

WEBVTT

NOTE duration:"01:02:23"

NOTE recognizability:0.934

NOTE language:en-us

NOTE Confidence: 0.97044375

00:00:00.000 --> 00:00:03.798 Good afternoon, everyone.

NOTE Confidence: 0.97044375

00:00:03.800 --> 00:00:05.225 Thank you for coming today

NOTE Confidence: 0.97044375

00:00:05.225 --> 00:00:06.565 to our T32 Grand rounds.

NOTE Confidence: 0.97044375

00:00:06.565 --> 00:00:07.840 We're on a tight schedule.

NOTE Confidence: 0.97044375

00:00:07.840 --> 00:00:09.568 We have three talks,

NOTE Confidence: 0.97044375

00:00:09.568 --> 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 --> 00:00:17.074 T32 with Michael Block.

NOTE Confidence: 0.97044375

00:00:17.080 --> 00:00:20.920 We're in, I think our 38th or 39th year.

NOTE Confidence: 0.97044375

00:00:20.920 --> 00:00:23.307 It's really one of the joys of

NOTE Confidence: 0.97044375

00:00:23.307 --> 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.

NOTE Confidence: 0.97044375

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 --> 00:00:36.770 we are up for a newal next year,  
NOTE Confidence: 0.87470297125

00:00:36.770 --> 00:00:38.658 so we're going to be doing a mad  
NOTE Confidence: 0.87470297125

00:00:38.658 --> 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 --> 00:00:44.333 And we really couldn't do it and  
NOTE Confidence: 0.87470297125

00:00:44.333 --> 00:00:46.034 succeed without you all and that the  
NOTE Confidence: 0.87470297125

00:00:46.034 --> 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 --> 00:00:57.050 We only have six slots,  
NOTE Confidence: 0.904343754545455

00:00:57.050 --> 00:00:58.247 Not only but that's what we have,  
NOTE Confidence: 0.904343754545455

00:00:58.250 --> 00:00:59.515 but we have many others  
NOTE Confidence: 0.904343754545455

00:00:59.515 --> 00:01:00.527 who participate with us.

NOTE Confidence: 0.904343754545455  
00:01:00.530 --> 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 --> 00:01:05.763 so I was able to bring everyone in here.  
NOTE Confidence: 0.904343754545455  
00:01:05.770 --> 00:01:07.527 I'm going to ask for some help  
NOTE Confidence: 0.904343754545455  
00:01:07.530 --> 00:01:08.610 down the road from you all.  
NOTE Confidence: 0.9335869  
00:01:11.090 --> 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 --> 00:01:23.976 Dr. Penner will be telling us  
NOTE Confidence: 0.9335869  
00:01:23.976 --> 00:01:25.846 about her work on understanding  
NOTE Confidence: 0.9335869  
00:01:25.846 --> 00:01:28.318 emotional regulation and pregnancy.  
NOTE Confidence: 0.9335869  
00:01:28.320 --> 00:01:29.910 Doctor Gerber will be telling  
NOTE Confidence: 0.9335869  
00:01:29.910 --> 00:01:31.500 us about emotion disruption and  
NOTE Confidence: 0.9335869  
00:01:31.557 --> 00:01:33.357 loneliness and autistic and autistic  
NOTE Confidence: 0.9335869

00:01:33.357 --> 00:01:35.157 youth during the COVID pandemic.  
NOTE Confidence: 0.9335869

00:01:35.160 --> 00:01:36.198 And lastly, Dr.  
NOTE Confidence: 0.9335869

00:01:36.198 --> 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 --> 00:01:42.920 drift rate and frontal midline  
NOTE Confidence: 0.9335869

00:01:42.920 --> 00:01:44.679 beta EEG oscillations.  
NOTE Confidence: 0.9335869

00:01:44.680 --> 00:01:46.200 Before we get on to the three talks,  
NOTE Confidence: 0.9335869

00:01:46.200 --> 00:01:48.216 I just want to say a few words  
NOTE Confidence: 0.9335869

00:01:48.216 --> 00:01:49.689 about these three trainees.  
NOTE Confidence: 0.9335869

00:01:49.690 --> 00:01:51.410 We would love to be able to have  
NOTE Confidence: 0.9335869

00:01:51.410 --> 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 --> 00:01:55.927 three individuals who reached out,  
NOTE Confidence: 0.9335869

00:01:55.930 --> 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 --> 00:02:03.218 Doctor Penner has really done an

NOTE Confidence: 0.9335869

00:02:03.218 --> 00:02:06.026 exceptional job as a T32 trainee.

NOTE Confidence: 0.9335869

00:02:06.026 --> 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 --> 00:02:13.450 Not all in the T32,

NOTE Confidence: 0.9335869

00:02:13.450 --> 00:02:15.124 but you know that's what she's

NOTE Confidence: 0.9335869

00:02:15.124 --> 00:02:16.680 been doing across her career.

NOTE Confidence: 0.9335869

00:02:16.680 --> 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 --> 00:02:24.320 so she'll be heading there.

NOTE Confidence: 0.9335869

00:02:24.320 --> 00:02:25.862 Doctor Gerber is in his first

NOTE Confidence: 0.9335869

00:02:25.862 --> 00:02:28.344 year in the T32 and he's rocked

NOTE Confidence: 0.9335869

00:02:28.344 --> 00:02:30.474 it already with two grants.

NOTE Confidence: 0.9335869

00:02:30.480 --> 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

NOTE Confidence: 0.9335869

00:02:36.930 --> 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 --> 00:02:42.200 So Congrats to Doctor Gerber.  
NOTE Confidence: 0.9335869

00:02:42.200 --> 00:02:43.490 And lastly Dr.  
NOTE Confidence: 0.9335869

00:02:43.490 --> 00:02:43.920 Stagna.  
NOTE Confidence: 0.94780115

00:02:46.480 --> 00:02:50.230 Also was quite prolific with 33  
NOTE Confidence: 0.94780115

00:02:50.230 --> 00:02:53.515 papers and and F32 also that's an  
NOTE Confidence: 0.94780115

00:02:53.515 --> 00:02:55.550 independent training grant that he  
NOTE Confidence: 0.94780115

00:02:55.628 --> 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 --> 00:03:05.920 So before I hand over the  
NOTE Confidence: 0.94780115

00:03:05.920 --> 00:03:08.680 the mic to Doctor Penner,  
NOTE Confidence: 0.94780115

00:03:08.680 --> 00:03:10.836 I just want to make a plug  
NOTE Confidence: 0.94780115

00:03:10.836 --> 00:03:12.652 for these these F32 grants.  
NOTE Confidence: 0.94780115

00:03:12.652 --> 00:03:15.964 We really only have a small number of.  
NOTE Confidence: 0.94780115

00:03:15.964 --> 00:03:18.830 Spots on the T32 compared to the need.

NOTE Confidence: 0.94780115

00:03:18.830 --> 00:03:21.784 And so I encourage everyone here to

NOTE Confidence: 0.94780115

00:03:21.784 --> 00:03:24.470 try to to pursue these F32 grants.

NOTE Confidence: 0.94780115

00:03:24.470 --> 00:03:26.086 We have lots of support for you.

NOTE Confidence: 0.94780115

00:03:26.086 --> 00:03:26.734 We read them.

NOTE Confidence: 0.94780115

00:03:26.734 --> 00:03:28.905 Michael and I both sat on the study second

NOTE Confidence: 0.94780115

00:03:28.905 --> 00:03:30.830 committee for the review of the grants.

NOTE Confidence: 0.94780115

00:03:30.830 --> 00:03:32.945 We have examples so we can scaffold you to

NOTE Confidence: 0.94780115

00:03:32.945 --> 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 --> 00:03:38.750 Here's a treat for you.

NOTE Confidence: 0.94780115

00:03:38.750 --> 00:03:39.830 So Doctor Penner.

NOTE Confidence: 0.9402535

00:03:48.470 --> 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 --> 00:03:52.086 I'm really thrilled to be

NOTE Confidence: 0.9402535

00:03:52.086 --> 00:03:53.070 presenting at Greyhounds.

NOTE Confidence: 0.9402535

00:03:53.070 --> 00:03:54.255 It's very exciting.  
NOTE Confidence: 0.9402535

00:03:54.255 --> 00:03:56.230 I like Doctor Crowley said.  
NOTE Confidence: 0.9402535

00:03:56.230 --> 00:03:57.670 My name is Francesca Penner.  
NOTE Confidence: 0.9402535

00:03:57.670 --> 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 --> 00:04:07.369 on emotion regulation during pregnancy.  
NOTE Confidence: 0.9402535

00:04:07.370 --> 00:04:09.332 I was excited to present this  
NOTE Confidence: 0.9402535

00:04:09.332 --> 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 --> 00:04:15.952 so I thought it would be interesting  
NOTE Confidence: 0.9402535

00:04:15.952 --> 00:04:17.988 to kind of share the progression  
NOTE Confidence: 0.9402535

00:04:17.988 --> 00:04:20.445 of work over the past two years.  
NOTE Confidence: 0.9402535

00:04:20.450 --> 00:04:21.293 So to start,  
NOTE Confidence: 0.9402535

00:04:21.293 --> 00:04:23.260 I wanted to begin with talking about



NOTE Confidence: 0.9402535

00:04:23.323 --> 00:04:25.561 why it's interesting and important to

NOTE Confidence: 0.9402535

00:04:25.561 --> 00:04:27.690 study emotion regulation in pregnancy,

NOTE Confidence: 0.9402535

00:04:27.690 --> 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 --> 00:04:33.836 So we know emotion regulation is

NOTE Confidence: 0.9402535

00:04:33.836 --> 00:04:35.560 a transdiagnostic factor relevant

NOTE Confidence: 0.9402535

00:04:35.560 --> 00:04:37.948 to many mental health disorders

NOTE Confidence: 0.9402535

00:04:37.948 --> 00:04:39.804 and symptoms of psychopathology.

NOTE Confidence: 0.9402535

00:04:39.804 --> 00:04:41.754 We also know it's a it's targeted in

NOTE Confidence: 0.9402535

00:04:41.754 --> 00:04:43.009 multiple evidence based treatment.

NOTE Confidence: 0.9402535

00:04:43.009 --> 00:04:45.594 So we have evidence that it can it's

NOTE Confidence: 0.9402535

00:04:45.594 --> 00:04:47.776 modifiable that we can improve emotion

NOTE Confidence: 0.9402535

00:04:47.776 --> 00:04:49.978 regulation and that by improving it.

NOTE Confidence: 0.9402535

00:04:49.978 --> 00:04:52.818 Or by decreasing emotion to circulation,

NOTE Confidence: 0.9402535

00:04:52.818 --> 00:04:55.245 we can prevent and reduce

NOTE Confidence: 0.9402535

00:04:55.245 --> 00:04:56.700 symptoms of psychopathology.  
NOTE Confidence: 0.9402535

00:04:56.700 --> 00:04:58.320 And we also know that emotion  
NOTE Confidence: 0.9402535

00:04:58.320 --> 00:04:59.980 regulation is important in caregiving.  
NOTE Confidence: 0.9402535

00:04:59.980 --> 00:05:02.700 So it helps us be more sensitive caregivers.  
NOTE Confidence: 0.9402535

00:05:02.700 --> 00:05:05.325 And it's also important in terms of  
NOTE Confidence: 0.9402535

00:05:05.325 --> 00:05:07.689 modeling for children as they develop  
NOTE Confidence: 0.9402535

00:05:07.689 --> 00:05:10.017 and learn emotion regulation as well.  
NOTE Confidence: 0.9402535

00:05:10.020 --> 00:05:11.570 When you think about emotion  
NOTE Confidence: 0.9402535

00:05:11.570 --> 00:05:12.500 regulation during pregnancy,  
NOTE Confidence: 0.9402535

00:05:12.500 --> 00:05:14.508 you can think about some of the unique  
NOTE Confidence: 0.9402535

00:05:14.508 --> 00:05:16.006 factors during this period that  
NOTE Confidence: 0.9402535

00:05:16.006 --> 00:05:17.576 might affect our emotion regulation.  
NOTE Confidence: 0.9402535

00:05:17.580 --> 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 --> 00:05:21.516 changes for the pregnant persons  
NOTE Confidence: 0.9402535

00:05:21.516 --> 00:05:23.456 and physiological and brain changes

NOTE Confidence: 0.9402535

00:05:23.456 --> 00:05:25.593 that might affect the physiological

NOTE Confidence: 0.9402535

00:05:25.593 --> 00:05:27.888 experience of emotions during pregnancy.

NOTE Confidence: 0.9402535

00:05:27.890 --> 00:05:29.114 There are also psychosocial

NOTE Confidence: 0.9402535

00:05:29.114 --> 00:05:30.644 stressors that might come up,

NOTE Confidence: 0.9402535

00:05:30.650 --> 00:05:32.930 whether it's financial relationship

NOTE Confidence: 0.9402535

00:05:32.930 --> 00:05:35.780 or medical stressors that might

NOTE Confidence: 0.9402535

00:05:35.780 --> 00:05:37.621 challenge or require emotion

NOTE Confidence: 0.9402535

00:05:37.621 --> 00:05:39.876 regulation strategies during this time.

NOTE Confidence: 0.9402535

00:05:39.880 --> 00:05:41.364 And then we also know that pregnancy

NOTE Confidence: 0.9402535

00:05:41.364 --> 00:05:43.144 is a time of increased vulnerability

NOTE Confidence: 0.9402535

00:05:43.144 --> 00:05:44.596 for mental health disorders,

NOTE Confidence: 0.9402535

00:05:44.600 --> 00:05:47.096 especially depression and anxiety,

NOTE Confidence: 0.9402535

00:05:47.096 --> 00:05:49.620 which also makes emotion regulation

NOTE Confidence: 0.9402535

00:05:49.620 --> 00:05:51.995 really relevant during this time.

NOTE Confidence: 0.9402535

00:05:52.000 --> 00:05:53.146 And then finally,

NOTE Confidence: 0.9402535

00:05:53.146 --> 00:05:55.625 when we think about for new parents  
NOTE Confidence: 0.9402535

00:05:55.625 --> 00:05:57.200 of the transition to parenthood,  
NOTE Confidence: 0.9402535

00:05:57.200 --> 00:05:59.075 whether there might be changes  
NOTE Confidence: 0.9402535

00:05:59.075 --> 00:06:01.321 in emotion regulation as sort of  
NOTE Confidence: 0.9402535

00:06:01.321 --> 00:06:03.463 as new skills come online as we  
NOTE Confidence: 0.9402535

00:06:03.463 --> 00:06:05.330 become parents for the first time.  
NOTE Confidence: 0.9402535

00:06:05.330 --> 00:06:07.172 So thinking about all those ways  
NOTE Confidence: 0.9402535

00:06:07.172 --> 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 --> 00:06:12.874 but also its relevance for stress and mental  
NOTE Confidence: 0.9402535

00:06:12.874 --> 00:06:15.809 health and caregiving during this time,  
NOTE Confidence: 0.9402535

00:06:15.810 --> 00:06:17.508 we were interested in kind of  
NOTE Confidence: 0.9402535

00:06:17.508 --> 00:06:19.025 looking at what's already known  
NOTE Confidence: 0.9402535

00:06:19.025 --> 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 --> 00:06:24.570 both during pregnancy and

NOTE Confidence: 0.9402535

00:06:24.570 --> 00:06:26.570 in the postpartum period.

NOTE Confidence: 0.9402535

00:06:26.570 --> 00:06:27.822 So early in 2022,

NOTE Confidence: 0.9402535

00:06:27.822 --> 00:06:30.215 Helena and I posted a paper and

NOTE Confidence: 0.9402535

00:06:30.215 --> 00:06:32.420 Archives of Women's Mental Health.

NOTE Confidence: 0.9402535

00:06:32.420 --> 00:06:34.170 That summarizes this research area

NOTE Confidence: 0.9402535

00:06:34.170 --> 00:06:36.283 and it's a pretty small research

NOTE Confidence: 0.9402535

00:06:36.283 --> 00:06:38.390 area so far in terms of studies

NOTE Confidence: 0.9402535

00:06:38.390 --> 00:06:40.659 that have actually measured emotion

NOTE Confidence: 0.9402535

00:06:40.659 --> 00:06:42.772 regulation during pregnancy and

NOTE Confidence: 0.9402535

00:06:42.772 --> 00:06:44.820 association with other variables

NOTE Confidence: 0.9402535

00:06:44.820 --> 00:06:47.380 either in pregnancy or postpartum.

NOTE Confidence: 0.9402535

00:06:47.380 --> 00:06:49.864 So this figure from our paper

NOTE Confidence: 0.9402535

00:06:49.864 --> 00:06:51.520 kind of summarizes this

NOTE Confidence: 0.9402536

00:06:51.602 --> 00:06:53.202 area so far. It's definitely

NOTE Confidence: 0.9402536

00:06:53.202 --> 00:06:54.857 a growing area of research.

