17:54.274$ I think it's also interesting in

NOTE Confidence: 0.9402536

 $00{:}17{:}54.274 \dashrightarrow 00{:}17{:}56.081$ doing these interviews and kind of

NOTE Confidence: 0.9402536

 $00:17:56.081 \longrightarrow 00:17:58.130$ talking with women about the stressors

NOTE Confidence: 0.9402536

 $00:17:58.130 \longrightarrow 00:18:00.530$ they are experienced how sometimes.

NOTE Confidence: 0.9402536

 $00:18:00.530 \longrightarrow 00:18:03.650$ Like objective stressors are minimized

NOTE Confidence: 0.9402536

 $00:18:03.650 \longrightarrow 00:18:05.470$ in terms of like our reporting of

NOTE Confidence: 0.9402536

 $00:18:05.470 \longrightarrow 00:18:07.652$ them and so then being able to

 $00{:}18{:}07.652 \dashrightarrow 00{:}18{:}09.322$ measure those because they might,

NOTE Confidence: 0.9402536

 $00{:}18{:}09.330 \dashrightarrow 00{:}18{:}11.997$ they might be having some kind of

NOTE Confidence: 0.9402536

00:18:11.997 --> 00:18:13.889 biological effect that we're not,

NOTE Confidence: 0.9402536

00:18:13.890 --> 00:18:17.964 you know like acknowledging or or reporting.

NOTE Confidence: 0.9402536

 $00:18:17.970 \dashrightarrow 00:18:20.770$ I do think there's some minimizing and.

NOTE Confidence: 0.9402536

 $00:18:20.770 \longrightarrow 00:18:22.838$ And I think also like I've learned

NOTE Confidence: 0.9402536

 $00:18:22.838 \longrightarrow 00:18:23.808$ from these interviews as well,

NOTE Confidence: 0.9402536

 $00:18:23.810 \longrightarrow 00:18:25.376$ I think also like pregnant women

NOTE Confidence: 0.9402536

 $00:18:25.376 \longrightarrow 00:18:27.143$ really get the message that they

NOTE Confidence: 0.9402536

 $00:18:27.143 \longrightarrow 00:18:28.808$ shouldn't be stressed during pregnancy.

NOTE Confidence: 0.9402536

 $00:18:28.810 \longrightarrow 00:18:30.820$ And so then they're like trying

NOTE Confidence: 0.9402536

 $00{:}18{:}30.820 \dashrightarrow 00{:}18{:}32.619$ to minimize the stressors that

NOTE Confidence: 0.9402536

 $00:18:32.619 \longrightarrow 00:18:33.810$ they are experiencing.

NOTE Confidence: 0.90149794

00:18:36.610 --> 00:18:38.170 You have 3 minutes. Another question,

NOTE Confidence: 0.886433075

 $00:18:41.210 \longrightarrow 00:18:42.050$ Doctor Mcpartland.

00:18:48.200 --> 00:18:49.200 Having never been pregnant,

NOTE Confidence: 0.941987846153846

 $00{:}18{:}49.280 \dashrightarrow 00{:}18{:}50.804$ I am surprised that the message

NOTE Confidence: 0.941987846153846

 $00:18:50.804 \longrightarrow 00:18:52.381$ received that you shouldn't be stressed

NOTE Confidence: 0.941987846153846

00:18:52.381 --> 00:18:53.880 during pregnancy As the husband

NOTE Confidence: 0.941987846153846

 $00:18:53.880 \longrightarrow 00:18:54.876$ of a woman who's been pregnant,

NOTE Confidence: 0.941987846153846

 $00:18:54.880 \longrightarrow 00:18:56.400$ we had a different experience,

NOTE Confidence: 0.941987846153846

 $00:18:56.400 \longrightarrow 00:18:57.759$ but I'm related

NOTE Confidence: 0.9402536

00:18:57.760 --> 00:19:00.154 to that. I'm curious when you I was surprised

NOTE Confidence: 0.9452853

 $00:19:00.160 \longrightarrow 00:19:01.900$ to see similar levels of stress

NOTE Confidence: 0.9452853

00:19:01.900 --> 00:19:04.320 between the between both partners and

NOTE Confidence: 0.9301902

 $00:19:04.320 \longrightarrow 00:19:05.400$ do you have a sense,

NOTE Confidence: 0.9301902

00:19:05.400 --> 00:19:06.440 how do you interpret that?

NOTE Confidence: 0.9301902

 $00:19:06.440 \longrightarrow 00:19:07.504$ And do you have a sense of

NOTE Confidence: 0.9301902

 $00:19:07.504 \longrightarrow 00:19:08.360$ the quality and the nature

NOTE Confidence: 0.949402145454545

 $00:19:08.360 \longrightarrow 00:19:09.728$ of the stress and whether they're

NOTE Confidence: 0.949402145454545

 $00:19:09.728 \longrightarrow 00:19:10.960$ stressed about the same things?

00:19:12.440 --> 00:19:13.904 Yeah, I think that's such a good question

NOTE Confidence: 0.919053286666667

00:19:13.904 --> 00:19:15.557 and I was wondering about that myself,

NOTE Confidence: 0.919053286666667

00:19:15.560 --> 00:19:17.918 like as I was doing this.

NOTE Confidence: 0.919053286666667

00:19:17.920 --> 00:19:18.776 Presentation again,

NOTE Confidence: 0.919053286666667

 $00:19:18.776 \longrightarrow 00:19:22.200$ just kind of re wondering about that result.

NOTE Confidence: 0.919053286666667

 $00:19:22.200 \longrightarrow 00:19:24.261$ I yeah, I'm not sure and some of them

NOTE Confidence: 0.919053286666667

 $00:19:24.261 \longrightarrow 00:19:26.400$ were couples and some of them were not.

NOTE Confidence: 0.919053286666667

00:19:26.400 --> 00:19:29.319 So I think there's also you know when

NOTE Confidence: 0.919053286666667

 $00:19:29.319 \dashrightarrow 00:19:31.510$ we looked at whether we need to control

NOTE Confidence: 0.919053286666667

 $00{:}19{:}31.510 \dashrightarrow 00{:}19{:}34.068$ for the fact that some of them were in

NOTE Confidence: 0.919053286666667

 $00{:}19{:}34.068 \mathrel{--}{>} 00{:}19{:}35.980$ couples that perceived stress like did

NOTE Confidence: 0.919053286666667

 $00:19:35.980 \longrightarrow 00:19:38.920$ have an effect at the couple level.

NOTE Confidence: 0.919053286666667

 $00:19:38.920 \longrightarrow 00:19:39.643$ So there were.

NOTE Confidence: 0.919053286666667

 $00:19:39.643 \longrightarrow 00:19:41.722$ So I think you know some of that

NOTE Confidence: 0.919053286666667

 $00:19:41.722 \longrightarrow 00:19:43.387$ is like whatever stressors are

 $00:19:43.387 \longrightarrow 00:19:45.197$ affecting both of them do seem

NOTE Confidence: 0.919053286666667

 $00:19:45.197 \longrightarrow 00:19:47.312$ to be a factor and then I think.

NOTE Confidence: 0.919053286666667

 $00{:}19{:}47.312 \dashrightarrow 00{:}19{:}49.220$ And I think I'm definitely interested

NOTE Confidence: 0.919053286666667

 $00:19:49.279 \longrightarrow 00:19:51.127$ in kind of looking at that more.

NOTE Confidence: 0.919053286666667

 $00:19:51.130 \longrightarrow 00:19:53.326$ I'd like the partner effects in

NOTE Confidence: 0.919053286666667

 $00:19:53.326 \longrightarrow 00:19:55.223$ terms of like objective stressors

NOTE Confidence: 0.919053286666667

00:19:55.223 --> 00:19:58.103 and how stress on the mom might be

NOTE Confidence: 0.919053286666667

 $00:19:58.103 \longrightarrow 00:19:59.930$ affecting stress on the dad and

NOTE Confidence: 0.919053286666667

 $00{:}19{:}59.930 \dashrightarrow 00{:}20{:}01.970$ we're on the nonpregnant parent.

NOTE Confidence: 0.919053286666667

00:20:01.970 --> 00:20:03.062 But then also understanding,

NOTE Confidence: 0.919053286666667 00:20:03.062 --> 00:20:03.608 I think, NOTE Confidence: 0.919053286666667

 $00:20:03.610 \longrightarrow 00:20:08.032$ how the relationship can also be protective,

NOTE Confidence: 0.919053286666667

 $00{:}20{:}08.032 \dashrightarrow 00{:}20{:}10.489$ like help to reduce stress or not.

NOTE Confidence: 0.8716417175

00:20:15.090 --> 00:20:17.238 Thank you Doctor Penner. Okay,

NOTE Confidence: 0.8716417175

00:20:17.238 --> 00:20:18.366 we'll have Dr. Gerber come up.

NOTE Confidence: 0.82617223 00:20:21.050 --> 00:20:21.090 All

 $00:20:27.560 \longrightarrow 00:20:28.280$ right.

NOTE Confidence: 0.9201268

 $00:20:32.880 \longrightarrow 00:20:35.240$ So that was a great talk,

NOTE Confidence: 0.9352219

 $00:20:35.240 \longrightarrow 00:20:37.838$ hard to follow. I am really,

NOTE Confidence: 0.9352219

 $00:20:37.840 \longrightarrow 00:20:39.632$ really excited to be here today and perhaps

NOTE Confidence: 0.9352219

 $00:20:39.632 \longrightarrow 00:20:42.396$ a little bit nervous to be speaking to

NOTE Confidence: 0.9352219

00:20:42.396 --> 00:20:44.820 such really great minds and people.

NOTE Confidence: 0.9352219

 $00:20:44.820 \longrightarrow 00:20:46.500$ Here that you know have

NOTE Confidence: 0.9352219

 $00:20:46.500 \longrightarrow 00:20:48.660$ inspired my work over the years,

NOTE Confidence: 0.9352219

 $00:20:48.660 \longrightarrow 00:20:51.000$ so I'm really excited to talk to you about

NOTE Confidence: 0.9352219

 $00:20:51.000 \longrightarrow 00:20:53.417$ some work that came out of my dissertation,

NOTE Confidence: 0.9352219

00:20:53.420 --> 00:20:55.814 which is done at Stony Brook University.

NOTE Confidence: 0.9352219

 $00:20:55.820 \longrightarrow 00:20:59.380$ I'm currently finishing up my first year of

NOTE Confidence: 0.9352219

 $00{:}20{:}59.380 \dashrightarrow 00{:}21{:}03.052$ postdoc in Doctor Mcpartland's lab right now,

NOTE Confidence: 0.9352219

 $00{:}21{:}03.052 \dashrightarrow 00{:}21{:}05.428$ and so I'll be talking about

NOTE Confidence: 0.9352219

00:21:05.428 --> 00:21:07.133 social disruption and loneliness

00:21:07.133 --> 00:21:09.635 in autistic and non autistic youth

NOTE Confidence: 0.9352219

00:21:09.635 --> 00:21:11.799 during the COVID-19 pandemic.

NOTE Confidence: 0.9352219

 $00:21:11.800 \longrightarrow 00:21:13.424$ So first of all what what do we

NOTE Confidence: 0.9352219

 $00:21:13.424 \longrightarrow 00:21:15.160$ mean when we talk about loneliness?

NOTE Confidence: 0.9352219

 $00:21:15.160 \longrightarrow 00:21:17.152$ So something we all a concept

NOTE Confidence: 0.9352219

00:21:17.152 --> 00:21:18.480 we're all familiar with,

NOTE Confidence: 0.9352219

 $00:21:18.480 \longrightarrow 00:21:20.814$ but really we're defining it as

NOTE Confidence: 0.9352219

 $00{:}21{:}20.814 \dashrightarrow 00{:}21{:}22.884$ this mismatch between your desired

NOTE Confidence: 0.9352219

 $00{:}21{:}22.884 \to 00{:}21{:}25.119$ and your actual social activity.

NOTE Confidence: 0.9201268

00:21:27.440 --> 00:21:29.360 So it's a really important and

NOTE Confidence: 0.9201268

 $00{:}21{:}29.360 \dashrightarrow 00{:}21{:}30.880$ a major public health concern.

NOTE Confidence: 0.9201268

 $00:21:30.880 \longrightarrow 00:21:33.056$ There's a lot of data that we have

NOTE Confidence: 0.9201268

 $00:21:33.056 \longrightarrow 00:21:35.159$ pre pandemic even that shows that

NOTE Confidence: 0.9201268

 $00:21:35.159 \longrightarrow 00:21:37.800$ loneliness is associated with worse

NOTE Confidence: 0.9201268

 $00:21:37.800 \longrightarrow 00:21:40.530$ mental as well as physical health.

NOTE Confidence: 0.9201268

 $00:21:40.530 \longrightarrow 00:21:42.050$ So it's really great concern,

00:21:42.050 --> 00:21:44.010 but of course, as we all know,

NOTE Confidence: 0.9201268

 $00:21:44.010 \longrightarrow 00:21:45.378$ we all live through,

NOTE Confidence: 0.9201268

00:21:45.378 --> 00:21:47.088 during the pandemic this became

NOTE Confidence: 0.9201268

00:21:47.088 --> 00:21:49.018 almost one of the, you know,

NOTE Confidence: 0.9201268

 $00:21:49.018 \longrightarrow 00:21:52.126$ key or probably the key psychosocial concern.

NOTE Confidence: 0.9201268

 $00:21:52.130 \longrightarrow 00:21:54.866$ And even into today we're still

NOTE Confidence: 0.9201268

 $00:21:54.866 \longrightarrow 00:21:57.459$ experiencing a rise in social

NOTE Confidence: 0.9201268

 $00:21:57.459 \longrightarrow 00:21:59.487$ isolation and loneliness,

NOTE Confidence: 0.9201268

 $00:21:59.490 \longrightarrow 00:22:02.970$ especially in our youth or for our youth.

NOTE Confidence: 0.9201268

 $00{:}22{:}05.160 \dashrightarrow 00{:}22{:}07.416$ So how is this affecting autistic

NOTE Confidence: 0.9201268

00:22:07.416 --> 00:22:09.080 individuals and autistic youth?

NOTE Confidence: 0.9201268

 $00:22:09.080 \longrightarrow 00:22:11.582$ Well, there were already some of

NOTE Confidence: 0.9201268

 $00{:}22{:}11.582 \dashrightarrow 00{:}22{:}12.833$ these preexisting disparities,

NOTE Confidence: 0.9201268

 $00:22:12.840 \longrightarrow 00:22:16.038$ and the pandemic really exacerbated those.

NOTE Confidence: 0.9201268

 $00:22:16.040 \longrightarrow 00:22:19.076$ So, for example, mental health concerns,

00:22:19.080 --> 00:22:20.952 increases in stress, anxiety,

NOTE Confidence: 0.9201268

 $00{:}22{:}20.952 \dashrightarrow 00{:}22{:}23.760$ depression for autistic youth who are

NOTE Confidence: 0.9201268

 $00:22:23.833 \longrightarrow 00:22:26.296$ already kind of at risk and importantly

NOTE Confidence: 0.9201268

 $00:22:26.296 \longrightarrow 00:22:28.436$ as well for their caregivers.

NOTE Confidence: 0.933544666666667

 $00:22:32.120 \longrightarrow 00:22:34.570$ So one thing we know is somebody who

NOTE Confidence: 0.933544666666667

 $00{:}22{:}34.570 \dashrightarrow 00{:}22{:}37.055$ studies social isolation and loneliness is

NOTE Confidence: 0.933544666666667

 $00:22:37.055 \longrightarrow 00:22:39.755$ pre pandemic autistic youth were already

NOTE Confidence: 0.933544666666667

 $00:22:39.755 \longrightarrow 00:22:41.800$ experiencing some challenges with this.

NOTE Confidence: 0.933544666666667

00:22:41.800 --> 00:22:44.596 They were already at elevated risk

NOTE Confidence: 0.933544666666667

 $00:22:44.596 \longrightarrow 00:22:47.320$ for loneliness and social isolation.

NOTE Confidence: 0.933544666666667

 $00:22:47.320 \longrightarrow 00:22:51.040$ And so one thing to consider is that

NOTE Confidence: 0.933544666666667

00:22:51.040 --> 00:22:53.368 the pandemic could really put them

NOTE Confidence: 0.933544666666667

00:22:53.368 --> 00:22:55.940 at even greater risk for you know,

NOTE Confidence: 0.933544666666667

 $00:22:55.940 \longrightarrow 00:22:57.800$ based on its impact on social life.

NOTE Confidence: 0.938815971428571

00:22:59.880 --> 00:23:01.875 So despite the fact that you know,

NOTE Confidence: 0.938815971428571

 $00:23:01.880 \longrightarrow 00:23:04.238$ there's a clear interest in this

 $00:23:04.240 \longrightarrow 00:23:05.615$ and there are qualitative reports

NOTE Confidence: 0.938815971428571

 $00:23:05.615 \longrightarrow 00:23:07.240$ on this that will tell you,

NOTE Confidence: 0.938815971428571

00:23:07.240 --> 00:23:09.266 you know, autistic people will

NOTE Confidence: 0.938815971428571

00:23:09.266 --> 00:23:11.448 report missing of social contact,

NOTE Confidence: 0.938815971428571

00:23:11.448 --> 00:23:13.533 but there's actually, to my knowledge,

NOTE Confidence: 0.938815971428571

00:23:13.533 --> 00:23:15.710 has not been any qualitative or sorry

NOTE Confidence: 0.938815971428571

 $00:23:15.774 \longrightarrow 00:23:17.526$ quantitative examination of loneliness

NOTE Confidence: 0.938815971428571

 $00{:}23{:}17.526 \dashrightarrow 00{:}23{:}20.154$ and autistic use during the pandemic.

NOTE Confidence: 0.923002

 $00:23:22.750 \longrightarrow 00:23:24.536$ So we set out to do is really

NOTE Confidence: 0.923002

 $00:23:24.536 \longrightarrow 00:23:26.709$ understand what were the trajectories

NOTE Confidence: 0.953000504666667

 $00{:}23{:}26.870 \dashrightarrow 00{:}23{:}28.795$ of social disruption and lone liness

NOTE Confidence: 0.953000504666667

 $00:23:28.795 \longrightarrow 00:23:30.720$ for autistic youth during this

NOTE Confidence: 0.953000504666667

 $00{:}23{:}30.778 \dashrightarrow 00{:}23{:}32.468$ early period of the pandemic.

NOTE Confidence: 0.953000504666667

 $00:23:32.470 \longrightarrow 00:23:33.508$ What was it like for them?

NOTE Confidence: 0.934662751111111

 $00:23:36.270 \longrightarrow 00:23:37.629$ I want to take you through a little bit

 $00:23:37.630 \longrightarrow 00:23:40.394$ of what the study recruitment looked like.

NOTE Confidence: 0.934662751111111

 $00{:}23{:}40.394 \dashrightarrow 00{:}23{:}43.710$ So we began the study early June,

NOTE Confidence: 0.934662751111111

 $00:23:43.710 \longrightarrow 00:23:46.383$ so June 1st, 2020, if you can think back

NOTE Confidence: 0.934662751111111

 $00:23:46.383 \longrightarrow 00:23:49.376$ to a couple years ago what that was like.

NOTE Confidence: 0.934662751111111

 $00:23:49.380 \longrightarrow 00:23:51.402$ And we follow families and and

NOTE Confidence: 0.934662751111111

 $00:23:51.402 \longrightarrow 00:23:53.300$ youth for about six months.

NOTE Confidence: 0.934662751111111

 $00:23:53.300 \longrightarrow 00:23:56.540$ So that went from basically June until mid.

NOTE Confidence: 0.934662751111111

 $00:23:56.540 \longrightarrow 00:23:58.094$ Should I talking to the mic more?

NOTE Confidence: 0.9346627511111111

00:23:58.100 --> 00:24:00.137 Can you can you guys hear me?

NOTE Confidence: 0.934662751111111

 $00:24:00.140 \longrightarrow 00:24:02.378$ Is it better with the mic?

NOTE Confidence: 0.9346627511111111

 $00{:}24{:}02.380 \dashrightarrow 00{:}24{:}03.139$ OK, hold on,

NOTE Confidence: 0.9415114475

 $00:24:05.260 \longrightarrow 00:24:09.116$ it was meant for somebody taller I think.

NOTE Confidence: 0.9415114475

 $00:24:09.120 \longrightarrow 00:24:11.871$ So in so basically the study ran

NOTE Confidence: 0.9415114475

 $00{:}24{:}11.871 \dashrightarrow 00{:}24{:}14.360$ from June until early December,

NOTE Confidence: 0.9415114475

 $00:24:14.360 \longrightarrow 00:24:15.784$ early to mid-december 2020.

NOTE Confidence: 0.9415114475

 $00:24:15.784 \longrightarrow 00:24:18.370$ So that over the period of six

 $00:24:18.370 \longrightarrow 00:24:20.626$ months we had participants in there

NOTE Confidence: 0.9415114475

 $00{:}24{:}20.626 \dashrightarrow 00{:}24{:}22.840$ and one caregiver fill out some

NOTE Confidence: 0.9415114475

 $00:24:22.840 \longrightarrow 00:24:24.280$ questionnaires every two weeks.

NOTE Confidence: 0.9415114475

 $00:24:24.280 \longrightarrow 00:24:26.634$ And so that total 12 total

NOTE Confidence: 0.9415114475

 $00:24:26.634 \longrightarrow 00:24:28.998$ questionnaires over that period of time.

NOTE Confidence: 0.93019015

 $00:24:33.280 \longrightarrow 00:24:35.175$ All the families that came in

NOTE Confidence: 0.93019015

 $00:24:35.175 \longrightarrow 00:24:36.870$ and participated had already come

NOTE Confidence: 0.93019015

 $00:24:36.935 \longrightarrow 00:24:38.720$ into the lab and when they did.

NOTE Confidence: 0.93019015

 $00:24:38.720 \longrightarrow 00:24:41.640$ They completed standardized a gold

NOTE Confidence: 0.93019015

 $00:24:41.640 \longrightarrow 00:24:44.560$ standard diagnostic evaluation for autism.

NOTE Confidence: 0.93019015

 $00:24:44.560 \longrightarrow 00:24:46.400$ They also completed a

NOTE Confidence: 0.93019015

 $00{:}24{:}46.400 \dashrightarrow 00{:}24{:}48.240$ cognitive assessment as well.

NOTE Confidence: 0.93019015

 $00:24:48.240 \longrightarrow 00:24:50.264$ So during this study,

NOTE Confidence: 0.93019015

 $00:24:50.264 \longrightarrow 00:24:53.622$ we asked participants to complete the a

NOTE Confidence: 0.93019015

 $00:24:53.622 \longrightarrow 00:24:55.677$ Standardized Self Report of loneliness,

 $00:24:55.680 \longrightarrow 00:24:57.360$ and that's the UCLA Loneliness Scale.

NOTE Confidence: 0.93019015

 $00:24:57.360 \longrightarrow 00:24:59.202$ So they they did that every

NOTE Confidence: 0.93019015

 $00:24:59.202 \longrightarrow 00:25:00.970$ other week for six months.

NOTE Confidence: 0.93019015

 $00:25:00.970 \longrightarrow 00:25:02.434$ We asked our caregiver to tell

NOTE Confidence: 0.93019015

 $00:25:02.434 \longrightarrow 00:25:04.417$ us a little bit about how the

NOTE Confidence: 0.93019015

 $00{:}25{:}04.417 \dashrightarrow 00{:}25{:}06.007$ pandemic was impacting the family.

NOTE Confidence: 0.93019015

00:25:06.010 --> 00:25:07.264 And in particular,

NOTE Confidence: 0.93019015

 $00:25:07.264 \longrightarrow 00:25:09.354$ we're really interested in understanding

NOTE Confidence: 0.93019015

 $00{:}25{:}09.354 \dashrightarrow 00{:}25{:}11.008$ social disruption in the family.

NOTE Confidence: 0.93019015

 $00:25:11.010 \longrightarrow 00:25:12.210$ And when I say that,

NOTE Confidence: 0.93019015

 $00{:}25{:}12.210 \longrightarrow 00{:}25{:}14.352$ what I mean is we were focused on the

NOTE Confidence: 0.93019015

00:25:14.352 --> 00:25:16.209 items that were related to family,

NOTE Confidence: 0.93019015

 $00:25:16.210 \longrightarrow 00:25:18.530$ anything that's limited or restricted

NOTE Confidence: 0.93019015

 $00{:}25{:}18.530 \dashrightarrow 00{:}25{:}21.130$ family and social activities.

NOTE Confidence: 0.9201268

00:25:25.330 --> 00:25:28.328 So 76 youth participated in this study,

NOTE Confidence: 0.9201268

 $00:25:28.330 \longrightarrow 00:25:32.008$ 51 were autistic, 25 were not.

 $00:25:32.010 \longrightarrow 00:25:35.520$ They range in age from 8 to 17 and what

NOTE Confidence: 0.9201268

 $00{:}25{:}35.615 {\:\dashrightarrow\:} 00{:}25{:}39.125$ you can see here is as we would expect,

NOTE Confidence: 0.9201268

 $00:25:39.130 \longrightarrow 00:25:40.450$ there were differences.

NOTE Confidence: 0.9201268

 $00:25:40.450 \longrightarrow 00:25:42.650$ The autistic youth were had

NOTE Confidence: 0.9201268

 $00:25:42.650 \longrightarrow 00:25:44.630$ higher autism symptoms, severity.

NOTE Confidence: 0.9201268

 $00:25:44.630 \longrightarrow 00:25:46.730$ They also were more males,

NOTE Confidence: 0.9201268

 $00:25:46.730 \longrightarrow 00:25:48.634$ but other than that they were pretty

NOTE Confidence: 0.9201268

 $00:25:48.634 \longrightarrow 00:25:50.142$ evenly matched across the board.

NOTE Confidence: 0.9201268

 $00:25:50.142 \longrightarrow 00:25:52.090$ So there were no differences in

NOTE Confidence: 0.9201268

 $00{:}25{:}52.090 \dashrightarrow 00{:}25{:}53.490$ loneliness or social disruption

NOTE Confidence: 0.9201268

 $00:25:53.490 \longrightarrow 00:25:54.690$ at that first time point.

NOTE Confidence: 0.9301902

 $00:25:58.920 \longrightarrow 00:25:59.760$ So what do we think?

NOTE Confidence: 0.9301902

 $00:25:59.760 \longrightarrow 00:26:01.008$ What's going to happen?

NOTE Confidence: 0.9301902

00:26:01.008 --> 00:26:03.240 Well, we hypothesize that social

NOTE Confidence: 0.9301902

 $00{:}26{:}03.240 \dashrightarrow 00{:}26{:}05.325$ disruption would decrease over

00:26:05.325 --> 00:26:07.800 time for non autistic youth,

NOTE Confidence: 0.9301902

 $00:26:07.800 \longrightarrow 00:26:10.680$ but remain about the same for autistic youth,

NOTE Confidence: 0.9301902

 $00:26:10.680 \longrightarrow 00:26:12.563$ perhaps due to some of the stress

NOTE Confidence: 0.9301902

 $00:26:12.563 \longrightarrow 00:26:14.531$ and mental health challenges going

NOTE Confidence: 0.9301902

 $00:26:14.531 \longrightarrow 00:26:17.957$ on with parents and in youth.

NOTE Confidence: 0.9301902

 $00:26:17.960 \longrightarrow 00:26:20.588$ We also hypothesize that loneliness would

NOTE Confidence: 0.9301902

 $00:26:20.588 \longrightarrow 00:26:23.719$ decrease over time for non autistic youth,

NOTE Confidence: 0.9301902

00:26:23.720 --> 00:26:26.744 but remain about the same for autistic youth.

NOTE Confidence: 0.9301902

 $00{:}26{:}26{.}750 \longrightarrow 00{:}26{:}28{.}565$ And perhaps due to challenges

NOTE Confidence: 0.9301902

 $00:26:28.565 \longrightarrow 00:26:31.225$ in the change in routine that we

NOTE Confidence: 0.9301902

 $00{:}26{:}31.225 \dashrightarrow 00{:}26{:}33.150$ all experienced in the pandemic.

NOTE Confidence: 0.9301902

00:26:33.150 --> 00:26:33.930 And finally,

NOTE Confidence: 0.9301902

 $00:26:33.930 \longrightarrow 00:26:35.880$ we hypothesize that greater social

NOTE Confidence: 0.9301902

 $00{:}26{:}35.880 \dashrightarrow 00{:}26{:}37.620$ disruption would be associated

NOTE Confidence: 0.9301902

 $00:26:37.620 \longrightarrow 00:26:39.147$ with greater loneliness.

NOTE Confidence: 0.92767435

 $00:26:42.190 \longrightarrow 00:26:42.750$ So what did we

 $00{:}26{:}42.750 --> 00{:}26{:}44.718 \ \mathrm{find?}$ Well, I want to walk

NOTE Confidence: 0.93824092

 $00:26:44.718 \longrightarrow 00:26:46.030$ you through this chart.

NOTE Confidence: 0.93824092

 $00:26:46.030 \longrightarrow 00:26:48.726$ So on the X axis, what you see basically

NOTE Confidence: 0.93824092

 $00:26:48.726 \longrightarrow 00:26:50.670$ is time since the study starts,

NOTE Confidence: 0.93824092

 $00:26:50.670 \longrightarrow 00:26:52.990$ so time over six months.

NOTE Confidence: 0.93824092

 $00:26:52.990 \longrightarrow 00:26:54.943$ And on the Y axis you can

NOTE Confidence: 0.93824092

 $00:26:54.943 \longrightarrow 00:26:56.580$ see their social disruption.

NOTE Confidence: 0.93824092

 $00:26:56.580 \longrightarrow 00:26:59.076$ So higher scores here,

NOTE Confidence: 0.93824092

00:26:59.076 --> 00:27:01.572 higher numbers means greater

NOTE Confidence: 0.93824092

 $00:27:01.572 \longrightarrow 00:27:02.820$ social disruption.

NOTE Confidence: 0.93824092

 $00:27:02.820 \longrightarrow 00:27:04.758$ And what you can see is

NOTE Confidence: 0.93824092

 $00:27:04.758 \longrightarrow 00:27:06.660$ that over time both groups,

NOTE Confidence: 0.93824092

 $00:27:06.660 \longrightarrow 00:27:09.240$ both the non autistic and the

NOTE Confidence: 0.93824092

 $00{:}27{:}09.240 \dashrightarrow 00{:}27{:}11.606$ autistic groups decreased in their

NOTE Confidence: 0.93824092

 $00:27:11.606 \longrightarrow 00:27:13.614$ experience of social disruption.

 $00:27:13.620 \longrightarrow 00:27:15.336$ However, there was an interaction effect,

NOTE Confidence: 0.93824092

 $00:27:15.340 \longrightarrow 00:27:17.328$ so we did find that non autistic

NOTE Confidence: 0.93824092

 $00{:}27{:}17.328 \dashrightarrow 00{:}27{:}19.108$ youth had a greater decline

NOTE Confidence: 0.93824092

00:27:19.108 --> 00:27:21.268 in social disruption over time

NOTE Confidence: 0.93824092

00:27:21.268 --> 00:27:23.020 compared to autistic youth.

NOTE Confidence: 0.9301902

 $00:27:26.460 \longrightarrow 00:27:27.366$ So what about loneliness?

NOTE Confidence: 0.9301902

 $00:27:27.366 \longrightarrow 00:27:28.698$ What happened with loneliness?

NOTE Confidence: 0.9301902

00:27:28.700 --> 00:27:31.178 Well, and I'll get into this later,

NOTE Confidence: 0.9301902

 $00:27:31.180 \longrightarrow 00:27:32.380$ this was a bit of surprise,

NOTE Confidence: 0.9301902

 $00:27:32.380 \longrightarrow 00:27:34.900$ but what you can see here is on the

NOTE Confidence: 0.9301902

 $00{:}27{:}34.900 \dashrightarrow 00{:}27{:}37.814$ X axis you can see time again on the

NOTE Confidence: 0.9301902

00:27:37.814 --> 00:27:39.099 why you're now seeing loneliness.

NOTE Confidence: 0.9301902

 $00{:}27{:}39.100 \dashrightarrow 00{:}27{:}41.700$ So higher scores here means

NOTE Confidence: 0.9301902

 $00:27:41.700 \longrightarrow 00:27:44.020$ higher self reported loneliness.

NOTE Confidence: 0.9301902

 $00:27:44.020 \longrightarrow 00:27:46.268$ And actually what we found here was that

NOTE Confidence: 0.9301902

 $00:27:46.268 \longrightarrow 00:27:48.256$ loneliness did in fact decrease over time,

 $00:27:48.260 \longrightarrow 00:27:50.897$ but only for the autistic youth in the study.

NOTE Confidence: 0.9301902

 $00{:}27{:}50.900 \dashrightarrow 00{:}27{:}54.106$ So you can see in the blue.

NOTE Confidence: 0.9301902

 $00:27:54.110 \longrightarrow 00:27:56.294$ That's a statistically

NOTE Confidence: 0.9301902

 $00:27:56.294 \longrightarrow 00:27:58.608$ significant decline in the red.

NOTE Confidence: 0.9301902

 $00:27:58.608 \longrightarrow 00:28:00.038$ You're seeing non autistic youth

NOTE Confidence: 0.9301902

 $00:28:00.038 \longrightarrow 00:28:01.410$ and there's no statistically

NOTE Confidence: 0.9301902

 $00:28:01.410 \longrightarrow 00:28:02.906$ different change over time.

NOTE Confidence: 0.9452853

 $00{:}28{:}05.870 \dashrightarrow 00{:}28{:}08.282$ So finally I want to show you the results

NOTE Confidence: 0.9452853

 $00:28:08.282 \longrightarrow 00:28:10.590$ for loneliness and social disruption.

NOTE Confidence: 0.9452853

 $00{:}28{:}10.590 \dashrightarrow 00{:}28{:}12.660$ So you can see on the X axis now

NOTE Confidence: 0.9452853

 $00{:}28{:}12.660 \dashrightarrow 00{:}28{:}14.429$ you're seeing social disruption.

NOTE Confidence: 0.9452853

00:28:14.430 --> 00:28:16.740 So again, higher numbers means

NOTE Confidence: 0.9452853

 $00{:}28{:}16.740 \dashrightarrow 00{:}28{:}19.140$ greater social disruption.

NOTE Confidence: 0.9452853

00:28:19.140 --> 00:28:21.296 On the why, you're now seeing loneliness.

NOTE Confidence: 0.9452853

 $00:28:21.300 \longrightarrow 00:28:23.425$ So higher numbers means greater

 $00:28:23.425 \longrightarrow 00:28:24.700$ self reported loneliness.

NOTE Confidence: 0.9452853

 $00{:}28{:}24.700 \dashrightarrow 00{:}28{:}27.944$ The colors are the same and what you

NOTE Confidence: 0.9452853

 $00:28:27.944 \longrightarrow 00:28:30.512$ can see is this interesting interaction

NOTE Confidence: 0.9452853

 $00:28:30.512 \longrightarrow 00:28:33.094$ effect where for autistic youth we did

NOTE Confidence: 0.9452853

 $00:28:33.094 \longrightarrow 00:28:35.381$ find the relationship we expected so

NOTE Confidence: 0.9452853

 $00:28:35.381 \longrightarrow 00:28:37.733$ we did find greater social disruption

NOTE Confidence: 0.9452853

 $00:28:37.740 \longrightarrow 00:28:39.780$ was associated with greater loneliness.

NOTE Confidence: 0.9452853

00:28:39.780 --> 00:28:41.046 But for the non autistic youth

NOTE Confidence: 0.9452853

 $00:28:41.046 \longrightarrow 00:28:42.180$ we did not see that,

NOTE Confidence: 0.9452853

 $00:28:42.180 \longrightarrow 00:28:43.540$ we didn't see that relationship.

NOTE Confidence: 0.926835843333333

 $00:28:48.020 \longrightarrow 00:28:50.100$ So what do we make of all this?

NOTE Confidence: 0.926835843333333

 $00:28:50.100 \longrightarrow 00:28:52.010$ So let's start with the

NOTE Confidence: 0.926835843333333

 $00:28:52.010 \longrightarrow 00:28:53.538$ findings on social disruption.

NOTE Confidence: 0.926835843333333

 $00:28:53.540 \longrightarrow 00:28:55.648$ But what we found was that

NOTE Confidence: 0.926835843333333

 $00:28:55.648 \longrightarrow 00:28:56.989$ social disruption declined

NOTE Confidence: 0.926835843333333

 $00:28:56.989 \longrightarrow 00:28:59.340$ over time for both groups,

 $00:28:59.340 \longrightarrow 00:29:01.074$ but it was a greater decline

NOTE Confidence: 0.926835843333333

 $00:29:01.074 \longrightarrow 00:29:02.660$ in the non autistic youth.

NOTE Confidence: 0.942266388

 $00:29:06.260 \longrightarrow 00:29:08.372$ So perhaps one way to look at this

NOTE Confidence: 0.942266388

 $00:29:08.372 \longrightarrow 00:29:10.908$ is that non autistic youth made a

NOTE Confidence: 0.942266388

 $00{:}29{:}10.908 \dashrightarrow 00{:}29{:}12.853$ quicker return to social activities.

NOTE Confidence: 0.917580985

 $00:29:15.660 \longrightarrow 00:29:16.820$ So in thinking again.