NOTE Confidence: 0.9402536

00:06:54.860 --> 00:06:56.332 So I expect that things have may have

NOTE Confidence: 0.9402536

00:06:56.332 --> 00:06:57.695 changed in the last year and a half,

NOTE Confidence: 0.9402536

00:06:57.700 --> 00:07:00.610 but in terms of what this

NOTE Confidence: 0.9402536

00:07:00.610 --> 00:07:03.180 figure represents, so the.

NOTE Confidence: 0.9402536

00:07:03.180 --> 00:07:06.239 Boxes in solid lines with solid arrows

NOTE Confidence: 0.9402536

00:07:06.239 --> 00:07:08.759 are correlates that we have evidence

NOTE Confidence: 0.9402536

00:07:08.759 --> 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 --> 00:07:16.093 lines are hypothesized correlates of

NOTE Confidence: 0.9402536

00:07:16.093 --> 00:07:17.977 emotion regulation during pregnancy.

NOTE Confidence: 0.9402536

00:07:17.980 --> 00:07:20.031 So some of the things you have

NOTE Confidence: 0.9402536

00:07:20.031 --> 00:07:22.742 evidence for so far are that emotion

NOTE Confidence: 0.9402536

00:07:22.742 --> 00:07:24.502 regulation measured during pregnancy

NOTE Confidence: 0.9402536

00:07:24.502 --> 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 --> 00:07:30.118 both in pregnancy and postpartum.

NOTE Confidence: 0.9402536

00:07:30.120 --> 00:07:32.510 It's shown association with caregiving

NOTE Confidence: 0.9402536

00:07:32.510 --> 00:07:35.280 behavior measured during pregnancy as well.

NOTE Confidence: 0.9402536

00:07:35.280 --> 00:07:38.542 And then it's Even so shown some

NOTE Confidence: 0.9402536

00:07:38.542 --> 00:07:40.400 associations between motion regulation

NOTE Confidence: 0.9402536

00:07:40.400 --> 00:07:42.700 during pregnancy in the pregnant

NOTE Confidence: 0.9402536

00:07:42.700 --> 00:07:45.658 person and then with some infant

NOTE Confidence: 0.9402536

00:07:45.658 --> 00:07:47.666 outcomes like feeding interactions

NOTE Confidence: 0.9402536

00:07:47.666 --> 00:07:50.079 and infant attention and arousal.

NOTE Confidence: 0.9402536

00:07:50.080 --> 00:07:53.790 So we have some emerging evidence for.

NOTE Confidence: 0.9402536

00:07:53.790 --> 00:07:56.070 These significant links showing that

NOTE Confidence: 0.9402536

00:07:56.070 --> 00:07:58.350 emotion regulation in pregnancy might

NOTE Confidence: 0.9402536

00:07:58.418 --> 00:08:00.707 have implications for not only a mental

NOTE Confidence: 0.9402536

00:08:00.707 --> 00:08:03.570 health in the pregnant person but also

NOTE Confidence: 0.9402536

00:08:03.570 --> 00:08:05.390 caregiving and infant development.

NOTE Confidence: 0.9402536

00:08:05.390 --> 00:08:07.466 Which suggests that this is an

NOTE Confidence: 0.9402536

00:08:07.466 --> 00:08:09.765 important factor to study and also  
NOTE Confidence: 0.9402536

00:08:09.765 --> 00:08:11.469 the potentially important factor  
NOTE Confidence: 0.9402536

00:08:11.469 --> 00:08:13.621 for intervention because it could  
NOTE Confidence: 0.9402536

00:08:13.621 --> 00:08:15.536 have these multi prompt impacts  
NOTE Confidence: 0.9402536

00:08:15.536 --> 00:08:17.630 even into the postpartum period.  
NOTE Confidence: 0.940902764117647

00:08:20.290 --> 00:08:22.306 So wanting to kind of build on this  
NOTE Confidence: 0.940902764117647

00:08:22.306 --> 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 --> 00:08:28.108 we conducted 2 studies with archival data  
NOTE Confidence: 0.940902764117647

00:08:28.108 --> 00:08:30.705 focused on emotion regulation and perceived  
NOTE Confidence: 0.940902764117647

00:08:30.705 --> 00:08:33.045 stress during the perinatal period.  
NOTE Confidence: 0.940902764117647

00:08:33.050 --> 00:08:34.970 And in both of these studies,  
NOTE Confidence: 0.940902764117647

00:08:34.970 --> 00:08:37.065 we were conceptualizing perceived stress  
NOTE Confidence: 0.940902764117647

00:08:37.065 --> 00:08:39.989 in terms of appraisals of one's life  
NOTE Confidence: 0.940902764117647

00:08:39.989 --> 00:08:41.894 as stressful versus objective measures  
NOTE Confidence: 0.940902764117647

00:08:41.894 --> 00:08:44.500 of life of stressful life events.



NOTE Confidence: 0.940902764117647  
00:08:44.500 --> 00:08:46.383 And we were thinking about emotion regulation  
NOTE Confidence: 0.940902764117647  
00:08:46.383 --> 00:08:48.418 in terms of James Gross's definition.  
NOTE Confidence: 0.940902764117647  
00:08:48.420 --> 00:08:50.580 So attempts to influence one's  
NOTE Confidence: 0.940902764117647  
00:08:50.580 --> 00:08:52.740 emotions and how they're expressed.  
NOTE Confidence: 0.940902764117647  
00:08:52.740 --> 00:08:53.684 In particular,  
NOTE Confidence: 0.940902764117647  
00:08:53.684 --> 00:08:56.044 thinking about the emotion regulation  
NOTE Confidence: 0.940902764117647  
00:08:56.044 --> 00:08:58.491 strategies of reappraisal and suppression  
NOTE Confidence: 0.940902764117647  
00:08:58.491 --> 00:09:01.125 with reappraisal thoughts to be a more  
NOTE Confidence: 0.940902764117647  
00:09:01.125 --> 00:09:02.457 adaptive emotion regulation strategy  
NOTE Confidence: 0.940902764117647  
00:09:02.457 --> 00:09:05.227 and suppression thoughts to be a more  
NOTE Confidence: 0.940902764117647  
00:09:05.227 --> 00:09:06.815 maladaptive emotion regulation strategy.  
NOTE Confidence: 0.940902764117647  
00:09:06.820 --> 00:09:08.340 So in the first study,  
NOTE Confidence: 0.940902764117647  
00:09:08.340 --> 00:09:10.644 we were focused on emotion regulation  
NOTE Confidence: 0.940902764117647  
00:09:10.644 --> 00:09:12.180 strategies and perceived stress  
NOTE Confidence: 0.940902764117647  
00:09:12.237 --> 00:09:14.127 and expectant mothers and fathers.  
NOTE Confidence: 0.940902764117647

00:09:14.130 --> 00:09:16.530 During the third trimester,  
NOTE Confidence: 0.940902764117647

00:09:16.530 --> 00:09:19.770 and this was a sample collected here at Yale.  
NOTE Confidence: 0.940902764117647

00:09:19.770 --> 00:09:21.018 Of 83 expectant parents,  
NOTE Confidence: 0.940902764117647

00:09:21.018 --> 00:09:22.890 about 50 of them were pregnant  
NOTE Confidence: 0.940902764117647

00:09:22.946 --> 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 --> 00:09:28.556 They completed the Perceived Stress Scale  
NOTE Confidence: 0.940902764117647

00:09:28.556 --> 00:09:30.490 and the Emotion Regulation Questionnaire.  
NOTE Confidence: 0.940902764117647

00:09:30.490 --> 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 --> 00:09:36.002 we looked at associations between each  
NOTE Confidence: 0.940902764117647

00:09:36.002 --> 00:09:37.929 of those emotion regulation strategies,  
NOTE Confidence: 0.940902764117647

00:09:37.930 --> 00:09:39.868 reappraisal and suppression  
NOTE Confidence: 0.940902764117647

00:09:39.868 --> 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 --> 00:09:45.386 directions based on prior work

NOTE Confidence: 0.940902764117647  
00:09:45.386 --> 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 --> 00:09:50.410 So we saw that as parents reported greater  
NOTE Confidence: 0.940902764117647  
00:09:50.410 --> 00:09:52.486 levels of or greater use of suppression,  
NOTE Confidence: 0.940902764117647  
00:09:52.490 --> 00:09:54.850 they also reported greater stress.  
NOTE Confidence: 0.940902764117647  
00:09:54.850 --> 00:09:55.810 And as they reported  
NOTE Confidence: 0.940902764117647  
00:09:55.810 --> 00:09:56.770 greater use of reappraisal,  
NOTE Confidence: 0.940902764117647  
00:09:56.770 --> 00:09:58.570 they reported lower perceived stress.  
NOTE Confidence: 0.940902764117647  
00:09:58.570 --> 00:10:01.090 So this is really underlining that  
NOTE Confidence: 0.940902764117647  
00:10:01.090 --> 00:10:02.608 in a sample of expected parents,  
NOTE Confidence: 0.940902764117647  
00:10:02.610 --> 00:10:05.535 we're seeing associations in expected  
NOTE Confidence: 0.940902764117647  
00:10:05.535 --> 00:10:08.490 directions with these two emotion  
NOTE Confidence: 0.940902764117647  
00:10:08.490 --> 00:10:11.490 regulation strategies and perceived stress.  
NOTE Confidence: 0.940902764117647  
00:10:11.490 --> 00:10:13.386 We then were interested in whether  
NOTE Confidence: 0.940902764117647  
00:10:13.386 --> 00:10:15.435 the mothers and fathers differed in  
NOTE Confidence: 0.940902764117647

00:10:15.435 --> 00:10:17.260 their levels of perceived stress  
NOTE Confidence: 0.940902764117647

00:10:17.260 --> 00:10:19.010 and emotion regulation strategies.  
NOTE Confidence: 0.940902764117647

00:10:19.010 --> 00:10:21.012 And we saw we were actually surprised  
NOTE Confidence: 0.940902764117647

00:10:21.012 --> 00:10:23.493 to see this finding was against our  
NOTE Confidence: 0.940902764117647

00:10:23.493 --> 00:10:25.448 hypothesis that perceived stress in  
NOTE Confidence: 0.940902764117647

00:10:25.448 --> 00:10:27.649 mothers and fathers was not different.  
NOTE Confidence: 0.940902764117647

00:10:27.650 --> 00:10:28.850 So during the third trimester,  
NOTE Confidence: 0.940902764117647

00:10:28.850 --> 00:10:31.850 they're reporting similar levels of  
NOTE Confidence: 0.940902764117647

00:10:31.850 --> 00:10:33.698 stress and they're also reporting  
NOTE Confidence: 0.940902764117647

00:10:33.698 --> 00:10:35.258 similar levels of each emotion  
NOTE Confidence: 0.940902764117647

00:10:35.258 --> 00:10:36.130 regulation strategies.  
NOTE Confidence: 0.940902764117647

00:10:36.130 --> 00:10:37.530 There were not any differences  
NOTE Confidence: 0.940902764117647

00:10:37.530 --> 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 --> 00:10:44.909 was that it was crosssectional data.  
NOTE Confidence: 0.884924438461538

00:10:44.910 --> 00:10:47.708 We were interested in also trying to

NOTE Confidence: 0.884924438461538

00:10:47.708 --> 00:10:49.742 understand better the direction of effects

NOTE Confidence: 0.884924438461538

00:10:49.742 --> 00:10:51.597 between emotion regulation and perceived

NOTE Confidence: 0.884924438461538

00:10:51.597 --> 00:10:53.467 stress during the perinatal period.

NOTE Confidence: 0.884924438461538

00:10:53.470 --> 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 --> 00:10:58.229 A and M Rebecca Brooker,

NOTE Confidence: 0.884924438461538

00:10:58.230 --> 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 --> 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 --> 00:11:12.018 in in the perinatal period.

NOTE Confidence: 0.884924438461538

00:11:12.020 --> 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 --> 00:11:17.858 third trimester and four months postpartum.

NOTE Confidence: 0.884924438461538

00:11:17.860 --> 00:11:20.317 We were interested in testing a cross  
NOTE Confidence: 0.884924438461538

00:11:20.317 --> 00:11:23.113 like panel model to be able to look at  
NOTE Confidence: 0.884924438461538

00:11:23.113 --> 00:11:25.295 both the stability of each of these  
NOTE Confidence: 0.884924438461538

00:11:25.295 --> 00:11:27.612 constructs but also the cross lag and  
NOTE Confidence: 0.884924438461538

00:11:27.620 --> 00:11:31.220 cross-sectional relationships between them.  
NOTE Confidence: 0.884924438461538

00:11:31.220 --> 00:11:34.532 And this was a sample of 92 pregnant women.  
NOTE Confidence: 0.884924438461538

00:11:34.540 --> 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 --> 00:11:40.750 they completed the same 2 measures,  
NOTE Confidence: 0.884924438461538

00:11:40.750 --> 00:11:42.086 the Emotion Regulation Questionnaire  
NOTE Confidence: 0.884924438461538

00:11:42.086 --> 00:11:43.756 and the Perceived Stress Scale  
NOTE Confidence: 0.884924438461538

00:11:43.756 --> 00:11:45.148 in the second trimester,  
NOTE Confidence: 0.884924438461538

00:11:45.150 --> 00:11:49.068 third trimester and four months postpartum.  
NOTE Confidence: 0.884924438461538

00:11:49.070 --> 00:11:51.326 So we looked at associations between  
NOTE Confidence: 0.884924438461538

00:11:51.326 --> 00:11:52.830 suppression and perceived stress.

NOTE Confidence: 0.884924438461538

00:11:52.830 --> 00:11:54.468 We really only saw evidence for

NOTE Confidence: 0.884924438461538

00:11:54.468 --> 00:11:56.510 stability of each of these constructs.

NOTE Confidence: 0.884924438461538

00:11:56.510 --> 00:11:58.110 So there were no cross,

NOTE Confidence: 0.884924438461538

00:11:58.110 --> 00:11:59.806 lagged or cross-sectional associations

NOTE Confidence: 0.884924438461538

00:11:59.806 --> 00:12:01.502 between suppression and perceived

NOTE Confidence: 0.884924438461538

00:12:01.502 --> 00:12:03.029 stress in this sample.

NOTE Confidence: 0.959262244444445

00:12:05.090 --> 00:12:06.645 We looked at associations between

NOTE Confidence: 0.959262244444445

00:12:06.645 --> 00:12:07.889 reappraisal and perceived stress.

NOTE Confidence: 0.959262244444445

00:12:07.890 --> 00:12:09.870 We again saw evidence for the

NOTE Confidence: 0.959262244444445

00:12:09.870 --> 00:12:11.643 stability of each of these

NOTE Confidence: 0.959262244444445

00:12:11.643 --> 00:12:13.568 across the three time points.

NOTE Confidence: 0.959262244444445

00:12:13.570 --> 00:12:15.480 And then we saw cross-sectional

NOTE Confidence: 0.959262244444445

00:12:15.480 --> 00:12:17.008 associations in the same

NOTE Confidence: 0.959262244444445

00:12:17.008 --> 00:12:18.810 direction as study one. So as

NOTE Confidence: 0.94331735

00:12:21.050 --> 00:12:23.386 reappraisal increased, perceived stress

NOTE Confidence: 0.94331735

00:12:23.386 --> 00:12:26.890 decreased in the same time point.  
NOTE Confidence: 0.94331735

00:12:26.890 --> 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 --> 00:12:35.602 effects where greater stress in the  
NOTE Confidence: 0.94331735

00:12:35.602 --> 00:12:37.202 second trimester predicted lower  
NOTE Confidence: 0.94331735

00:12:37.268 --> 00:12:39.328 reappraisal in the third trimester.  
NOTE Confidence: 0.94331735

00:12:39.330 --> 00:12:41.390 So potentially suggesting that  
NOTE Confidence: 0.94331735

00:12:41.390 --> 00:12:43.965 more stress in pregnancy could  
NOTE Confidence: 0.94331735

00:12:43.965 --> 00:12:47.839 sort of get in the way of adaptive  
NOTE Confidence: 0.94331735

00:12:47.839 --> 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 --> 00:12:53.150 so both studies together showed.  
NOTE Confidence: 0.94331735

00:12:53.150 --> 00:12:55.298 Significant links between reappraisal  
NOTE Confidence: 0.94331735

00:12:55.298 --> 00:12:59.765 and perceived stress cross sectionally in  
NOTE Confidence: 0.94331735

00:12:59.765 --> 00:13:02.495 both mothers and fathers during during



NOTE Confidence: 0.94331735

00:13:02.495 --> 00:13:04.605 pregnancy Study two gave some evidence

NOTE Confidence: 0.94331735

00:13:04.605 --> 00:13:06.785 for the stability of emotion regulation

NOTE Confidence: 0.94331735

00:13:06.785 --> 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 --> 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 --> 00:13:15.350 is thought to be more traitlike.