NOTE Confidence: 0.94654317375

 $00:29:17.360 \longrightarrow 00:29:18.700$ Into what this period

NOTE Confidence: 0.94654317375

 $00:29:18.700 \longrightarrow 00:29:20.040$ was like for caregivers.

NOTE Confidence: 0.94654317375

 $00{:}29{:}20.040 \dashrightarrow 00{:}29{:}21.930$ There's quite a bit of research

NOTE Confidence: 0.94654317375

 $00:29:21.930 \longrightarrow 00:29:23.556$ that suggests that, you know,

NOTE Confidence: 0.94654317375

 $00:29:23.556 \longrightarrow 00:29:25.246$ caregivers of autistic individuals and

NOTE Confidence: 0.94654317375

 $00:29:25.246 \longrightarrow 00:29:27.160$ autistic youth were already stressed.

NOTE Confidence: 0.94654317375

00:29:27.160 --> 00:29:29.218 And the pandemic with challenges and

NOTE Confidence: 0.94654317375

 $00:29:29.218 \longrightarrow 00:29:31.699$ getting services and all sorts of changes

NOTE Confidence: 0.94654317375

 $00:29:31.699 \longrightarrow 00:29:33.799$ in routine were really quite stressful.

00:29:33.800 --> 00:29:35.424 And if you think about it or if

NOTE Confidence: 0.94654317375

 $00:29:35.424 \longrightarrow 00:29:36.878$ there any parents in the room,

NOTE Confidence: 0.94654317375

 $00:29:36.880 \longrightarrow 00:29:38.596$ parents tend to be the gatekeepers,

NOTE Confidence: 0.94654317375

 $00:29:38.600 \longrightarrow 00:29:41.600$ the facilitators of social activity.

NOTE Confidence: 0.94654317375

00:29:41.600 --> 00:29:43.872 And so perhaps one way to think about

NOTE Confidence: 0.94654317375

 $00:29:43.872 \longrightarrow 00:29:46.337$ this is that it might have been hard.

NOTE Confidence: 0.94654317375

 $00:29:46.340 \longrightarrow 00:29:49.455$ For those parents to reengage in social

NOTE Confidence: 0.94654317375

 $00:29:49.455 \longrightarrow 00:29:51.694$ activity and to bring their kids to

NOTE Confidence: 0.94654317375

 $00{:}29{:}51.694 \dashrightarrow 00{:}29{:}53.659$ activities and things of that nature.

NOTE Confidence: 0.94654317375

00:29:53.660 --> 00:29:55.816 And so I think it's really important

NOTE Confidence: 0.94654317375

 $00{:}29{:}55.816 \dashrightarrow 00{:}29{:}57.939$ to think about and the implications

NOTE Confidence: 0.94654317375

00:29:57.939 --> 00:29:59.852 here for parents health particular

NOTE Confidence: 0.94654317375

 $00:29:59.852 \longrightarrow 00:30:01.420$ or parent mental health,

NOTE Confidence: 0.94654317375

00:30:01.420 --> 00:30:05.098 thinking about caregivers of autistic youth,

NOTE Confidence: 0.94654317375

 $00:30:05.100 \longrightarrow 00:30:06.948$ both during the pandemic but also

NOTE Confidence: 0.94654317375

 $00:30:06.948 \longrightarrow 00:30:09.783$ now that it can be have a really sort

 $00:30:09.783 \longrightarrow 00:30:11.700$ of profound impact on their kids.

NOTE Confidence: 0.9301902

00:30:15.870 --> 00:30:18.063 So what happened with loneliness?

NOTE Confidence: 0.9301902

 $00{:}30{:}18.063 \dashrightarrow 00{:}30{:}20.347$ Loneliness declined over time,

NOTE Confidence: 0.9301902

 $00:30:20.350 \longrightarrow 00:30:22.184$ so we did find that, but actually

NOTE Confidence: 0.9301902

 $00:30:22.184 \longrightarrow 00:30:24.263$ it was only for the autistic youth.

NOTE Confidence: 0.9301902

 $00{:}30{:}24.270 \dashrightarrow 00{:}30{:}26.356$ And if you think about that graph

NOTE Confidence: 0.9301902

 $00:30:26.356 \longrightarrow 00:30:28.699$ what it what seems to be happening

NOTE Confidence: 0.9301902

 $00:30:28.699 \longrightarrow 00:30:30.763$ is sort of they're coming close

NOTE Confidence: 0.9301902

 $00:30:30.830 \longrightarrow 00:30:33.948$ to their non autistic peers.

NOTE Confidence: 0.9301902

 $00:30:33.950 \longrightarrow 00:30:36.110$ This is really striking to me,

NOTE Confidence: 0.9301902

 $00{:}30{:}36.110 \dashrightarrow 00{:}30{:}38.520$ really surprising because it runs

NOTE Confidence: 0.9301902

 $00:30:38.520 \longrightarrow 00:30:40.930$ counter this widely accepted idea

NOTE Confidence: 0.9301902

 $00{:}30{:}41.007 \dashrightarrow 00{:}30{:}43.425$ that autistic youth are sort of

NOTE Confidence: 0.9301902

 $00{:}30{:}43.425 \dashrightarrow 00{:}30{:}45.760$ universally lonely or or isolated.

NOTE Confidence: 0.9301902

 $00:30:45.760 \longrightarrow 00:30:47.503$ And so one one thing we thought

 $00:30:47.503 \longrightarrow 00:30:48.888$ about maybe this is actually

NOTE Confidence: 0.9301902

 $00{:}30{:}48.888 \dashrightarrow 00{:}30{:}50.640$ related to the change in routine,

NOTE Confidence: 0.9301902

 $00:30:50.640 \longrightarrow 00:30:52.038$ but it in a positive way.

NOTE Confidence: 0.9301902

 $00:30:52.040 \longrightarrow 00:30:55.250$ So perhaps there was some

NOTE Confidence: 0.9301902

00:30:55.250 --> 00:30:57.200 flexibility or choice in who,

NOTE Confidence: 0.9301902

 $00:30:57.200 \longrightarrow 00:30:59.200$ how, when they were interacting,

NOTE Confidence: 0.9301902

 $00:30:59.200 \longrightarrow 00:31:01.475$ how frequently that led to

NOTE Confidence: 0.9301902

00:31:01.475 --> 00:31:02.840 reductions in loneliness.

NOTE Confidence: 0.94780115

00:31:05.600 --> 00:31:07.145 Another thing we really thought

NOTE Confidence: 0.94780115

00:31:07.145 --> 00:31:09.549 about though is if you guys remember.

NOTE Confidence: 0.94780115

 $00{:}31{:}09.550 \dashrightarrow 00{:}31{:}10.906$ When you were in the pandemic,

NOTE Confidence: 0.94780115

 $00{:}31{:}10.910 \dashrightarrow 00{:}31{:}12.570$ remember this appeared of of

NOTE Confidence: 0.94780115

00:31:12.570 --> 00:31:14.870 June 2020 and and on right?

NOTE Confidence: 0.94780115

 $00:31:14.870 \longrightarrow 00:31:16.928$ There was a big increase in who

NOTE Confidence: 0.94780115

 $00:31:16.928 \longrightarrow 00:31:18.470$ you were spending time with.

NOTE Confidence: 0.94780115

 $00{:}31{:}18.470 \dashrightarrow 00{:}31{:}20.388$ It was whether it was your room mate,

 $00:31:20.390 \longrightarrow 00:31:21.122$ your your family.

NOTE Confidence: 0.94780115

 $00:31:21.122 \longrightarrow 00:31:22.586$ And so there was a big

NOTE Confidence: 0.94780115

 $00:31:22.586 \longrightarrow 00:31:23.629$ increase in family time.

NOTE Confidence: 0.94780115

00:31:23.630 --> 00:31:25.208 And perhaps one possibility is that

NOTE Confidence: 0.94780115

 $00{:}31{:}25.208 \dashrightarrow 00{:}31{:}26.910$ this was actually a big positive

NOTE Confidence: 0.94780115

00:31:26.910 --> 00:31:28.716 for autistic youth that they enjoyed

NOTE Confidence: 0.94780115

 $00:31:28.716 \longrightarrow 00:31:30.230$ spending time with their family.

NOTE Confidence: 0.9201268

 $00:31:33.090 \longrightarrow 00:31:35.230$ So lastly, we found that increases

NOTE Confidence: 0.9201268

 $00:31:35.230 \longrightarrow 00:31:37.452$ in social disruption did lead to

NOTE Confidence: 0.9201268

00:31:37.452 --> 00:31:38.884 greater loneliness, but actually

NOTE Confidence: 0.9201268

 $00:31:38.884 \longrightarrow 00:31:40.610$ it was only for autistic youth.

NOTE Confidence: 0.946657581818182

 $00:31:42.970 \longrightarrow 00:31:45.859$ So this suggests to us that when they were

NOTE Confidence: 0.946657581818182

 $00{:}31{:}45.859 \dashrightarrow 00{:}31{:}48.170$ actually experiencing social disruption,

NOTE Confidence: 0.946657581818182

 $00:31:48.170 \longrightarrow 00:31:50.950$ autistic youth were more vulnerable to

NOTE Confidence: 0.946657581818182

 $00:31:50.950 \longrightarrow 00:31:53.770$ feelings of loneliness than their peers.

00:31:53.770 --> 00:31:55.730 And so one thing we thought about was,

NOTE Confidence: 0.946657581818182

 $00{:}31{:}55.730 \dashrightarrow 00{:}31{:}57.716$ you know, if you're experiencing the

NOTE Confidence: 0.946657581818182

00:31:57.716 --> 00:32:00.098 social disruption and you're sort of.

NOTE Confidence: 0.946657581818182

 $00:32:00.098 \longrightarrow 00:32:01.546$ Forced into only this

NOTE Confidence: 0.946657581818182

00:32:01.546 --> 00:32:03.250 digital social communication,

NOTE Confidence: 0.946657581818182

 $00:32:03.250 \longrightarrow 00:32:05.050$ we all remember the zoom fatigue,

NOTE Confidence: 0.946657581818182

 $00:32:05.050 \longrightarrow 00:32:07.930$ that zoom burnout of of 2020.

NOTE Confidence: 0.946657581818182

 $00:32:07.930 \longrightarrow 00:32:10.198$ This is something that might be in

NOTE Confidence: 0.946657581818182

 $00:32:10.198 \longrightarrow 00:32:11.878$ particular a challenge for autistic

NOTE Confidence: 0.946657581818182

 $00:32:11.878 \longrightarrow 00:32:13.498$ youth as they are experiencing

NOTE Confidence: 0.946657581818182

 $00{:}32{:}13.498 \dashrightarrow 00{:}32{:}15.187$ more and more social disruption

NOTE Confidence: 0.946657581818182

 $00:32:15.187 \longrightarrow 00:32:17.483$ and this is for their only option.

NOTE Confidence: 0.946657581818182

 $00:32:17.490 \longrightarrow 00:32:19.602$ Although another possibility is that they

NOTE Confidence: 0.946657581818182

 $00:32:19.602 \longrightarrow 00:32:21.928$ didn't have anyone else to reach out to.

NOTE Confidence: 0.946657581818182

 $00:32:21.930 \longrightarrow 00:32:24.205$ Perhaps other teens were Facetiming all day,

NOTE Confidence: 0.946657581818182

00:32:24.210 --> 00:32:26.346 but autistic youth who are experiencing

00:32:26.346 --> 00:32:29.242 a lot of social disruption didn't really

NOTE Confidence: 0.946657581818182

 $00:32:29.242 \longrightarrow 00:32:32.050$ have other options and deep connections.

NOTE Confidence: 0.946657581818182

 $00:32:32.050 \longrightarrow 00:32:34.003$ So I'm thinking about what my next steps are.

NOTE Confidence: 0.946657581818182

00:32:34.010 --> 00:32:36.075 I'm really interested in continuing

NOTE Confidence: 0.946657581818182

 $00:32:36.075 \longrightarrow 00:32:38.140$ to examine loneliness and autistic

NOTE Confidence: 0.946657581818182

00:32:38.204 --> 00:32:40.379 youth and thinking about its

NOTE Confidence: 0.946657581818182

 $00:32:40.379 \longrightarrow 00:32:41.684$ relationship with suicidality.

NOTE Confidence: 0.946657581818182

 $00{:}32{:}41.690 \dashrightarrow 00{:}32{:}43.846$ So I'm really grateful for funding from

NOTE Confidence: 0.946657581818182

00:32:43.850 --> 00:32:45.768 the Yale Child Study Center pilot grant,

NOTE Confidence: 0.946657581818182

00:32:45.770 --> 00:32:47.800 as well as the Organization

NOTE Confidence: 0.946657581818182

 $00:32:47.800 \longrightarrow 00:32:49.018$ for Autism Research.

NOTE Confidence: 0.946657581818182

 $00:32:49.020 \longrightarrow 00:32:51.252$ And what we plan to do is we'll

NOTE Confidence: 0.946657581818182

 $00{:}32{:}51.252 \dashrightarrow 00{:}32{:}52.780$ have participants come in the lab,

NOTE Confidence: 0.946657581818182

 $00{:}32{:}52.780 \dashrightarrow 00{:}32{:}54.160$ complete a naturalistic

NOTE Confidence: 0.946657581818182

 $00:32:54.160 \longrightarrow 00:32:56.180$ social reward paradigm,

 $00:32:56.180 \longrightarrow 00:32:58.350$ and then we'll have them fill out

NOTE Confidence: 0.946657581818182

 $00{:}32{:}58.350 \dashrightarrow 00{:}33{:}00.263$ question naires through an app on their

NOTE Confidence: 0.946657581818182

 $00:33:00.263 \longrightarrow 00:33:02.123$ smartphone telling us about loneliness as

NOTE Confidence: 0.946657581818182

 $00:33:02.123 \longrightarrow 00:33:04.220$ they experience it outside of the lab.

NOTE Confidence: 0.946657581818182

 $00:33:04.220 \longrightarrow 00:33:05.004$ And ultimately,

NOTE Confidence: 0.946657581818182

 $00:33:05.004 \longrightarrow 00:33:06.964$ we hope to understand the

NOTE Confidence: 0.946657581818182

 $00:33:06.964 \longrightarrow 00:33:08.980$ relationship between social reward,

NOTE Confidence: 0.946657581818182 00:33:08.980 --> 00:33:09.820 loneliness, NOTE Confidence: 0.946657581818182

00:33:09.820 --> 00:33:14.656 and and suicidality in autistic youth.

NOTE Confidence: 0.946657581818182

 $00:33:14.660 \longrightarrow 00:33:16.320$ So I just want to close

NOTE Confidence: 0.946657581818182

 $00{:}33{:}16.320 \dashrightarrow 00{:}33{:}17.993$ by acknowledging the mic.

NOTE Confidence: 0.946657581818182

00:33:17.993 --> 00:33:20.058 Doctoral advisor Doctor Lerner as

NOTE Confidence: 0.946657581818182

 $00{:}33{:}20.058 \dashrightarrow 00{:}33{:}22.332$ well as Doctor Mcpartlin who's in

NOTE Confidence: 0.946657581818182

 $00:33:22.332 \longrightarrow 00:33:24.580$ the room who've been really key in

NOTE Confidence: 0.946657581818182

 $00:33:24.580 \longrightarrow 00:33:27.047$ in getting all of this work done

NOTE Confidence: 0.946657581818182

 $00:33:27.047 \longrightarrow 00:33:29.290$ and for the great support of the

 $00:33:29.290 \longrightarrow 00:33:30.730$ Stony Brook team that was essential

NOTE Confidence: 0.946657581818182

 $00:33:30.730 \longrightarrow 00:33:32.730$ in in conducting this research.

NOTE Confidence: 0.946657581818182

00:33:32.730 --> 00:33:34.602 I also want to thank everybody in my lab,

NOTE Confidence: 0.946657581818182

 $00:33:34.610 \longrightarrow 00:33:37.831$ many of which are here and in particular.

NOTE Confidence: 0.946657581818182

 $00:33:37.831 \longrightarrow 00:33:40.289$ I did want to thank Doctor Keifer and Dr.

NOTE Confidence: 0.94665758181818200:33:40.290 --> 00:33:40.532 Naples,

NOTE Confidence: 0.946657581818182

 $00:33:40.532 \longrightarrow 00:33:42.710$ who I know is in the room for their

NOTE Confidence: 0.946657581818182

 $00{:}33{:}42.775 \dashrightarrow 00{:}33{:}44.425$ really essential and a mazing work

NOTE Confidence: 0.946657581818182

 $00:33:44.425 \longrightarrow 00:33:46.070$ on this naturalistic paradigm.

NOTE Confidence: 0.946657581818182

00:33:46.070 --> 00:33:47.050 And finally,

NOTE Confidence: 0.946657581818182

 $00:33:47.050 \longrightarrow 00:33:49.250$ I'll conclude by thanking the

NOTE Confidence: 0.946657581818182

 $00:33:49.250 \longrightarrow 00:33:50.690$ funders which you can see there,

NOTE Confidence: 0.946657581818182

00:33:50.690 --> 00:33:52.980 as well as really all of the

NOTE Confidence: 0.946657581818182

 $00{:}33{:}52.980 \dashrightarrow 00{:}33{:}54.402$ participating families who we really

NOTE Confidence: 0.946657581818182

 $00:33:54.402 \longrightarrow 00:33:56.810$ could not do any of this work without.

 $00:33:56.810 \longrightarrow 00:33:58.232$ So thank you very much for

NOTE Confidence: 0.946657581818182

 $00{:}33{:}58.232 \dashrightarrow 00{:}34{:}00.010$ listening and I can take questions,

NOTE Confidence: 0.946657581818182 00:34:00.010 --> 00:34:00.330 questions NOTE Confidence: 0.682987586666667

 $00:34:07.960 \longrightarrow 00:34:09.598$ for Doctor Gerber.

NOTE Confidence: 0.94780115

 $00:34:12.310 \longrightarrow 00:34:13.470$ Everything was so clear.

NOTE Confidence: 0.88100364

00:34:20.280 --> 00:34:23.675 Hi. I'm curious if you're defining

NOTE Confidence: 0.88100364

 $00:34:23.675 \longrightarrow 00:34:27.005$ loneliness as the mismatch between the

NOTE Confidence: 0.88100364

 $00:34:27.005 \longrightarrow 00:34:30.659$ social motivation and the and what kids

NOTE Confidence: 0.88100364

 $00:34:30.659 \longrightarrow 00:34:33.190$ are actually getting when when you're

NOTE Confidence: 0.88100364

 $00:34:33.190 \longrightarrow 00:34:34.640$ looking at the loneliness scores.

NOTE Confidence: 0.88100364

 $00:34:34.640 \longrightarrow 00:34:36.415$ When we know that social

NOTE Confidence: 0.88100364

00:34:36.415 --> 00:34:37.835 motivation might not change,

NOTE Confidence: 0.88100364

 $00:34:37.840 \longrightarrow 00:34:39.838$ but what they're getting might change.

NOTE Confidence: 0.88100364

 $00:34:39.840 \longrightarrow 00:34:44.250$ If there was a difference in.

NOTE Confidence: 0.88100364

 $00:34:44.250 \longrightarrow 00:34:45.758$ Initial social motivation in

NOTE Confidence: 0.88100364

00:34:45.758 --> 00:34:47.643 autistic and non autistic use,

 $00:34:47.650 \longrightarrow 00:34:48.770$ if that makes sense.

NOTE Confidence: 0.88100364

 $00:34:48.770 \longrightarrow 00:34:50.620$ So the loneliness scores might

NOTE Confidence: 0.88100364

 $00:34:50.620 \longrightarrow 00:34:52.564$ not be changing because they

NOTE Confidence: 0.88100364

 $00:34:52.564 \longrightarrow 00:34:54.649$ might have been lower initially.

NOTE Confidence: 0.88100364

 $00:34:54.650 \longrightarrow 00:34:56.810$ And the and

NOTE Confidence: 0.940253532

 $00:34:57.170 \longrightarrow 00:34:58.490$ yeah, if that makes sense,

NOTE Confidence: 0.94193077

 $00:34:59.370 \longrightarrow 00:35:00.720$ yeah. So I think this actually

NOTE Confidence: 0.94193077

 $00:35:00.720 \longrightarrow 00:35:02.330$ brings up kind of two questions.

NOTE Confidence: 0.94193077

 $00:35:02.330 \longrightarrow 00:35:05.330$ One is. The relationship between

NOTE Confidence: 0.94193077

 $00{:}35{:}05.330 \dashrightarrow 00{:}35{:}06.835$ social motivation and loneliness and

NOTE Confidence: 0.94193077

 $00{:}35{:}06.835 \dashrightarrow 00{:}35{:}09.132$ autism and this kind of gets to the

NOTE Confidence: 0.94193077

 $00{:}35{:}09.132 \dashrightarrow 00{:}35{:}10.602$ heart of what I'm interested in.

NOTE Confidence: 0.94193077

 $00{:}35{:}10.610 \dashrightarrow 00{:}35{:}12.390$ This idea that autistic people

NOTE Confidence: 0.94193077

 $00:35:12.390 \longrightarrow 00:35:14.170$ may not be socially motivated,

NOTE Confidence: 0.94193077

 $00:35:14.170 \longrightarrow 00:35:16.130$ they may not be interested in interaction,

 $00:35:16.130 \longrightarrow 00:35:18.885$ so how could they feel lonely pre

NOTE Confidence: 0.94193077

 $00{:}35{:}18.885 \dashrightarrow 00{:}35{:}20.260$ pandemic though there's quite a

NOTE Confidence: 0.94193077

 $00:35:20.260 \longrightarrow 00:35:22.261$ bit of data at this point that

NOTE Confidence: 0.94193077

00:35:22.261 --> 00:35:24.007 suggests that that's not quite true,

NOTE Confidence: 0.94193077

 $00:35:24.010 \longrightarrow 00:35:25.714$ that they actually do feel a

NOTE Confidence: 0.94193077

 $00:35:25.714 \longrightarrow 00:35:26.566$ lot of loneliness.

NOTE Confidence: 0.94193077

00:35:26.570 --> 00:35:28.290 Now the other thing they are bringing up,

NOTE Confidence: 0.94193077

 $00:35:28.290 \longrightarrow 00:35:30.676$ which is kind of a challenge is and

NOTE Confidence: 0.94193077

 $00{:}35{:}30.676 \dashrightarrow 00{:}35{:}32.206$ every body I imagine experienced this,

NOTE Confidence: 0.94193077

 $00:35:32.210 \longrightarrow 00:35:34.420$ who did pre pandemic work.

NOTE Confidence: 0.94193077

00:35:34.420 --> 00:35:35.888 Or during pandemic work,

NOTE Confidence: 0.94193077

 $00:35:35.888 \longrightarrow 00:35:38.090$ right is we didn't have that

NOTE Confidence: 0.94193077

 $00{:}35{:}38.162 \dashrightarrow 00{:}35{:}40.378$ information before the pandemic.

NOTE Confidence: 0.94193077

 $00:35:40.380 \longrightarrow 00:35:42.216$ So we do have some data on these kids,

NOTE Confidence: 0.94193077

 $00:35:42.220 \longrightarrow 00:35:44.764$ but we don't have their social

NOTE Confidence: 0.94193077

 $00:35:44.764 \longrightarrow 00:35:46.460$ motivation and loneliness prepandemic.

 $00:35:46.460 \longrightarrow 00:35:48.980$ So it would be really interesting to see if,

NOTE Confidence: 0.94193077

 $00:35:48.980 \longrightarrow 00:35:49.712$ you know,

NOTE Confidence: 0.94193077

 $00:35:49.712 \longrightarrow 00:35:51.542$ kids who are not socially

NOTE Confidence: 0.94193077

 $00:35:51.542 \longrightarrow 00:35:53.020$ motivated were totally fine,

NOTE Confidence: 0.94193077

 $00:35:53.020 \longrightarrow 00:35:53.896$ but we just don't have that.

NOTE Confidence: 0.94193077

 $00:35:53.900 \longrightarrow 00:35:54.820$ But it's a great question.

NOTE Confidence: 0.94193077

 $00:35:54.820 \longrightarrow 00:35:54.940$ More

NOTE Confidence: 0.9603804

 $00:35:58.380 \longrightarrow 00:35:59.420$ questions for Doctor Gerber.

NOTE Confidence: 0.9905706

 $00:36:03.900 \longrightarrow 00:36:05.140$ Hopefully this is a softball,

NOTE Confidence: 0.93270605

 $00:36:06.420 \longrightarrow 00:36:07.660$ it's going to be,

NOTE Confidence: 0.93270605

 $00:36:07.660 \longrightarrow 00:36:09.148$ it's not a super softball,

NOTE Confidence: 0.93270605

 $00:36:09.148 \longrightarrow 00:36:10.364$ but if you probably can

NOTE Confidence: 0.93270605

 $00:36:10.364 \longrightarrow 00:36:12.406$ answer just with yes or no.

NOTE Confidence: 0.93270605

 $00{:}36{:}12.406 \dashrightarrow 00{:}36{:}14.755$ I was wondering if you'd done

NOTE Confidence: 0.93270605

 $00:36:14.755 \longrightarrow 00:36:16.500$ anything looking at the date,

 $00:36:16.500 \longrightarrow 00:36:19.044$ the data over time in a nonlinear fashion.

NOTE Confidence: 0.93270605

00:36:19.044 --> 00:36:20.550 Because I guess when I'm

NOTE Confidence: 0.93270605

 $00:36:20.550 \longrightarrow 00:36:21.420$ thinking about COVID,

NOTE Confidence: 0.93270605

 $00:36:21.420 \longrightarrow 00:36:22.852$ I kind of think about it is

NOTE Confidence: 0.93270605

 $00:36:22.852 \longrightarrow 00:36:24.488$ it was there was a lot of

NOTE Confidence: 0.93270605

 $00:36:24.488 \longrightarrow 00:36:25.755$ abs and flows of things and

NOTE Confidence: 0.93270605

00:36:25.755 --> 00:36:26.780 I'm wondering if you there's

NOTE Confidence: 0.93622824

 $00:36:26.780 \longrightarrow 00:36:28.180$ any use to parsing out

NOTE Confidence: 0.946962533333333

 $00:36:28.180 \longrightarrow 00:36:31.249$ the data looking at time or?

NOTE Confidence: 0.946962533333333

00:36:31.250 --> 00:36:33.280 Chronologically in terms of months of

 $00:36:33.280 \longrightarrow 00:36:36.130$ the year rather than time and and then

NOTE Confidence: 0.946962533333333

 $00:36:36.130 \longrightarrow 00:36:37.930$ also looking at when the lockdowns

NOTE Confidence: 0.944278912

 $00:36:37.930 \longrightarrow 00:36:39.210$ were and how that affected

NOTE Confidence: 0.891569852

 $00:36:39.690 \longrightarrow 00:36:41.570$ autistic versus non autistic kids.

NOTE Confidence: 0.938576306666667

 $00:36:42.370 \longrightarrow 00:36:44.701$ Yeah, this is this is a great

NOTE Confidence: 0.938576306666667

 $00{:}36{:}44.701 \dashrightarrow 00{:}36{:}46.649$ question and I'm grateful to.

 $00:36:46.650 \longrightarrow 00:36:49.072$ I practice this in my lab and

NOTE Confidence: 0.938576306666667

 $00:36:49.072 \longrightarrow 00:36:50.916$ this question came up so.

NOTE Confidence: 0.938576306666667

 $00:36:50.916 \longrightarrow 00:36:53.260$ Always get to practice.

NOTE Confidence: 0.938576306666667

 $00:36:53.260 \longrightarrow 00:36:54.380$ It's a great question.

NOTE Confidence: 0.938576306666667

 $00:36:54.380 \longrightarrow 00:36:55.500$ We've thought about it.

NOTE Confidence: 0.938576306666667

 $00:36:55.500 \longrightarrow 00:36:57.152$ We have looked at some of these

NOTE Confidence: 0.938576306666667

 $00:36:57.152 \longrightarrow 00:36:59.018$ things in a long linear fashion,

NOTE Confidence: 0.938576306666667

 $00:36:59.020 \longrightarrow 00:37:00.860$ and I figured I'd only had 13 minutes,

NOTE Confidence: 0.938576306666667

 $00{:}37{:}00.860 \dashrightarrow 00{:}37{:}02.820$ so I didn't get into it too much.

NOTE Confidence: 0.938576306666667

 $00:37:02.820 \longrightarrow 00:37:06.235$ But there is a quadratic

NOTE Confidence: 0.938576306666667

 $00{:}37{:}06.235 \dashrightarrow 00{:}37{:}08.967$ relationship with social disruption.

NOTE Confidence: 0.938576306666667

 $00:37:08.970 \longrightarrow 00:37:10.344$ Where kind of dips over the

NOTE Confidence: 0.938576306666667

00:37:10.344 --> 00:37:11.450 summer and comes back up,

NOTE Confidence: 0.938576306666667

 $00:37:11.450 \longrightarrow 00:37:14.246$ which is it was just interesting.

NOTE Confidence: 0.938576306666667

00:37:14.250 --> 00:37:17.288 Loneliness didn't appear to change that much,

 $00:37:17.290 \longrightarrow 00:37:18.970$ which I also thought was interesting

NOTE Confidence: 0.938576306666667

00:37:18.970 --> 00:37:20.490 but wasn't shocking because

NOTE Confidence: 0.938576306666667

 $00:37:20.490 \longrightarrow 00:37:22.584$ if you look at the general,

NOTE Confidence: 0.938576306666667

 $00:37:22.584 \longrightarrow 00:37:24.593$ if you look at the data that's

NOTE Confidence: 0.938576306666667

 $00:37:24.593 \longrightarrow 00:37:26.208$ coming out now on loneliness,

NOTE Confidence: 0.938576306666667

 $00:37:26.210 \longrightarrow 00:37:28.156$ there was sort of this initial period

NOTE Confidence: 0.938576306666667

 $00:37:28.156 \longrightarrow 00:37:30.090$ where people didn't know what to do and

NOTE Confidence: 0.938576306666667

00:37:30.090 --> 00:37:32.010 people were feeling trapped and lonely,

NOTE Confidence: 0.938576306666667

00:37:32.010 --> 00:37:33.936 but people adjusted pretty quickly.

NOTE Confidence: 0.938576306666667

 $00:37:33.936 \longrightarrow 00:37:35.468$ And in the end,

NOTE Confidence: 0.938576306666667

 $00:37:35.470 \longrightarrow 00:37:37.154$ loneliness remained relatively stable.

NOTE Confidence: 0.938576306666667

 $00:37:37.154 \longrightarrow 00:37:39.950$ So we have data from June on.

NOTE Confidence: 0.938576306666667

 $00{:}37{:}39.950 \dashrightarrow 00{:}37{:}42.393$ I think it would tell a different

NOTE Confidence: 0.938576306666667

 $00:37:42.393 \longrightarrow 00:37:44.822$ story if we had data in April

NOTE Confidence: 0.938576306666667

 $00:37:44.822 \longrightarrow 00:37:48.230$ and May in terms of a break,

NOTE Confidence: 0.938576306666667

 $00:37:48.230 \dashrightarrow 00:37:49.970$ a breaking point when school starts.

 $00:37:49.970 \longrightarrow 00:37:51.718$ Also an interesting thing that

NOTE Confidence: 0.938576306666667

00:37:51.718 --> 00:37:53.228 we haven't quite looked at,

NOTE Confidence: 0.938576306666667

 $00:37:53.230 \longrightarrow 00:37:54.470$ but it's a great point.

NOTE Confidence: 0.938576306666667 00:37:54.470 --> 00:37:54.816 Sorry, NOTE Confidence: 0.938576306666667

 $00:37:54.816 \longrightarrow 00:37:57.030$ I saved time for that last question.

NOTE Confidence: 0.926835733333333 00:37:57.110 --> 00:37:57.509 Do we have

NOTE Confidence: 0.950317

 $00:37:58.390 \longrightarrow 00:37:59.149$ one more question?

NOTE Confidence: 0.943608066666667

 $00{:}38{:}03.660 \dashrightarrow 00{:}38{:}06.180$ Hi, first of all great presentation.

NOTE Confidence: 0.943608066666667

 $00{:}38{:}06.180 \dashrightarrow 00{:}38{:}08.583$ I wanted to ask if you saw any difference

NOTE Confidence: 0.943608066666667

 $00:38:08.583 \longrightarrow 00:38:10.792$ in habituation to the routine between

NOTE Confidence: 0.943608066666667

 $00{:}38{:}10.792 \dashrightarrow 00{:}38{:}13.100$ a non autistic and autistic youth.

NOTE Confidence: 0.4057999

 $00:38:15.340 \longrightarrow 00:38:18.316$ Yeah so the question is

NOTE Confidence: 0.4057999

 $00:38:18.316 \longrightarrow 00:38:19.858$ about habituation between

NOTE Confidence: 0.95434236

 $00:38:19.860 \longrightarrow 00:38:23.450$ between groups to their routine.

NOTE Confidence: 0.95434236

 $00:38:23.450 \longrightarrow 00:38:26.006$ So the short answer here is we can only

00:38:26.006 --> 00:38:27.762 measure so much and we debated heavily

NOTE Confidence: 0.95434236

 $00{:}38{:}27.762 \dashrightarrow 00{:}38{:}30.290$ what we should put in to this study.

NOTE Confidence: 0.95434236

 $00{:}38{:}30.290 \dashrightarrow 00{:}38{:}32.887$ And so we didn't really ask about

NOTE Confidence: 0.95434236

 $00:38:32.887 \longrightarrow 00:38:34.810$ habituation to change in routine.

NOTE Confidence: 0.95434236

 $00:38:34.810 \longrightarrow 00:38:36.682$ So in a sense, I think what we're

NOTE Confidence: 0.95434236

 $00:38:36.682 \longrightarrow 00:38:38.480$ looking at when we look at loneliness

NOTE Confidence: 0.95434236

 $00{:}38{:}38.480 \dashrightarrow 00{:}38{:}40.611$ and we have some data that I didn't

NOTE Confidence: 0.95434236

00:38:40.611 --> 00:38:42.154 present today on anxiety and

NOTE Confidence: 0.95434236

 $00:38:42.154 \longrightarrow 00:38:45.130$ depression is kind of a proxy for that.

NOTE Confidence: 0.95434236

00:38:45.130 --> 00:38:48.487 But it's a great question and that's a good

NOTE Confidence: 0.95434236

 $00:38:48.490 \longrightarrow 00:38:50.774$ lesson learned for designing studies if.

NOTE Confidence: 0.95434236

 $00:38:50.774 \longrightarrow 00:38:53.426$ The change in routine happened differently

NOTE Confidence: 0.95434236

 $00:38:53.426 \longrightarrow 00:38:56.054$ and was quicker and perhaps mediate

NOTE Confidence: 0.95434236

 $00:38:56.054 \longrightarrow 00:38:58.418$ some of of these relationships,

NOTE Confidence: 0.95434236

 $00:38:58.418 \longrightarrow 00:39:00.328$ but I'm out of time.

NOTE Confidence: 0.95434236

 $00:39:00.330 \longrightarrow 00:39:01.530$ So thank you for that.

 $00:39:01.850 \longrightarrow 00:39:03.050$ Thank you Dr. Gerber. Nice job.

NOTE Confidence: 0.92264079625

 $00:39:07.330 \longrightarrow 00:39:09.250$ Last but not least we have Doctor Kistagno.

NOTE Confidence: 0.87827185

00:39:14.810 --> 00:39:18.650 Wait, Mike, is it just the next?

NOTE Confidence: 0.942266388

00:39:27.320 --> 00:39:28.800 Perfect. All right, all set.

NOTE Confidence: 0.929602534230769

00:39:30.840 --> 00:39:32.712 So thank you for this opportunity

NOTE Confidence: 0.929602534230769

 $00:39:32.712 \longrightarrow 00:39:34.807$ to share my research Today I'll

NOTE Confidence: 0.929602534230769

00:39:34.807 --> 00:39:36.379 present research recently published

NOTE Confidence: 0.929602534230769

 $00:39:36.379 \longrightarrow 00:39:38.415$ in our image entitled Modeling

NOTE Confidence: 0.929602534230769

00:39:38.415 --> 00:39:40.435 Brain dynamics and gaze Behavior.

NOTE Confidence: 0.929602534230769

 $00{:}39{:}40.440 \dashrightarrow 00{:}39{:}43.320$ Starting point bias and drift rate relate

NOTE Confidence: 0.929602534230769

 $00:39:43.320 \longrightarrow 00:39:46.680$ to frontal midline Theta EEG oscillations.

NOTE Confidence: 0.929602534230769

 $00:39:46.680 \longrightarrow 00:39:48.790$ In this study we applied.

NOTE Confidence: 0.929602534230769

 $00{:}39{:}48.790 \dashrightarrow 00{:}39{:}50.530$ Computational modeling to participants

NOTE Confidence: 0.929602534230769

 $00{:}39{:}50.530 {\:{\mbox{--}}\!>\:} 00{:}39{:}53.140$ performance on the anti saccade task

NOTE Confidence: 0.929602534230769

 $00:39:53.206 \longrightarrow 00:39:55.121$ with eye tracking while collecting

00:39:55.121 --> 00:39:57.437 high density EEG to investigate the

NOTE Confidence: 0.929602534230769

 $00:39:57.437 \longrightarrow 00:39:59.796$ effects of trial by trial Theta dynamics

NOTE Confidence: 0.929602534230769

 $00:39:59.796 \longrightarrow 00:40:01.253$ on contingent eye gaze behavior.