NOTE Confidence: 0.94331735

00:13:15.350 --> 00:13:18.350 So that's one reason why we're

NOTE Confidence: 0.94331735

00:13:18.350 --> 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 --> 00:13:23.960 we saw that higher stress or appraisals

NOTE Confidence: 0.94331735

00:13:24.025 --> 00:13:25.789 of stress in the second trimester

NOTE Confidence: 0.94331735

00:13:25.789 --> 00:13:28.334 sort of might get in the way of

NOTE Confidence: 0.94331735

00:13:28.334 --> 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

NOTE Confidence: 0.94331735

00:13:31.650 --> 00:13:33.336 direction of effects and then study  
NOTE Confidence: 0.94331735

00:13:33.336 --> 00:13:35.128 one suggests that there is a potential  
NOTE Confidence: 0.94331735

00:13:35.128 --> 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 --> 00:13:40.383 prenatal mental health screening  
NOTE Confidence: 0.94331735

00:13:40.383 --> 00:13:42.103 and interventions because we saw  
NOTE Confidence: 0.94331735

00:13:42.103 --> 00:13:43.873 these similar levels of stress  
NOTE Confidence: 0.94331735

00:13:43.873 --> 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 --> 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 --> 00:13:55.821 got funding for as a postdoc and  
NOTE Confidence: 0.945889103999999

00:13:55.821 --> 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 --> 00:14:01.992 what is known and unknown in  
NOTE Confidence: 0.945889103999999

00:14:01.992 --> 00:14:02.883 terms of correlates?

NOTE Confidence: 0.945889103999999  
00:14:02.890 --> 00:14:06.340 I was interested in better understanding  
NOTE Confidence: 0.945889103999999  
00:14:06.340 --> 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 --> 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 --> 00:14:19.990 Faculty Forum to conduct a qualitative study.  
NOTE Confidence: 0.945889103999999  
00:14:19.990 --> 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 --> 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 --> 00:14:30.356 experience of emotions, stressors,  
NOTE Confidence: 0.945889103999999  
00:14:30.356 --> 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,  
NOTE Confidence: 0.945889103999999

00:14:35.590 --> 00:14:38.110 and the plan is to code these  
NOTE Confidence: 0.9458891039999999

00:14:38.110 --> 00:14:40.269 interviews once they're all complete  
NOTE Confidence: 0.9458891039999999

00:14:40.269 --> 00:14:41.778 using thematic analysis.  
NOTE Confidence: 0.9458891039999999

00:14:41.780 --> 00:14:43.400 The second study that's ongoing right  
NOTE Confidence: 0.9458891039999999

00:14:43.400 --> 00:14:45.290 now is focused on this association  
NOTE Confidence: 0.9458891039999999

00:14:45.290 --> 00:14:46.802 between emotion regulation measured  
NOTE Confidence: 0.9458891039999999

00:14:46.802 --> 00:14:49.283 in pregnancy and whether it can tell  
NOTE Confidence: 0.9458891039999999

00:14:49.283 --> 00:14:50.803 us anything about future caregiving  
NOTE Confidence: 0.9458891039999999

00:14:50.803 --> 00:14:53.660 behavior after the baby is born.  
NOTE Confidence: 0.9458891039999999

00:14:53.660 --> 00:14:55.522 So this study is funded by the  
NOTE Confidence: 0.9458891039999999

00:14:55.522 --> 00:14:57.160 Colleen Dobbins Foundation and the  
NOTE Confidence: 0.9458891039999999

00:14:57.160 --> 00:14:58.339 American Psychological Foundation,  
NOTE Confidence: 0.9458891039999999

00:14:58.340 --> 00:15:01.140 and it is recruiting 61st time parents,  
NOTE Confidence: 0.9458891039999999

00:15:01.140 --> 00:15:02.928 both mothers and fathers,  
NOTE Confidence: 0.9458891039999999

00:15:02.928 --> 00:15:05.163 to evaluate whether emotion regulation  
NOTE Confidence: 0.9458891039999999

00:15:05.163 --> 00:15:07.327 measured during the third trimester.

NOTE Confidence: 0.945889103999999  
00:15:07.330 --> 00:15:09.520 Can predict caregiving 2 to four  
NOTE Confidence: 0.945889103999999  
00:15:09.520 --> 00:15:10.250 months postpartum.  
NOTE Confidence: 0.945889103999999  
00:15:10.250 --> 00:15:12.370 And in terms of caregiving,  
NOTE Confidence: 0.945889103999999  
00:15:12.370 --> 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 --> 00:15:17.732 We're measuring that in multiple ways  
NOTE Confidence: 0.945889103999999  
00:15:17.732 --> 00:15:19.530 that so through questionnaire measures,  
NOTE Confidence: 0.945889103999999  
00:15:19.530 --> 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 --> 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 --> 00:15:30.579 certain amount of time.  
NOTE Confidence: 0.945889103999999  
00:15:30.580 --> 00:15:32.980 And then also through measuring EE,  
NOTE Confidence: 0.945889103999999  
00:15:32.980 --> 00:15:35.188 G and event related potentials during  
NOTE Confidence: 0.945889103999999

00:15:35.188 --> 00:15:37.220 audio of infant crying as well.  
NOTE Confidence: 0.938576366666667

00:15:39.540 --> 00:15:41.548 So as I transition to faculty, I'm excited  
NOTE Confidence: 0.938576366666667

00:15:41.548 --> 00:15:43.536 to continue building this line of research.  
NOTE Confidence: 0.938576366666667

00:15:43.540 --> 00:15:45.876 So some initial thoughts are to expand the  
NOTE Confidence: 0.938576366666667

00:15:45.876 --> 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 --> 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&P&ERP at multiple time points to understand  
NOTE Confidence: 0.938576366666667

00:15:59.960 --> 00:16:01.600 other methods with other methods,  
NOTE Confidence: 0.938576366666667

00:16:01.600 --> 00:16:03.538 whether there's stability or change in  
NOTE Confidence: 0.938576366666667

00:16:03.538 --> 00:16:05.479 the emotion 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 --> 00:16:10.875 in this in the context of intervention,  
NOTE Confidence: 0.938576366666667

00:16:10.880 --> 00:16:12.835 to really thinking about interventions  
NOTE Confidence: 0.938576366666667

00:16:12.835 --> 00:16:14.399 that improve emotion regulation,  
NOTE Confidence: 0.938576366666667

00:16:14.400 --> 00:16:16.596 whether they can really have this,  
NOTE Confidence: 0.938576366666667

00:16:16.600 --> 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 --> 00:16:26.360 caregiving after the child is born.  
NOTE Confidence: 0.938576366666667

00:16:26.360 --> 00:16:28.754 So I just wanted to end by thanking Helena.  
NOTE Confidence: 0.938576366666667

00:16:28.760 --> 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 --> 00:16:36.639 the T32 directors.  
NOTE Confidence: 0.938576366666667

00:16:36.639 --> 00:16:39.751 It's been really great to be in the  
NOTE Confidence: 0.938576366666667

00:16:39.751 --> 00:16:42.726 T32 and especially in terms of grant  
NOTE Confidence: 0.938576366666667

00:16:42.726 --> 00:16:45.080 writing training and also wanted to thank  
NOTE Confidence: 0.938576366666667

00:16:45.080 --> 00:16:47.220 funders and everyone in the Babel lab,  
NOTE Confidence: 0.938576366666667

00:16:47.220 --> 00:16:48.975 coauthors and other post docs  
NOTE Confidence: 0.938576366666667

00:16:48.975 --> 00:16:50.379 in the T32 seminar.

NOTE Confidence: 0.938576366666667  
00:16:50.380 --> 00:16:50.860 Thank you.  
NOTE Confidence: 0.937378342857143  
00:17:00.590 --> 00:17:02.627 So we do have time for questions.  
NOTE Confidence: 0.937378342857143  
00:17:02.630 --> 00:17:05.610 We have 5 minutes. Make sure  
NOTE Confidence: 0.937378342857143  
00:17:05.610 --> 00:17:08.110 this is done. Any questions?  
NOTE Confidence: 0.9402536  
00:17:12.530 --> 00:17:14.530 That was very impressive and interesting.  
NOTE Confidence: 0.94780115  
00:17:14.530 --> 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 --> 00:17:20.330 wondering what your thoughts are  
NOTE Confidence: 0.91018715  
00:17:20.330 --> 00:17:22.100 about measures of stress in the  
NOTE Confidence: 0.91018715  
00:17:22.100 --> 00:17:24.769 pregnant moms, if it's self-reports  
NOTE Confidence: 0.91018715  
00:17:24.770 --> 00:17:26.846 are better or some objective measures.  
NOTE Confidence: 0.91018715  
00:17:26.850 --> 00:17:28.887 What's your experience now being in there  
NOTE Confidence: 0.9402536  
00:17:29.290 --> 00:17:32.850 I think really that.  
NOTE Confidence: 0.9402536  
00:17:32.850 --> 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  
NOTE Confidence: 0.9402536



00:17:35.343 --> 00:17:36.208 important to do both.  
NOTE Confidence: 0.9402536

00:17:36.210 --> 00:17:38.110 I mean these these studies, you know,  
NOTE Confidence: 0.9402536

00:17:38.110 --> 00:17:40.280 were perceived stress and I do think  
NOTE Confidence: 0.9402536

00:17:40.280 --> 00:17:42.768 there is a place for that because, you know,  
NOTE Confidence: 0.9402536

00:17:42.770 --> 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 --> 00:17:49.998 like depression and anxiety.  
NOTE Confidence: 0.9402536

00:17:49.998 --> 00:17:52.402 But I do think that it,  
NOTE Confidence: 0.9402536

00:17:52.402 --> 00:17:54.274 I think it's also interesting in  
NOTE Confidence: 0.9402536

00:17:54.274 --> 00:17:56.081 doing these interviews and kind of  
NOTE Confidence: 0.9402536

00:17:56.081 --> 00:17:58.130 talking with women about the stressors  
NOTE Confidence: 0.9402536

00:17:58.130 --> 00:18:00.530 they are experienced how sometimes.  
NOTE Confidence: 0.9402536

00:18:00.530 --> 00:18:03.650 Like objective stressors are minimized  
NOTE Confidence: 0.9402536

00:18:03.650 --> 00:18:05.470 in terms of like our reporting of  
NOTE Confidence: 0.9402536

00:18:05.470 --> 00:18:07.652 them and so then being able to

NOTE Confidence: 0.9402536

00:18:07.652 --> 00:18:09.322 measure those because they might,

NOTE Confidence: 0.9402536

00:18:09.330 --> 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 --> 00:18:20.770 I do think there's some minimizing and.

NOTE Confidence: 0.9402536

00:18:20.770 --> 00:18:22.838 And I think also like I've learned

NOTE Confidence: 0.9402536

00:18:22.838 --> 00:18:23.808 from these interviews as well,

NOTE Confidence: 0.9402536

00:18:23.810 --> 00:18:25.376 I think also like pregnant women

NOTE Confidence: 0.9402536

00:18:25.376 --> 00:18:27.143 really get the message that they

NOTE Confidence: 0.9402536

00:18:27.143 --> 00:18:28.808 shouldn't be stressed during pregnancy.

NOTE Confidence: 0.9402536

00:18:28.810 --> 00:18:30.820 And so then they're like trying

NOTE Confidence: 0.9402536

00:18:30.820 --> 00:18:32.619 to minimize the stressors that

NOTE Confidence: 0.9402536

00:18:32.619 --> 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 --> 00:18:42.050 Doctor Mcpartland.

NOTE Confidence: 0.95786455

00:18:48.200 --> 00:18:49.200 Having never been pregnant,  
NOTE Confidence: 0.941987846153846

00:18:49.280 --> 00:18:50.804 I am surprised that the message  
NOTE Confidence: 0.941987846153846

00:18:50.804 --> 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 --> 00:18:54.876 of a woman who's been pregnant,  
NOTE Confidence: 0.941987846153846

00:18:54.880 --> 00:18:56.400 we had a different experience,  
NOTE Confidence: 0.941987846153846

00:18:56.400 --> 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 --> 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 --> 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 --> 00:19:07.504 And do you have a sense of  
NOTE Confidence: 0.9301902

00:19:07.504 --> 00:19:08.360 the quality and the nature  
NOTE Confidence: 0.949402145454545

00:19:08.360 --> 00:19:09.728 of the stress and whether they're  
NOTE Confidence: 0.949402145454545

00:19:09.728 --> 00:19:10.960 stressed about the same things?

NOTE Confidence: 0.919053286666667  
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 --> 00:19:22.200 just kind of re wondering about that result.  
NOTE Confidence: 0.919053286666667  
00:19:22.200 --> 00:19:24.261 I yeah, I'm not sure and some of them  
NOTE Confidence: 0.919053286666667  
00:19:24.261 --> 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 --> 00:19:31.510 we looked at whether we need to control  
NOTE Confidence: 0.919053286666667  
00:19:31.510 --> 00:19:34.068 for the fact that some of them were in  
NOTE Confidence: 0.919053286666667  
00:19:34.068 --> 00:19:35.980 couples that perceived stress like did  
NOTE Confidence: 0.919053286666667  
00:19:35.980 --> 00:19:38.920 have an effect at the couple level.  
NOTE Confidence: 0.919053286666667  
00:19:38.920 --> 00:19:39.643 So there were.  
NOTE Confidence: 0.919053286666667  
00:19:39.643 --> 00:19:41.722 So I think you know some of that  
NOTE Confidence: 0.919053286666667  
00:19:41.722 --> 00:19:43.387 is like whatever stressors are  
NOTE Confidence: 0.919053286666667

00:19:43.387 --> 00:19:45.197 affecting both of them do seem  
NOTE Confidence: 0.919053286666667

00:19:45.197 --> 00:19:47.312 to be a factor and then I think.  
NOTE Confidence: 0.919053286666667

00:19:47.312 --> 00:19:49.220 And I think I'm definitely interested  
NOTE Confidence: 0.919053286666667

00:19:49.279 --> 00:19:51.127 in kind of looking at that more.  
NOTE Confidence: 0.919053286666667

00:19:51.130 --> 00:19:53.326 I'd like the partner effects in  
NOTE Confidence: 0.919053286666667

00:19:53.326 --> 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 --> 00:19:59.930 affecting stress on the dad and  
NOTE Confidence: 0.919053286666667

00:19:59.930 --> 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 --> 00:20:08.032 how the relationship can also be protective,  
NOTE Confidence: 0.919053286666667

00:20:08.032 --> 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

NOTE Confidence: 0.82617223

00:20:27.560 --> 00:20:28.280 right.

NOTE Confidence: 0.9201268

00:20:32.880 --> 00:20:35.240 So that was a great talk,

NOTE Confidence: 0.9352219

00:20:35.240 --> 00:20:37.838 hard to follow. I am really,

NOTE Confidence: 0.9352219

00:20:37.840 --> 00:20:39.632 really excited to be here today and perhaps

NOTE Confidence: 0.9352219

00:20:39.632 --> 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 --> 00:20:46.500 Here that you know have

NOTE Confidence: 0.9352219

00:20:46.500 --> 00:20:48.660 inspired my work over the years,

NOTE Confidence: 0.9352219

00:20:48.660 --> 00:20:51.000 so I'm really excited to talk to you about

NOTE Confidence: 0.9352219

00:20:51.000 --> 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 --> 00:20:59.380 I'm currently finishing up my first year of

NOTE Confidence: 0.9352219

00:20:59.380 --> 00:21:03.052 postdoc in Doctor Mcpartland's lab right now,

NOTE Confidence: 0.9352219

00:21:03.052 --> 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

NOTE Confidence: 0.9352219

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 --> 00:21:13.424 So first of all what what do we

NOTE Confidence: 0.9352219

00:21:13.424 --> 00:21:15.160 mean when we talk about loneliness?

NOTE Confidence: 0.9352219

00:21:15.160 --> 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 --> 00:21:20.814 but really we're defining it as

NOTE Confidence: 0.9352219

00:21:20.814 --> 00:21:22.884 this mismatch between your desired

NOTE Confidence: 0.9352219

00:21:22.884 --> 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 --> 00:21:30.880 a major public health concern.

NOTE Confidence: 0.9201268

00:21:30.880 --> 00:21:33.056 There's a lot of data that we have

NOTE Confidence: 0.9201268

00:21:33.056 --> 00:21:35.159 pre pandemic even that shows that

NOTE Confidence: 0.9201268

00:21:35.159 --> 00:21:37.800 loneliness is associated with worse

NOTE Confidence: 0.9201268

00:21:37.800 --> 00:21:40.530 mental as well as physical health.

NOTE Confidence: 0.9201268

00:21:40.530 --> 00:21:42.050 So it's really great concern,

NOTE Confidence: 0.9201268

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

NOTE Confidence: 0.9201268

00:21:44.010 --> 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 --> 00:21:52.126 key or probably the key psychosocial concern.

NOTE Confidence: 0.9201268

00:21:52.130 --> 00:21:54.866 And even into today we're still

NOTE Confidence: 0.9201268

00:21:54.866 --> 00:21:57.459 experiencing a rise in social

NOTE Confidence: 0.9201268

00:21:57.459 --> 00:21:59.487 isolation and loneliness,

NOTE Confidence: 0.9201268

00:21:59.490 --> 00:22:02.970 especially in our youth or for our youth.

NOTE Confidence: 0.9201268

00:22:05.160 --> 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 --> 00:22:11.582 Well, there were already some of

NOTE Confidence: 0.9201268

00:22:11.582 --> 00:22:12.833 these preexisting disparities,

NOTE Confidence: 0.9201268

00:22:12.840 --> 00:22:16.038 and the pandemic really exacerbated those.

NOTE Confidence: 0.9201268

00:22:16.040 --> 00:22:19.076 So, for example, mental health concerns,

NOTE Confidence: 0.9201268



00:22:19.080 --> 00:22:20.952 increases in stress, anxiety,  
NOTE Confidence: 0.9201268

00:22:20.952 --> 00:22:23.760 depression for autistic youth who are  
NOTE Confidence: 0.9201268

00:22:23.833 --> 00:22:26.296 already kind of at risk and importantly  
NOTE Confidence: 0.9201268

00:22:26.296 --> 00:22:28.436 as well for their caregivers.  
NOTE Confidence: 0.933544666666667

00:22:32.120 --> 00:22:34.570 So one thing we know is somebody who  
NOTE Confidence: 0.933544666666667

00:22:34.570 --> 00:22:37.055 studies social isolation and loneliness is  
NOTE Confidence: 0.933544666666667

00:22:37.055 --> 00:22:39.755 pre pandemic autistic youth were already  
NOTE Confidence: 0.933544666666667

00:22:39.755 --> 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 --> 00:22:47.320 for loneliness and social isolation.  
NOTE Confidence: 0.933544666666667

00:22:47.320 --> 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 --> 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 --> 00:23:04.238 there's a clear interest in this

NOTE Confidence: 0.938815971428571

00:23:04.240 --> 00:23:05.615 and there are qualitative reports

NOTE Confidence: 0.938815971428571

00:23:05.615 --> 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 --> 00:23:17.526 quantitative examination of loneliness

NOTE Confidence: 0.938815971428571

00:23:17.526 --> 00:23:20.154 and autistic use during the pandemic.

NOTE Confidence: 0.923002

00:23:22.750 --> 00:23:24.536 So we set out to do is really

NOTE Confidence: 0.923002

00:23:24.536 --> 00:23:26.709 understand what were the trajectories

NOTE Confidence: 0.953000504666667

00:23:26.870 --> 00:23:28.795 of social disruption and loneliness

NOTE Confidence: 0.953000504666667

00:23:28.795 --> 00:23:30.720 for autistic youth during this

NOTE Confidence: 0.953000504666667

00:23:30.778 --> 00:23:32.468 early period of the pandemic.

NOTE Confidence: 0.953000504666667

00:23:32.470 --> 00:23:33.508 What was it like for them?

NOTE Confidence: 0.934662751111111

00:23:36.270 --> 00:23:37.629 I want to take you through a little bit

NOTE Confidence: 0.934662751111111

00:23:37.630 --> 00:23:40.394 of what the study recruitment looked like.

NOTE Confidence: 0.9346627511111111

00:23:40.394 --> 00:23:43.710 So we began the study early June,

NOTE Confidence: 0.9346627511111111

00:23:43.710 --> 00:23:46.383 so June 1st, 2020, if you can think back

NOTE Confidence: 0.9346627511111111

00:23:46.383 --> 00:23:49.376 to a couple years ago what that was like.

NOTE Confidence: 0.9346627511111111

00:23:49.380 --> 00:23:51.402 And we follow families and and

NOTE Confidence: 0.9346627511111111

00:23:51.402 --> 00:23:53.300 youth for about six months.

NOTE Confidence: 0.9346627511111111

00:23:53.300 --> 00:23:56.540 So that went from basically June until mid.

NOTE Confidence: 0.9346627511111111

00:23:56.540 --> 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: 0.9346627511111111

00:24:00.140 --> 00:24:02.378 Is it better with the mic?

NOTE Confidence: 0.9346627511111111

00:24:02.380 --> 00:24:03.139 OK, hold on,

NOTE Confidence: 0.9415114475

00:24:05.260 --> 00:24:09.116 it was meant for somebody taller I think.

NOTE Confidence: 0.9415114475

00:24:09.120 --> 00:24:11.871 So in so basically the study ran

NOTE Confidence: 0.9415114475

00:24:11.871 --> 00:24:14.360 from June until early December,

NOTE Confidence: 0.9415114475

00:24:14.360 --> 00:24:15.784 early to mid-december 2020.

NOTE Confidence: 0.9415114475

00:24:15.784 --> 00:24:18.370 So that over the period of six

NOTE Confidence: 0.9415114475  
00:24:18.370 --> 00:24:20.626 months we had participants in there  
NOTE Confidence: 0.9415114475  
00:24:20.626 --> 00:24:22.840 and one caregiver fill out some  
NOTE Confidence: 0.9415114475  
00:24:22.840 --> 00:24:24.280 questionnaires every two weeks.  
NOTE Confidence: 0.9415114475  
00:24:24.280 --> 00:24:26.634 And so that total 12 total  
NOTE Confidence: 0.9415114475  
00:24:26.634 --> 00:24:28.998 questionnaires over that period of time.  
NOTE Confidence: 0.93019015  
00:24:33.280 --> 00:24:35.175 All the families that came in  
NOTE Confidence: 0.93019015  
00:24:35.175 --> 00:24:36.870 and participated had already come  
NOTE Confidence: 0.93019015  
00:24:36.935 --> 00:24:38.720 into the lab and when they did.  
NOTE Confidence: 0.93019015  
00:24:38.720 --> 00:24:41.640 They completed standardized a gold  
NOTE Confidence: 0.93019015  
00:24:41.640 --> 00:24:44.560 standard diagnostic evaluation for autism.  
NOTE Confidence: 0.93019015  
00:24:44.560 --> 00:24:46.400 They also completed a  
NOTE Confidence: 0.93019015  
00:24:46.400 --> 00:24:48.240 cognitive assessment as well.  
NOTE Confidence: 0.93019015  
00:24:48.240 --> 00:24:50.264 So during this study,  
NOTE Confidence: 0.93019015  
00:24:50.264 --> 00:24:53.622 we asked participants to complete the a  
NOTE Confidence: 0.93019015  
00:24:53.622 --> 00:24:55.677 Standardized Self Report of loneliness,  
NOTE Confidence: 0.93019015

00:24:55.680 --> 00:24:57.360 and that's the UCLA Loneliness Scale.  
NOTE Confidence: 0.93019015

00:24:57.360 --> 00:24:59.202 So they they did that every  
NOTE Confidence: 0.93019015

00:24:59.202 --> 00:25:00.970 other week for six months.  
NOTE Confidence: 0.93019015

00:25:00.970 --> 00:25:02.434 We asked our caregiver to tell  
NOTE Confidence: 0.93019015

00:25:02.434 --> 00:25:04.417 us a little bit about how the  
NOTE Confidence: 0.93019015

00:25:04.417 --> 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 --> 00:25:09.354 we're really interested in understanding  
NOTE Confidence: 0.93019015

00:25:09.354 --> 00:25:11.008 social disruption in the family.  
NOTE Confidence: 0.93019015

00:25:11.010 --> 00:25:12.210 And when I say that,  
NOTE Confidence: 0.93019015

00:25:12.210 --> 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 --> 00:25:18.530 anything that's limited or restricted  
NOTE Confidence: 0.93019015

00:25:18.530 --> 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 --> 00:25:32.008 51 were autistic, 25 were not.

NOTE Confidence: 0.9201268

00:25:32.010 --> 00:25:35.520 They range in age from 8 to 17 and what

NOTE Confidence: 0.9201268

00:25:35.615 --> 00:25:39.125 you can see here is as we would expect,

NOTE Confidence: 0.9201268

00:25:39.130 --> 00:25:40.450 there were differences.

NOTE Confidence: 0.9201268

00:25:40.450 --> 00:25:42.650 The autistic youth were had

NOTE Confidence: 0.9201268

00:25:42.650 --> 00:25:44.630 higher autism symptoms, severity.

NOTE Confidence: 0.9201268

00:25:44.630 --> 00:25:46.730 They also were more males,

NOTE Confidence: 0.9201268

00:25:46.730 --> 00:25:48.634 but other than that they were pretty

NOTE Confidence: 0.9201268

00:25:48.634 --> 00:25:50.142 evenly matched across the board.

NOTE Confidence: 0.9201268

00:25:50.142 --> 00:25:52.090 So there were no differences in

NOTE Confidence: 0.9201268

00:25:52.090 --> 00:25:53.490 loneliness or social disruption

NOTE Confidence: 0.9201268

00:25:53.490 --> 00:25:54.690 at that first time point.

NOTE Confidence: 0.9301902

00:25:58.920 --> 00:25:59.760 So what do we think?

NOTE Confidence: 0.9301902

00:25:59.760 --> 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 --> 00:26:05.325 disruption would decrease over

NOTE Confidence: 0.9301902

00:26:05.325 --> 00:26:07.800 time for non autistic youth,  
NOTE Confidence: 0.9301902

00:26:07.800 --> 00:26:10.680 but remain about the same for autistic youth,  
NOTE Confidence: 0.9301902

00:26:10.680 --> 00:26:12.563 perhaps due to some of the stress  
NOTE Confidence: 0.9301902

00:26:12.563 --> 00:26:14.531 and mental health challenges going  
NOTE Confidence: 0.9301902

00:26:14.531 --> 00:26:17.957 on with parents and in youth.  
NOTE Confidence: 0.9301902

00:26:17.960 --> 00:26:20.588 We also hypothesize that loneliness would  
NOTE Confidence: 0.9301902

00:26:20.588 --> 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 --> 00:26:28.565 And perhaps due to challenges  
NOTE Confidence: 0.9301902

00:26:28.565 --> 00:26:31.225 in the change in routine that we  
NOTE Confidence: 0.9301902

00:26:31.225 --> 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 --> 00:26:35.880 we hypothesize that greater social  
NOTE Confidence: 0.9301902

00:26:35.880 --> 00:26:37.620 disruption would be associated  
NOTE Confidence: 0.9301902

00:26:37.620 --> 00:26:39.147 with greater loneliness.  
NOTE Confidence: 0.92767435

00:26:42.190 --> 00:26:42.750 So what did we

NOTE Confidence: 0.93824092

00:26:42.750 --> 00:26:44.718 find? Well, I want to walk

NOTE Confidence: 0.93824092

00:26:44.718 --> 00:26:46.030 you through this chart.

NOTE Confidence: 0.93824092

00:26:46.030 --> 00:26:48.726 So on the X axis, what you see basically

NOTE Confidence: 0.93824092

00:26:48.726 --> 00:26:50.670 is time since the study starts,

NOTE Confidence: 0.93824092

00:26:50.670 --> 00:26:52.990 so time over six months.

NOTE Confidence: 0.93824092

00:26:52.990 --> 00:26:54.943 And on the Y axis you can

NOTE Confidence: 0.93824092

00:26:54.943 --> 00:26:56.580 see their social disruption.

NOTE Confidence: 0.93824092

00:26:56.580 --> 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 --> 00:27:02.820 social disruption.

NOTE Confidence: 0.93824092

00:27:02.820 --> 00:27:04.758 And what you can see is

NOTE Confidence: 0.93824092

00:27:04.758 --> 00:27:06.660 that over time both groups,

NOTE Confidence: 0.93824092

00:27:06.660 --> 00:27:09.240 both the non autistic and the

NOTE Confidence: 0.93824092

00:27:09.240 --> 00:27:11.606 autistic groups decreased in their

NOTE Confidence: 0.93824092

00:27:11.606 --> 00:27:13.614 experience of social disruption.

NOTE Confidence: 0.93824092



00:27:13.620 --> 00:27:15.336 However, there was an interaction effect,  
NOTE Confidence: 0.93824092

00:27:15.340 --> 00:27:17.328 so we did find that non autistic  
NOTE Confidence: 0.93824092

00:27:17.328 --> 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 --> 00:27:27.366 So what about loneliness?  
NOTE Confidence: 0.9301902

00:27:27.366 --> 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 --> 00:27:32.380 this was a bit of surprise,  
NOTE Confidence: 0.9301902

00:27:32.380 --> 00:27:34.900 but what you can see here is on the  
NOTE Confidence: 0.9301902

00:27:34.900 --> 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 --> 00:27:41.700 So higher scores here means  
NOTE Confidence: 0.9301902

00:27:41.700 --> 00:27:44.020 higher self reported loneliness.  
NOTE Confidence: 0.9301902

00:27:44.020 --> 00:27:46.268 And actually what we found here was that  
NOTE Confidence: 0.9301902

00:27:46.268 --> 00:27:48.256 loneliness did in fact decrease over time,

NOTE Confidence: 0.9301902

00:27:48.260 --> 00:27:50.897 but only for the autistic youth in the study.

NOTE Confidence: 0.9301902

00:27:50.900 --> 00:27:54.106 So you can see in the blue.

NOTE Confidence: 0.9301902

00:27:54.110 --> 00:27:56.294 That's a statistically

NOTE Confidence: 0.9301902

00:27:56.294 --> 00:27:58.608 significant decline in the red.

NOTE Confidence: 0.9301902

00:27:58.608 --> 00:28:00.038 You're seeing non autistic youth

NOTE Confidence: 0.9301902

00:28:00.038 --> 00:28:01.410 and there's no statistically

NOTE Confidence: 0.9301902

00:28:01.410 --> 00:28:02.906 different change over time.

NOTE Confidence: 0.9452853

00:28:05.870 --> 00:28:08.282 So finally I want to show you the results

NOTE Confidence: 0.9452853

00:28:08.282 --> 00:28:10.590 for loneliness and social disruption.

NOTE Confidence: 0.9452853

00:28:10.590 --> 00:28:12.660 So you can see on the X axis now

NOTE Confidence: 0.9452853

00:28:12.660 --> 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 --> 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 --> 00:28:23.425 So higher numbers means greater

NOTE Confidence: 0.9452853

00:28:23.425 --> 00:28:24.700 self reported loneliness.  
NOTE Confidence: 0.9452853

00:28:24.700 --> 00:28:27.944 The colors are the same and what you  
NOTE Confidence: 0.9452853

00:28:27.944 --> 00:28:30.512 can see is this interesting interaction  
NOTE Confidence: 0.9452853

00:28:30.512 --> 00:28:33.094 effect where for autistic youth we did  
NOTE Confidence: 0.9452853

00:28:33.094 --> 00:28:35.381 find the relationship we expected so  
NOTE Confidence: 0.9452853

00:28:35.381 --> 00:28:37.733 we did find greater social disruption  
NOTE Confidence: 0.9452853

00:28:37.740 --> 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 --> 00:28:42.180 we did not see that,  
NOTE Confidence: 0.9452853

00:28:42.180 --> 00:28:43.540 we didn't see that relationship.  
NOTE Confidence: 0.9268358433333333

00:28:48.020 --> 00:28:50.100 So what do we make of all this?  
NOTE Confidence: 0.9268358433333333

00:28:50.100 --> 00:28:52.010 So let's start with the  
NOTE Confidence: 0.9268358433333333

00:28:52.010 --> 00:28:53.538 findings on social disruption.  
NOTE Confidence: 0.9268358433333333

00:28:53.540 --> 00:28:55.648 But what we found was that  
NOTE Confidence: 0.9268358433333333

00:28:55.648 --> 00:28:56.989 social disruption declined  
NOTE Confidence: 0.9268358433333333

00:28:56.989 --> 00:28:59.340 over time for both groups,

NOTE Confidence: 0.926835843333333  
00:28:59.340 --> 00:29:01.074 but it was a greater decline  
NOTE Confidence: 0.926835843333333  
00:29:01.074 --> 00:29:02.660 in the non autistic youth.  
NOTE Confidence: 0.942266388  
00:29:06.260 --> 00:29:08.372 So perhaps one way to look at this  
NOTE Confidence: 0.942266388  
00:29:08.372 --> 00:29:10.908 is that non autistic youth made a  
NOTE Confidence: 0.942266388  
00:29:10.908 --> 00:29:12.853 quicker return to social activities.  
NOTE Confidence: 0.917580985  
00:29:15.660 --> 00:29:16.820 So in thinking again.  
NOTE Confidence: 0.94654317375  
00:29:17.360 --> 00:29:18.700 Into what this period  
NOTE Confidence: 0.94654317375  
00:29:18.700 --> 00:29:20.040 was like for caregivers.  
NOTE Confidence: 0.94654317375  
00:29:20.040 --> 00:29:21.930 There's quite a bit of research  
NOTE Confidence: 0.94654317375  
00:29:21.930 --> 00:29:23.556 that suggests that, you know,  
NOTE Confidence: 0.94654317375  
00:29:23.556 --> 00:29:25.246 caregivers of autistic individuals and  
NOTE Confidence: 0.94654317375  
00:29:25.246 --> 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 --> 00:29:31.699 getting services and all sorts of changes  
NOTE Confidence: 0.94654317375  
00:29:31.699 --> 00:29:33.799 in routine were really quite stressful.  
NOTE Confidence: 0.94654317375

00:29:33.800 --> 00:29:35.424 And if you think about it or if  
NOTE Confidence: 0.94654317375

00:29:35.424 --> 00:29:36.878 there any parents in the room,  
NOTE Confidence: 0.94654317375

00:29:36.880 --> 00:29:38.596 parents tend to be the gatekeepers,  
NOTE Confidence: 0.94654317375

00:29:38.600 --> 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 --> 00:29:46.337 this is that it might have been hard.  
NOTE Confidence: 0.94654317375

00:29:46.340 --> 00:29:49.455 For those parents to reengage in social  
NOTE Confidence: 0.94654317375

00:29:49.455 --> 00:29:51.694 activity and to bring their kids to  
NOTE Confidence: 0.94654317375

00:29:51.694 --> 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 --> 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 --> 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 --> 00:30:06.948 both during the pandemic but also  
NOTE Confidence: 0.94654317375

00:30:06.948 --> 00:30:09.783 now that it can be have a really sort

NOTE Confidence: 0.94654317375

00:30:09.783 --> 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 --> 00:30:20.347 Loneliness declined over time,

NOTE Confidence: 0.9301902

00:30:20.350 --> 00:30:22.184 so we did find that, but actually

NOTE Confidence: 0.9301902

00:30:22.184 --> 00:30:24.263 it was only for the autistic youth.