NOTE Confidence: 0.929602534230769

 $00:40:01.253 \longrightarrow 00:40:03.647$ So I know that was a lot of words

NOTE Confidence: 0.929602534230769

 $00{:}40{:}03.647 \dashrightarrow 00{:}40{:}05.639$ and I promise that a lot of them

NOTE Confidence: 0.929602534230769

 $00:40:05.706 \longrightarrow 00:40:07.350$ will make sense by the end.

NOTE Confidence: 0.929602534230769

 $00:40:07.350 \longrightarrow 00:40:09.048$ Important to start is that a

NOTE Confidence: 0.929602534230769

 $00:40:09.048 \longrightarrow 00:40:11.030$ saccade is just an eye movement.

NOTE Confidence: 0.929602534230769

00:40:11.030 --> 00:40:12.956 So. If you're moving your eyes,

NOTE Confidence: 0.929602534230769

00:40:12.960 --> 00:40:14.800 what you're looking at that is a saccade.

NOTE Confidence: 0.929602534230769

 $00{:}40{:}14.800 \dashrightarrow 00{:}40{:}16.717$ If I point to one side of the room,

NOTE Confidence: 0.929602534230769

 $00:40:16.720 \longrightarrow 00:40:18.992$ everyone that looked to that side of the

NOTE Confidence: 0.929602534230769

 $00{:}40{:}18.992 \rightarrow 00{:}40{:}20.558$ room, that would have been a saccade.

NOTE Confidence: 0.929602534230769

00:40:20.560 --> 00:40:22.040 Whereas if you didn't look,

NOTE Confidence: 0.929602534230769

 $00:40:22.040 \longrightarrow 00:40:23.678$ that would have been an antisychade.

NOTE Confidence: 0.929602534230769

 $00:40:23.680 \longrightarrow 00:40:25.510$ You inhibited your natural inclination

 $00:40:25.510 \longrightarrow 00:40:27.920$ to look to where I pointed.

NOTE Confidence: 0.929602534230769

00:40:27.920 --> 00:40:29.397 So that's a task we're dealing with,

NOTE Confidence: 0.929602534230769

00:40:29.400 --> 00:40:31.794 which I'll get into more in depth,

NOTE Confidence: 0.929602534230769

 $00:40:31.800 \longrightarrow 00:40:33.654$ just figured need to get that

NOTE Confidence: 0.929602534230769

 $00:40:33.654 \longrightarrow 00:40:35.390$ out of the way early.

NOTE Confidence: 0.929602534230769

 $00:40:35.390 \longrightarrow 00:40:37.830$ So why visual, visual attention?

NOTE Confidence: 0.929602534230769

 $00:40:37.830 \longrightarrow 00:40:39.582$ I gaze plays a critical role

NOTE Confidence: 0.929602534230769

 $00:40:39.582 \longrightarrow 00:40:40.750$ in many human behaviors.

NOTE Confidence: 0.929602534230769

 $00{:}40{:}40.750 \dashrightarrow 00{:}40{:}43.802$ What grabs our attention grabs our thoughts

NOTE Confidence: 0.929602534230769

 $00:40:43.802 \longrightarrow 00:40:48.070$ from moral judgments to purchasing decisions.

NOTE Confidence: 0.929602534230769

 $00:40:48.070 \longrightarrow 00:40:50.362$ Another is in regard to clinical

NOTE Confidence: 0.929602534230769

 $00{:}40{:}50.362 \dashrightarrow 00{:}40{:}50.744$ implications.

NOTE Confidence: 0.929602534230769

 $00{:}40{:}50.750 \dashrightarrow 00{:}40{:}52.340$ Tension bias is well known play

NOTE Confidence: 0.929602534230769

 $00{:}40{:}52.340 \dashrightarrow 00{:}40{:}54.460$ a role in the development and

NOTE Confidence: 0.929602534230769

00:40:54.460 --> 00:40:56.444 maintenance of anxiety disorders

 $00:40:56.444 \longrightarrow 00:40:58.428$ and depressed depressive disorders.

NOTE Confidence: 0.929602534230769

 $00{:}40{:}58.430 \dashrightarrow 00{:}41{:}00.854$ A a critical aspect of adaptive

NOTE Confidence: 0.929602534230769

 $00:41:00.854 \longrightarrow 00:41:02.066$ goal directed behaviors,

NOTE Confidence: 0.929602534230769

 $00:41:02.070 \longrightarrow 00:41:03.993$ appropriate response preparation.

NOTE Confidence: 0.929602534230769

 $00:41:03.993 \longrightarrow 00:41:08.480$ This led to our motivating research question.

NOTE Confidence: 0.929602534230769

 $00:41:08.480 \longrightarrow 00:41:10.676$ Can we model effortful eye gaze

NOTE Confidence: 0.929602534230769

00:41:10.676 --> 00:41:12.592 behavior to improve precision

NOTE Confidence: 0.929602534230769

 $00:41:12.592 \longrightarrow 00:41:14.959$ when studying intentional biases?

NOTE Confidence: 0.929602534230769

00:41:14.960 --> 00:41:16.520 Fortunately for the field,

NOTE Confidence: 0.929602534230769

 $00:41:16.520 \longrightarrow 00:41:19.468$ there's a decent grasp on a specific

NOTE Confidence: 0.929602534230769

 $00:41:19.468 \longrightarrow 00:41:22.118$ neural marker of effortful control.

NOTE Confidence: 0.929602534230769

00:41:22.120 --> 00:41:24.300 Frontal and central midline Theta

NOTE Confidence: 0.929602534230769

 $00:41:24.300 \longrightarrow 00:41:26.480$ oscillations are robust domain general

NOTE Confidence: 0.929602534230769

 $00{:}41{:}26.543 \dashrightarrow 00{:}41{:}28.933$ neural marker of cognitive control

NOTE Confidence: 0.929602534230769

 $00:41:28.933 \longrightarrow 00:41:31.323$ processes and therefore promising candidate.

NOTE Confidence: 0.929602534230769

 $00:41:31.330 \longrightarrow 00:41:32.778$ So what are oscillations?

 $00:41:32.778 \longrightarrow 00:41:34.588$ Just really quickly there are

NOTE Confidence: 0.929602534230769

 $00:41:34.588 \longrightarrow 00:41:36.609$ two main types of eg analysis.

NOTE Confidence: 0.929602534230769

00:41:36.610 --> 00:41:38.226 Typically people are familiar

NOTE Confidence: 0.929602534230769

00:41:38.226 --> 00:41:40.246 with ERP event related potentials,

NOTE Confidence: 0.929602534230769

 $00:41:40.250 \longrightarrow 00:41:42.966$ which are an average of a bunch

NOTE Confidence: 0.929602534230769

 $00:41:42.966 \longrightarrow 00:41:44.130$ of different waves.

NOTE Confidence: 0.929602534230769

 $00:41:44.130 \longrightarrow 00:41:45.486$ One of those waves is Theta,

NOTE Confidence: 0.929602534230769

 $00:41:45.490 \longrightarrow 00:41:49.274$ which occurs between roughly 4 and 8 Hertz.

NOTE Confidence: 0.929602534230769

 $00{:}41{:}49.280 \dashrightarrow 00{:}41{:}52.016$ There are other frequencies here we're

NOTE Confidence: 0.929602534230769

 $00:41:52.016 \longrightarrow 00:41:53.840$ interested in Theta oscillations,

NOTE Confidence: 0.929602534230769

 $00:41:53.840 \longrightarrow 00:41:55.592$ and really what this is indicative

NOTE Confidence: 0.929602534230769

 $00:41:55.592 \longrightarrow 00:41:57.476$ of is a population of neurons

NOTE Confidence: 0.929602534230769

00:41:57.476 --> 00:41:58.796 that are firing together.

NOTE Confidence: 0.929602534230769

 $00:41:58.800 \longrightarrow 00:42:01.586$ So this is a neural signature that

NOTE Confidence: 0.929602534230769

 $00:42:01.586 \longrightarrow 00:42:04.120$ is thought to play important role.

 $00:42:04.120 \longrightarrow 00:42:06.420$ It increases in the magnitude

NOTE Confidence: 0.929602534230769

00:42:06.420 --> 00:42:07.800 in response errors,

NOTE Confidence: 0.929602534230769

 $00:42:07.800 \longrightarrow 00:42:12.000$ negative feedback to unexpected

NOTE Confidence: 0.929602534230769

00:42:12.000 --> 00:42:14.880 events during inhibitory control

NOTE Confidence: 0.929602534230769

 $00:42:14.880 \longrightarrow 00:42:16.458$ when resolving different.

NOTE Confidence: 0.929602534230769

00:42:16.458 --> 00:42:18.036 Competition between different

NOTE Confidence: 0.929602534230769

 $00:42:18.036 \longrightarrow 00:42:20.140$ responses and adjusting response

NOTE Confidence: 0.929602534230769

00:42:20.205 --> 00:42:22.060 strategies to our task demands,

NOTE Confidence: 0.9440274875

 $00{:}42{:}24.700 \dashrightarrow 00{:}42{:}27.535$ as well as following events that are

NOTE Confidence: 0.9440274875

 $00:42:27.535 \longrightarrow 00:42:29.512$ novel or ambiguous after performance.

NOTE Confidence: 0.9440274875

 $00{:}42{:}29.512 \dashrightarrow 00{:}42{:}31.477$ The signals thought to reflect

NOTE Confidence: 0.9440274875

 $00:42:31.477 \longrightarrow 00:42:32.818$ activity in the anterior,

NOTE Confidence: 0.9440274875

 $00:42:32.820 \longrightarrow 00:42:34.878$ at least partially in the anterior

NOTE Confidence: 0.9440274875

 $00:42:34.878 \longrightarrow 00:42:37.004$ singlet cortex and plays a central

NOTE Confidence: 0.9440274875

 $00:42:37.004 \longrightarrow 00:42:38.719$ role in detecting when our

NOTE Confidence: 0.9440274875

 $00{:}42{:}38.719 \dashrightarrow 00{:}42{:}40.340$ expectations are being violated.

 $00:42:40.340 \longrightarrow 00:42:42.140$ So what we thought was going to happen,

NOTE Confidence: 0.9440274875

 $00:42:42.140 \longrightarrow 00:42:45.930$ did not happen, is one way to think about it.

NOTE Confidence: 0.9440274875

00:42:45.930 --> 00:42:47.348 Depending on the circumstances

NOTE Confidence: 0.9440274875

 $00:42:47.348 \longrightarrow 00:42:48.326$ when this occurs,

NOTE Confidence: 0.9440274875

 $00:42:48.330 \longrightarrow 00:42:49.370$ it can work to recruit.

NOTE Confidence: 0.64122856 00:42:57.290 --> 00:42:57.730 Oh,

NOTE Confidence: 0.5086851

 $00:43:02.170 \longrightarrow 00:43:02.570$ excuse me.

NOTE Confidence: 0.9201268 00:43:30.380 --> 00:43:30.440 We

NOTE Confidence: 0.93622824

 $00:43:33.550 \longrightarrow 00:43:34.270$ got it worked that way.

NOTE Confidence: 0.93622824

 $00:43:34.270 \longrightarrow 00:43:36.950$ You were here. No, wait.

NOTE Confidence: 0.93622824

00:43:36.950 --> 00:43:39.310 Yeah, right there. Yeah, yeah,

NOTE Confidence: 0.933544666666667

 $00:43:42.430 \longrightarrow 00:43:46.270$ sure. Is that working for

NOTE Confidence: 0.933544666666667

 $00{:}43{:}46.270 --> 00{:}43{:}48.069$ them though? On Zoom. I

NOTE Confidence: 0.92817752

 $00:43:51.190 \longrightarrow 00:43:53.270$ have a spy. On Zoom

NOTE Confidence: 0.9201268

 $00:43:56.670 \longrightarrow 00:43:57.870$ we see purpose enter for you.

 $00:44:01.110 \longrightarrow 00:44:02.070$ They can okay,

NOTE Confidence: 0.93824092

 $00:44:04.630 \longrightarrow 00:44:07.190$ so we went through that.

NOTE Confidence: 0.93824092

 $00:44:07.190 \longrightarrow 00:44:09.332$ So some of the limitations of past

NOTE Confidence: 0.93824092

 $00:44:09.332 \longrightarrow 00:44:11.429$ studies of visual attention behavior.

NOTE Confidence: 0.93824092

 $00:44:11.430 \longrightarrow 00:44:13.502$ A button presses one step removed from

NOTE Confidence: 0.93824092

00:44:13.502 --> 00:44:15.349 the true behavior of interest here,

NOTE Confidence: 0.93824092

 $00:44:15.350 \longrightarrow 00:44:16.970$ which is simple attention

NOTE Confidence: 0.93824092

 $00:44:16.970 \longrightarrow 00:44:18.590$ or eye gaze behavior.

NOTE Confidence: 0.93824092

 $00:44:18.590 \longrightarrow 00:44:21.074$ Therefore we apply the drift diffusion

NOTE Confidence: 0.93824092

00:44:21.074 --> 00:44:23.709 model to participants eye gaze behavior.

NOTE Confidence: 0.93824092

 $00{:}44{:}23.710 --> 00{:}44{:}24.958$ And I will get into what

NOTE Confidence: 0.93824092

 $00:44:24.958 \longrightarrow 00:44:25.790$ drift diffusion model is.

NOTE Confidence: 0.93824092

 $00{:}44{:}25.790 \dashrightarrow 00{:}44{:}28.110$ But first we need to cover what the task is.

NOTE Confidence: 0.93824092

 $00:44:28.110 \longrightarrow 00:44:29.550$ The anti saccade task,

NOTE Confidence: 0.93824092

 $00:44:29.550 \longrightarrow 00:44:31.374$ which I briefly touched on in

NOTE Confidence: 0.93824092

 $00:44:31.374 \longrightarrow 00:44:33.030$ the beginning in the sense of

 $00:44:33.093 \longrightarrow 00:44:34.827$ that is the behavior of interest

NOTE Confidence: 0.93824092

 $00{:}44{:}34.830 \dashrightarrow 00{:}44{:}36.110$ during the anti saccade task.

NOTE Confidence: 0.93824092

00:44:36.110 --> 00:44:37.890 It's a fastpaced inhibitory control

NOTE Confidence: 0.93824092

 $00:44:37.890 \longrightarrow 00:44:39.670$ task strictly driven by participants

NOTE Confidence: 0.93824092

00:44:39.719 --> 00:44:41.651 eye gaze behavior and that's a really

NOTE Confidence: 0.93824092

00:44:41.651 --> 00:44:43.230 important thing to remember here.

NOTE Confidence: 0.93824092

 $00:44:43.230 \longrightarrow 00:44:44.750$ There are no button presses,

NOTE Confidence: 0.93824092

 $00:44:44.750 \longrightarrow 00:44:46.745$ it's strictly where the participant

NOTE Confidence: 0.93824092

 $00:44:46.745 \longrightarrow 00:44:49.552$ is looking on the screen is driving

NOTE Confidence: 0.93824092

 $00{:}44{:}49.552 \dashrightarrow 00{:}44{:}51.999$ the task paradigm during pro saccade.

NOTE Confidence: 0.93824092

00:44:51.999 --> 00:44:54.214 Participants receive a queue on

NOTE Confidence: 0.93824092

 $00:44:54.214 \longrightarrow 00:44:56.335$ screen either a white or black

NOTE Confidence: 0.93824092

 $00{:}44{:}56.335 \dashrightarrow 00{:}44{:}58.010$ fixation cross during the pro

NOTE Confidence: 0.93824092

 $00:44:58.075 \longrightarrow 00:45:00.085$ saccade is a white fixation cross

NOTE Confidence: 0.93824092

 $00:45:00.085 \longrightarrow 00:45:02.438$ and that tells them I'll need to

 $00:45:02.438 \longrightarrow 00:45:04.018$ look at the upcoming probe.

NOTE Confidence: 0.950317

 $00:45:06.540 \longrightarrow 00:45:09.164$ Next they'll see the probe and they will

NOTE Confidence: 0.950317

 $00:45:09.164 \longrightarrow 00:45:11.869$ look in that direction hopefully and

NOTE Confidence: 0.950317

 $00:45:11.869 \longrightarrow 00:45:14.339$ they'll receive feedback of correct.

NOTE Confidence: 0.950317

 $00:45:14.340 \longrightarrow 00:45:16.482$ Now during an anti saccade they

NOTE Confidence: 0.950317

 $00{:}45{:}16.482 \to 00{:}45{:}19.516$ will receive a probe that is a black

NOTE Confidence: 0.950317

 $00:45:19.516 \longrightarrow 00:45:21.426$ fixation cross indicating to them.

NOTE Confidence: 0.950317

 $00:45:21.430 \longrightarrow 00:45:23.638$ I'll need to look away when

NOTE Confidence: 0.950317

 $00{:}45{:}23.638 \dashrightarrow 00{:}45{:}25.670$ I see the upcoming queue.

NOTE Confidence: 0.950317

 $00:45:25.670 \longrightarrow 00:45:26.874$ When the queue comes,

NOTE Confidence: 0.950317

 $00{:}45{:}26.874 \longrightarrow 00{:}45{:}29.669$ if they are engaging in the task correctly,

NOTE Confidence: 0.950317

 $00:45:29.670 \longrightarrow 00:45:31.470$ they should inhibit their response

NOTE Confidence: 0.950317

 $00:45:31.470 \longrightarrow 00:45:34.293$ to look at the white box and look

NOTE Confidence: 0.950317

 $00:45:34.293 \longrightarrow 00:45:36.339$ away in the opposite direction of

NOTE Confidence: 0.950317

 $00{:}45{:}36.339 \dashrightarrow 00{:}45{:}38.865$ the screen of the box and therefore

NOTE Confidence: 0.950317

 $00{:}45{:}38.870 \dashrightarrow 00{:}45{:}43.190$ providing a anti saccade response.

 $00:45:43.190 \longrightarrow 00:45:44.855$ Now the important thing also

NOTE Confidence: 0.950317

 $00:45:44.855 \longrightarrow 00:45:45.854$ to remember here.

NOTE Confidence: 0.950317

00:45:45.860 --> 00:45:47.260 Apart from it being strictly

NOTE Confidence: 0.950317

 $00:45:47.260 \longrightarrow 00:45:48.100$ driven by participants,

NOTE Confidence: 0.950317

00:45:48.100 --> 00:45:50.218 eye gaze behavior is that it

NOTE Confidence: 0.950317

 $00:45:50.218 \longrightarrow 00:45:52.060$ is acute anti saccade cast,

NOTE Confidence: 0.950317

 $00:45:52.060 \longrightarrow 00:45:54.085$ which some people would call

NOTE Confidence: 0.950317

 $00:45:54.085 \longrightarrow 00:45:55.300$ proactive cognitive control.

NOTE Confidence: 0.950317

 $00:45:55.300 \longrightarrow 00:45:57.295$ In this sense, they know what's coming.