NOTE Confidence: 0.9301902

00:30:24.270 --> 00:30:26.356 And if you think about that graph

NOTE Confidence: 0.9301902

00:30:26.356 --> 00:30:28.699 what it what seems to be happening

NOTE Confidence: 0.9301902

00:30:28.699 --> 00:30:30.763 is sort of they're coming close

NOTE Confidence: 0.9301902

00:30:30.830 --> 00:30:33.948 to their non autistic peers.

NOTE Confidence: 0.9301902

00:30:33.950 --> 00:30:36.110 This is really striking to me,

NOTE Confidence: 0.9301902

00:30:36.110 --> 00:30:38.520 really surprising because it runs

NOTE Confidence: 0.9301902

00:30:38.520 --> 00:30:40.930 counter this widely accepted idea

NOTE Confidence: 0.9301902

00:30:41.007 --> 00:30:43.425 that autistic youth are sort of

NOTE Confidence: 0.9301902

00:30:43.425 --> 00:30:45.760 universally lonely or or isolated.

NOTE Confidence: 0.9301902

00:30:45.760 --> 00:30:47.503 And so one one thing we thought

NOTE Confidence: 0.9301902

00:30:47.503 --> 00:30:48.888 about maybe this is actually  
NOTE Confidence: 0.9301902

00:30:48.888 --> 00:30:50.640 related to the change in routine,  
NOTE Confidence: 0.9301902

00:30:50.640 --> 00:30:52.038 but it in a positive way.  
NOTE Confidence: 0.9301902

00:30:52.040 --> 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 --> 00:30:59.200 how, when they were interacting,  
NOTE Confidence: 0.9301902

00:30:59.200 --> 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 --> 00:31:10.906 When you were in the pandemic,  
NOTE Confidence: 0.94780115

00:31:10.910 --> 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 --> 00:31:16.928 There was a big increase in who  
NOTE Confidence: 0.94780115

00:31:16.928 --> 00:31:18.470 you were spending time with.  
NOTE Confidence: 0.94780115

00:31:18.470 --> 00:31:20.388 It was whether it was your roommate,

NOTE Confidence: 0.94780115

00:31:20.390 --> 00:31:21.122 your your family.

NOTE Confidence: 0.94780115

00:31:21.122 --> 00:31:22.586 And so there was a big

NOTE Confidence: 0.94780115

00:31:22.586 --> 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 --> 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 --> 00:31:30.230 spending time with their family.

NOTE Confidence: 0.9201268

00:31:33.090 --> 00:31:35.230 So lastly, we found that increases

NOTE Confidence: 0.9201268

00:31:35.230 --> 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 --> 00:31:40.610 it was only for autistic youth.

NOTE Confidence: 0.946657581818182

00:31:42.970 --> 00:31:45.859 So this suggests to us that when they were

NOTE Confidence: 0.946657581818182

00:31:45.859 --> 00:31:48.170 actually experiencing social disruption,

NOTE Confidence: 0.946657581818182

00:31:48.170 --> 00:31:50.950 autistic youth were more vulnerable to

NOTE Confidence: 0.946657581818182

00:31:50.950 --> 00:31:53.770 feelings of loneliness than their peers.

NOTE Confidence: 0.946657581818182



00:31:53.770 --> 00:31:55.730 And so one thing we thought about was,  
NOTE Confidence: 0.946657581818182

00:31:55.730 --> 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 --> 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 --> 00:32:05.050 we all remember the zoom fatigue,  
NOTE Confidence: 0.946657581818182

00:32:05.050 --> 00:32:07.930 that zoom burnout of of 2020.  
NOTE Confidence: 0.946657581818182

00:32:07.930 --> 00:32:10.198 This is something that might be in  
NOTE Confidence: 0.946657581818182

00:32:10.198 --> 00:32:11.878 particular a challenge for autistic  
NOTE Confidence: 0.946657581818182

00:32:11.878 --> 00:32:13.498 youth as they are experiencing  
NOTE Confidence: 0.946657581818182

00:32:13.498 --> 00:32:15.187 more and more social disruption  
NOTE Confidence: 0.946657581818182

00:32:15.187 --> 00:32:17.483 and this is for their only option.  
NOTE Confidence: 0.946657581818182

00:32:17.490 --> 00:32:19.602 Although another possibility is that they  
NOTE Confidence: 0.946657581818182

00:32:19.602 --> 00:32:21.928 didn't have anyone else to reach out to.  
NOTE Confidence: 0.946657581818182

00:32:21.930 --> 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

NOTE Confidence: 0.946657581818182  
00:32:26.346 --> 00:32:29.242 a lot of social disruption didn't really  
NOTE Confidence: 0.946657581818182  
00:32:29.242 --> 00:32:32.050 have other options and deep connections.  
NOTE Confidence: 0.946657581818182  
00:32:32.050 --> 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 --> 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 --> 00:32:41.684 relationship with suicidality.  
NOTE Confidence: 0.946657581818182  
00:32:41.690 --> 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 --> 00:32:49.018 for Autism Research.  
NOTE Confidence: 0.946657581818182  
00:32:49.020 --> 00:32:51.252 And what we plan to do is we'll  
NOTE Confidence: 0.946657581818182  
00:32:51.252 --> 00:32:52.780 have participants come in the lab,  
NOTE Confidence: 0.946657581818182  
00:32:52.780 --> 00:32:54.160 complete a naturalistic  
NOTE Confidence: 0.946657581818182  
00:32:54.160 --> 00:32:56.180 social reward paradigm,  
NOTE Confidence: 0.946657581818182

00:32:56.180 --> 00:32:58.350 and then we'll have them fill out  
NOTE Confidence: 0.946657581818182

00:32:58.350 --> 00:33:00.263 questionnaires through an app on their  
NOTE Confidence: 0.946657581818182

00:33:00.263 --> 00:33:02.123 smartphone telling us about loneliness as  
NOTE Confidence: 0.946657581818182

00:33:02.123 --> 00:33:04.220 they experience it outside of the lab.  
NOTE Confidence: 0.946657581818182

00:33:04.220 --> 00:33:05.004 And ultimately,  
NOTE Confidence: 0.946657581818182

00:33:05.004 --> 00:33:06.964 we hope to understand the  
NOTE Confidence: 0.946657581818182

00:33:06.964 --> 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 --> 00:33:16.320 So I just want to close  
NOTE Confidence: 0.946657581818182

00:33:16.320 --> 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 --> 00:33:22.332 well as Doctor Mcpartlin who's in  
NOTE Confidence: 0.946657581818182

00:33:22.332 --> 00:33:24.580 the room who've been really key in  
NOTE Confidence: 0.946657581818182

00:33:24.580 --> 00:33:27.047 in getting all of this work done  
NOTE Confidence: 0.946657581818182

00:33:27.047 --> 00:33:29.290 and for the great support of the

NOTE Confidence: 0.946657581818182

00:33:29.290 --> 00:33:30.730 Stony Brook team that was essential

NOTE Confidence: 0.946657581818182

00:33:30.730 --> 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 --> 00:33:37.831 many of which are here and in particular.

NOTE Confidence: 0.946657581818182

00:33:37.831 --> 00:33:40.289 I did want to thank Doctor Keifer and Dr.

NOTE Confidence: 0.946657581818182

00:33:40.290 --> 00:33:40.532 Naples,

NOTE Confidence: 0.946657581818182

00:33:40.532 --> 00:33:42.710 who I know is in the room for their

NOTE Confidence: 0.946657581818182

00:33:42.775 --> 00:33:44.425 really essential and amazing work

NOTE Confidence: 0.946657581818182

00:33:44.425 --> 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 --> 00:33:49.250 I'll conclude by thanking the

NOTE Confidence: 0.946657581818182

00:33:49.250 --> 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 --> 00:33:54.402 participating families who we really

NOTE Confidence: 0.946657581818182

00:33:54.402 --> 00:33:56.810 could not do any of this work without.

NOTE Confidence: 0.946657581818182

00:33:56.810 --> 00:33:58.232 So thank you very much for  
NOTE Confidence: 0.946657581818182

00:33:58.232 --> 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 --> 00:34:09.598 for Doctor Gerber.  
NOTE Confidence: 0.94780115

00:34:12.310 --> 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 --> 00:34:27.005 loneliness as the mismatch between the  
NOTE Confidence: 0.88100364

00:34:27.005 --> 00:34:30.659 social motivation and the and what kids  
NOTE Confidence: 0.88100364

00:34:30.659 --> 00:34:33.190 are actually getting when when you're  
NOTE Confidence: 0.88100364

00:34:33.190 --> 00:34:34.640 looking at the loneliness scores.  
NOTE Confidence: 0.88100364

00:34:34.640 --> 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 --> 00:34:39.838 but what they're getting might change.  
NOTE Confidence: 0.88100364

00:34:39.840 --> 00:34:44.250 If there was a difference in.  
NOTE Confidence: 0.88100364

00:34:44.250 --> 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,

NOTE Confidence: 0.88100364

00:34:47.650 --> 00:34:48.770 if that makes sense.

NOTE Confidence: 0.88100364

00:34:48.770 --> 00:34:50.620 So the loneliness scores might

NOTE Confidence: 0.88100364

00:34:50.620 --> 00:34:52.564 not be changing because they

NOTE Confidence: 0.88100364

00:34:52.564 --> 00:34:54.649 might have been lower initially.

NOTE Confidence: 0.88100364

00:34:54.650 --> 00:34:56.810 And the and

NOTE Confidence: 0.940253532

00:34:57.170 --> 00:34:58.490 yeah, if that makes sense,

NOTE Confidence: 0.94193077

00:34:59.370 --> 00:35:00.720 yeah. So I think this actually

NOTE Confidence: 0.94193077

00:35:00.720 --> 00:35:02.330 brings up kind of two questions.

NOTE Confidence: 0.94193077

00:35:02.330 --> 00:35:05.330 One is. The relationship between

NOTE Confidence: 0.94193077

00:35:05.330 --> 00:35:06.835 social motivation and loneliness and

NOTE Confidence: 0.94193077

00:35:06.835 --> 00:35:09.132 autism and this kind of gets to the

NOTE Confidence: 0.94193077

00:35:09.132 --> 00:35:10.602 heart of what I'm interested in.

NOTE Confidence: 0.94193077

00:35:10.610 --> 00:35:12.390 This idea that autistic people

NOTE Confidence: 0.94193077

00:35:12.390 --> 00:35:14.170 may not be socially motivated,

NOTE Confidence: 0.94193077

00:35:14.170 --> 00:35:16.130 they may not be interested in interaction,

NOTE Confidence: 0.94193077

00:35:16.130 --> 00:35:18.885 so how could they feel lonely pre  
NOTE Confidence: 0.94193077

00:35:18.885 --> 00:35:20.260 pandemic though there's quite a  
NOTE Confidence: 0.94193077

00:35:20.260 --> 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 --> 00:35:25.714 that they actually do feel a  
NOTE Confidence: 0.94193077

00:35:25.714 --> 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 --> 00:35:30.676 which is kind of a challenge is and  
NOTE Confidence: 0.94193077

00:35:30.676 --> 00:35:32.206 everybody I imagine experienced this,  
NOTE Confidence: 0.94193077

00:35:32.210 --> 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 --> 00:35:38.090 right is we didn't have that  
NOTE Confidence: 0.94193077

00:35:38.162 --> 00:35:40.378 information before the pandemic.  
NOTE Confidence: 0.94193077

00:35:40.380 --> 00:35:42.216 So we do have some data on these kids,  
NOTE Confidence: 0.94193077

00:35:42.220 --> 00:35:44.764 but we don't have their social  
NOTE Confidence: 0.94193077

00:35:44.764 --> 00:35:46.460 motivation and loneliness prepandemic.

NOTE Confidence: 0.94193077  
00:35:46.460 --> 00:35:48.980 So it would be really interesting to see if,  
NOTE Confidence: 0.94193077  
00:35:48.980 --> 00:35:49.712 you know,  
NOTE Confidence: 0.94193077  
00:35:49.712 --> 00:35:51.542 kids who are not socially  
NOTE Confidence: 0.94193077  
00:35:51.542 --> 00:35:53.020 motivated were totally fine,  
NOTE Confidence: 0.94193077  
00:35:53.020 --> 00:35:53.896 but we just don't have that.  
NOTE Confidence: 0.94193077  
00:35:53.900 --> 00:35:54.820 But it's a great question.  
NOTE Confidence: 0.94193077  
00:35:54.820 --> 00:35:54.940 More  
NOTE Confidence: 0.9603804  
00:35:58.380 --> 00:35:59.420 questions for Doctor Gerber.  
NOTE Confidence: 0.9905706  
00:36:03.900 --> 00:36:05.140 Hopefully this is a softball,  
NOTE Confidence: 0.93270605  
00:36:06.420 --> 00:36:07.660 it's going to be,  
NOTE Confidence: 0.93270605  
00:36:07.660 --> 00:36:09.148 it's not a super softball,  
NOTE Confidence: 0.93270605  
00:36:09.148 --> 00:36:10.364 but if you probably can  
NOTE Confidence: 0.93270605  
00:36:10.364 --> 00:36:12.406 answer just with yes or no.  
NOTE Confidence: 0.93270605  
00:36:12.406 --> 00:36:14.755 I was wondering if you'd done  
NOTE Confidence: 0.93270605  
00:36:14.755 --> 00:36:16.500 anything looking at the date,  
NOTE Confidence: 0.93270605



00:36:16.500 --> 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 --> 00:36:21.420 thinking about COVID,

NOTE Confidence: 0.93270605

00:36:21.420 --> 00:36:22.852 I kind of think about it is

NOTE Confidence: 0.93270605

00:36:22.852 --> 00:36:24.488 it was there was a lot of

NOTE Confidence: 0.93270605

00:36:24.488 --> 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 --> 00:36:28.180 any use to parsing out

NOTE Confidence: 0.9469625333333333

00:36:28.180 --> 00:36:31.249 the data looking at time or?

NOTE Confidence: 0.9469625333333333

00:36:31.250 --> 00:36:33.280 Chronologically in terms of months of

NOTE Confidence: 0.9469625333333333

00:36:33.280 --> 00:36:36.130 the year rather than time and and then

NOTE Confidence: 0.9469625333333333

00:36:36.130 --> 00:36:37.930 also looking at when the lockdowns

NOTE Confidence: 0.944278912

00:36:37.930 --> 00:36:39.210 were and how that affected

NOTE Confidence: 0.891569852

00:36:39.690 --> 00:36:41.570 autistic versus non autistic kids.

NOTE Confidence: 0.938576306666667

00:36:42.370 --> 00:36:44.701 Yeah, this is this is a great

NOTE Confidence: 0.938576306666667

00:36:44.701 --> 00:36:46.649 question and I'm grateful to.

NOTE Confidence: 0.938576306666667  
00:36:46.650 --> 00:36:49.072 I practice this in my lab and  
NOTE Confidence: 0.938576306666667  
00:36:49.072 --> 00:36:50.916 this question came up so.  
NOTE Confidence: 0.938576306666667  
00:36:50.916 --> 00:36:53.260 Always get to practice.  
NOTE Confidence: 0.938576306666667  
00:36:53.260 --> 00:36:54.380 It's a great question.  
NOTE Confidence: 0.938576306666667  
00:36:54.380 --> 00:36:55.500 We've thought about it.  
NOTE Confidence: 0.938576306666667  
00:36:55.500 --> 00:36:57.152 We have looked at some of these  
NOTE Confidence: 0.938576306666667  
00:36:57.152 --> 00:36:59.018 things in a long linear fashion,  
NOTE Confidence: 0.938576306666667  
00:36:59.020 --> 00:37:00.860 and I figured I'd only had 13 minutes,  
NOTE Confidence: 0.938576306666667  
00:37:00.860 --> 00:37:02.820 so I didn't get into it too much.  
NOTE Confidence: 0.938576306666667  
00:37:02.820 --> 00:37:06.235 But there is a quadratic  
NOTE Confidence: 0.938576306666667  
00:37:06.235 --> 00:37:08.967 relationship with social disruption.  
NOTE Confidence: 0.938576306666667  
00:37:08.970 --> 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 --> 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,  
NOTE Confidence: 0.938576306666667

00:37:17.290 --> 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 --> 00:37:22.584 if you look at the general,  
NOTE Confidence: 0.938576306666667

00:37:22.584 --> 00:37:24.593 if you look at the data that's  
NOTE Confidence: 0.938576306666667

00:37:24.593 --> 00:37:26.208 coming out now on loneliness,  
NOTE Confidence: 0.938576306666667

00:37:26.210 --> 00:37:28.156 there was sort of this initial period  
NOTE Confidence: 0.938576306666667

00:37:28.156 --> 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 --> 00:37:35.468 And in the end,  
NOTE Confidence: 0.938576306666667

00:37:35.470 --> 00:37:37.154 loneliness remained relatively stable.  
NOTE Confidence: 0.938576306666667

00:37:37.154 --> 00:37:39.950 So we have data from June on.  
NOTE Confidence: 0.938576306666667

00:37:39.950 --> 00:37:42.393 I think it would tell a different  
NOTE Confidence: 0.938576306666667

00:37:42.393 --> 00:37:44.822 story if we had data in April  
NOTE Confidence: 0.938576306666667

00:37:44.822 --> 00:37:48.230 and May in terms of a break,  
NOTE Confidence: 0.938576306666667

00:37:48.230 --> 00:37:49.970 a breaking point when school starts.

NOTE Confidence: 0.938576306666667

00:37:49.970 --> 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 --> 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 --> 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 --> 00:37:59.149 one more question?

NOTE Confidence: 0.943608066666667

00:38:03.660 --> 00:38:06.180 Hi, first of all great presentation.

NOTE Confidence: 0.943608066666667

00:38:06.180 --> 00:38:08.583 I wanted to ask if you saw any difference

NOTE Confidence: 0.943608066666667

00:38:08.583 --> 00:38:10.792 in habituation to the routine between

NOTE Confidence: 0.943608066666667

00:38:10.792 --> 00:38:13.100 a non autistic and autistic youth.

NOTE Confidence: 0.4057999

00:38:15.340 --> 00:38:18.316 Yeah so the question is

NOTE Confidence: 0.4057999

00:38:18.316 --> 00:38:19.858 about habituation between

NOTE Confidence: 0.95434236

00:38:19.860 --> 00:38:23.450 between groups to their routine.

NOTE Confidence: 0.95434236

00:38:23.450 --> 00:38:26.006 So the short answer here is we can only

NOTE Confidence: 0.95434236

00:38:26.006 --> 00:38:27.762 measure so much and we debated heavily

NOTE Confidence: 0.95434236

00:38:27.762 --> 00:38:30.290 what we should put in to this study.

NOTE Confidence: 0.95434236

00:38:30.290 --> 00:38:32.887 And so we didn't really ask about

NOTE Confidence: 0.95434236

00:38:32.887 --> 00:38:34.810 habituation to change in routine.

NOTE Confidence: 0.95434236

00:38:34.810 --> 00:38:36.682 So in a sense, I think what we're

NOTE Confidence: 0.95434236

00:38:36.682 --> 00:38:38.480 looking at when we look at loneliness

NOTE Confidence: 0.95434236

00:38:38.480 --> 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 --> 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 --> 00:38:50.774 lesson learned for designing studies if.

NOTE Confidence: 0.95434236

00:38:50.774 --> 00:38:53.426 The change in routine happened differently

NOTE Confidence: 0.95434236

00:38:53.426 --> 00:38:56.054 and was quicker and perhaps mediate

NOTE Confidence: 0.95434236

00:38:56.054 --> 00:38:58.418 some of of of these relationships,

NOTE Confidence: 0.95434236

00:38:58.418 --> 00:39:00.328 but I'm out of time.

NOTE Confidence: 0.95434236

00:39:00.330 --> 00:39:01.530 So thank you for that.

NOTE Confidence: 0.9172950333333333  
00:39:01.850 --> 00:39:03.050 Thank you Dr. Gerber. Nice job.  
NOTE Confidence: 0.92264079625  
00:39:07.330 --> 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 --> 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 --> 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 --> 00:39:43.320 Starting point bias and drift rate relate  
NOTE Confidence: 0.929602534230769  
00:39:43.320 --> 00:39:46.680 to frontal midline Theta EEG oscillations.  
NOTE Confidence: 0.929602534230769  
00:39:46.680 --> 00:39:48.790 In this study we applied.  
NOTE Confidence: 0.929602534230769  
00:39:48.790 --> 00:39:50.530 Computational modeling to participants  
NOTE Confidence: 0.929602534230769  
00:39:50.530 --> 00:39:53.140 performance on the anti saccade task  
NOTE Confidence: 0.929602534230769  
00:39:53.206 --> 00:39:55.121 with eye tracking while collecting  
NOTE Confidence: 0.929602534230769

00:39:55.121 --> 00:39:57.437 high density EEG to investigate the  
NOTE Confidence: 0.929602534230769

00:39:57.437 --> 00:39:59.796 effects of trial by trial Theta dynamics  
NOTE Confidence: 0.929602534230769

00:39:59.796 --> 00:40:01.253 on contingent eye gaze behavior.  
NOTE Confidence: 0.929602534230769

00:40:01.253 --> 00:40:03.647 So I know that was a lot of words  
NOTE Confidence: 0.929602534230769

00:40:03.647 --> 00:40:05.639 and I promise that a lot of them  
NOTE Confidence: 0.929602534230769

00:40:05.706 --> 00:40:07.350 will make sense by the end.  
NOTE Confidence: 0.929602534230769

00:40:07.350 --> 00:40:09.048 Important to start is that a  
NOTE Confidence: 0.929602534230769

00:40:09.048 --> 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 --> 00:40:16.717 If I point to one side of the room,  
NOTE Confidence: 0.929602534230769

00:40:16.720 --> 00:40:18.992 everyone that looked to that side of the  
NOTE Confidence: 0.929602534230769

00:40:18.992 --> 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 --> 00:40:23.678 that would have been an antisychade.  
NOTE Confidence: 0.929602534230769

00:40:23.680 --> 00:40:25.510 You inhibited your natural inclination

NOTE Confidence: 0.929602534230769  
00:40:25.510 --> 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 --> 00:40:33.654 just figured need to get that  
NOTE Confidence: 0.929602534230769  
00:40:33.654 --> 00:40:35.390 out of the way early.  
NOTE Confidence: 0.929602534230769  
00:40:35.390 --> 00:40:37.830 So why visual, visual attention?  
NOTE Confidence: 0.929602534230769  
00:40:37.830 --> 00:40:39.582 I gaze plays a critical role  
NOTE Confidence: 0.929602534230769  
00:40:39.582 --> 00:40:40.750 in many human behaviors.  
NOTE Confidence: 0.929602534230769  
00:40:40.750 --> 00:40:43.802 What grabs our attention grabs our thoughts  
NOTE Confidence: 0.929602534230769  
00:40:43.802 --> 00:40:48.070 from moral judgments to purchasing decisions.  
NOTE Confidence: 0.929602534230769  
00:40:48.070 --> 00:40:50.362 Another is in regard to clinical  
NOTE Confidence: 0.929602534230769  
00:40:50.362 --> 00:40:50.744 implications.  
NOTE Confidence: 0.929602534230769  
00:40:50.750 --> 00:40:52.340 Tension bias is well known play  
NOTE Confidence: 0.929602534230769  
00:40:52.340 --> 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  
NOTE Confidence: 0.929602534230769



00:40:56.444 --> 00:40:58.428 and depressed depressive disorders.  
NOTE Confidence: 0.929602534230769

00:40:58.430 --> 00:41:00.854 A a critical aspect of adaptive  
NOTE Confidence: 0.929602534230769

00:41:00.854 --> 00:41:02.066 goal directed behaviors,  
NOTE Confidence: 0.929602534230769

00:41:02.070 --> 00:41:03.993 appropriate response preparation.  
NOTE Confidence: 0.929602534230769

00:41:03.993 --> 00:41:08.480 This led to our motivating research question.  
NOTE Confidence: 0.929602534230769

00:41:08.480 --> 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 --> 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 --> 00:41:19.468 there's a decent grasp on a specific  
NOTE Confidence: 0.929602534230769

00:41:19.468 --> 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 --> 00:41:26.480 oscillations are robust domain general  
NOTE Confidence: 0.929602534230769

00:41:26.543 --> 00:41:28.933 neural marker of cognitive control  
NOTE Confidence: 0.929602534230769

00:41:28.933 --> 00:41:31.323 processes and therefore promising candidate.  
NOTE Confidence: 0.929602534230769

00:41:31.330 --> 00:41:32.778 So what are oscillations?

NOTE Confidence: 0.929602534230769

00:41:32.778 --> 00:41:34.588 Just really quickly there are

NOTE Confidence: 0.929602534230769

00:41:34.588 --> 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 --> 00:41:42.966 which are an average of a bunch

NOTE Confidence: 0.929602534230769

00:41:42.966 --> 00:41:44.130 of different waves.

NOTE Confidence: 0.929602534230769

00:41:44.130 --> 00:41:45.486 One of those waves is Theta,

NOTE Confidence: 0.929602534230769

00:41:45.490 --> 00:41:49.274 which occurs between roughly 4 and 8 Hertz.

NOTE Confidence: 0.929602534230769

00:41:49.280 --> 00:41:52.016 There are other frequencies here we're

NOTE Confidence: 0.929602534230769

00:41:52.016 --> 00:41:53.840 interested in Theta oscillations,

NOTE Confidence: 0.929602534230769

00:41:53.840 --> 00:41:55.592 and really what this is indicative

NOTE Confidence: 0.929602534230769

00:41:55.592 --> 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 --> 00:42:01.586 So this is a neural signature that

NOTE Confidence: 0.929602534230769

00:42:01.586 --> 00:42:04.120 is thought to play important role.

NOTE Confidence: 0.929602534230769

00:42:04.120 --> 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 --> 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 --> 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 --> 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 --> 00:42:27.535 as well as following events that are  
NOTE Confidence: 0.9440274875

00:42:27.535 --> 00:42:29.512 novel or ambiguous after performance.  
NOTE Confidence: 0.9440274875

00:42:29.512 --> 00:42:31.477 The signals thought to reflect  
NOTE Confidence: 0.9440274875

00:42:31.477 --> 00:42:32.818 activity in the anterior,  
NOTE Confidence: 0.9440274875

00:42:32.820 --> 00:42:34.878 at least partially in the anterior  
NOTE Confidence: 0.9440274875

00:42:34.878 --> 00:42:37.004 singlet cortex and plays a central  
NOTE Confidence: 0.9440274875

00:42:37.004 --> 00:42:38.719 role in detecting when our  
NOTE Confidence: 0.9440274875

00:42:38.719 --> 00:42:40.340 expectations are being violated.

NOTE Confidence: 0.9440274875  
00:42:40.340 --> 00:42:42.140 So what we thought was going to happen,  
NOTE Confidence: 0.9440274875  
00:42:42.140 --> 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 --> 00:42:48.326 when this occurs,  
NOTE Confidence: 0.9440274875  
00:42:48.330 --> 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 --> 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 --> 00:43:34.270 got it worked that way.  
NOTE Confidence: 0.93622824  
00:43:34.270 --> 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 --> 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 --> 00:43:53.270 have a spy. On Zoom  
NOTE Confidence: 0.9201268  
00:43:56.670 --> 00:43:57.870 we see purpose enter for you.  
NOTE Confidence: 0.7596533833333333

00:44:01.110 --> 00:44:02.070 They can okay,  
NOTE Confidence: 0.93824092

00:44:04.630 --> 00:44:07.190 so we went through that.  
NOTE Confidence: 0.93824092

00:44:07.190 --> 00:44:09.332 So some of the limitations of past  
NOTE Confidence: 0.93824092

00:44:09.332 --> 00:44:11.429 studies of visual attention behavior.  
NOTE Confidence: 0.93824092

00:44:11.430 --> 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 --> 00:44:16.970 which is simple attention  
NOTE Confidence: 0.93824092

00:44:16.970 --> 00:44:18.590 or eye gaze behavior.  
NOTE Confidence: 0.93824092

00:44:18.590 --> 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 --> 00:44:25.790 drift diffusion model is.  
NOTE Confidence: 0.93824092

00:44:25.790 --> 00:44:28.110 But first we need to cover what the task is.  
NOTE Confidence: 0.93824092

00:44:28.110 --> 00:44:29.550 The anti saccade task,  
NOTE Confidence: 0.93824092

00:44:29.550 --> 00:44:31.374 which I briefly touched on in  
NOTE Confidence: 0.93824092

00:44:31.374 --> 00:44:33.030 the beginning in the sense of

NOTE Confidence: 0.93824092  
00:44:33.093 --> 00:44:34.827 that is the behavior of interest  
NOTE Confidence: 0.93824092  
00:44:34.830 --> 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 --> 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 --> 00:44:44.750 There are no button presses,  
NOTE Confidence: 0.93824092  
00:44:44.750 --> 00:44:46.745 it's strictly where the participant  
NOTE Confidence: 0.93824092  
00:44:46.745 --> 00:44:49.552 is looking on the screen is driving  
NOTE Confidence: 0.93824092  
00:44:49.552 --> 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 --> 00:44:56.335 screen either a white or black  
NOTE Confidence: 0.93824092  
00:44:56.335 --> 00:44:58.010 fixation cross during the pro  
NOTE Confidence: 0.93824092  
00:44:58.075 --> 00:45:00.085 saccade is a white fixation cross  
NOTE Confidence: 0.93824092  
00:45:00.085 --> 00:45:02.438 and that tells them I'll need to  
NOTE Confidence: 0.93824092

00:45:02.438 --> 00:45:04.018 look at the upcoming probe.  
NOTE Confidence: 0.950317

00:45:06.540 --> 00:45:09.164 Next they'll see the probe and they will  
NOTE Confidence: 0.950317

00:45:09.164 --> 00:45:11.869 look in that direction hopefully and  
NOTE Confidence: 0.950317

00:45:11.869 --> 00:45:14.339 they'll receive feedback of correct.  
NOTE Confidence: 0.950317

00:45:14.340 --> 00:45:16.482 Now during an anti saccade they  
NOTE Confidence: 0.950317

00:45:16.482 --> 00:45:19.516 will receive a probe that is a black  
NOTE Confidence: 0.950317

00:45:19.516 --> 00:45:21.426 fixation cross indicating to them.  
NOTE Confidence: 0.950317

00:45:21.430 --> 00:45:23.638 I'll need to look away when  
NOTE Confidence: 0.950317

00:45:23.638 --> 00:45:25.670 I see the upcoming queue.  
NOTE Confidence: 0.950317

00:45:25.670 --> 00:45:26.874 When the queue comes,  
NOTE Confidence: 0.950317

00:45:26.874 --> 00:45:29.669 if they are engaging in the task correctly,  
NOTE Confidence: 0.950317

00:45:29.670 --> 00:45:31.470 they should inhibit their response  
NOTE Confidence: 0.950317

00:45:31.470 --> 00:45:34.293 to look at the white box and look  
NOTE Confidence: 0.950317

00:45:34.293 --> 00:45:36.339 away in the opposite direction of  
NOTE Confidence: 0.950317

00:45:36.339 --> 00:45:38.865 the screen of the box and therefore  
NOTE Confidence: 0.950317

00:45:38.870 --> 00:45:43.190 providing a anti saccade response.