NOTE Confidence: 0.950317

 $00:45:57.300 \longrightarrow 00:45:58.956$ They know that they're going to

NOTE Confidence: 0.950317

 $00:45:58.956 \longrightarrow 00:46:00.698$ have to either inhibit A prepotent

NOTE Confidence: 0.950317

 $00:46:00.698 \longrightarrow 00:46:02.612$ response or they're going to have

NOTE Confidence: 0.950317

 $00{:}46{:}02.612 \dashrightarrow 00{:}46{:}04.751$ to just provide the response that

NOTE Confidence: 0.950317

 $00{:}46{:}04.751 \dashrightarrow 00{:}46{:}06.099$ is their natural inclination,

NOTE Confidence: 0.950317

 $00:46:06.100 \longrightarrow 00:46:08.708$ which is which is to look at the

 $00:46:08.708 \longrightarrow 00:46:10.924$ white screen in this very dark

NOTE Confidence: 0.950317

 $00:46:10.924 \longrightarrow 00:46:13.790$ room on this computer screen now.

NOTE Confidence: 0.950317

00:46:13.790 --> 00:46:14.270 Briefly,

NOTE Confidence: 0.950317

 $00:46:14.270 \longrightarrow 00:46:17.150$ Introduction to a Drift Diffusion model.

NOTE Confidence: 0.950317

 $00:46:17.150 \longrightarrow 00:46:19.286$ It's a broadly defined any model

NOTE Confidence: 0.950317

 $00:46:19.286 \longrightarrow 00:46:20.710$ as a dynamic system.

NOTE Confidence: 0.950317

 $00:46:20.710 \longrightarrow 00:46:22.348$ When presented with a time series,

NOTE Confidence: 0.950317

 $00:46:22.350 \longrightarrow 00:46:25.644$ inputs such as reaction time and

NOTE Confidence: 0.950317

 $00{:}46{:}25.644 \dashrightarrow 00{:}46{:}28.580$ performance can produce simulation outputs.

NOTE Confidence: 0.950317

 $00:46:28.580 \longrightarrow 00:46:30.720$ And drift diffusion models were

NOTE Confidence: 0.950317

 $00{:}46{:}30.720 {\:{\circ}{\circ}{\circ}}>00{:}46{:}32.714$ specifically created in order to

NOTE Confidence: 0.950317

00:46:32.714 --> 00:46:34.604 relate response times to underlying

NOTE Confidence: 0.950317

 $00:46:34.604 \longrightarrow 00:46:36.020$ latent cognitive processes,

NOTE Confidence: 0.950317

 $00{:}46{:}36.020 \dashrightarrow 00{:}46{:}37.870$ which is the really important

NOTE Confidence: 0.950317

 $00:46:37.870 \longrightarrow 00:46:40.465$ part to understand here is that we

NOTE Confidence: 0.950317

 $00:46:40.465 \longrightarrow 00:46:42.493$ feed in the behavior of interest,

 $00:46:42.500 \longrightarrow 00:46:44.240$ in this case their sequential

NOTE Confidence: 0.950317

00:46:44.240 --> 00:46:46.340 behavior on the anti saccade task,

NOTE Confidence: 0.950317

 $00:46:46.340 \longrightarrow 00:46:48.570$ the reaction time, their performance.

NOTE Confidence: 0.950317

00:46:48.570 --> 00:46:51.018 And what is generated is individual

NOTE Confidence: 0.950317

 $00:46:51.018 \longrightarrow 00:46:52.650$ estimates of certain parameters.

NOTE Confidence: 0.950317

 $00{:}46{:}52.650 \dashrightarrow 00{:}46{:}54.370$ These parameters are latent constructs.

NOTE Confidence: 0.950317

00:46:54.370 --> 00:46:56.054 They don't actually exist,

NOTE Confidence: 0.950317

 $00:46:56.054 \longrightarrow 00:46:58.580$ but they're thought to relate to

NOTE Confidence: 0.950317

00:46:58.656 --> 00:47:00.746 real world underlying cognitive

NOTE Confidence: 0.950317

00:47:00.746 --> 00:47:03.632 processes that are a closer step

NOTE Confidence: 0.950317

 $00:47:03.632 \longrightarrow 00:47:05.550$ towards what is going on in the

NOTE Confidence: 0.950317

 $00:47:05.617 \longrightarrow 00:47:07.567$ brain than simple reaction time,

NOTE Confidence: 0.950317

 $00:47:07.570 \longrightarrow 00:47:09.250$ which is an amalgamation of many,

NOTE Confidence: 0.950317

00:47:09.250 --> 00:47:12.250 many, many cognitive processes.

NOTE Confidence: 0.950317

00:47:12.250 --> 00:47:14.210 For the drift diffusion model,

00:47:14.210 --> 00:47:16.166 it parses it between drift rate,

NOTE Confidence: 0.950317

 $00:47:16.170 \longrightarrow 00:47:18.774$ which is thought of as information

NOTE Confidence: 0.950317

 $00:47:18.774 \longrightarrow 00:47:19.208$ processing.

NOTE Confidence: 0.950317

 $00:47:19.210 \longrightarrow 00:47:21.282$ You can think of a drift rate as

NOTE Confidence: 0.950317

00:47:21.282 --> 00:47:23.010 being an individual's subjective

NOTE Confidence: 0.950317

 $00:47:23.010 \longrightarrow 00:47:25.290$ experience of task difficulty.

NOTE Confidence: 0.950317

 $00:47:25.290 \longrightarrow 00:47:27.846$ So every individual in this task,

NOTE Confidence: 0.950317

 $00:47:27.850 \longrightarrow 00:47:30.106$ once we feed in their behavior,

NOTE Confidence: 0.950317

 $00{:}47{:}30.106 \dashrightarrow 00{:}47{:}31.930$ response time and performance,

NOTE Confidence: 0.950317

 $00:47:31.930 \longrightarrow 00:47:33.832$ we get an estimate of their

NOTE Confidence: 0.950317

 $00{:}47{:}33.832 \dashrightarrow 00{:}47{:}35.689$ specific drift rate during the task.

NOTE Confidence: 0.950317

 $00:47:35.690 \longrightarrow 00:47:37.958$ And their drift rate estimate for

NOTE Confidence: 0.950317

 $00{:}47{:}37.958 \dashrightarrow 00{:}47{:}40.352$ an individual would be how difficult

NOTE Confidence: 0.950317

 $00:47:40.352 \longrightarrow 00:47:43.094$ say they thought the pro saccade

NOTE Confidence: 0.950317

 $00{:}47{:}43.094 \dashrightarrow 00{:}47{:}45.812$ or the anti saccade trials were.

NOTE Confidence: 0.950317

 $00:47:45.812 \longrightarrow 00:47:47.858$ How efficient they were at processing

 $00:47:47.858 \longrightarrow 00:47:49.878$ that and engaging in that task.

NOTE Confidence: 0.950317

 $00{:}47{:}49.880 \dashrightarrow 00{:}47{:}52.640$ There's also a threshold separation,

NOTE Confidence: 0.950317

 $00:47:52.640 \longrightarrow 00:47:56.402$ which is the boundaries shown on the

NOTE Confidence: 0.950317

 $00:47:56.402 \longrightarrow 00:47:58.509$ right there where the red lines are

NOTE Confidence: 0.950317

 $00:47:58.509 \longrightarrow 00:48:00.760$ going and meeting in the star forms.

NOTE Confidence: 0.950317

 $00:48:00.760 \longrightarrow 00:48:02.560$ That is the decision boundary.

NOTE Confidence: 0.950317

00:48:02.560 --> 00:48:04.480 So once that boundary is reached,

NOTE Confidence: 0.950317

 $00:48:04.480 \longrightarrow 00:48:06.156$ whatever boundary that is,

NOTE Confidence: 0.950317

 $00{:}48{:}06.156 \dashrightarrow 00{:}48{:}09.319$ that boundary is a decision that is made.

NOTE Confidence: 0.950317

00:48:09.320 --> 00:48:11.104 And here the boundary,

NOTE Confidence: 0.950317

00:48:11.104 --> 00:48:13.780 the top boundary is indicative of.

NOTE Confidence: 0.950317

 $00:48:13.780 \longrightarrow 00:48:15.740$ Providing a pro saccade response,

NOTE Confidence: 0.950317

00:48:15.740 --> 00:48:17.480 where is the bottom boundary

NOTE Confidence: 0.950317

 $00:48:17.480 \longrightarrow 00:48:19.220$ is the anti saccade response,

NOTE Confidence: 0.950317

 $00:48:19.220 \longrightarrow 00:48:23.180$ so they also have a bias or a starting point.

 $00:48:23.180 \longrightarrow 00:48:26.015$ So where in the middle of that?

NOTE Confidence: 0.883847927142857

 $00:48:26.020 \longrightarrow 00:48:27.708$ The decision threshold or

NOTE Confidence: 0.883847927142857

 $00:48:27.708 \longrightarrow 00:48:28.974$ the threshold separation?

NOTE Confidence: 0.883847927142857

 $00:48:28.980 \longrightarrow 00:48:30.024$ Where are they starting?

NOTE Confidence: 0.883847927142857

 $00:48:30.024 \longrightarrow 00:48:31.590$ Are they starting in the middle

NOTE Confidence: 0.883847927142857

 $00:48:31.640 \longrightarrow 00:48:33.040$ or do they have a bias where

NOTE Confidence: 0.883847927142857

 $00:48:33.040 \longrightarrow 00:48:34.265$ they need more information to

NOTE Confidence: 0.883847927142857

 $00:48:34.265 \longrightarrow 00:48:35.695$ gather to make one decision,

NOTE Confidence: 0.883847927142857

 $00:48:35.700 \longrightarrow 00:48:39.746$ much less to make the alternative decision?

NOTE Confidence: 0.883847927142857

 $00:48:39.750 \longrightarrow 00:48:41.435$ And finally, there is also

NOTE Confidence: 0.883847927142857

 $00:48:41.435 \longrightarrow 00:48:42.783$ a non decision time.

NOTE Confidence: 0.883847927142857

 $00{:}48{:}42.790 \dashrightarrow 00{:}48{:}44.509$ I'm not going to get too much of the

NOTE Confidence: 0.883847927142857

00:48:44.509 --> 00:48:46.019 non decision time because of the

NOTE Confidence: 0.883847927142857

 $00{:}48{:}46.019 \dashrightarrow 00{:}48{:}47.670$ amalgamation of a lot of cognitive

NOTE Confidence: 0.883847927142857

00:48:47.670 --> 00:48:48.990 processes that aren't related

NOTE Confidence: 0.883847927142857

 $00{:}48{:}48.990 \dashrightarrow 00{:}48{:}50.958$ to the decision making process

00:48:50.958 --> 00:48:53.550 like early orientate orienting,

NOTE Confidence: 0.883847927142857

 $00{:}48{:}53.550 \dashrightarrow 00{:}48{:}55.402$ early perceptual encoding and

NOTE Confidence: 0.883847927142857

 $00:48:55.402 \longrightarrow 00:48:57.717$ later processes that are non

NOTE Confidence: 0.883847927142857

 $00:48:57.717 \longrightarrow 00:48:59.732$ decision related such as the

NOTE Confidence: 0.883847927142857

 $00{:}48{:}59.732 \dashrightarrow 00{:}49{:}02.819$ execution of a motor response.

NOTE Confidence: 0.883847927142857

00:49:02.820 --> 00:49:05.053 But let's walk through what this actually

NOTE Confidence: 0.883847927142857

00:49:05.053 --> 00:49:07.584 is so you have a better understanding

NOTE Confidence: 0.883847927142857

 $00{:}49{:}07.584 \dashrightarrow 00{:}49{:}09.464$ cuz me giving you definitions

NOTE Confidence: 0.883847927142857

 $00:49:09.464 \longrightarrow 00:49:11.657$ is probably not going to do it.

NOTE Confidence: 0.883847927142857

 $00{:}49{:}11.660 \dashrightarrow 00{:}49{:}13.695$ You have the decision threshold

NOTE Confidence: 0.883847927142857

 $00:49:13.695 \longrightarrow 00:49:16.373$ here for the anti saccade task that

NOTE Confidence: 0.883847927142857

00:49:16.373 --> 00:49:18.544 if the drift rate reaches this top

NOTE Confidence: 0.883847927142857

 $00:49:18.544 \longrightarrow 00:49:20.450$ boundary then they are going to

NOTE Confidence: 0.883847927142857

 $00{:}49{:}20.450 \dashrightarrow 00{:}49{:}22.226$ produce a pro saccade or decide

NOTE Confidence: 0.883847927142857

 $00:49:22.226 \longrightarrow 00:49:24.218$ to produce a pro saccade response.

 $00:49:24.220 \longrightarrow 00:49:26.140$ And then you have a bottom

NOTE Confidence: 0.883847927142857

 $00:49:26.140 \longrightarrow 00:49:26.780$ decision threshold.

NOTE Confidence: 0.883847927142857

00:49:26.780 --> 00:49:29.216 If the drift rate reaches this threshold,

NOTE Confidence: 0.883847927142857

 $00:49:29.220 \longrightarrow 00:49:32.316$ they provide an anti saccade response.

NOTE Confidence: 0.883847927142857

 $00:49:32.320 \longrightarrow 00:49:34.808$ And you have a bias parameter or the

NOTE Confidence: 0.883847927142857

00:49:34.808 --> 00:49:36.813 starting point is what it's also known

NOTE Confidence: 0.883847927142857

 $00:49:36.813 \longrightarrow 00:49:38.515$ as and you can have a drift rate.

NOTE Confidence: 0.883847927142857

 $00:49:38.520 \longrightarrow 00:49:40.104$ So here's a blue drift rate

NOTE Confidence: 0.883847927142857

 $00:49:40.104 \longrightarrow 00:49:42.440$ indicating a pro saccade response.

NOTE Confidence: 0.883847927142857

00:49:42.440 --> 00:49:44.246 It's viewed as a noisy process

NOTE Confidence: 0.883847927142857

 $00:49:44.246 \longrightarrow 00:49:46.359$ which is beyond the scope of this,

NOTE Confidence: 0.883847927142857

 $00:49:46.360 \longrightarrow 00:49:48.880$ but that is why that is a jagged line.

NOTE Confidence: 0.883847927142857

 $00:49:48.880 \longrightarrow 00:49:50.720$ You'll often see jagged lines.

NOTE Confidence: 0.883847927142857

 $00:49:50.720 \longrightarrow 00:49:53.160$ They might also have a.

NOTE Confidence: 0.883847927142857

00:49:53.160 --> 00:49:55.800 This is a hypothetical anti saccade

NOTE Confidence: 0.883847927142857

 $00:49:55.800 \longrightarrow 00:49:58.042$ decision deciding to provide an

 $00{:}49{:}58.042 \dashrightarrow 00{:}50{:}00.354$ anti saccade response so you can

NOTE Confidence: 0.883847927142857

 $00:50:00.354 \longrightarrow 00:50:01.786$ have a decision threshold.

NOTE Confidence: 0.883847927142857

 $00:50:01.790 \dashrightarrow 00:50:04.346$ Like I said, top is a pro psychotic response,

NOTE Confidence: 0.883847927142857

 $00:50:04.350 \longrightarrow 00:50:06.610$ bottom is an anti psychotic response.

NOTE Confidence: 0.883847927142857

00:50:06.610 --> 00:50:07.864 You can also,

NOTE Confidence: 0.883847927142857

 $00:50:07.864 \longrightarrow 00:50:10.240$ so you can think about it as someone

NOTE Confidence: 0.883847927142857

 $00:50:10.310 \longrightarrow 00:50:12.510$ who has large decision thresholds.

NOTE Confidence: 0.883847927142857

 $00:50:12.510 \longrightarrow 00:50:14.290$ This would be an individual

NOTE Confidence: 0.883847927142857

 $00:50:14.290 \longrightarrow 00:50:16.070$ where the parameter estimates is

NOTE Confidence: 0.883847927142857

 $00{:}50{:}16.131 \dashrightarrow 00{:}50{:}18.027$ larger than average for a group.

NOTE Confidence: 0.883847927142857

00:50:18.030 --> 00:50:20.814 You could think of them as having a

NOTE Confidence: 0.883847927142857

00:50:20.814 --> 00:50:22.590 conservative style of decision making,

NOTE Confidence: 0.883847927142857

00:50:22.590 --> 00:50:24.390 at least on this task.

NOTE Confidence: 0.883847927142857

 $00:50:24.390 \longrightarrow 00:50:25.848$ So they need much more evidence

NOTE Confidence: 0.883847927142857

 $00:50:25.848 \longrightarrow 00:50:27.350$ to come to any decision.

 $00:50:27.350 \longrightarrow 00:50:30.584$ They need a lot of information they

NOTE Confidence: 0.883847927142857

 $00:50:30.584 \longrightarrow 00:50:32.806$ are favoring. Accuracy over speed.

NOTE Confidence: 0.883847927142857

 $00:50:32.806 \longrightarrow 00:50:35.398$ There could be also people with

NOTE Confidence: 0.883847927142857

00:50:35.398 --> 00:50:38.147 more of an impulsive style where

NOTE Confidence: 0.883847927142857

00:50:38.147 --> 00:50:40.382 they favor speed over accuracy.

NOTE Confidence: 0.883847927142857

 $00:50:40.390 \longrightarrow 00:50:42.112$ You can imagine now they need

NOTE Confidence: 0.883847927142857

 $00{:}50{:}42.112 \dashrightarrow 00{:}50{:}43.551$ much less evidence regardless of

NOTE Confidence: 0.883847927142857

 $00:50:43.551 \longrightarrow 00:50:44.741$ what decision they're going to

NOTE Confidence: 0.883847927142857

 $00:50:44.741 \longrightarrow 00:50:46.429$ come to to come to a decision.

NOTE Confidence: 0.919214448571429

 $00:50:48.910 \longrightarrow 00:50:51.906$ And now the bias parameter as well.

NOTE Confidence: 0.919214448571429

 $00:50:51.910 \longrightarrow 00:50:54.887$ It can do a little dance on the where

NOTE Confidence: 0.919214448571429

 $00:50:54.887 \longrightarrow 00:50:57.149$ determining where that starting point is.

NOTE Confidence: 0.919214448571429

 $00:50:57.150 \longrightarrow 00:50:59.758$ It can be high, it can be low.

NOTE Confidence: 0.919214448571429

00:50:59.760 --> 00:51:04.897 And altogether, this is hypothetical,

NOTE Confidence: 0.919214448571429

 $00:51:04.897 \longrightarrow 00:51:08.760$ several trials of the pro saccade or

NOTE Confidence: 0.919214448571429

 $00:51:08.760 \longrightarrow 00:51:12.048$ the anti saccade task for both pro and

 $00:51:12.048 \longrightarrow 00:51:14.418$ anti saccade conditions and just for

NOTE Confidence: 0.919214448571429

 $00{:}51{:}14.418 \dashrightarrow 00{:}51{:}17.554$ to show what a drift rate where bias

NOTE Confidence: 0.919214448571429

 $00:51:17.554 \longrightarrow 00:51:20.476$ is shifted downward would look like.