NOTE Confidence: 0.950317  
00:45:43.190 --> 00:45:44.855 Now the important thing also  
NOTE Confidence: 0.950317  
00:45:44.855 --> 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 --> 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 --> 00:45:52.060 is acute anti saccade cast,  
NOTE Confidence: 0.950317  
00:45:52.060 --> 00:45:54.085 which some people would call  
NOTE Confidence: 0.950317  
00:45:54.085 --> 00:45:55.300 proactive cognitive control.  
NOTE Confidence: 0.950317  
00:45:55.300 --> 00:45:57.295 In this sense, they know what's coming.  
NOTE Confidence: 0.950317  
00:45:57.300 --> 00:45:58.956 They know that they're going to  
NOTE Confidence: 0.950317  
00:45:58.956 --> 00:46:00.698 have to either inhibit A prepotent  
NOTE Confidence: 0.950317  
00:46:00.698 --> 00:46:02.612 response or they're going to have  
NOTE Confidence: 0.950317  
00:46:02.612 --> 00:46:04.751 to just provide the response that  
NOTE Confidence: 0.950317  
00:46:04.751 --> 00:46:06.099 is their natural inclination,  
NOTE Confidence: 0.950317  
00:46:06.100 --> 00:46:08.708 which is which is to look at the  
NOTE Confidence: 0.950317



00:46:08.708 --> 00:46:10.924 white screen in this very dark  
NOTE Confidence: 0.950317

00:46:10.924 --> 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 --> 00:46:17.150 Introduction to a Drift Diffusion model.  
NOTE Confidence: 0.950317

00:46:17.150 --> 00:46:19.286 It's a broadly defined any model  
NOTE Confidence: 0.950317

00:46:19.286 --> 00:46:20.710 as a dynamic system.  
NOTE Confidence: 0.950317

00:46:20.710 --> 00:46:22.348 When presented with a time series,  
NOTE Confidence: 0.950317

00:46:22.350 --> 00:46:25.644 inputs such as reaction time and  
NOTE Confidence: 0.950317

00:46:25.644 --> 00:46:28.580 performance can produce simulation outputs.  
NOTE Confidence: 0.950317

00:46:28.580 --> 00:46:30.720 And drift diffusion models were  
NOTE Confidence: 0.950317

00:46:30.720 --> 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 --> 00:46:36.020 latent cognitive processes,  
NOTE Confidence: 0.950317

00:46:36.020 --> 00:46:37.870 which is the really important  
NOTE Confidence: 0.950317

00:46:37.870 --> 00:46:40.465 part to understand here is that we  
NOTE Confidence: 0.950317

00:46:40.465 --> 00:46:42.493 feed in the behavior of interest,

NOTE Confidence: 0.950317  
00:46:42.500 --> 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 --> 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 --> 00:46:52.650 estimates of certain parameters.  
NOTE Confidence: 0.950317  
00:46:52.650 --> 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 --> 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 --> 00:47:05.550 towards what is going on in the  
NOTE Confidence: 0.950317  
00:47:05.617 --> 00:47:07.567 brain than simple reaction time,  
NOTE Confidence: 0.950317  
00:47:07.570 --> 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,  
NOTE Confidence: 0.950317

00:47:14.210 --> 00:47:16.166 it parses it between drift rate,  
NOTE Confidence: 0.950317

00:47:16.170 --> 00:47:18.774 which is thought of as information  
NOTE Confidence: 0.950317

00:47:18.774 --> 00:47:19.208 processing.  
NOTE Confidence: 0.950317

00:47:19.210 --> 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 --> 00:47:25.290 experience of task difficulty.  
NOTE Confidence: 0.950317

00:47:25.290 --> 00:47:27.846 So every individual in this task,  
NOTE Confidence: 0.950317

00:47:27.850 --> 00:47:30.106 once we feed in their behavior,  
NOTE Confidence: 0.950317

00:47:30.106 --> 00:47:31.930 response time and performance,  
NOTE Confidence: 0.950317

00:47:31.930 --> 00:47:33.832 we get an estimate of their  
NOTE Confidence: 0.950317

00:47:33.832 --> 00:47:35.689 specific drift rate during the task.  
NOTE Confidence: 0.950317

00:47:35.690 --> 00:47:37.958 And their drift rate estimate for  
NOTE Confidence: 0.950317

00:47:37.958 --> 00:47:40.352 an individual would be how difficult  
NOTE Confidence: 0.950317

00:47:40.352 --> 00:47:43.094 say they thought the pro saccade  
NOTE Confidence: 0.950317

00:47:43.094 --> 00:47:45.812 or the anti saccade trials were.  
NOTE Confidence: 0.950317

00:47:45.812 --> 00:47:47.858 How efficient they were at processing

NOTE Confidence: 0.950317  
00:47:47.858 --> 00:47:49.878 that and engaging in that task.  
NOTE Confidence: 0.950317  
00:47:49.880 --> 00:47:52.640 There's also a threshold separation,  
NOTE Confidence: 0.950317  
00:47:52.640 --> 00:47:56.402 which is the boundaries shown on the  
NOTE Confidence: 0.950317  
00:47:56.402 --> 00:47:58.509 right there where the red lines are  
NOTE Confidence: 0.950317  
00:47:58.509 --> 00:48:00.760 going and meeting in the star forms.  
NOTE Confidence: 0.950317  
00:48:00.760 --> 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 --> 00:48:06.156 whatever boundary that is,  
NOTE Confidence: 0.950317  
00:48:06.156 --> 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 --> 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 --> 00:48:19.220 is the anti saccade response,  
NOTE Confidence: 0.950317  
00:48:19.220 --> 00:48:23.180 so they also have a bias or a starting point.  
NOTE Confidence: 0.883847927142857

00:48:23.180 --> 00:48:26.015 So where in the middle of that?  
NOTE Confidence: 0.883847927142857

00:48:26.020 --> 00:48:27.708 The decision threshold or  
NOTE Confidence: 0.883847927142857

00:48:27.708 --> 00:48:28.974 the threshold separation?  
NOTE Confidence: 0.883847927142857

00:48:28.980 --> 00:48:30.024 Where are they starting?  
NOTE Confidence: 0.883847927142857

00:48:30.024 --> 00:48:31.590 Are they starting in the middle  
NOTE Confidence: 0.883847927142857

00:48:31.640 --> 00:48:33.040 or do they have a bias where  
NOTE Confidence: 0.883847927142857

00:48:33.040 --> 00:48:34.265 they need more information to  
NOTE Confidence: 0.883847927142857

00:48:34.265 --> 00:48:35.695 gather to make one decision,  
NOTE Confidence: 0.883847927142857

00:48:35.700 --> 00:48:39.746 much less to make the alternative decision?  
NOTE Confidence: 0.883847927142857

00:48:39.750 --> 00:48:41.435 And finally, there is also  
NOTE Confidence: 0.883847927142857

00:48:41.435 --> 00:48:42.783 a non decision time.  
NOTE Confidence: 0.883847927142857

00:48:42.790 --> 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 --> 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 --> 00:48:50.958 to the decision making process

NOTE Confidence: 0.883847927142857  
00:48:50.958 --> 00:48:53.550 like early orientate orienting,  
NOTE Confidence: 0.883847927142857  
00:48:53.550 --> 00:48:55.402 early perceptual encoding and  
NOTE Confidence: 0.883847927142857  
00:48:55.402 --> 00:48:57.717 later processes that are non  
NOTE Confidence: 0.883847927142857  
00:48:57.717 --> 00:48:59.732 decision related such as the  
NOTE Confidence: 0.883847927142857  
00:48:59.732 --> 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 --> 00:49:09.464 cuz me giving you definitions  
NOTE Confidence: 0.883847927142857  
00:49:09.464 --> 00:49:11.657 is probably not going to do it.  
NOTE Confidence: 0.883847927142857  
00:49:11.660 --> 00:49:13.695 You have the decision threshold  
NOTE Confidence: 0.883847927142857  
00:49:13.695 --> 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 --> 00:49:20.450 boundary then they are going to  
NOTE Confidence: 0.883847927142857  
00:49:20.450 --> 00:49:22.226 produce a pro saccade or decide  
NOTE Confidence: 0.883847927142857  
00:49:22.226 --> 00:49:24.218 to produce a pro saccade response.  
NOTE Confidence: 0.883847927142857

00:49:24.220 --> 00:49:26.140 And then you have a bottom  
NOTE Confidence: 0.883847927142857

00:49:26.140 --> 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 --> 00:49:32.316 they provide an anti saccade response.  
NOTE Confidence: 0.883847927142857

00:49:32.320 --> 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 --> 00:49:38.515 as and you can have a drift rate.  
NOTE Confidence: 0.883847927142857

00:49:38.520 --> 00:49:40.104 So here's a blue drift rate  
NOTE Confidence: 0.883847927142857

00:49:40.104 --> 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 --> 00:49:46.359 which is beyond the scope of this,  
NOTE Confidence: 0.883847927142857

00:49:46.360 --> 00:49:48.880 but that is why that is a jagged line.  
NOTE Confidence: 0.883847927142857

00:49:48.880 --> 00:49:50.720 You'll often see jagged lines.  
NOTE Confidence: 0.883847927142857

00:49:50.720 --> 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 --> 00:49:58.042 decision deciding to provide an

NOTE Confidence: 0.883847927142857  
00:49:58.042 --> 00:50:00.354 anti saccade response so you can  
NOTE Confidence: 0.883847927142857  
00:50:00.354 --> 00:50:01.786 have a decision threshold.  
NOTE Confidence: 0.883847927142857  
00:50:01.790 --> 00:50:04.346 Like I said, top is a pro psychotic response,  
NOTE Confidence: 0.883847927142857  
00:50:04.350 --> 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 --> 00:50:10.240 so you can think about it as someone  
NOTE Confidence: 0.883847927142857  
00:50:10.310 --> 00:50:12.510 who has large decision thresholds.  
NOTE Confidence: 0.883847927142857  
00:50:12.510 --> 00:50:14.290 This would be an individual  
NOTE Confidence: 0.883847927142857  
00:50:14.290 --> 00:50:16.070 where the parameter estimates is  
NOTE Confidence: 0.883847927142857  
00:50:16.131 --> 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 --> 00:50:25.848 So they need much more evidence  
NOTE Confidence: 0.883847927142857  
00:50:25.848 --> 00:50:27.350 to come to any decision.  
NOTE Confidence: 0.883847927142857



00:50:27.350 --> 00:50:30.584 They need a lot of information they  
NOTE Confidence: 0.883847927142857

00:50:30.584 --> 00:50:32.806 are favoring. Accuracy over speed.  
NOTE Confidence: 0.883847927142857

00:50:32.806 --> 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 --> 00:50:42.112 You can imagine now they need  
NOTE Confidence: 0.883847927142857

00:50:42.112 --> 00:50:43.551 much less evidence regardless of  
NOTE Confidence: 0.883847927142857

00:50:43.551 --> 00:50:44.741 what decision they're going to  
NOTE Confidence: 0.883847927142857

00:50:44.741 --> 00:50:46.429 come to to come to a decision.  
NOTE Confidence: 0.919214448571429

00:50:48.910 --> 00:50:51.906 And now the bias parameter as well.  
NOTE Confidence: 0.919214448571429

00:50:51.910 --> 00:50:54.887 It can do a little dance on the where  
NOTE Confidence: 0.919214448571429

00:50:54.887 --> 00:50:57.149 determining where that starting point is.  
NOTE Confidence: 0.919214448571429

00:50:57.150 --> 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 --> 00:51:08.760 several trials of the pro saccade or  
NOTE Confidence: 0.919214448571429

00:51:08.760 --> 00:51:12.048 the anti saccade task for both pro and

NOTE Confidence: 0.919214448571429  
00:51:12.048 --> 00:51:14.418 anti saccade conditions and just for  
NOTE Confidence: 0.919214448571429  
00:51:14.418 --> 00:51:17.554 to show what a drift rate where bias  
NOTE Confidence: 0.919214448571429  
00:51:17.554 --> 00:51:20.476 is shifted downward would look like.  
NOTE Confidence: 0.919214448571429  
00:51:20.480 --> 00:51:22.657 And this might be something to remember  
NOTE Confidence: 0.919214448571429  
00:51:22.657 --> 00:51:25.111 for when I talk about the results  
NOTE Confidence: 0.919214448571429  
00:51:25.111 --> 00:51:27.100 very shortly you see there's much  
NOTE Confidence: 0.919214448571429  
00:51:27.100 --> 00:51:28.990 more information that needs to be.  
NOTE Confidence: 0.919214448571429  
00:51:28.990 --> 00:51:32.518 Garnered to come to a prosycho  
NOTE Confidence: 0.919214448571429  
00:51:32.518 --> 00:51:35.169 response and alternatively much less  
NOTE Confidence: 0.919214448571429  
00:51:35.169 --> 00:51:36.464 information needs to be acquired  
NOTE Confidence: 0.919214448571429  
00:51:36.464 --> 00:51:38.589 to come to a antisychod response.  
NOTE Confidence: 0.919214448571429  
00:51:38.590 --> 00:51:41.470 This would be an individual with a strong  
NOTE Confidence: 0.919214448571429  
00:51:41.470 --> 00:51:43.868 bias towards the antisychod boundary,  
NOTE Confidence: 0.919214448571429  
00:51:43.870 --> 00:51:46.096 and you can see how that's different  
NOTE Confidence: 0.919214448571429  
00:51:46.096 --> 00:51:47.981 from the threshold separation where  
NOTE Confidence: 0.919214448571429

00:51:47.981 --> 00:51:50.151 they generally for either decision  
NOTE Confidence: 0.919214448571429

00:51:50.151 --> 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 --> 00:52:00.886 Now jumping into the results here,  
NOTE Confidence: 0.946962533333333

00:52:00.890 --> 00:52:02.182 interestingly we found larger  
NOTE Confidence: 0.946962533333333

00:52:02.182 --> 00:52:03.797 drift rate drift rates for  
NOTE Confidence: 0.946962533333333

00:52:03.797 --> 00:52:05.528 the anti psychotic condition,  
NOTE Confidence: 0.946962533333333

00:52:05.530 --> 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,  
NOTE Confidence: 0.946962533333333

00:52:11.490 --> 00:52:13.002 potentially reflecting a burst  
NOTE Confidence: 0.946962533333333

00:52:13.002 --> 00:52:14.892 in frontal midline Theta that's  
NOTE Confidence: 0.946962533333333

00:52:14.892 --> 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 --> 00:52:27.486 There's also meaningful differences in the.  
NOTE Confidence: 0.951754628571429

00:52:27.490 --> 00:52:30.258 Highest parameter as well.

NOTE Confidence: 0.951754628571429

00:52:30.258 --> 00:52:33.366 So specifically when cued of an upcoming

NOTE Confidence: 0.951754628571429

00:52:33.366 --> 00:52:35.142 challenge anti saccade condition,

NOTE Confidence: 0.951754628571429

00:52:35.142 --> 00:52:38.250 there tended to be a shift downward

NOTE Confidence: 0.951754628571429

00:52:38.250 --> 00:52:40.490 towards the anti saccade boundary.

NOTE Confidence: 0.951754628571429

00:52:40.490 --> 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 --> 00:52:49.460 but much more evidence was needed to

NOTE Confidence: 0.951754628571429

00:52:49.460 --> 00:52:52.388 incorrectly provide a pro saccade response.

NOTE Confidence: 0.951754628571429

00:52:52.390 --> 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 --> 00:53:00.250 facilitate fast performance but accurate

NOTE Confidence: 0.951754628571429

00:53:00.250 --> 00:53:03.370 performance the more during the more

NOTE Confidence: 0.951754628571429

00:53:03.370 --> 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 --> 00:53:07.646 on the other hand,

NOTE Confidence: 0.951754628571429

00:53:07.646 --> 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 --> 00:53:13.678 bias parameter estimate where equal  
NOTE Confidence: 0.951754628571429

00:53:13.678 --> 00:53:16.080 amounts of evidence was needed.  
NOTE Confidence: 0.951754628571429

00:53:16.080 --> 00:53:16.950 For either decision.  
NOTE Confidence: 0.951754628571429

00:53:16.950 --> 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 --> 00:53:21.656 they tended to have a shift  
NOTE Confidence: 0.951754628571429

00:53:21.656 --> 00:53:22.680 downward in their bias,  
NOTE Confidence: 0.951754628571429

00:53:22.680 --> 00:53:25.466 which gave them a buffer such that  
NOTE Confidence: 0.951754628571429

00:53:25.466 --> 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 --> 00:53:32.010 might be underlying these group  
NOTE Confidence: 0.951754628571429

00:53:32.067 --> 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 --> 00:53:38.120 Now what about those neural

NOTE Confidence: 0.951754628571429

00:53:38.120 --> 00:53:40.360 oscillations we're talking about?