NOTE Confidence: 0.919214448571429

 $00:51:20.480 \longrightarrow 00:51:22.657$ And this might be something to remember

NOTE Confidence: 0.919214448571429

 $00{:}51{:}22.657 \dashrightarrow 00{:}51{:}25.111$ for when I talk about the results

NOTE Confidence: 0.919214448571429

 $00:51:25.111 \longrightarrow 00:51:27.100$ very shortly you see there's much

NOTE Confidence: 0.919214448571429

 $00:51:27.100 \longrightarrow 00:51:28.990$ more information that needs to be.

NOTE Confidence: 0.919214448571429

 $00{:}51{:}28.990 \dashrightarrow 00{:}51{:}32.518$ Garnered to come to a prosychod

NOTE Confidence: 0.919214448571429

 $00:51:32.518 \longrightarrow 00:51:35.169$ response and alternatively much less

NOTE Confidence: 0.919214448571429

 $00:51:35.169 \longrightarrow 00:51:36.464$ information needs to be acquired

NOTE Confidence: 0.919214448571429

 $00:51:36.464 \longrightarrow 00:51:38.589$ to come to a antisychod response.

NOTE Confidence: 0.919214448571429

 $00:51:38.590 \longrightarrow 00:51:41.470$ This would be an individual with a strong

NOTE Confidence: 0.919214448571429

 $00{:}51{:}41.470 \dashrightarrow 00{:}51{:}43.868$ bias towards the antisychod boundary,

NOTE Confidence: 0.919214448571429

 $00{:}51{:}43.870 \longrightarrow 00{:}51{:}46.096$ and you can see how that's different

NOTE Confidence: 0.919214448571429

 $00:51:46.096 \longrightarrow 00:51:47.981$ from the threshold separation where

00:51:47.981 --> 00:51:50.151 they generally for either decision

NOTE Confidence: 0.919214448571429

 $00:51:50.151 \longrightarrow 00:51:52.003$ are either conservative or impulsive

NOTE Confidence: 0.919214448571429

00:51:52.003 --> 00:51:53.868 in their decision making style.

NOTE Confidence: 0.946962533333333

 $00:51:57.850 \longrightarrow 00:52:00.886$ Now jumping into the results here,

NOTE Confidence: 0.9469625333333333

 $00:52:00.890 \longrightarrow 00:52:02.182$ interestingly we found larger

NOTE Confidence: 0.9469625333333333

 $00:52:02.182 \longrightarrow 00:52:03.797$ drift rate drift rates for

NOTE Confidence: 0.946962533333333

 $00:52:03.797 \longrightarrow 00:52:05.528$ the anti psychotic condition,

NOTE Confidence: 0.9469625333333333

 $00:52:05.530 \longrightarrow 00:52:07.966$ which indicates that there was actually

NOTE Confidence: 0.946962533333333

00:52:07.966 --> 00:52:09.590 more efficient processing occurring

NOTE Confidence: 0.946962533333333

00:52:09.648 --> 00:52:11.488 during these high conflict trials,

 $00{:}52{:}11.490 \dashrightarrow 00{:}52{:}13.002$ potentially reflecting a burst

NOTE Confidence: 0.946962533333333

 $00:52:13.002 \longrightarrow 00:52:14.892$ in frontal midline Theta that's

NOTE Confidence: 0.946962533333333

 $00{:}52{:}14.892 \dashrightarrow 00{:}52{:}16.770$ not as strong in the Prosecco

NOTE Confidence: 0.951754628571429

00:52:18.890 --> 00:52:22.649 condition which I'll get into very shortly.

NOTE Confidence: 0.951754628571429

 $00:52:22.650 \longrightarrow 00:52:27.486$ There's also meaningful differences in the.

NOTE Confidence: 0.951754628571429

 $00:52:27.490 \longrightarrow 00:52:30.258$ Highest parameter as well.

00:52:30.258 --> 00:52:33.366 So specifically when cued of an upcoming

NOTE Confidence: 0.951754628571429

 $00:52:33.366 \longrightarrow 00:52:35.142$ challenge anti saccade condition,

NOTE Confidence: 0.951754628571429

 $00:52:35.142 \longrightarrow 00:52:38.250$ there tended to be a shift downward

NOTE Confidence: 0.951754628571429

 $00:52:38.250 \longrightarrow 00:52:40.490$ towards the anti saccade boundary.

NOTE Confidence: 0.951754628571429

 $00:52:40.490 \longrightarrow 00:52:44.330$ Therefore less evidence was required

NOTE Confidence: 0.951754628571429

00:52:44.330 --> 00:52:46.450 to provide that inhibitory response,

NOTE Confidence: 0.951754628571429

 $00:52:46.450 \longrightarrow 00:52:49.460$ but much more evidence was needed to

NOTE Confidence: 0.951754628571429

 $00:52:49.460 \longrightarrow 00:52:52.388$ incorrectly provide a pro saccade response.

NOTE Confidence: 0.951754628571429

 $00:52:52.390 \longrightarrow 00:52:55.270$ I think of this potentially as

NOTE Confidence: 0.951754628571429

00:52:55.270 --> 00:52:57.750 indicating A compensatory strategy to

NOTE Confidence: 0.951754628571429

 $00{:}52{:}57.750 {\:{\mbox{--}}}{>}\ 00{:}53{:}00.250$ facilitate fast performance but accurate

NOTE Confidence: 0.951754628571429

 $00:53:00.250 \longrightarrow 00:53:03.370$ performance the more during the more

NOTE Confidence: 0.951754628571429

 $00{:}53{:}03.370 \dashrightarrow 00{:}53{:}05.466$ difficult anti saccade condition.

NOTE Confidence: 0.951754628571429

00:53:05.470 --> 00:53:06.750 During the pro saccade condition,

NOTE Confidence: 0.951754628571429

 $00:53:06.750 \longrightarrow 00:53:07.646$ on the other hand,

 $00:53:07.646 \longrightarrow 00:53:09.418$ there was no there was a more

NOTE Confidence: 0.951754628571429

00:53:09.418 --> 00:53:11.473 neutral approach shown with the

NOTE Confidence: 0.951754628571429

 $00:53:11.473 \longrightarrow 00:53:13.678$ bias parameter estimate where equal

NOTE Confidence: 0.951754628571429

 $00:53:13.678 \longrightarrow 00:53:16.080$ amounts of evidence was needed.

NOTE Confidence: 0.951754628571429

 $00:53:16.080 \longrightarrow 00:53:16.950$ For either decision.

NOTE Confidence: 0.951754628571429

 $00:53:16.950 \longrightarrow 00:53:18.690$ So when they were cued of

NOTE Confidence: 0.951754628571429

00:53:18.690 --> 00:53:20.119 this upcoming challenge,

NOTE Confidence: 0.951754628571429

 $00:53:20.120 \longrightarrow 00:53:21.656$ they tended to have a shift

NOTE Confidence: 0.951754628571429

 $00:53:21.656 \longrightarrow 00:53:22.680$ downward in their bias,

NOTE Confidence: 0.951754628571429

 $00:53:22.680 \longrightarrow 00:53:25.466$ which gave them a buffer such that

NOTE Confidence: 0.951754628571429

 $00{:}53{:}25.466 \dashrightarrow 00{:}53{:}27.909$ they could still respond accurately

NOTE Confidence: 0.951754628571429

00:53:27.909 --> 00:53:30.545 and quickly is what we are thinking

NOTE Confidence: 0.951754628571429

 $00:53:30.545 \longrightarrow 00:53:32.010$ might be underlying these group

NOTE Confidence: 0.951754628571429

 $00:53:32.067 \longrightarrow 00:53:33.872$ differences during the task from

NOTE Confidence: 0.951754628571429

00:53:33.872 --> 00:53:35.316 a drift diffusion framework.

NOTE Confidence: 0.951754628571429

 $00:53:35.320 \longrightarrow 00:53:38.120$ Now what about those neural

 $00:53:38.120 \longrightarrow 00:53:40.360$ oscillations we're talking about?

NOTE Confidence: 0.951754628571429

 $00:53:40.360 \longrightarrow 00:53:41.240$ Here are the head plots.

NOTE Confidence: 0.951754628571429

00:53:41.240 --> 00:53:42.997 I'm going to Orient you to the

NOTE Confidence: 0.951754628571429

00:53:42.997 --> 00:53:44.660 grand average in the bottom here.

NOTE Confidence: 0.951754628571429

 $00:53:44.660 \longrightarrow 00:53:46.908$ On the left in red is the anti

NOTE Confidence: 0.951754628571429

 $00:53:46.908 \longrightarrow 00:53:48.821$ saccade and on the in blue on

NOTE Confidence: 0.951754628571429

 $00:53:48.821 \longrightarrow 00:53:50.700$ the right is the pro saccade.

NOTE Confidence: 0.951754628571429

 $00{:}53{:}50.700 \dashrightarrow 00{:}53{:}54.424$ You can see there's a pretty routine

NOTE Confidence: 0.951754628571429

 $00:53:54.424 \longrightarrow 00:53:56.444$ and reliable neural response to

NOTE Confidence: 0.951754628571429

 $00:53:56.444 \longrightarrow 00:53:59.340$ both pro and anti saccade response,

NOTE Confidence: 0.951754628571429

 $00:53:59.340 \longrightarrow 00:54:02.994$ but the difference can be shown much.

NOTE Confidence: 0.951754628571429

 $00:54:03.000 \longrightarrow 00:54:04.967$ It becomes much more salient in the

NOTE Confidence: 0.951754628571429

 $00{:}54{:}04.967 \dashrightarrow 00{:}54{:}06.685$ time series output here where I'll

NOTE Confidence: 0.951754628571429

 $00{:}54{:}06.685 \dashrightarrow 00{:}54{:}08.317$ Orient you to the delay period.

NOTE Confidence: 0.951754628571429

 $00:54:08.320 \longrightarrow 00:54:10.315$ So this is the period after they're

00:54:10.315 --> 00:54:12.086 told they're going to need to either

NOTE Confidence: 0.951754628571429

 $00:54:12.086 \longrightarrow 00:54:14.368$ provide a pro or anti saccade response

NOTE Confidence: 0.951754628571429

00:54:14.368 --> 00:54:16.311 to Remember that white or black

NOTE Confidence: 0.951754628571429

00:54:16.311 --> 00:54:18.159 fixation cross so they know what's

NOTE Confidence: 0.951754628571429

00:54:18.226 --> 00:54:20.398 coming during that short delay period.

NOTE Confidence: 0.951754628571429

00:54:20.400 --> 00:54:22.116 Before they see the white probe,

NOTE Confidence: 0.951754628571429

 $00:54:22.120 \longrightarrow 00:54:23.495$ there is a stronger burst

NOTE Confidence: 0.951754628571429

00:54:23.495 --> 00:54:24.595 of frontal midline Theta,

NOTE Confidence: 0.951754628571429

 $00:54:24.600 \longrightarrow 00:54:27.155$ remember that is indicating that

NOTE Confidence: 0.951754628571429

 $00:54:27.155 \longrightarrow 00:54:29.199$ expectations might be violated.

NOTE Confidence: 0.951754628571429

 $00{:}54{:}29.200 \dashrightarrow 00{:}54{:}31.797$ You might need to get the right,

NOTE Confidence: 0.951754628571429

 $00.54:31.800 \longrightarrow 00.54:33.612$ get the cavalry to.

NOTE Confidence: 0.951754628571429

 $00:54:33.612 \longrightarrow 00:54:36.250$ Help with this upcoming challenge since

NOTE Confidence: 0.951754628571429

00:54:36.250 --> 00:54:38.840 they were cued that this upcoming challenge,

NOTE Confidence: 0.951754628571429

 $00:54:38.840 \longrightarrow 00:54:40.700$ the anti saccade shown in orange

NOTE Confidence: 0.951754628571429

 $00:54:40.700 \longrightarrow 00:54:42.699$ there tended to be a larger

00:54:42.699 --> 00:54:44.434 burst of frontal midline Theta.

NOTE Confidence: 0.951754628571429

 $00{:}54{:}44.440 \dashrightarrow 00{:}54{:}47.401$ So what about all that talk of trial by

NOTE Confidence: 0.951754628571429

 $00:54:47.401 \longrightarrow 00:54:50.216$ trial changes in frontal midline Theta?

NOTE Confidence: 0.951754628571429

 $00:54:50.220 \longrightarrow 00:54:52.908$ So when taking the behavioral neural

NOTE Confidence: 0.951754628571429

00:54:52.908 --> 00:54:54.252 physiological findings together,

NOTE Confidence: 0.951754628571429

 $00:54:54.260 \longrightarrow 00:54:56.954$ the drift drift diffusion model input

NOTE Confidence: 0.951754628571429

00:54:56.954 --> 00:54:59.220 includes participants trial by trial,

NOTE Confidence: 0.951754628571429

 $00:54:59.220 \longrightarrow 00:55:00.513$ reaction time, response,

NOTE Confidence: 0.951754628571429

 $00:55:00.513 \longrightarrow 00:55:03.099$ empower or strength of their event,

NOTE Confidence: 0.951754628571429

 $00{:}55{:}03.100 \dashrightarrow 00{:}55{:}04.820$ locked Theta neural response

NOTE Confidence: 0.951754628571429

 $00:55:04.820 \longrightarrow 00:55:06.540$ during each task queue.

NOTE Confidence: 0.951754628571429

 $00:55:06.540 \longrightarrow 00:55:09.277$ So within the model is an estimate

NOTE Confidence: 0.951754628571429

 $00{:}55{:}09.277 \dashrightarrow 00{:}55{:}12.193$ of their the specific participants

NOTE Confidence: 0.951754628571429

 $00:55:12.193 \longrightarrow 00:55:15.748$ Theta during that response queue.

NOTE Confidence: 0.951754628571429

00:55:15.750 --> 00:55:17.748 They're in that queue where I

 $00:55:17.748 \longrightarrow 00:55:20.070$ showed you between after the queue

NOTE Confidence: 0.951754628571429

 $00{:}55{:}20.070 \dashrightarrow 00{:}55{:}23.022$ and prior to receiving the probe.

NOTE Confidence: 0.951754628571429

00:55:23.022 --> 00:55:24.110 Put differently,

NOTE Confidence: 0.951754628571429

00:55:24.110 --> 00:55:25.635 we examined the within subject

NOTE Confidence: 0.951754628571429

 $00:55:25.635 \longrightarrow 00:55:27.837$ effects of this trial by trial frontal

NOTE Confidence: 0.951754628571429

 $00:55:27.837 \longrightarrow 00:55:30.007$ midline Theta on drift rate and bias

NOTE Confidence: 0.951754628571429

 $00:55:30.007 \longrightarrow 00:55:32.100$ those two parameters that were found

NOTE Confidence: 0.951754628571429

 $00:55:32.100 \longrightarrow 00:55:33.820$ to differ in their performance.

NOTE Confidence: 0.951754628571429

 $00:55:33.820 \longrightarrow 00:55:35.390$ And allowing for different levels

NOTE Confidence: 0.951754628571429 00:55:35.390 --> 00:55:36.018 of difficulty, NOTE Confidence: 0.951754628571429

 $00:55:36.020 \longrightarrow 00:55:38.090$ so pro and anti saccade to

NOTE Confidence: 0.951754628571429

 $00:55:38.090 \longrightarrow 00:55:39.470$ exert influence via drift

NOTE Confidence: 0.951091041538461

00:55:39.544 --> 00:55:41.338 diffusion regression model.

NOTE Confidence: 0.951091041538461

00:55:41.340 --> 00:55:43.890 This allowed us to directly examine

NOTE Confidence: 0.951091041538461

 $00:55:43.890 \longrightarrow 00:55:46.942$ eye gaze behavior and trial by trial

NOTE Confidence: 0.951091041538461

 $00{:}55{:}46.942 \dashrightarrow 00{:}55{:}49.067$ changes in frontal midline Theta

 $00:55:49.067 \longrightarrow 00:55:51.650$ within an individual model together

NOTE Confidence: 0.951091041538461

 $00:55:51.650 \longrightarrow 00:55:54.380$ within subject in a Bayesian space.

NOTE Confidence: 0.951091041538461

 $00:55:54.380 \longrightarrow 00:55:56.966$ And this allowed us to to

NOTE Confidence: 0.951091041538461

 $00:55:56.966 \longrightarrow 00:55:58.690$ directly examine where these

NOTE Confidence: 0.951091041538461

 $00:55:58.774 \longrightarrow 00:56:01.409$ changes in frontal midline Theta.

NOTE Confidence: 0.951091041538461

 $00:56:01.410 \longrightarrow 00:56:03.826$ Over the course of tasks has a significant

NOTE Confidence: 0.951091041538461

 $00:56:03.826 \longrightarrow 00:56:05.810$ influence on the drift rate and bias.

NOTE Confidence: 0.9301902

 $00:56:09.290 \longrightarrow 00:56:10.986$ And finally these were the

NOTE Confidence: 0.9301902

 $00{:}56{:}10.986 \dashrightarrow 00{:}56{:}12.510$ results of the trial by trial

NOTE Confidence: 0.9301902

 $00{:}56{:}12.558 \dashrightarrow 00{:}56{:}14.168$ effects of frontal midline Theta.

NOTE Confidence: 0.9301902

 $00:56:14.170 \longrightarrow 00:56:15.930$ Here these are posterior distribution.

NOTE Confidence: 0.9301902

 $00:56:15.930 \longrightarrow 00:56:18.090$ So I oriented you to zero

NOTE Confidence: 0.9301902

 $00:56:18.090 \longrightarrow 00:56:19.530$ there with that line.

NOTE Confidence: 0.9301902

 $00:56:19.530 \longrightarrow 00:56:21.096$ And the important part here is

NOTE Confidence: 0.9301902

00:56:21.096 --> 00:56:22.458 if a posterior distribution in

00:56:22.458 --> 00:56:23.808 this context passes through zero,

NOTE Confidence: 0.9301902

 $00{:}56{:}23.810 --> 00{:}56{:}27.180$ then is not a meaningful.

NOTE Confidence: 0.9301902

 $00{:}56{:}27.180 \dashrightarrow 00{:}56{:}29.238$ Effect here for both pro and anti

NOTE Confidence: 0.9301902

 $00:56:29.238 \longrightarrow 00:56:31.418$ saccade shown in the blue and the red.

NOTE Confidence: 0.9301902

 $00:56:31.420 \longrightarrow 00:56:33.744$ You can see there was a positive

NOTE Confidence: 0.9301902

 $00:56:33.744 \longrightarrow 00:56:35.991$ effect of frontal midline Theta on

NOTE Confidence: 0.9301902

00:56:35.991 --> 00:56:38.343 pro during pro and anti saccade

NOTE Confidence: 0.9301902

 $00:56:38.343 \longrightarrow 00:56:40.362$ conditions with an individual which

NOTE Confidence: 0.9301902

 $00:56:40.362 \longrightarrow 00:56:42.192$ shows that which is consistent with

NOTE Confidence: 0.9301902

00:56:42.192 --> 00:56:43.770 those head plots you saw before

NOTE Confidence: 0.9301902

 $00:56:43.820 \longrightarrow 00:56:45.566$ because there were first the frontal

NOTE Confidence: 0.9301902

 $00{:}56{:}45.566 \to 00{:}56{:}47.300$ midline Theta during both conditions.

NOTE Confidence: 0.9301902

 $00:56:47.300 \longrightarrow 00:56:49.232$ Although the time series input did

NOTE Confidence: 0.9301902

 $00:56:49.232 \longrightarrow 00:56:51.351$ show that they were stronger during

NOTE Confidence: 0.9301902

 $00:56:51.351 \longrightarrow 00:56:53.536$ the anti saccade condition however.

NOTE Confidence: 0.9301902

 $00:56:53.536 \longrightarrow 00:56:57.528$ Being probed that there was an upcoming task,

 $00:56:57.528 \longrightarrow 00:56:58.244$ a challenge,

NOTE Confidence: 0.9301902

 $00:56:58.244 \longrightarrow 00:57:00.750$ something to do look at the probe

NOTE Confidence: 0.9301902

 $00:57:00.823 \longrightarrow 00:57:02.634$ or look away elicited frontal

NOTE Confidence: 0.9301902

 $00{:}57{:}02.634 \dashrightarrow 00{:}57{:}05.586$ midline Theta and both of those

NOTE Confidence: 0.9301902

 $00:57:05.586 \longrightarrow 00:57:07.218$ increased individuals processing

NOTE Confidence: 0.9301902

 $00{:}57{:}07.218 \dashrightarrow 00{:}57{:}10.088$ efficiency during the upcoming demand.

NOTE Confidence: 0.9301902

 $00:57:10.090 \longrightarrow 00:57:14.230$ Now interestingly the bias parameter here.

NOTE Confidence: 0.9301902

 $00:57:14.230 \longrightarrow 00:57:15.802$ You can see the prosychot directly

NOTE Confidence: 0.9301902

00:57:15.802 --> 00:57:16.588 passes through zero,

NOTE Confidence: 0.9301902

 $00{:}57{:}16.590 \dashrightarrow 00{:}57{:}18.336$ so there's no effect of frontal

NOTE Confidence: 0.9301902

 $00:57:18.336 \longrightarrow 00:57:19.974$ midline Theta within an individual

NOTE Confidence: 0.9301902

00:57:19.974 --> 00:57:21.626 on their prosychot response.

NOTE Confidence: 0.9301902

00:57:21.630 --> 00:57:23.390 So during the prosychot trials,

NOTE Confidence: 0.9301902

 $00:57:23.390 \longrightarrow 00:57:25.510$ there was no effect of frontal midline Theta.

NOTE Confidence: 0.9301902

00:57:25.510 --> 00:57:26.536 Very interestingly though,

 $00:57:26.536 \longrightarrow 00:57:29.515$ there was an effect, a negative effect,

NOTE Confidence: 0.9301902

 $00:57:29.515 \longrightarrow 00:57:32.190$ on the antisychotic condition which

NOTE Confidence: 0.9301902

 $00{:}57{:}32.190 \dashrightarrow 00{:}57{:}34.745$ relates to that shift downward

NOTE Confidence: 0.9301902

 $00:57:34.745 \longrightarrow 00:57:36.789$ in that bias parameter.

NOTE Confidence: 0.9301902

00:57:36.790 --> 00:57:37.882 That shift downward,

NOTE Confidence: 0.9301902

00:57:37.882 --> 00:57:40.430 which I showed in that schematic earlier,

NOTE Confidence: 0.9301902

 $00:57:40.430 \longrightarrow 00:57:42.150$ is what's going on here.

NOTE Confidence: 0.9301902

 $00:57:42.150 \longrightarrow 00:57:42.556$ Where?

NOTE Confidence: 0.9301902

00:57:42.556 --> 00:57:44.586 These results indicate that that

NOTE Confidence: 0.9301902

00:57:44.586 --> 00:57:47.192 burst of frontal midline Theta during

NOTE Confidence: 0.9301902

 $00{:}57{:}47.192 \dashrightarrow 00{:}57{:}49.477$ that anti psychotic condition not

NOTE Confidence: 0.9301902

 $00:57:49.477 \longrightarrow 00:57:51.269$ only increased processing efficiency

NOTE Confidence: 0.9301902

 $00{:}57{:}51.269 --> 00{:}57{:}53.754$ via the drift rate but also shifted

NOTE Confidence: 0.9301902

 $00:57:53.754 \longrightarrow 00:57:57.830$ that bias parameter downward on that.

NOTE Confidence: 0.954789551111111

00:58:00.220 --> 00:58:01.588 Allowing their starting point

NOTE Confidence: 0.954789551111111

 $00:58:01.588 \longrightarrow 00:58:03.298$ bias to be shifted downward.

 $00:58:03.300 \longrightarrow 00:58:05.145$ Therefore, they need much more

NOTE Confidence: 0.954789551111111

 $00:58:05.145 \longrightarrow 00:58:06.990$ evidence to accumulate to erroneously

NOTE Confidence: 0.954789551111111

00:58:07.054 --> 00:58:08.739 provide a pro saccade response,

NOTE Confidence: 0.954789551111111

00:58:08.740 --> 00:58:11.008 but much less information need to

NOTE Confidence: 0.954789551111111

 $00:58:11.008 \longrightarrow 00:58:12.520$ accumulate to provide correctly

NOTE Confidence: 0.954789551111111

 $00:58:12.585 \longrightarrow 00:58:14.097$ the anti saccade response,

NOTE Confidence: 0.954789551111111

00:58:14.100 --> 00:58:15.180 if you remember,

NOTE Confidence: 0.954789551111111

 $00:58:15.180 \longrightarrow 00:58:16.620$ is that bottom threshold.

NOTE Confidence: 0.93579177

 $00:58:20.100 \longrightarrow 00:58:22.760$ Finally, we're also interested in

NOTE Confidence: 0.93579177

 $00:58:22.760 \longrightarrow 00:58:25.905$ potentially showing the utility of using.

NOTE Confidence: 0.93579177

 $00{:}58{:}25.905 \dashrightarrow 00{:}58{:}27.360$ Computational modeling to

NOTE Confidence: 0.93579177

 $00{:}58{:}27.360 \dashrightarrow 00{:}58{:}29.300$ decompose task based behavior.

NOTE Confidence: 0.93579177

 $00:58:29.300 \longrightarrow 00:58:31.162$ So we included reaction time in the

NOTE Confidence: 0.93579177

 $00:58:31.162 \longrightarrow 00:58:33.020$ first block which was not significant.

NOTE Confidence: 0.93579177

 $00:58:33.020 \longrightarrow 00:58:34.940$ In the second block we introduced

 $00:58:34.940 \longrightarrow 00:58:36.220$ the drift diffusion parameters.

NOTE Confidence: 0.93579177

 $00{:}58{:}36.220 \dashrightarrow 00{:}58{:}39.660$ Bias was a significant predictor.

NOTE Confidence: 0.93579177

 $00:58:39.660 \longrightarrow 00:58:41.214$ Drift rate was not in this case,

NOTE Confidence: 0.93579177

 $00{:}58{:}41.220 {\:{\circ}{\circ}{\circ}}>00{:}58{:}43.536$ but in subsequent regressions where we

NOTE Confidence: 0.93579177

00:58:43.536 --> 00:58:45.819 weren't interested in showing the utility,

NOTE Confidence: 0.93579177

00:58:45.820 --> 00:58:47.695 but just examining whether drift

NOTE Confidence: 0.93579177

 $00:58:47.695 \longrightarrow 00:58:49.402$ rate and bias predicted frontal

NOTE Confidence: 0.93579177

 $00:58:49.402 \longrightarrow 00:58:50.857$ midline Theta during the task.

NOTE Confidence: 0.93579177

 $00{:}58{:}50.860 \dashrightarrow 00{:}58{:}53.740$ Both of those were predictors with

NOTE Confidence: 0.93579177

00:58:53.740 --> 00:58:56.540 significant predictors without reaction time.

NOTE Confidence: 0.93579177

 $00:58:56.540 \longrightarrow 00:58:59.500$ In the in the model and the

NOTE Confidence: 0.93579177

 $00:58:59.500 \longrightarrow 00:59:01.660$ overall variance explained was

NOTE Confidence: 0.96038026

00:59:03.740 --> 00:59:07.988 fairly robust. Finally the take

NOTE Confidence: 0.96038026

 $00:59:07.988 \longrightarrow 00:59:10.799$ home here increased Theta power was

NOTE Confidence: 0.96038026

 $00:59:10.799 \longrightarrow 00:59:12.371$ associated with increased processing

NOTE Confidence: 0.96038026

 $00:59:12.371 \longrightarrow 00:59:14.687$ efficiency and a shift in starting

 $00:59:14.687 \longrightarrow 00:59:16.482$ point bias which facilitated accurate

NOTE Confidence: 0.96038026

 $00{:}59{:}16.482 \dashrightarrow 00{:}59{:}20.080$ and fat but fast responding and finally

NOTE Confidence: 0.96038026

 $00:59:20.080 \longrightarrow 00:59:23.560$ modeling proactive cognitive control.

NOTE Confidence: 0.96038026

 $00:59:23.560 \longrightarrow 00:59:25.616$ At the level of eye gaze from a

NOTE Confidence: 0.96038026

00:59:25.616 --> 00:59:27.580 drift eye gaze, behavior from a

NOTE Confidence: 0.96038026

 $00:59:27.580 \longrightarrow 00:59:28.940$ drift diffusion framework improved

NOTE Confidence: 0.96038026

00:59:28.940 --> 00:59:32.200 our measurement precision,

NOTE Confidence: 0.96038026

 $00:59:32.200 \longrightarrow 00:59:34.558$ as shown through our regression analyses.

NOTE Confidence: 0.93019015

 $00:59:39.730 \longrightarrow 00:59:41.758$ And oh, there it is.

NOTE Confidence: 0.93019015

00:59:41.758 --> 00:59:42.769 And for acknowledgments,

NOTE Confidence: 0.93019015

00:59:42.770 --> 00:59:45.171 I'd like to thank Courage Lab and

NOTE Confidence: 0.93019015

00:59:45.171 --> 00:59:47.330 our members and Doctor Crowley,

NOTE Confidence: 0.93019015

 $00{:}59{:}47.330 \dashrightarrow 00{:}59{:}50.506$ my mentor, as well as my other cowork

NOTE Confidence: 0.93019015

 $00:59:50.506 \longrightarrow 00:59:52.728$ coauthors on the on the paper,

NOTE Confidence: 0.93019015

 $00:59:52.730 \longrightarrow 00:59:56.610$ Stefan and Purr, as well as my

 $00:59:56.610 \longrightarrow 00:59:59.114$ funding the F32 as well as the T32.

NOTE Confidence: 0.93019015

 $00{:}59{:}59.114 --> 01{:}00{:}01.763$ And Doctor Block who Co

NOTE Confidence: 0.93019015

 $01:00:01.763 \longrightarrow 01:00:03.328$ runs the T32 with Mike.

NOTE Confidence: 0.93019015

 $01:00:03.330 \longrightarrow 01:00:04.290$ So thank you.

NOTE Confidence: 0.9402536

 $01:00:09.680 \longrightarrow 01:00:10.600$ Thank you. Nice job, Peter.

NOTE Confidence: 0.9402536

 $01:00:10.600 \longrightarrow 01:00:12.280$ Sorry for the technical snafu.

NOTE Confidence: 0.9402536

 $01:00:12.280 \longrightarrow 01:00:13.800$ No worries. We have time

NOTE Confidence: 0.9402536

 $01:00:13.800 \longrightarrow 01:00:15.320$ for one question for Peter.

NOTE Confidence: 0.9402536

 $01:00:17.440 \longrightarrow 01:00:17.530$ Come

NOTE Confidence: 0.900340958333333

01:00:22.730 --> 01:00:25.348 on, there's gotta be a computational model

NOTE Confidence: 0.900340958333333

 $01:00:25.348 \longrightarrow 01:00:27.890$ and person in the crowd. There's Taylor.

NOTE Confidence: 0.9352219

 $01:00:33.050 \longrightarrow 01:00:34.330$ I wanted to go back to

NOTE Confidence: 0.9352219

 $01:00:34.330 \longrightarrow 01:00:35.770$ this one to show this is.

NOTE Confidence: 0.936060516666667

 $01:00:35.770 \longrightarrow 01:00:37.954$ I made this slide to show kind of

NOTE Confidence: 0.936060516666667

01:00:37.954 --> 01:00:39.617 what that effect was hypothesized

NOTE Confidence: 0.936060516666667

 $01:00:39.617 \longrightarrow 01:00:42.059$ for that effect of frontal midline

01:00:42.059 --> 01:00:44.490 Theta on anti sacod conditions,

NOTE Confidence: 0.936060516666667

 $01{:}00{:}44.490 \dashrightarrow 01{:}00{:}46.965$ what that look like and that is kind of

NOTE Confidence: 0.936060516666667

 $01:00:46.970 \longrightarrow 01:00:49.406$ what that shift downward would look like.

NOTE Confidence: 0.936060516666667

 $01:00:49.410 \longrightarrow 01:00:50.370$ If anyone's interested,

NOTE Confidence: 0.927314942857143

 $01:00:50.490 \longrightarrow 01:00:51.365$ I wanted to go back to it.

NOTE Confidence: 0.927314942857143

01:00:51.370 --> 01:00:53.600 But right now I have a question, Peter.

NOTE Confidence: 0.927314942857143

 $01:00:53.600 \longrightarrow 01:00:56.050$ So where can we take this research

NOTE Confidence: 0.927314942857143

 $01:00:56.050 \longrightarrow 01:00:57.570$ studying anxiety for instance?

NOTE Confidence: 0.9301902

 $01:00:57.930 \longrightarrow 01:01:01.925$ Yeah, so I think I've thought a lot about

NOTE Confidence: 0.9301902

 $01{:}01{:}01{:}01{:}025 \dashrightarrow 01{:}01{:}03{.}920$ using attentional biases to threat.

NOTE Confidence: 0.9301902

 $01{:}01{:}03.920 \dashrightarrow 01{:}01{:}08.312$ And often times we'll use a dot pro task or

NOTE Confidence: 0.9301902

01:01:08.320 --> 01:01:11.272 pretty much any kind of task we use really.

NOTE Confidence: 0.9301902

 $01{:}01{:}11.280 \dashrightarrow 01{:}01{:}12.896$ We're inferring where their

NOTE Confidence: 0.9301902

 $01:01:12.896 \longrightarrow 01:01:14.916$ attention is via button presses.

NOTE Confidence: 0.9301902

 $01:01:14.920 \longrightarrow 01:01:17.830$ And I think it'd be it shows

01:01:17.830 --> 01:01:19.475 that we can use the Drift Drift,

NOTE Confidence: 0.9301902

 $01{:}01{:}19.480 \dashrightarrow 01{:}01{:}21.776$ diffusion modeling framework to

NOTE Confidence: 0.9301902

 $01:01:21.776 \longrightarrow 01:01:24.216$ decompose gaze behavior into these

NOTE Confidence: 0.9301902

01:01:24.216 --> 01:01:26.774 late and underlying constructs which

NOTE Confidence: 0.9301902

 $01:01:26.774 \longrightarrow 01:01:30.603$ may allow us to better relate to.

NOTE Confidence: 0.9301902

01:01:30.610 --> 01:01:32.968 Neural dynamics, whether it be frontal,

NOTE Confidence: 0.9301902

01:01:32.970 --> 01:01:36.282 midline, Theta, A joint model as

NOTE Confidence: 0.9301902

01:01:36.282 --> 01:01:40.362 seen here can also be applied to FM,

NOTE Confidence: 0.9301902

01:01:40.362 --> 01:01:41.770 RI through bold response.

NOTE Confidence: 0.9301902

01:01:41.770 --> 01:01:44.902 It doesn't need to be necessarily EE,

NOTE Confidence: 0.9301902

01:01:44.902 --> 01:01:47.326 G or Austory dynamics,

NOTE Confidence: 0.9301902

01:01:47.330 --> 01:01:49.330 but what's really important with

NOTE Confidence: 0.9301902

01:01:49.330 --> 01:01:51.793 this type of modeling is having

NOTE Confidence: 0.9301902

 $01{:}01{:}51.793 \dashrightarrow 01{:}01{:}54.139$ that trial by trial changes and.

NOTE Confidence: 0.9301902

01:01:54.140 --> 01:01:54.511 Obviously,

NOTE Confidence: 0.9301902

01:01:54.511 --> 01:01:56.366 the temporal specificity of veg

 $01{:}01{:}56.366 \dashrightarrow 01{:}01{:}58.648$ lends itself very nicely to a

NOTE Confidence: 0.9301902

 $01{:}01{:}58.648 \dashrightarrow 01{:}01{:}59.761$ computational modeling approach

NOTE Confidence: 0.9301902

 $01:01:59.761 \longrightarrow 01:02:01.616$ to something like this because

NOTE Confidence: 0.9301902

 $01:02:01.672 \longrightarrow 01:02:02.945$ of that temporal specificity as

NOTE Confidence: 0.9301902

 $01:02:02.945 \longrightarrow 01:02:04.420$ opposed to a bold response.

NOTE Confidence: 0.9301902

 $01:02:04.420 \longrightarrow 01:02:06.324$ But there are ways to kind of lag

NOTE Confidence: 0.9301902

 $01:02:06.324 \longrightarrow 01:02:08.602$ that so that it matches up with the

NOTE Confidence: 0.9301902

 $01:02:08.602 \longrightarrow 01:02:10.700$ behavior which is kind of interesting.

NOTE Confidence: 0.9301902

01:02:10.700 --> 01:02:13.143 So I think using this to study

NOTE Confidence: 0.9301902

 $01:02:13.143 \longrightarrow 01:02:15.050$ attention biases with with eye

NOTE Confidence: 0.9301902

 $01:02:15.050 \longrightarrow 01:02:17.020$ tracking is is something that's

NOTE Confidence: 0.9301902

 $01:02:17.020 \longrightarrow 01:02:19.140$ really cool and in the future.

NOTE Confidence: 0.94584437777778

01:02:20.180 --> 01:02:21.432 Thank you very much.

NOTE Confidence: 0.945844377777778

01:02:21.432 --> 01:02:22.997 Thank you for coming everyone.