NOTE Confidence: 0.951754628571429

00:53:40.360 --> 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 --> 00:53:46.908 On the left in red is the anti

NOTE Confidence: 0.951754628571429

00:53:46.908 --> 00:53:48.821 saccade and on the in blue on

NOTE Confidence: 0.951754628571429

00:53:48.821 --> 00:53:50.700 the right is the pro saccade.

NOTE Confidence: 0.951754628571429

00:53:50.700 --> 00:53:54.424 You can see there's a pretty routine

NOTE Confidence: 0.951754628571429

00:53:54.424 --> 00:53:56.444 and reliable neural response to

NOTE Confidence: 0.951754628571429

00:53:56.444 --> 00:53:59.340 both pro and anti saccade response,

NOTE Confidence: 0.951754628571429

00:53:59.340 --> 00:54:02.994 but the difference can be shown much.

NOTE Confidence: 0.951754628571429

00:54:03.000 --> 00:54:04.967 It becomes much more salient in the

NOTE Confidence: 0.951754628571429

00:54:04.967 --> 00:54:06.685 time series output here where I'll

NOTE Confidence: 0.951754628571429

00:54:06.685 --> 00:54:08.317 Orient you to the delay period.

NOTE Confidence: 0.951754628571429

00:54:08.320 --> 00:54:10.315 So this is the period after they're

NOTE Confidence: 0.951754628571429

00:54:10.315 --> 00:54:12.086 told they're going to need to either  
NOTE Confidence: 0.951754628571429

00:54:12.086 --> 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 --> 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 --> 00:54:27.155 remember that is indicating that  
NOTE Confidence: 0.951754628571429

00:54:27.155 --> 00:54:29.199 expectations might be violated.  
NOTE Confidence: 0.951754628571429

00:54:29.200 --> 00:54:31.797 You might need to get the right,  
NOTE Confidence: 0.951754628571429

00:54:31.800 --> 00:54:33.612 get the cavalry to.  
NOTE Confidence: 0.951754628571429

00:54:33.612 --> 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 --> 00:54:40.700 the anti saccade shown in orange  
NOTE Confidence: 0.951754628571429

00:54:40.700 --> 00:54:42.699 there tended to be a larger

NOTE Confidence: 0.951754628571429

00:54:42.699 --> 00:54:44.434 burst of frontal midline Theta.

NOTE Confidence: 0.951754628571429

00:54:44.440 --> 00:54:47.401 So what about all that talk of trial by

NOTE Confidence: 0.951754628571429

00:54:47.401 --> 00:54:50.216 trial changes in frontal midline Theta?

NOTE Confidence: 0.951754628571429

00:54:50.220 --> 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 --> 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 --> 00:55:00.513 reaction time, response,

NOTE Confidence: 0.951754628571429

00:55:00.513 --> 00:55:03.099 empower or strength of their event,

NOTE Confidence: 0.951754628571429

00:55:03.100 --> 00:55:04.820 locked Theta neural response

NOTE Confidence: 0.951754628571429

00:55:04.820 --> 00:55:06.540 during each task queue.

NOTE Confidence: 0.951754628571429

00:55:06.540 --> 00:55:09.277 So within the model is an estimate

NOTE Confidence: 0.951754628571429

00:55:09.277 --> 00:55:12.193 of their the specific participants

NOTE Confidence: 0.951754628571429

00:55:12.193 --> 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

NOTE Confidence: 0.951754628571429



00:55:17.748 --> 00:55:20.070 showed you between after the queue  
NOTE Confidence: 0.951754628571429

00:55:20.070 --> 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 --> 00:55:27.837 effects of this trial by trial frontal  
NOTE Confidence: 0.951754628571429

00:55:27.837 --> 00:55:30.007 midline Theta on drift rate and bias  
NOTE Confidence: 0.951754628571429

00:55:30.007 --> 00:55:32.100 those two parameters that were found  
NOTE Confidence: 0.951754628571429

00:55:32.100 --> 00:55:33.820 to differ in their performance.  
NOTE Confidence: 0.951754628571429

00:55:33.820 --> 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 --> 00:55:38.090 so pro and anti saccade to  
NOTE Confidence: 0.951754628571429

00:55:38.090 --> 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 --> 00:55:46.942 eye gaze behavior and trial by trial  
NOTE Confidence: 0.951091041538461

00:55:46.942 --> 00:55:49.067 changes in frontal midline Theta

NOTE Confidence: 0.951091041538461  
00:55:49.067 --> 00:55:51.650 within an individual model together  
NOTE Confidence: 0.951091041538461  
00:55:51.650 --> 00:55:54.380 within subject in a Bayesian space.  
NOTE Confidence: 0.951091041538461  
00:55:54.380 --> 00:55:56.966 And this allowed us to to  
NOTE Confidence: 0.951091041538461  
00:55:56.966 --> 00:55:58.690 directly examine where these  
NOTE Confidence: 0.951091041538461  
00:55:58.774 --> 00:56:01.409 changes in frontal midline Theta.  
NOTE Confidence: 0.951091041538461  
00:56:01.410 --> 00:56:03.826 Over the course of tasks has a significant  
NOTE Confidence: 0.951091041538461  
00:56:03.826 --> 00:56:05.810 influence on the drift rate and bias.  
NOTE Confidence: 0.9301902  
00:56:09.290 --> 00:56:10.986 And finally these were the  
NOTE Confidence: 0.9301902  
00:56:10.986 --> 00:56:12.510 results of the trial by trial  
NOTE Confidence: 0.9301902  
00:56:12.558 --> 00:56:14.168 effects of frontal midline Theta.  
NOTE Confidence: 0.9301902  
00:56:14.170 --> 00:56:15.930 Here these are posterior distribution.  
NOTE Confidence: 0.9301902  
00:56:15.930 --> 00:56:18.090 So I oriented you to zero  
NOTE Confidence: 0.9301902  
00:56:18.090 --> 00:56:19.530 there with that line.  
NOTE Confidence: 0.9301902  
00:56:19.530 --> 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  
NOTE Confidence: 0.9301902

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 --> 00:56:29.238 Effect here for both pro and anti  
NOTE Confidence: 0.9301902

00:56:29.238 --> 00:56:31.418 saccade shown in the blue and the red.  
NOTE Confidence: 0.9301902

00:56:31.420 --> 00:56:33.744 You can see there was a positive  
NOTE Confidence: 0.9301902

00:56:33.744 --> 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 --> 00:56:40.362 conditions with an individual which  
NOTE Confidence: 0.9301902

00:56:40.362 --> 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 --> 00:56:45.566 because there were first the frontal  
NOTE Confidence: 0.9301902

00:56:45.566 --> 00:56:47.300 midline Theta during both conditions.  
NOTE Confidence: 0.9301902

00:56:47.300 --> 00:56:49.232 Although the time series input did  
NOTE Confidence: 0.9301902

00:56:49.232 --> 00:56:51.351 show that they were stronger during  
NOTE Confidence: 0.9301902

00:56:51.351 --> 00:56:53.536 the anti saccade condition however.  
NOTE Confidence: 0.9301902

00:56:53.536 --> 00:56:57.528 Being probed that there was an upcoming task,

NOTE Confidence: 0.9301902  
00:56:57.528 --> 00:56:58.244 a challenge,  
NOTE Confidence: 0.9301902  
00:56:58.244 --> 00:57:00.750 something to do look at the probe  
NOTE Confidence: 0.9301902  
00:57:00.823 --> 00:57:02.634 or look away elicited frontal  
NOTE Confidence: 0.9301902  
00:57:02.634 --> 00:57:05.586 midline Theta and both of those  
NOTE Confidence: 0.9301902  
00:57:05.586 --> 00:57:07.218 increased individuals processing  
NOTE Confidence: 0.9301902  
00:57:07.218 --> 00:57:10.088 efficiency during the upcoming demand.  
NOTE Confidence: 0.9301902  
00:57:10.090 --> 00:57:14.230 Now interestingly the bias parameter here.  
NOTE Confidence: 0.9301902  
00:57:14.230 --> 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 --> 00:57:18.336 so there's no effect of frontal  
NOTE Confidence: 0.9301902  
00:57:18.336 --> 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 --> 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,  
NOTE Confidence: 0.9301902

00:57:26.536 --> 00:57:29.515 there was an effect, a negative effect,  
NOTE Confidence: 0.9301902

00:57:29.515 --> 00:57:32.190 on the antipsychotic condition which  
NOTE Confidence: 0.9301902

00:57:32.190 --> 00:57:34.745 relates to that shift downward  
NOTE Confidence: 0.9301902

00:57:34.745 --> 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 --> 00:57:42.150 is what's going on here.  
NOTE Confidence: 0.9301902

00:57:42.150 --> 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 --> 00:57:49.477 that anti psychotic condition not  
NOTE Confidence: 0.9301902

00:57:49.477 --> 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 --> 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 --> 00:58:03.298 bias to be shifted downward.

NOTE Confidence: 0.9547895511111111  
00:58:03.300 --> 00:58:05.145 Therefore, they need much more  
NOTE Confidence: 0.9547895511111111  
00:58:05.145 --> 00:58:06.990 evidence to accumulate to erroneously  
NOTE Confidence: 0.9547895511111111  
00:58:07.054 --> 00:58:08.739 provide a pro saccade response,  
NOTE Confidence: 0.9547895511111111  
00:58:08.740 --> 00:58:11.008 but much less information need to  
NOTE Confidence: 0.9547895511111111  
00:58:11.008 --> 00:58:12.520 accumulate to provide correctly  
NOTE Confidence: 0.9547895511111111  
00:58:12.585 --> 00:58:14.097 the anti saccade response,  
NOTE Confidence: 0.9547895511111111  
00:58:14.100 --> 00:58:15.180 if you remember,  
NOTE Confidence: 0.9547895511111111  
00:58:15.180 --> 00:58:16.620 is that bottom threshold.  
NOTE Confidence: 0.93579177  
00:58:20.100 --> 00:58:22.760 Finally, we're also interested in  
NOTE Confidence: 0.93579177  
00:58:22.760 --> 00:58:25.905 potentially showing the utility of using.  
NOTE Confidence: 0.93579177  
00:58:25.905 --> 00:58:27.360 Computational modeling to  
NOTE Confidence: 0.93579177  
00:58:27.360 --> 00:58:29.300 decompose task based behavior.  
NOTE Confidence: 0.93579177  
00:58:29.300 --> 00:58:31.162 So we included reaction time in the  
NOTE Confidence: 0.93579177  
00:58:31.162 --> 00:58:33.020 first block which was not significant.  
NOTE Confidence: 0.93579177  
00:58:33.020 --> 00:58:34.940 In the second block we introduced  
NOTE Confidence: 0.93579177

00:58:34.940 --> 00:58:36.220 the drift diffusion parameters.  
NOTE Confidence: 0.93579177

00:58:36.220 --> 00:58:39.660 Bias was a significant predictor.  
NOTE Confidence: 0.93579177

00:58:39.660 --> 00:58:41.214 Drift rate was not in this case,  
NOTE Confidence: 0.93579177

00:58:41.220 --> 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 --> 00:58:49.402 rate and bias predicted frontal  
NOTE Confidence: 0.93579177

00:58:49.402 --> 00:58:50.857 midline Theta during the task.  
NOTE Confidence: 0.93579177

00:58:50.860 --> 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 --> 00:58:59.500 In the in the model and the  
NOTE Confidence: 0.93579177

00:58:59.500 --> 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 --> 00:59:10.799 home here increased Theta power was  
NOTE Confidence: 0.96038026

00:59:10.799 --> 00:59:12.371 associated with increased processing  
NOTE Confidence: 0.96038026

00:59:12.371 --> 00:59:14.687 efficiency and a shift in starting

NOTE Confidence: 0.96038026

00:59:14.687 --> 00:59:16.482 point bias which facilitated accurate

NOTE Confidence: 0.96038026

00:59:16.482 --> 00:59:20.080 and fat but fast responding and finally

NOTE Confidence: 0.96038026

00:59:20.080 --> 00:59:23.560 modeling proactive cognitive control.

NOTE Confidence: 0.96038026

00:59:23.560 --> 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 --> 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 --> 00:59:34.558 as shown through our regression analyses.

NOTE Confidence: 0.93019015

00:59:39.730 --> 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 --> 00:59:50.506 my mentor, as well as my other cowork

NOTE Confidence: 0.93019015

00:59:50.506 --> 00:59:52.728 coauthors on the on the paper,

NOTE Confidence: 0.93019015

00:59:52.730 --> 00:59:56.610 Stefan and Purr, as well as my

NOTE Confidence: 0.93019015



00:59:56.610 --> 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 --> 01:00:03.328 runs the T32 with Mike.  
NOTE Confidence: 0.93019015

01:00:03.330 --> 01:00:04.290 So thank you.  
NOTE Confidence: 0.9402536

01:00:09.680 --> 01:00:10.600 Thank you. Nice job, Peter.  
NOTE Confidence: 0.9402536

01:00:10.600 --> 01:00:12.280 Sorry for the technical snafu.  
NOTE Confidence: 0.9402536

01:00:12.280 --> 01:00:13.800 No worries. We have time  
NOTE Confidence: 0.9402536

01:00:13.800 --> 01:00:15.320 for one question for Peter.  
NOTE Confidence: 0.9402536

01:00:17.440 --> 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 --> 01:00:27.890 and person in the crowd. There's Taylor.  
NOTE Confidence: 0.9352219

01:00:33.050 --> 01:00:34.330 I wanted to go back to  
NOTE Confidence: 0.9352219

01:00:34.330 --> 01:00:35.770 this one to show this is.  
NOTE Confidence: 0.936060516666667

01:00:35.770 --> 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 --> 01:00:42.059 for that effect of frontal midline

NOTE Confidence: 0.936060516666667  
01:00:42.059 --> 01:00:44.490 Theta on anti sacod conditions,  
NOTE Confidence: 0.936060516666667  
01:00:44.490 --> 01:00:46.965 what that look like and that is kind of  
NOTE Confidence: 0.936060516666667  
01:00:46.970 --> 01:00:49.406 what that shift downward would look like.  
NOTE Confidence: 0.936060516666667  
01:00:49.410 --> 01:00:50.370 If anyone's interested,  
NOTE Confidence: 0.927314942857143  
01:00:50.490 --> 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 --> 01:00:56.050 So where can we take this research  
NOTE Confidence: 0.927314942857143  
01:00:56.050 --> 01:00:57.570 studying anxiety for instance?  
NOTE Confidence: 0.9301902  
01:00:57.930 --> 01:01:01.925 Yeah, so I think I've thought a lot about  
NOTE Confidence: 0.9301902  
01:01:01.925 --> 01:01:03.920 using attentional biases to threat.  
NOTE Confidence: 0.9301902  
01:01:03.920 --> 01:01:08.312 And oftentimes 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 --> 01:01:12.896 We're inferring where their  
NOTE Confidence: 0.9301902  
01:01:12.896 --> 01:01:14.916 attention is via button presses.  
NOTE Confidence: 0.9301902  
01:01:14.920 --> 01:01:17.830 And I think it'd be it shows  
NOTE Confidence: 0.9301902

01:01:17.830 --> 01:01:19.475 that we can use the Drift Drift,  
NOTE Confidence: 0.9301902

01:01:19.480 --> 01:01:21.776 diffusion modeling framework to  
NOTE Confidence: 0.9301902

01:01:21.776 --> 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 --> 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 --> 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

NOTE Confidence: 0.9301902  
01:01:56.366 --> 01:01:58.648 lends itself very nicely to a  
NOTE Confidence: 0.9301902  
01:01:58.648 --> 01:01:59.761 computational modeling approach  
NOTE Confidence: 0.9301902  
01:01:59.761 --> 01:02:01.616 to something like this because  
NOTE Confidence: 0.9301902  
01:02:01.672 --> 01:02:02.945 of that temporal specificity as  
NOTE Confidence: 0.9301902  
01:02:02.945 --> 01:02:04.420 opposed to a bold response.  
NOTE Confidence: 0.9301902  
01:02:04.420 --> 01:02:06.324 But there are ways to kind of lag  
NOTE Confidence: 0.9301902  
01:02:06.324 --> 01:02:08.602 that so that it matches up with the  
NOTE Confidence: 0.9301902  
01:02:08.602 --> 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 --> 01:02:15.050 attention biases with with eye  
NOTE Confidence: 0.9301902  
01:02:15.050 --> 01:02:17.020 tracking is is something that's  
NOTE Confidence: 0.9301902  
01:02:17.020 --> 01:02:19.140 really cool and in the future.  
NOTE Confidence: 0.945844377777778  
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.